



# Household Energy Survey 2017









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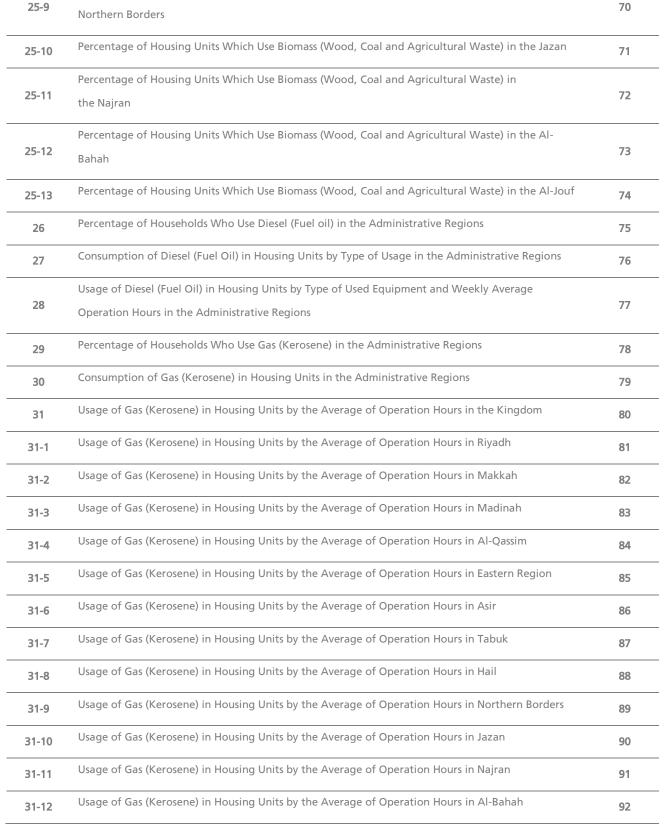
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Administrative Regions

Possession in the Administrative Regions

Administrative Regions

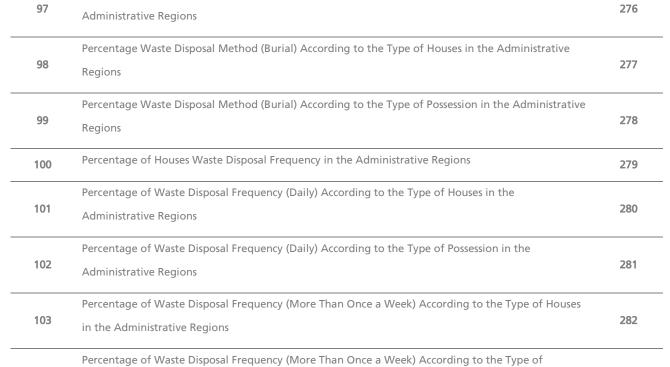
Administrative Regions

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### Methodology of the Household Energy Survey:

#### **Definition:**

It is a survey in which household energy data is collected for a sample of households selected and represented by all households. The data can calculate many estimates and indicators on energy consumption in the household sector by gender, nationality and the administrative area

### **Description:**

It is a regular study that provides precise and comprehensive statistical data to meet the needs of decision-makers, data users and researchers on energy sources, forms, uses and consumption patterns across the household sector.



### **Survey Objectives:**

### The Household Energy Survey has many objectives, including:

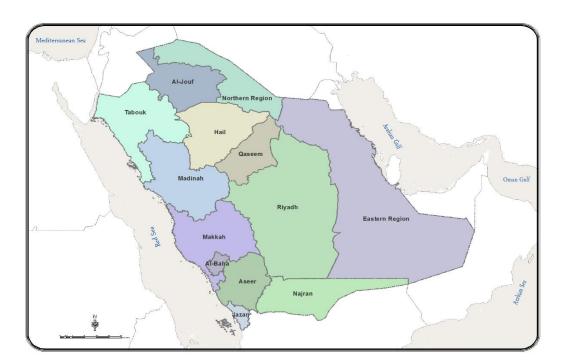
- 1. Providing data on residence characteristics, such as type, components and air-conditioned areas.
- 2. Identifying the impact of economic, social and geographical variables on energy consumption.
- 3. Providing data on household consumption of various fuel types.
- 4. Providing data on energy consumption in the domestic sector to supplement the primary consumption coverage of various energy forms, which contributes to the preparation of energy balance.
- 5. Identifying patterns of energy consumption and the forms of energy used in the domestic sector.
- 6. Identifying the community behavior in energy consumption by type and source.

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- 7. Creating a statistical database with indicators on energy consumption in the domestic sector across the Kingdom's provinces, including:
  - Data on household consumption of various petroleum products.
  - Data on household consumption of electricity.
  - Data on household consumption of biomass (fuelwood, coal, agricultural waste).
  - Usage of fuel and energy types based on different activities such as (medical, air-condoning, lighting, heating, food preservation).
- 8. Identifying key instructional media in electric energy consumption.

### **Scope of survey**

The survey covers the 13 administrative regions by using a sample of households in these regions represented by actual updating of the general population and housing census of 1431H (2010)







#### Time reference

- Data of the Household Energy Survey regarding the information of housing and household and their characteristics are based on the date of household's visit.
- Data of the Household Energy Survey regarding the use of fuel, electricity and biomasses (wood, coal and agricultural wastes) cover the year 2016.

### Sample Design: -

The Household Energy Survey is one of sample-based household surveys carried out by the General Authority for Statistics by using the general population and housing census framework. To get highly efficient and effective estimates, the survey society has been divided into non-overlapping parts, characterized by relative homogeneity in their units. Each part is considered a category, and each category is dealt with as an independent society. A random sample is independently drawn from each category. Finally, all drawn sampling units are integrated to form the entire sample. To prepare this framework, each administrative region was divided into a number of categories ranging 3-10 categories, defined according to population size, so that the total number amounted to fifty-four categories all over the Kingdom. The optimum size of the main sample that fulfills the purposes different family researches conducted by the Authority all over the Kingdom and the administrative regions was identified. After that, primary sampling units were drawn, represented in statistical areas that amounted to 1334 statistical areas distributed over all administrative regions.

### Survey Sample Design and Selection:

Head for the sample designing and proper methodology selection, the size of the sample of the new survey has been estimated, and the selected sample, which is a random categorical cluster sample, was identified. It was selected through two stages, in accordance with the following: -

#### First Phase: -

After determining the optimum size of the survey sample of families of each administrative region, the process of drawing the primary sampling units, i.e. statistical areas, from the framework of restricting and numbering buildings and real-estate begins. A number of 1340 sample statistical areas, out of 36198 total statistical areas within the framework of the census have been drawn. They



are distributed among all categories in all administrative regions using the method that is commensurate with the size, considering the number of Saudi families in them, distributed as follows:

| S/N | Administrative Region |       | Sampling units number | S/N | Administrative Region |       | Sampling units number |
|-----|-----------------------|-------|-----------------------|-----|-----------------------|-------|-----------------------|
| 1   | Riyadh                | Rural | 186                   | 8   | Hail                  | Rural | 44                    |
|     |                       | Urban | 21                    |     |                       | Urban | 21                    |
|     | Total                 |       | 207                   |     | Total                 |       | 65                    |
| 2   | Makkah                | Rural | 218                   | 9   | Northern Borders      | Rural | 58                    |
|     |                       | Urban | 24                    |     |                       | Urban | 12                    |
|     | Total                 |       | 242                   |     | Total                 |       | 70                    |
| 3   | Madinah               | Rural | 72                    | 10  | Jazan                 | Rural | 44                    |
|     |                       | Urban | 20                    |     |                       | Urban | 27                    |
|     | Total                 |       | 92                    |     | Total                 |       | 71                    |
| 4   | Al-Qassim             | Rural | 48                    | 11  | Najran                | Rural | 50                    |
|     |                       | Urban | 18                    |     |                       | Urban | 14                    |
|     | Total                 |       | 66                    |     | Total                 |       | 64                    |
| 5   | Eastern Region        | Rural | 158                   | 12  | Al-Bahah              | Rural | 44                    |
|     |                       | Urban | 10                    |     |                       | Urban | 16                    |
|     | Total                 |       | 168                   |     | Total                 |       | 60                    |
| 6   | Asir                  | Rural | 60                    | 13  | Al-Jouf               | Rural | 58                    |
|     |                       | Urban | 30                    |     |                       | Urban | 8                     |
|     | Total                 |       | 90                    |     | Total                 |       | 66                    |
| 7   | Tabuk                 | Rural | 57                    | 14  | Total for the Kingdom | Rural | 1097                  |
|     |                       | Urban | 16                    |     |                       | Urban | 237                   |
|     | Total                 |       | 73                    |     | Total                 |       | 1334                  |

### **Second Stage:**

The secondary sampling units, i.e. households, were randomly drawn from the statistical areas, which were chosen in the first phase using the regular random sample. About (25) households were chosen from each statistical area, totaling 33,500 households all over the Kingdom.





### **Survey Form Design**

The survey form was prepared and designed by specialists at the Power Survey Department in the General Authority for Statistics (GASTAT). When designing the form, the international recommendations, standards, and definitions were taken into consideration to mirror changes that are taking place in the household sector over years. The resulting form was reviewed by experts of the GCC-STAT and other agencies in concern for their feedback and notes.

The survey forms shall generally include the following sections: -

- **Section I:** Geographical details which may be used to depict the household.
- Section II: The residence details (including types of house and possession, the estimated aged of the house; components, number and area as per the ventilation and air-conditioned spaces; source of power, solar-energy, cocking fuel, as well as environment data the cover source of drinking water, reservoir, sewage and ways and number of time to get-rid of waste.)
- **Section III:** Information about the household include (nationality, number of members, educational status, employed members and the average working hours.)
- Section IV: Usage of diesel (this includes data on [A] fuel oil, its usages, storage volume for winter and the remaining days of the year as per type of device, number and average of operation hours during the same period; [B] kerosene, its usages, storage volume for winter and the remaining days of the year as per type of device, number and average of operation hours per week for the same period; [C] Liquefied Petroleum Gas (LPG), its usages, cylinder and tank types, re-load times per year, cost and number of people sharing the same tank, types of devices, number and average of operation hours per week for the same period.)
- Section V: ways of electricity use that included (house supply, type of electricity meters, power stabilizer, consumption for winter and the remaining days of the year as per type of device, number and average of operation hours per week for the same period as well as the other devices.
  - The form's Section V also included data on electricity rationalized usage and how much the respondent cares about rationalization.
- **Section VI:** The fuel wood, coal and agricultural waste (this includes the usage and type).
- **Section VII:** Outcome of the household visit.





#### Technical cadres:

- 1. The specialists who take part in the study (for the supervisory and executive missions) are chosen from experts who have wide knowledge of field surveys and form works with good knowledge about the geographical mapping for all the Saudi regions.
- 2. The survey team includes members from the .Survey services agency and operations and methodologies authority.
- 3. The field work supervisory team shall comprise inspectors and supervisors who are working for GASTAT and represent all Saudi regions. All cadres have received the necessary training at headquarters and branches.
- 4. The programing and technical support job was carried out by a group of specialists from GASTAT to develop new applications and to support computer processes.

#### **Data collection method**

The process of Household Energy Survey data collection continues for four weeks. Because of the fact that the household is the focus of the research, the method of direct contact with the household has been used in the process of completing survey form. Researchers, in charge of this process, visited the sample households and completed data directly using the Household Energy Survey Form.

### **Key Concepts and Definitions:**

The key concepts and definitions are important to keep work methodologies consistent and to be guidelines for field workers. So, please read carefully and stick closely to these definitions.



### First: Definitions of terms used in the survey:

### **Administrative Region:**

Part of the Kingdom of Saudi Arabia that is administered by a government agency which is directly affiliated with the Ministry of Interior such as Riyadh and Makkah ... etc. And each administrative region has a capital city;

#### **&** Governorate:

Part of the region, the second-level of the subdivisions and reports directly to region, such as Al-Kharj Governorate of Riyadh Region;

### **\*** Municipality:

The administrative entity that reports to a governorate such as al-Dilam municipality of Al-Kharj Governorate; Others report directly to the Emirate headquarter such as Irqah which reports directly to Riyadh. Some municipalities report to other municipalities like Uyaynah of Halat Ammar in Tabuk region.

### **Populated locality:**

A static population cluster such as a city, village or a farm, or non-static like cluster around a water source.

### **Village:**

A clustered human settlement with a commonly recognized name, and a population of no less than 50 thousand, or no less than 10 inhabited dwellings.

### **Covered populated locality:**

A static human settlement with a population of less than (50 thousand, or no less than (10 inhabited dwellings. This definition covers public and private work locations.

## **City:**

For census purposes, 'city' refers herein to every locality with a municipality, or whose population exceeds (5,000 persons).

### **District** (Neighborhood):

Part of a city that includes building, streets and roads, with a commonly recognized name; It is usually surrounded with main streets dividing it from other neighborhoods. Citywide, districts numbering starts with (001) and ends with the number of the last one in a city.





#### **Sector:**

A statistical division used for statistical purposes in cities. It is a geographically clustered area which represents a part of a district, and usually enclosed by main streets. At the district level, sectors serial numbering starts with (01) and ends with the number of the last one in a district.

#### **❖** Block:

A geographical area surrounded by streets, and comprises a building or a number of contiguous buildings that are not separated by streets. It takes various shapes including a square, rectangle, circle or irregular-shaped space as in old neighborhoods. The block might also be an open space. At the sector level, blocks numbering starts with (001) and ends with the number of the last one in a sector.

### **&** Building:

Building is every structure; whether permanent or temporary, single- or multi-storey, with one or more rooms, and has one or more doors through which to access it. A building might and might not be inhabited; and it could be intended for housing, or for economic, social or religious purposes ... etc., such as such as a complex, a palace, a villa, a popular house, a tent, a hut, a shack, a shanty, a government body, a shop, a mosque... etc.

Note that annexes to a building or a villa such as a garage or a shop are not counted as separate buildings. Likewise, bridges, power rooms, water pumps are not counted as buildings unless used for residential purposes during census period. In addition, buildings under construction are counted as buildings unless bases, foundations and walls are built.

### **\*** Household:

As per the population census, a 'household' refers to a person or a group of persons - with or without kinship binding them to one another - who share residence during the enumeration. The household includes:

• Saudi and non-Saudi nationals who usually live with the household but they were absent while the survey was conducted for being temporarily away; for example, businessmen, tourists, people who are travel for medication, students on scholarship beyond the borders of the kingdom.





- Individuals who stay with the household and were absent during conducting the study for the reason of being serving at work night shifts; for example, guards, doctors, nurses, pharmacists, and airport employees, in addition to household members who were at some public dwellings during the researcher's visit to the household.
- Servants, drivers and the like who are members of the same household.
- Family members who are on a trip in the Kingdom.

### **Dwelling:**

It is a single- or multi-room unit which is primarily prepared for one family and has one separate door, whether it was still under construction, occupied or inhabited during the survey and enumeration. The dwelling might accommodate one or more households, one or more businesses, or a household and a business simultaneously. For the purposes of census and field studies, every inhabited building during the numbering period shall be counted as a dwelling, even if it was not set up for that purpose such as workshops and schools. A villa, house, apartment, tent, shack and formwork are types of dwellings.

### **\*** Head of the family:

It refers to the person regarded by the family members as its chief member. Usually, he is responsible for undertaking the responsibility of the household and his age must not be under (15) years old. If the family consists of children and their mother, and they are cared for by a relative who does not live with them, such a relative shall not be deemed as the head of the family, nor shall he be recorded as one of its members, since he shall be recorded with his own family. In this case, the mother shall be deemed as the head of the family.

### **\*** Nationality:

It is the individual's legal right of belonging to a particular country. It is usually defined by the passport the person already has, or has the right to obtain.

### **Supervisor's Area of Operation:**

It consists of an administrative region and covers a number of areas for inspectors and surveyors.

### **!** Inspector's Area of Operation:

It includes a number of counting areas. On average, it includes a sample of (560 - 700 households distributed among (5 surveyors, serialized in the supervisor's area of operation.

### **Surveyor's Area of Operation:**



It involves a number of counting areas selected for survey from (4 to 5) areas, based on each area's circumstances. Surveyors are serialized within the inspector's area.

### **Counting area:**

It is the smallest statistical division used in census 1431H that is composed of a geographical space and includes a number of buildings, dwellings and an average of (75) households of which a sample has been taken. The number of the sampled households is (25) in every numeration area.

### **Second: Key terms and definitions:**

The most recent international definitions appertaining to energy statistics are used and adopted to go in accordance with United Nations recommendations and other relating scientific resources.

### **\*** Household Energy Consumption

It refers to the energy consumed by the population for domestic affairs only (water heating, warming, air-conditioning, lighting, cooking ... etc.).

#### Fuel

It refers to any type of material used to produce energy through a thermo-chemical or nuclear reaction.

### Diesel

It is a liquid hydrocarbon fuel that is extracted through crude oil distillation. It is heavy oil that is distilled between 200 - 380 °C. Its flash point is permanently higher than 50 °C, and its specific weight is higher than 82 °C.

#### \* kerosene

It is medium oil that distills between 150 - 300 °C. Its specific weight is approximately 8, and its flash point is higher than 38 °C. It is not an aviation fuel.

### Liquefied Petroleum Gas (LPG)

It consists of a mixture of gases and is extracted from natural gas or from crude oil fractionation. It mainly consists of Propane and Butane or a mixture of them. It is used as a fuel for heating and household cooking, and as a fuel for some types of engines. It is additionally used as a raw material in some chemical industries. It is often marketed in the form of metal cylindrical canisters, or in the form of surface or underground tanks.

### **&** Electricity:





It is the work done to move an electric charge via a connector. Its measuring unit is kilowatt/hour.

Electricity consumption = power (kilowatt) x time (hours)

### **Firewood**

All types of firewood used as a fuel

### Charcoal

It is a hard material that mainly contains carbon. It is extracted through firewood destructive distillation while being secluded from air.

### **Agricultural Residues**

It is the hard residues from fruit trees such as olive residues after squeezing. It has various benefits as it may be used in generating energy for baking bread in tabun ovens, and it may be used as a fertilizer for trees or as a fodder for animals.





### **Data Quality**

Quality control – done in conjunction with data collection – is one of the key stages of implementing the household energy survey, when a fully automated system is adopted with certain regulations to control data entry, to find errors and notes on forms and to fix them under a supervisor after recurring to the household if necessary.

In addition, quality control stage involves following-up and studying daily reports coming from respective operation room, then preparing periodical reports on field work progress and submitting them to officials of the General Authority for Statistics by the administrative department supervising the survey.

This stage also incorporates field visits by the supervisor of household energy survey, in addition to department managers in concern and a number of specialists, to gain field insights into data collection, entry and auditing, and to follow up the application of instructions to obtain top quality results.

With special attention to the technical dimensions while not overlooking the administrative aspect, field visits focus on key cities in the survey sample, by adopting forms particularly prepared for this purpose. The forms feature sampling of some forms picked from a surveyor study to learn about data entry process, audit, and completing the field visit form including stratification with the organization of field and desk work.



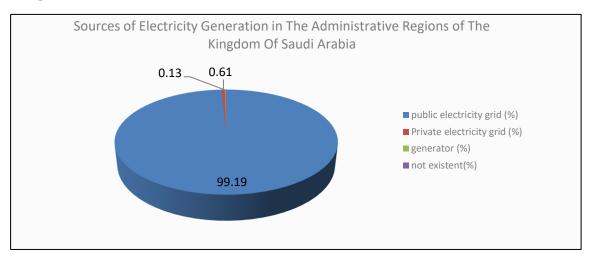


#### Some statistical indicators through household Energy Survey 2017

First: The most important results that related to the proportion of energy forms

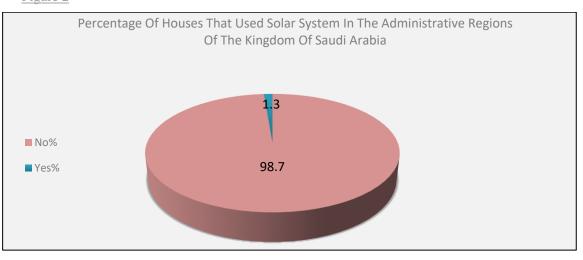
1. The survey results show that approximately (99.93%) households use electricity in the dwelling, around (99.19%) connected to the public electricity grid, while (0.61%) they are using private electricity grid, whereas the households consuming their own generator as a source of electricity by (0.13%).

Figure 1



2. The survey shows that around (1.3%) of households using solar energy in all regions of Saudi Arabia.

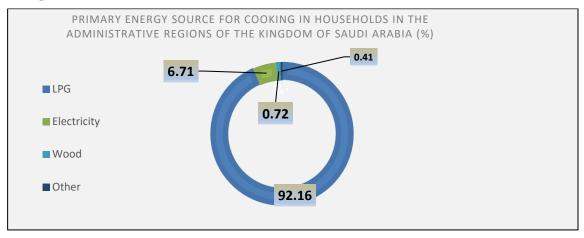
Figure 2





3. Diagram displays that about (92.16%) of households consuming gas as cooking, while (6.71%) of householders using electricity as the main fuel for cooking, although (0.72%) of households rely on fuelwood as the main source of fuel for their cooking.

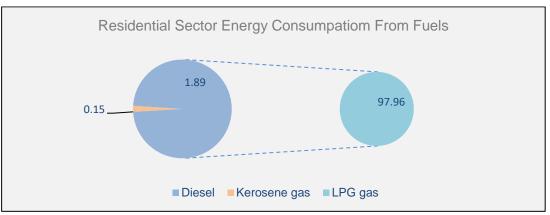
Figure 3



### Second: The major important results that related to consumption:

- 1. The survey results indicate that the consumption of fuel derived from diesel (fuel oil), kerosene and gas (LPG) in the kingdom consumed more than (1,011,191,458) for the residential sector.
- The gas diesel oil consumed around (1,482,258) liter which is about (0.15%) from total fuel consumption.
- The kerosene was consumed by (1.89%) of total fuel consumption for (19,148,276) liter.
- The LPG gas consumed more than (990,560,924) liter which is represent (97.96%) from total fuel consumption.

Figure 4



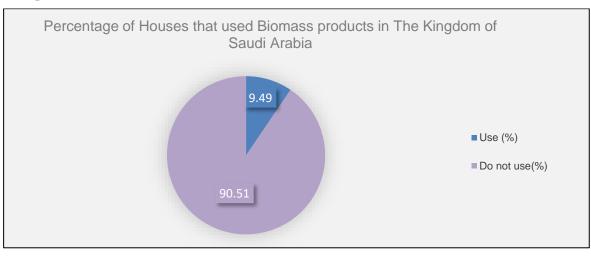
 $2.\ Consumption\ of\ electric\ power\ in\ Saudi\ Arabia\ for\ the\ residential\ sector\ is\ about\ (260,458.30)\ GW$ 



### Third: The significant results related to types of electric power:

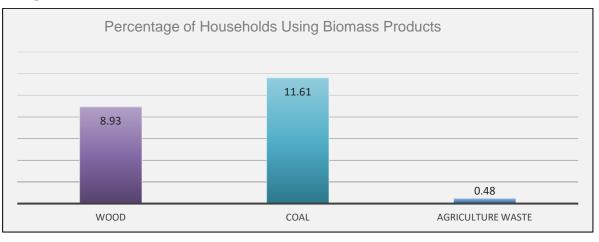
1. The survey shows that around (9.49%) of households using biomass products such as coal, firewood and agriculture waste.

Figure 5



2. The bar chart below indicates that biomass products (coal, firewood and agriculture waste) represented by (11.61%), (8.93%) and (0.48%) respectively for heating and cooking.

Figure 6





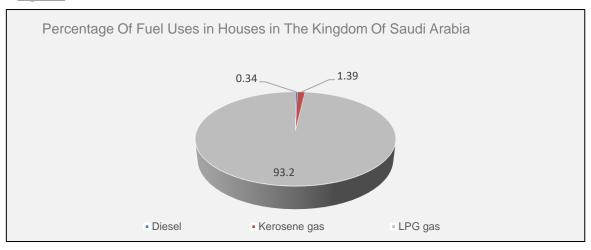
From the results below:

The consumption of desal in Saudi Arabia about (0.34%) for the residential sector.

The consumption of the kerosene gas in Saudi Arabia is approximately about (1.39%) for the residential sector.

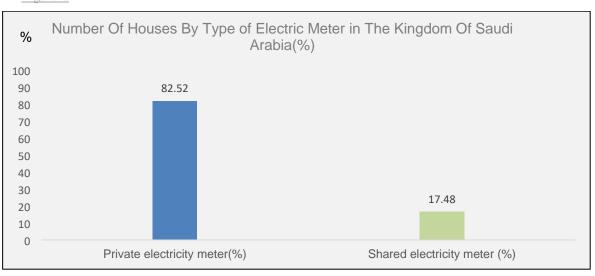
The LPG gas rich to around (93.20%) in all regions of Saudi Arabia.

Figure 7



The chart illustrated that the percentage of dwellings that use private electricity meter rich to (82.52%), whereas dwellings that use share electricity meter is about (17.48%).

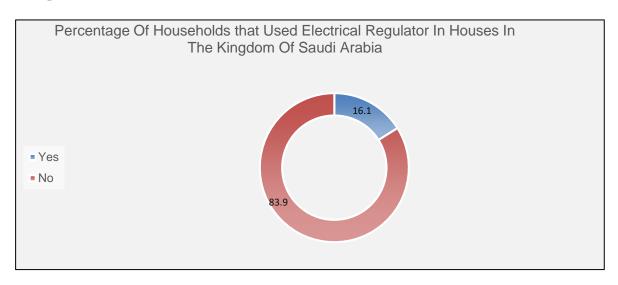
Figure 8





The diagram shows that, the percentage of household that own electrical regulator represented by (16.10%) in Saudi Arabia.

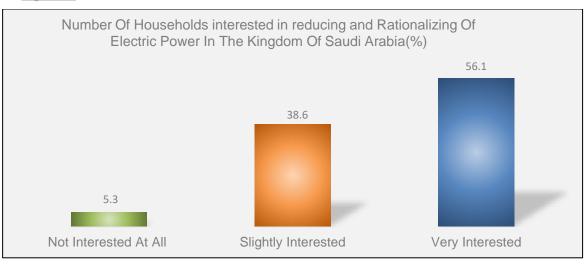
Figure 9



The most important results that related to electricity conservation:

-The result indicates that, (56.1%) from household are caring about electricity conservation, while (38.6%) from household are less interested to electricity conservation, however (5.3%) are not interested to electricity conservation.

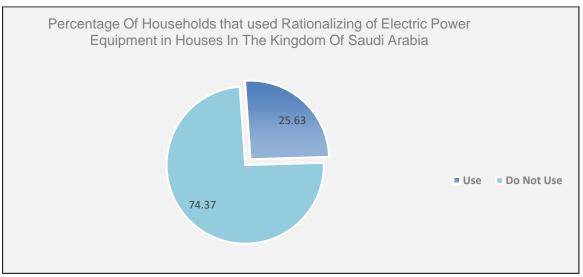
Figure 10





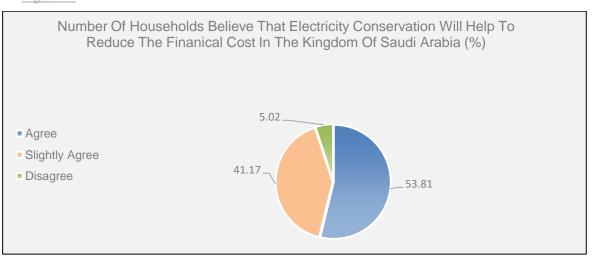
Moreover, the bar chart shows that (25.6%) from household are using equipment of elasticity conservation, while (74.4%) from household are not using equipment of elasticity conservation.

Figure 11



The result show that (53.81%) from household in Saudi Arabia believe that electricity conservation will help to reduce the financial cost, whereas (41.17%) from household partly believe that electricity conservation will help to reduce the financial cost, unlike (5.02%) they do not believe that electricity conservation will help to reduce the financial cost.

Figure 12

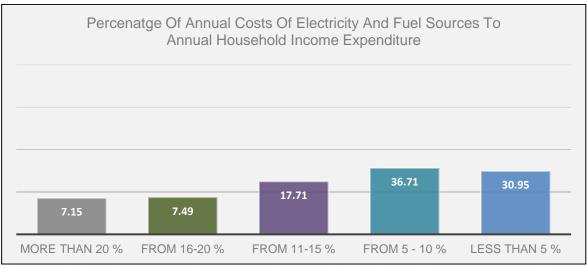






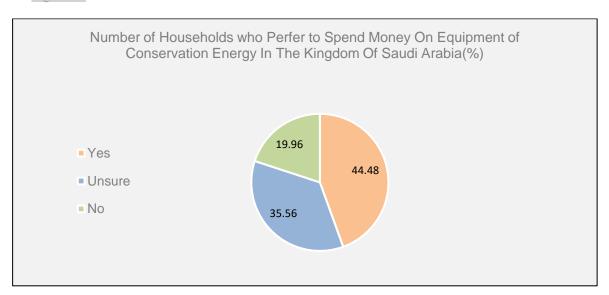
The survey result shows that (30.95%) from household spending less than (5%) from their income on electricity and fuel, while (36.71%) from household spending between (10-5%) from their income on electricity and fuel, whereas (17.71%) from household spending between (15-11%) from that, while (7.49%) from household spending between (20-16%) from their income on electricity and fuel, (7.15%) from household spending more than (20%) from their income on electricity and fuel.

Figure 13



The result displays that (44.48%) from household strongly believe in spending money on electricity conservation, while (35.56%) from household slightly believe that, on the other hand (19.96%) they do not believe in spending money on electricity conservation.

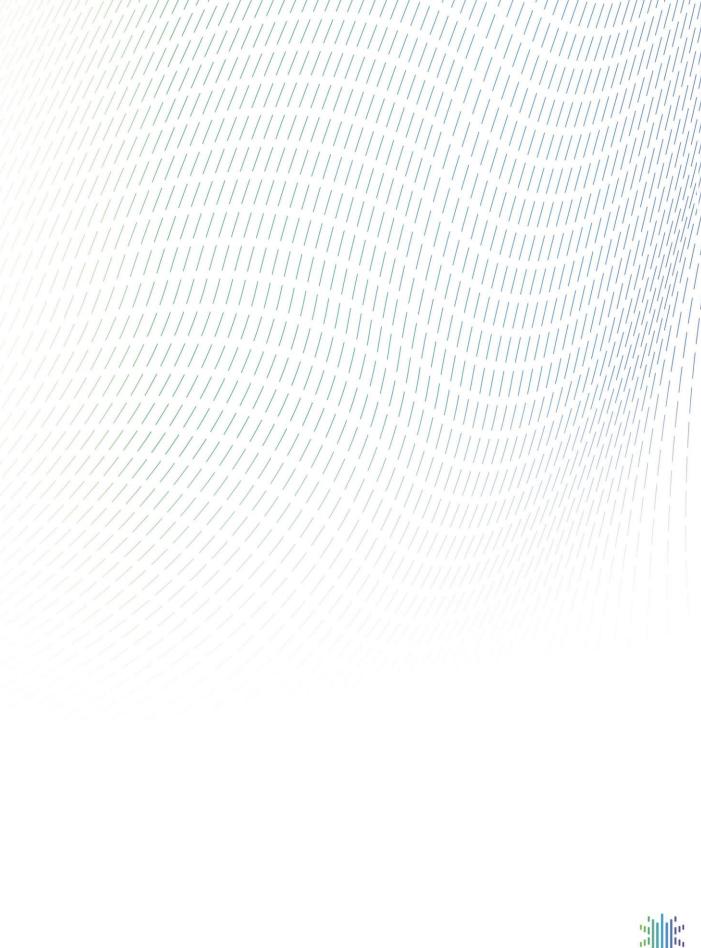
Figure 14







## **Tables**







# Number of Houses Occupied by Households (Saudi and Non-Saudi) in the Administrative Regions

Table 1

| S/N         | Administrative Region | Nun       | nber of Houses Occupied with Housh | nolds     |
|-------------|-----------------------|-----------|------------------------------------|-----------|
| <i>3/</i> N | Administrative Region | Saudi     | Non-Saudi                          | Total     |
| 1           | Riyadh                | 829,178   | 521,461                            | 1,350,639 |
| 2           | Makkah                | 872,330   | 623,062                            | 1,495,392 |
| 3           | Madinah               | 244,505   | 131,624                            | 376,129   |
| 4           | Al-Qassim             | 164,922   | 107,156                            | 272,078   |
| 5           | Eastern Region        | 499,461   | 259,455                            | 758,916   |
| 6           | Asir                  | 298,787   | 100,182                            | 398,969   |
| 7           | Tabuk                 | 117,342   | 49,503                             | 166,845   |
| 8           | Hail                  | 78,215    | 33,611                             | 111,826   |
| 9           | Northern Borders      | 37,274    | 10,574                             | 47,848    |
| 10          | Jazan                 | 174,765   | 45,473                             | 220,238   |
| 11          | Najran                | 66,463    | 39,678                             | 106,141   |
| 12          | Al-Bahah              | 65,733    | 17,654                             | 83,387    |
| 13          | Al-Jouf               | 56,500    | 22,002                             | 78,502    |
|             | Total of the Kingdom  | 3,505,475 | 1,961,435                          | 5,466,910 |



#### Total Number and Area of (Cooled) House Components in the Administrative Regions

Table 2

|     |                       |              |             |              |             |              | House Co   | mponents     |            |              |           |              |            |
|-----|-----------------------|--------------|-------------|--------------|-------------|--------------|------------|--------------|------------|--------------|-----------|--------------|------------|
| S/N | Administrative Region | Guests Liv   | ing Room    | Bedro        | ooms        | Living I     | Rooms      | Kitch        | nens       | Bathro       | ooms      | Ann          | exes       |
|     |                       | Total number | Area (m²)   | Total number | Area (m²)   | Total number | Area (m²)  | Total number | Area (m²)  | Total number | Area (m²) | Total number | Area (m²)  |
| 1   | Riyadh                | 1,415,531    | 32,160,747  | 3,261,239    | 54,038,057  | 1,010,160    | 24,834,790 | 347,370      | 8,147,829  | 69,115       | 1,119,005 | 270,343      | 6,468,393  |
| 2   | Makkah                | 1,572,391    | 33,239,774  | 2,918,722    | 49,261,455  | 862,569      | 17,312,453 | 396,386      | 8,444,485  | 78,521       | 2,357,603 | 24,293       | 809,183    |
| 3   | Madinah               | 373,427      | 8,035,102   | 651,535      | 11,287,349  | 243,530      | 5,837,250  | 73,281       | 1,787,722  | 25,404       | 317,256   | 6,113        | 172,801    |
| 4   | Al-Qassim             | 270,039      | 6,022,881   | 564,657      | 11,237,783  | 173,952      | 4,526,527  | 94,795       | 2,016,171  | 34,975       | 417,060   | 45,422       | 1,132,991  |
| 5   | Eastern Region        | 773,467      | 17,860,323  | 1,895,294    | 32,944,682  | 692,574      | 15,575,247 | 425,565      | 7,951,019  | 121,004      | 1,707,827 | 61,709       | 1,778,596  |
| 6   | Asir                  | 339,981      | 8,133,591   | 588,147      | 11,009,546  | 135,197      | 3,030,201  | 27,205       | 685,266    | 2,885        | 10,521    | 2,036        | 54,301     |
| 7   | Tabuk                 | 140,340      | 3,309,297   | 337,394      | 5,378,605   | 92,153       | 2,001,162  | 15,366       | 411,167    | 15,988       | 223,245   | 2,474        | 105,353    |
| 8   | Hail                  | 133,020      | 3,646,108   | 273,157      | 5,688,014   | 75,302       | 2,118,594  | 16,711       | 412,514    | 16,001       | 109,224   | 8,635        | 280,637    |
| 9   | Northern Borders      | 58,780       | 1,180,601   | 104,276      | 1,615,859   | 21,370       | 551,664    | 7,957        | 291,729    | 12,741       | 192,548   | 2,194        | 55,994     |
| 10  | Jazan                 | 236,470      | 4,814,590   | 430,610      | 6,936,204   | 186,312      | 4,034,102  | 118,662      | 1,880,087  | 146,323      | 867,431   | 4,784        | 79,319     |
| 11  | Najran                | 98,046       | 2,555,391   | 221,336      | 3,881,632   | 55,384       | 1,121,870  | 5,305        | 127,001    | 3,716        | 74,879    | 1,532        | 31,914     |
| 12  | Al-Bahah              | 64,705       | 1,655,825   | 118,488      | 2,234,252   | 33,953       | 848,682    | 16,414       | 361,786    | 11,963       | 116,911   | 562          | 11,522     |
| 13  | Al-Jouf               | 88,074       | 1,962,152   | 162,333      | 2,799,862   | 42,049       | 1,143,664  | 11,112       | 384,947    | 17,159       | 179,726   | 1,804        | 78,822     |
| 1   | Total of the Kingdom  | 5,564,271    | 124,576,382 | 11,527,188   | 198,313,300 | 3,624,505    | 82,936,206 | 1,556,129    | 32,901,723 | 555,795      | 7,693,236 | 431,901      | 11,059,826 |



#### Total Number and Area of (Heated) House Components in the Administrative Regions

Table 3

|     |                       |              |            |              |            |              | House Co   | mponents     |           |              |           |              |           |
|-----|-----------------------|--------------|------------|--------------|------------|--------------|------------|--------------|-----------|--------------|-----------|--------------|-----------|
| S/N | Administrative Region | Guests Livi  | ing Room   | Bedro        | ooms       | Living       | Rooms      | Kitch        | iens      | Bathr        | ooms      | Ann          | exes      |
|     |                       | Total number | Area (m²)  | Total number | Area (m²)  | Total number | Area (m²)  | Total number | Area (m²) | Total number | Area (m²) | Total number | Area (m²) |
| 1   | Riyadh                | 617,310      | 15,316,281 | 1,434,026    | 25,882,277 | 464,561      | 11,960,341 | 139,749      | 3,369,117 | 135,791      | 1,082,241 | 156,052      | 4,405,789 |
| 2   | Makkah                | 103,374      | 2,665,252  | 180,332      | 3,375,543  | 42,719       | 1,075,308  | 16,550       | 406,629   | 9,112        | 98,413    | 4,722        | 443,002   |
| 3   | Madinah               | 87,848       | 2,547,992  | 139,574      | 3,120,646  | 36,515       | 1,318,562  | 11,115       | 483,820   | 34,660       | 243,065   | 1,368        | 34,197    |
| 4   | Al-Qassim             | 173,626      | 4,166,681  | 378,682      | 7,950,689  | 110,281      | 2,942,191  | 65,606       | 1,398,302 | 42,481       | 508,498   | 33,073       | 867,841   |
| 5   | Eastern Region        | 209,188      | 5,106,413  | 551,714      | 10,290,540 | 220,728      | 4,962,114  | 52,203       | 912,853   | 79,194       | 441,060   | 19,543       | 668,167   |
| 6   | Asir                  | 247,316      | 5,647,375  | 476,005      | 8,235,356  | 116,433      | 2,408,853  | 26,158       | 504,924   | 24,264       | 88,346    | 679          | 18,496    |
| 7   | Tabuk                 | 98,334       | 2,420,211  | 239,508      | 3,540,368  | 70,908       | 1,506,488  | 11,850       | 418,091   | 17,500       | 282,082   | 1,188        | 64,384    |
| 8   | Hail                  | 121,818      | 3,472,606  | 250,974      | 5,404,344  | 66,579       | 1,923,177  | 13,263       | 329,823   | 16,444       | 111,073   | 8,419        | 276,674   |
| 9   | Northern Borders      | 52,412       | 1,201,433  | 84,623       | 1,563,732  | 19,441       | 562,778    | 5,949        | 290,175   | 10,088       | 165,273   | 2,109        | 58,085    |
| 10  | Jazan                 | 392          | 10,071     | 3,008        | 23,544     | 1,308        | 19,489     | 785          | 10,333    | 916          | 10,071    | 3,373        | 44,409    |
| 11  | Najran                | 57,146       | 1,527,169  | 134,490      | 2,312,770  | 34,769       | 717,353    | 1,028        | 38,875    | 1,327        | 9,282     | 638          | 14,681    |
| 12  | Al-Bahah              | 54,412       | 1,421,248  | 98,231       | 1,870,839  | 30,619       | 747,604    | 9,566        | 200,963   | 12,381       | 104,902   | 562          | 12,927    |
| 13  | Al-Jouf               | 75,022       | 1,787,225  | 141,896      | 2,576,662  | 43,433       | 1,172,230  | 10,982       | 394,307   | 17,176       | 180,299   | 1,702        | 75,644    |
| Т   | otal of the Kingdom   | 1,898,198    | 47,289,957 | 4,113,063    | 76,147,310 | 1,258,294    | 31,316,488 | 364,804      | 8,758,212 | 401,334      | 3,324,605 | 233,428      | 6,984,296 |



## Percentage of Electricity Sources Used in Houses in the Administrative Regions

Table 4

| S/N          | Administrative Region |                    |                     | Source of Elictricity |         |           |
|--------------|-----------------------|--------------------|---------------------|-----------------------|---------|-----------|
| <i>3</i> /1N | Administrative Region | Public Network (%) | Private network (%) | Private Generator (%) | N/A (%) | Other (%) |
| 1            | Riyadh                | 98.61              | 1.38                | 0.01                  | 0.00    | 100.00    |
| 2            | Makkah                | 99.92              | 0.07                | 0.01                  | 0.00    | 100.00    |
| 3            | Madinah               | 99.63              | 0.14                | 0.05                  | 0.18    | 100.00    |
| 4            | Al-Qassim             | 99.98              | 0.01                | 0.01                  | 0.00    | 100.00    |
| 5            | Eastern Region        | 99.68              | 0.16                | 0.16                  | 0.00    | 100.00    |
| 6            | Asir                  | 96.47              | 3.43                | 0.10                  | 0.00    | 100.00    |
| 7            | Tabuk                 | 99.41              | 0.56                | 0.03                  | 0.00    | 100.00    |
| 8            | Hail                  | 99.86              | 0.12                | 0.02                  | 0.00    | 100.00    |
| 9            | Northern Borders      | 99.17              | 0.81                | 0.02                  | 0.00    | 100.00    |
| 10           | Jazan                 | 99.11              | 0.00                | 0.89                  | 0.00    | 100.00    |
| 11           | Najran                | 99.10              | 0.13                | 0.33                  | 0.44    | 100.00    |
| 12           | Al-Bahah              | 99.64              | 0.07                | 0.01                  | 0.28    | 100.00    |
| 13           | Al-Jouf               | 98.86              | 1.11                | 0.03                  | 0.00    | 100.00    |
| Т            | otal of the Kingdom   | 99.19              | 0.61                | 0.13                  | 0.07    | 100.00    |



### Percentage of Electricity Source (Public Network) According to the Type of Houses in the Administrative Regions

Table 5

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 99.82                 | 98.19     | 100.00                               | 99.70                 | 98.24         | 99.59     |
| 2   | Makkah                | 100.00                | 100.00    | 100.00                               | 100.00                | 100.00        | 99.86     |
| 3   | Madinah               | 99.09                 | 100.00    | 100.00                               | 100.00                | 99.92         | 99.17     |
| 4   | Al-Qassim             | 99.97                 | 100.00    | 99.91                                | 100.00                | 100.00        | 100.00    |
| 5   | Eastern Region        | 99.62                 | 99.20     | 98.45                                | 99.89                 | 99.85         | 100.00    |
| 6   | Asir                  | 99.28                 | 90.94     | 81.70                                | 99.48                 | 97.95         | 100.00    |
| 7   | Tabuk                 | 99.58                 | 100.00    | 100.00                               | 100.00                | 99.44         | 98.55     |
| 8   | Hail                  | 99.63                 | 99.97     | 100.00                               | 99.85                 | 100.00        | 100.00    |
| 9   | Northern Borders      | 99.66                 | 99.24     | 100.00                               | 98.55                 | 98.95         | 100.00    |
| 10  | Jazan                 | 98.89                 | 99.86     | 94.34                                | 99.76                 | 99.69         | 100.00    |
| 11  | Najran                | 99.42                 | 99.09     | 100.00                               | 99.44                 | 99.66         | 93.94     |
| 12  | Al-Bahah              | 98.77                 | 100.00    | 100.00                               | 99.96                 | 99.85         | 99.53     |
| 13  | Al-Jouf               | 100.00                | 100.00    | 100.00                               | 100.00                | 98.13         | 98.79     |
| Т   | otal of the Kingdom   | 99.59                 | 98.98     | 98.18                                | 99.79                 | 99.38         | 99.19     |



# Percentage of Electricity Source (Public Network) According to Possession Type in the Administrative Regions

Table 6

| S/N          | Administrative Region |           | Possession type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 98.64     | 98.38           | 99.46                   |
| 2            | Makkah                | 99.92     | 99.97           | 99.67                   |
| 3            | Madinah               | 99.46     | 99.81           | 99.56                   |
| 4            | Al-Qassim             | 99.99     | 99.99           | 100.00                  |
| 5            | Eastern Region        | 99.56     | 99.80           | 99.51                   |
| 6            | Asir                  | 96.80     | 96.33           | 93.67                   |
| 7            | Tabuk                 | 99.93     | 99.32           | 97.77                   |
| 8            | Hail                  | 99.76     | 99.97           | 100.00                  |
| 9            | Northern Borders      | 99.44     | 98.82           | 100.00                  |
| 10           | Jazan                 | 98.82     | 99.54           | 100.00                  |
| 11           | Najran                | 99.32     | 99.84           | 95.83                   |
| 12           | Al-Bahah              | 99.31     | 100.00          | 100.00                  |
| 13           | Al-Jouf               | 99.98     | 99.87           | 86.66                   |
|              | Total of the Kingdom  | 99.88     | 99.79           | 97.89                   |



### Percentage of Electricity Source (Private Network) by Type of Housing Unit in the Administrative Regions

Table 7

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.00                  | 1.96      | 0.00                                 | 0.30                  | 1.76          | 0.39      |
| 2   | Makkah                | 0.20                  | 0.00      | 0.00                                 | 0.00                  | 0.01          | 0.39      |
| 3   | Madinah               | 0.30                  | 0.00      | 0.00                                 | 0.00                  | 0.08          | 0.00      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.09                                 | 0.00                  | 0.00          | 0.00      |
| 5   | Eastern Region        | 0.00                  | 0.55      | 0.00                                 | 0.00                  | 0.08          | 0.00      |
| 6   | Asir                  | 0.63                  | 8.86      | 17.85                                | 0.30                  | 2.05          | 0.00      |
| 7   | Tabuk                 | 0.51                  | 0.00      | 0.00                                 | 0.00                  | 0.56          | 1.45      |
| 8   | Hail                  | 0.37                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 9   | Northern Borders      | 0.28                  | 0.72      | 0.00                                 | 1.45                  | 1.05          | 0.00      |
| 10  | Jazan                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 11  | Najran                | 0.19                  | 0.00      | 0.00                                 | 0.00                  | 0.16          | 0.00      |
| 12  | Al-Bahah              | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.15          | 0.00      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 1.81          | 1.21      |
| То  | tal for the Kingdom   | 0.22                  | 1.33      | 1.78                                 | 0.24                  | 0.60          | 0.35      |



# Percentage of Electricity Source (Private Network) by Possession Type in the Administrative Regions

Table 8

| Table |                       |           | Possession type |                         |
|-------|-----------------------|-----------|-----------------|-------------------------|
| S/N   | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1     | Riyadh                | 1.35      | 1.62            | 0.46                    |
| 2     | Makkah                | 0.07      | 0.03            | 0.27                    |
| 3     | Madinah               | 0.11      | 0.19            | 0.00                    |
| 4     | Al-Qassim             | 0.00      | 0.01            | 0.00                    |
| 5     | Eastern Region        | 0.17      | 0.09            | 0.41                    |
| 6     | Asir                  | 3.00      | 3.67            | 6.33                    |
| 7     | Tabuk                 | 0.00      | 0.68            | 2.23                    |
| 8     | Hail                  | 0.23      | 0.00            | 0.00                    |
| 9     | Northern Borders      | 0.53      | 1.16            | 0.00                    |
| 10    | Jazan                 | 0.00      | 0.00            | 0.00                    |
| 11    | Najran                | 0.13      | 0.00            | 0.60                    |
| 12    | Al-Bahah              | 0.14      | 0.00            | 0.00                    |
| 13    | Al-Jouf               | 0.00      | 0.13            | 13.01                   |
|       | Total for the Kingdom | 0.50      | 0.65            | 0.98                    |



## Percentage of Electricity Source (Private Generator) by Type of Housing Unit in the Administrative Regions

Table 9

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.18                  | 0.01      | 0.00                                 | 0.00                  | 0.00          | 0.02      |
| 2   | Makkah                | 0.01                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.14      |
| 3   | Madinah               | 0.15                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 4   | Al-Qassim             | 0.03                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 5   | Eastern Region        | 0.38                  | 0.25      | 1.55                                 | 0.11                  | 0.07          | 0.00      |
| 6   | Asir                  | 0.09                  | 0.20      | 0.45                                 | 0.21                  | 0.00          | 0.00      |
| 7   | Tabuk                 | 0.08                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 8   | Hail                  | 0.00                  | 0.03      | 0.00                                 | 0.17                  | 0.00          | 0.00      |
| 9   | Northern Borders      | 0.06                  | 0.04      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 1.13                  | 0.14      | 5.66                                 | 0.24                  | 0.31          | 0.00      |
| 11  | Najran                | 0.39                  | 0.91      | 0.00                                 | 0.56                  | 0.18          | 0.00      |
| 12  | Al-Bahah              | 0.00                  | 0.00      | 0.00                                 | 0.04                  | 0.00          | 0.00      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.06          | 0.00      |
| T   | otal for the Kingdom  | 0.23                  | 0.11      | 0.59                                 | 0.09                  | 0.03          | 0.02      |



# Percentage of Electricity Source (Private Generator) by Possession Type in the Administrative Regions

Table 10

| S/N          | Administrative Region |           | Possession type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.01      | 0.00            | 0.08                    |
| 2            | Makkah                | 0.01      | 0.00            | 0.06                    |
| 3            | Madinah               | 0.11      | 0.00            | 0.00                    |
| 4            | Al-Qassim             | 0.01      | 0.00            | 0.00                    |
| 5            | Eastern Region        | 0.27      | 0.11            | 0.08                    |
| 6            | Asir                  | 0.20      | 0.00            | 0.00                    |
| 7            | Tabuk                 | 0.07      | 0.00            | 0.00                    |
| 8            | Hail                  | 0.01      | 0.03            | 0.00                    |
| 9            | Northern Borders      | 0.01      | 0.02            | 0.00                    |
| 10           | Jazan                 | 1.18      | 0.46            | 0.00                    |
| 11           | Najran                | 0.55      | 0.16            | 0.00                    |
| 12           | Al-Bahah              | 0.01      | 0.00            | 0.00                    |
| 13           | Al-Jouf               | 0.02      | 0.00            | 0.33                    |
|              | Total for the Kingdom | 0.19      | 0.04            | 0.05                    |



## Percentage of Housing Units With no Electricity Source by Type of Housing Unit in the Administrative Regions

Table 11

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 2   | Makkah                | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 3   | Madinah               | 0.46                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.83      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 5   | Eastern Region        | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 6   | Asir                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 7   | Tabuk                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 8   | Hail                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 11  | Najran                | 0.19                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 6.06      |
| 12  | Al-Bahah              | 1.23                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.47      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| Т   | otal for the Kingdom  | 0.11                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.47      |



# Percentage of Housing Units With no Electricity Source by Possession Type in the Administrative Regions

Table 12

| S/N          | Administrative Region |           | Possession type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.00      | 0.00            | 0.00                    |
| 2            | Makkah                | 0.00      | 0.00            | 0.00                    |
| 3            | Madinah               | 0.32      | 0.00            | 0.44                    |
| 4            | Al-Qassim             | 0.00      | 0.00            | 0.00                    |
| 5            | Eastern Region        | 0.00      | 0.00            | 0.00                    |
| 6            | Asir                  | 0.00      | 0.00            | 0.00                    |
| 7            | Tabuk                 | 0.00      | 0.00            | 0.00                    |
| 8            | Hail                  | 0.00      | 0.00            | 0.00                    |
| 9            | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10           | Jazan                 | 0.00      | 0.00            | 0.00                    |
| 11           | Najran                | 0.00      | 0.00            | 3.75                    |
| 12           | Al-Bahah              | 0.54      | 0.00            | 0.00                    |
| 13           | Al-Jouf               | 0.00      | 0.00            | 0.00                    |
|              | Total for the Kingdom | 0.05      | 0.00            | 0.24                    |



## Percentage of Housing Units Which Use Solar Energy in the Administrative Region

Table 13

| S/N | Administrative Region | Total Number of Units | Yes (%) | No (%) | Total (%) |
|-----|-----------------------|-----------------------|---------|--------|-----------|
|     |                       |                       |         |        |           |
| 1   | Riyadh                | 1,350,639             | 1.17    | 98.83  | 100.00    |
| 2   | Makkah                | 1,495,392             | 1.23    | 98.77  | 100.00    |
| 3   | Madinah               | 376,129               | 1.00    | 99.00  | 100.00    |
| 4   | Al-Qassim             | 272,078               | 0.88    | 99.12  | 100.00    |
| 5   | Eastern Region        | 758,916               | 1.88    | 98.12  | 100.00    |
| 6   | Asir                  | 398,969               | 1.42    | 98.58  | 100.00    |
| 7   | Tabuk                 | 166,845               | 0.79    | 99.21  | 100.00    |
| 8   | Hail                  | 111,826               | 2.84    | 97.16  | 100.00    |
| 9   | Northern Borders      | 47,848                | 1.16    | 98.84  | 100.00    |
| 10  | Jazan                 | 220,238               | 0.96    | 99.04  | 100.00    |
| 11  | Najran                | 106,141               | 1.87    | 98.13  | 100.00    |
| 12  | Al-Bahah              | 83,387                | 0.77    | 99.23  | 100.00    |
| 13  | Al-Jouf               | 78,502                | 0.85    | 99.15  | 100.00    |
| T-  | otal for the Kingdom  | 5,466,910             | 1.30    | 98.70  | 100.00    |



## Percentage of Fuel Used in the Unit for Cooking in the Administrative Regions

Table 14

| S/N  | Administrative Region |         |                 | Fuel Used for Cooking |          |           |
|------|-----------------------|---------|-----------------|-----------------------|----------|-----------|
| 3/11 | Administrative Region | Gas (%) | Electricity (%) | Wood(%)               | Other(%) | Total (%) |
| 1    | Riyadh                | 90.95   | 8.77            | 0.07                  | 0.21     | 100.00    |
| 2    | Makkah                | 94.90   | 4.58            | 0.34                  | 0.18     | 100.00    |
| 3    | Madinah               | 91.89   | 6.56            | 0.49                  | 1.06     | 100.00    |
| 4    | Al-Qassim             | 97.21   | 2.64            | 0.03                  | 0.12     | 100.00    |
| 5    | Eastern Region        | 77.12   | 21.39           | 0.02                  | 1.47     | 100.00    |
| 6    | Asir                  | 94.08   | 4.92            | 1.00                  | 0.00     | 100.00    |
| 7    | Tabuk                 | 97.13   | 2.21            | 0.44                  | 0.22     | 100.00    |
| 8    | Hail                  | 94.86   | 4.44            | 0.58                  | 0.12     | 100.00    |
| 9    | Northern Borders      | 97.84   | 2.11            | 0.05                  | 0.00     | 100.00    |
| 10   | Jazan                 | 93.64   | 0.82            | 5.23                  | 0.31     | 100.00    |
| 11   | Najran                | 91.57   | 5.09            | 3.28                  | 0.06     | 100.00    |
| 12   | Al-Bahah              | 98.63   | 0.57            | 0.63                  | 0.17     | 100.00    |
| 13   | Al-Jouf               | 95.80   | 3.18            | 0.37                  | 0.65     | 100.00    |
|      | Total for the Kingdom | 92.16   | 6.71            | 0.72                  | 0.41     | 100.00    |



## Percentage of Fuel Used in the Unit for Cooking (Gas) by Type of Unit in the Administrative Regions

Table 15

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 98.84                 | 91.35     | 99.71                                | 93.89                 | 88.80         | 89.49     |
| 2   | Makkah                | 97.32                 | 83.84     | 99.17                                | 91.31                 | 94.94         | 93.63     |
| 3   | Madinah               | 98.01                 | 65.85     | 96.09                                | 93.12                 | 92.64         | 68.34     |
| 4   | Al-Qassim             | 99.71                 | 95.89     | 99.53                                | 95.65                 | 97.04         | 100.00    |
| 5   | Eastern Region        | 94.09                 | 64.05     | 84.11                                | 71.35                 | 80.63         | 61.59     |
| 6   | Asir                  | 95.20                 | 93.82     | 96.74                                | 90.70                 | 94.67         | 91.43     |
| 7   | Tabuk                 | 98.27                 | 98.44     | 100.00                               | 98.20                 | 95.88         | 98.33     |
| 8   | Hail                  | 94.87                 | 93.92     | 98.68                                | 95.05                 | 94.82         | 96.18     |
| 9   | Northern Borders      | 97.48                 | 98.43     | 99.38                                | 99.28                 | 97.18         | 98.80     |
| 10  | Jazan                 | 90.77                 | 91.81     | 96.34                                | 92.06                 | 97.46         | 98.00     |
| 11  | Najran                | 90.33                 | 91.55     | 87.48                                | 90.29                 | 92.03         | 99.63     |
| 12  | Al-Bahah              | 99.02                 | 97.33     | 99.45                                | 99.67                 | 98.22         | 99.47     |
| 13  | Al-Jouf               | 98.48                 | 98.61     | 97.55                                | 99.34                 | 97.31         | 79.09     |
|     | Total for the Kingdom | 95.86                 | 87.17     | 96.63                                | 91.89                 | 92.12         | 89.08     |



# Percentage of Fuel Used in the Unit for Cooking (Gas) by Possession Type in the Administrative Regions

Table 16

| S/N          | Administrative Region |           | Possession type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 94.28     | 90.10           | 86.89                   |
| 2            | Makkah                | 92.37     | 96.06           | 96.03                   |
| 3            | Madinah               | 94.74     | 91.40           | 82.53                   |
| 4            | Al-Qassim             | 96.54     | 97.18           | 99.43                   |
| 5            | Eastern Region        | 71.06     | 85.69           | 56.63                   |
| 6            | Asir                  | 93.01     | 95.19           | 94.18                   |
| 7            | Tabuk                 | 97.48     | 96.91           | 96.82                   |
| 8            | Hail                  | 93.73     | 95.86           | 97.57                   |
| 9            | Northern Borders      | 98.47     | 98.99           | 85.47                   |
| 10           | Jazan                 | 92.16     | 95.86           | 96.77                   |
| 11           | Najran                | 89.21     | 96.70           | 82.88                   |
| 12           | Al-Bahah              | 98.92     | 97.81           | 99.10                   |
| 13           | Al-Jouf               | 98.77     | 95.03           | 85.93                   |
|              | Total for the Kingdom | 91.88     | 93.52           | 86.61                   |



## Percentage of Fuel Used in the Unit for Cooking (Electricity) by Type of Unit in the Administrative Regions

Table 17

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 1.11                  | 8.47      | 0.29                                 | 5.97                  | 10.85         | 9.73      |
| 2   | Makkah                | 1.14                  | 16.06     | 0.54                                 | 8.10                  | 4.86          | 5.52      |
| 3   | Madinah               | 0.29                  | 34.15     | 1.45                                 | 6.88                  | 7.17          | 15.83     |
| 4   | Al-Qassim             | 0.29                  | 4.11      | 0.47                                 | 4.26                  | 2.53          | 0.00      |
| 5   | Eastern Region        | 5.86                  | 35.84     | 15.88                                | 28.54                 | 19.06         | 4.65      |
| 6   | Asir                  | 1.11                  | 4.94      | 2.63                                 | 7.95                  | 5.24          | 8.57      |
| 7   | Tabuk                 | 0.41                  | 1.56      | 0.00                                 | 1.80                  | 3.68          | 1.67      |
| 8   | Hail                  | 3.85                  | 5.68      | 1.32                                 | 4.53                  | 4.88          | 2.59      |
| 9   | Northern Borders      | 2.44                  | 1.39      | 0.62                                 | 0.72                  | 2.82          | 1.20      |
| 10  | Jazan                 | 0.46                  | 1.39      | 1.08                                 | 2.48                  | 0.77          | 0.00      |
| 11  | Najran                | 3.15                  | 6.55      | 5.63                                 | 5.65                  | 7.01          | 0.10      |
| 12  | Al-Bahah              | 0.00                  | 0.29      | 0.00                                 | 0.00                  | 1.15          | 0.00      |
| 13  | Al-Jouf               | 0.89                  | 1.07      | 1.63                                 | 0.66                  | 2.28          | 14.85     |
|     | Total for the Kingdom | 1.52                  | 12.23     | 2.46                                 | 7.34                  | 7.51          | 5.73      |



# Percentage of Fuel Used in the Unit for Cooking (Electricity) by Possession Type in the Administrative Regions

Table 18

| S/N          | Administrative Region |           | Possession type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 5.47      | 9.61            | 12.79                   |
| 2            | Makkah                | 6.57      | 3.66            | 3.79                    |
| 3            | Madinah               | 4.08      | 7.91            | 10.48                   |
| 4            | Al-Qassim             | 3.46      | 2.42            | 0.57                    |
| 5            | Eastern Region        | 28.85     | 14.00           | 32.36                   |
| 6            | Asir                  | 5.07      | 4.70            | 5.82                    |
| 7            | Tabuk                 | 1.49      | 2.98            | 1.28                    |
| 8            | Hail                  | 5.34      | 3.65            | 2.29                    |
| 9            | Northern Borders      | 1.44      | 1.00            | 14.53                   |
| 10           | Jazan                 | 0.97      | 0.62            | 0.00                    |
| 11           | Najran                | 5.81      | 1.47            | 15.65                   |
| 12           | Al-Bahah              | 0.08      | 1.36            | 0.68                    |
| 13           | Al-Jouf               | 0.85      | 3.55            | 12.36                   |
|              | Total for the Kingdom | 6.64      | 5.92            | 10.88                   |



## Percentage of Fuel Used in the Unit for Cooking (Wood) by Type of Unit in the Administrative Regions

Table 19

|     |                       |                       |           | Type of Ho                           | f Housing Unit        |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.04                  | 0.17      | 0.00                                 | 0.12                  | 0.03          | 0.00      |
| 2   | Makkah                | 1.27                  | 0.02      | 0.29                                 | 0.59                  | 0.04          | 0.46      |
| 3   | Madinah               | 1.38                  | 0.00      | 2.46                                 | 0.00                  | 0.00          | 0.00      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.09                  | 0.06          | 0.00      |
| 5   | Eastern Region        | 0.01                  | 0.09      | 0.00                                 | 0.11                  | 0.00          | 0.00      |
| 6   | Asir                  | 3.69                  | 1.24      | 0.63                                 | 1.33                  | 0.09          | 0.00      |
| 7   | Tabuk                 | 1.32                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 8   | Hail                  | 1.28                  | 0.40      | 0.00                                 | 0.42                  | 0.07          | 0.00      |
| 9   | Northern Borders      | 0.08                  | 0.18      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 8.65                  | 6.12      | 2.52                                 | 4.42                  | 1.43          | 0.00      |
| 11  | Najran                | 6.43                  | 1.72      | 6.78                                 | 4.02                  | 0.95          | 0.25      |
| 12  | Al-Bahah              | 0.98                  | 2.30      | 0.55                                 | 0.25                  | 0.31          | 0.53      |
| 13  | Al-Jouf               | 0.63                  | 0.32      | 0.82                                 | 0.00                  | 0.40          | 0.00      |
|     | Total for the Kingdom | 2.51                  | 0.56      | 0.90                                 | 0.71                  | 0.15          | 0.15      |



# Percentage of Fuel Used in the Unit for Cooking (Wood) by Possession Type in the Administrative Regions

Table 20

| Tubic | ble 20                |           |                 |                         |  |  |  |
|-------|-----------------------|-----------|-----------------|-------------------------|--|--|--|
| S/N   | Administrative Region |           | Possession type |                         |  |  |  |
| 3/14  | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |  |  |  |
| 1     | Riyadh                | 0.16      | 0.03            | 0.02                    |  |  |  |
| 2     | Makkah                | 0.83      | 0.13            | 0.00                    |  |  |  |
| 3     | Madinah               | 1.05      | 0.00            | 0.44                    |  |  |  |
| 4     | Al-Qassim             | 0.00      | 0.08            | 0.00                    |  |  |  |
| 5     | Eastern Region        | 0.06      | 0.01            | 0.00                    |  |  |  |
| 6     | Asir                  | 1.91      | 0.11            | 0.00                    |  |  |  |
| 7     | Tabuk                 | 1.03      | 0.00            | 0.22                    |  |  |  |
| 8     | Hail                  | 0.93      | 0.16            | 0.14                    |  |  |  |
| 9     | Northern Borders      | 0.09      | 0.01            | 0.00                    |  |  |  |
| 10    | Jazan                 | 6.50      | 3.28            | 3.23                    |  |  |  |
| 11    | Najran                | 4.87      | 1.82            | 1.40                    |  |  |  |
| 12    | Al-Bahah              | 0.97      | 0.30            | 0.22                    |  |  |  |
| 13    | Al-Jouf               | 0.38      | 0.41            | 0.08                    |  |  |  |
|       | Total for the Kingdom | 1.39      | 0.29            | 0.18                    |  |  |  |



## Percentage of Fuel Used in the Unit for Cooking (Other) by Type of Unit in the Administrative Regions

Table 21

| lable | ne zi                 |                       |           |                                      |                       |               |           |
|-------|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
|       |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
| S/N   | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1     | Riyadh                | 0.01                  | 0.01      | 0.00                                 | 0.02                  | 0.32          | 0.78      |
| 2     | Makkah                | 0.27                  | 0.08      | 0.00                                 | 0.00                  | 0.16          | 0.39      |
| 3     | Madinah               | 0.32                  | 0.00      | 0.00                                 | 0.00                  | 0.19          | 15.83     |
| 4     | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.37          | 0.00      |
| 5     | Eastern Region        | 0.04                  | 0.02      | 0.01                                 | 0.00                  | 0.31          | 33.76     |
| 6     | Asir                  | 0.00                  | 0.00      | 0.00                                 | 0.02                  | 0.00          | 0.00      |
| 7     | Tabuk                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.44          | 0.00      |
| 8     | Hail                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.23          | 1.23      |
| 9     | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10    | Jazan                 | 0.12                  | 0.68      | 0.06                                 | 1.04                  | 0.34          | 2.00      |
| 11    | Najran                | 0.09                  | 0.18      | 0.11                                 | 0.04                  | 0.01          | 0.02      |
| 12    | Al-Bahah              | 0.00                  | 0.08      | 0.00                                 | 0.08                  | 0.32          | 0.00      |
| 13    | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.01          | 6.06      |
| Т     | otal for the Kingdom  | 0.11                  | 0.04      | 0.01                                 | 0.06                  | 0.22          | 5.04      |



# Percentage of Fuel Used in the Unit for Cooking (Other) by Possession Type in the Administrative Regions

Table 22

| S/N         | Administrative Region |           | Possession type |                         |  |
|-------------|-----------------------|-----------|-----------------|-------------------------|--|
| <i>3/</i> N | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |  |
| 1           | Riyadh                | 0.09      | 0.26            | 0.30                    |  |
| 2           | Makkah                | 0.23      | 0.15            | 0.18                    |  |
| 3           | Madinah               | 0.13      | 0.69            | 6.55                    |  |
| 4           | Al-Qassim             | 0.00      | 0.32            | 0.00                    |  |
| 5           | Eastern Region        | 0.03      | 0.30            | 11.01                   |  |
| 6           | Asir                  | 0.01      | 0.00            | 0.00                    |  |
| 7           | Tabuk                 | 0.00      | 0.11 1.68       |                         |  |
| 8           | Hail                  | 0.00      | 0.33            | 0.00                    |  |
| 9           | Northern Borders      | 0.00      | 0.00            | 0.00                    |  |
| 10          | Jazan                 | 0.37      | 0.24            | 0.00                    |  |
| 11          | Najran                | 0.11      | 0.01            | 0.07                    |  |
| 12          | Al-Bahah              | 0.03      | 0.53            | 0.00                    |  |
| 13          | Al-Jouf               | 0.00      | 1.01            | 1.63                    |  |
|             | Total for the Kingdom | 0.09      | 0.27            | 2.33                    |  |



## Percentage of Housing Units Which Use Biomass in the Administrative Regions

Table 23

| S/N | Administrative Region | Number of Units | Yes (%) | No (%) | Total  |
|-----|-----------------------|-----------------|---------|--------|--------|
| 1   | Riyadh                | 1,350,639       | 6.49    | 93.51  | 100.00 |
| 2   | Makkah                | 1,495,392       | 4.71    | 95.29  | 100.00 |
| 3   | Madinah               | 376,129         | 3.88    | 96.12  | 100.00 |
| 4   | Al-Qassim             | 272,078         | 8.88    | 91.12  | 100.00 |
| 5   | Eastern Region        | 758,916         | 7.51    | 92.49  | 100.00 |
| 6   | Asir                  | 398,969         | 7.55    | 92.45  | 100.00 |
| 7   | Tabuk                 | 166,845         | 3.90    | 96.10  | 100.00 |
| 8   | Hail                  | 111,826         | 11.45   | 88.55  | 100.00 |
| 9   | Northern Borders      | 47,848          | 6.87    | 93.13  | 100.00 |
| 10  | Jazan                 | 220,238         | 14.80   | 85.20  | 100.00 |
| 11  | Najran                | 106,141         | 22.85   | 77.15  | 100.00 |
| 12  | Al-Bahah              | 83,387          | 13.23   | 86.77  | 100.00 |
| 13  | Al-Jouf               | 78,502          | 11.27   | 88.73  | 100.00 |
|     | Total of the Kingdom  | 5,466,910       | 9.49    | 90.51  | 100.00 |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Administrative Regions

Table 24

| S/N  | Administrative Region | Number of Units                   | Wo      | ood    | Co      | Coal   |         | Agricultural Waste |  |
|------|-----------------------|-----------------------------------|---------|--------|---------|--------|---------|--------------------|--|
| 3/11 | Administrative Region | istrative Region Number of Offits | Yes (%) | No (%) | Yes (%) | No (%) | Yes (%) | No (%)             |  |
| 1    | Riyadh                | 1,350,639                         | 10.55   | 89.45  | 8.86    | 91.14  | 0.07    | 99.93              |  |
| 2    | Makkah                | 1,495,392                         | 2.72    | 97.28  | 11.36   | 88.64  | 0.04    | 99.96              |  |
| 3    | Madinah               | 376,129                           | 4.35    | 95.65  | 6.24    | 93.76  | 1.06    | 98.94              |  |
| 4    | Al-Qassim             | 272,078                           | 19.29   | 80.71  | 6.74    | 93.26  | 0.60    | 99.40              |  |
| 5    | Eastern Region        | 758,916                           | 3.35    | 96.65  | 19.19   | 80.81  | 0.00    | 100.00             |  |
| 6    | Asir                  | 398,969                           | 14.82   | 85.18  | 7.66    | 92.34  | 0.18    | 99.82              |  |
| 7    | Tabuk                 | 166,845                           | 8.13    | 91.87  | 3.53    | 96.47  | 0.05    | 99.95              |  |
| 8    | Hail                  | 111,826                           | 15.21   | 84.79  | 17.19   | 82.81  | 1.95    | 98.05              |  |
| 9    | Northern Borders      | 47,848                            | 4.19    | 95.81  | 15.64   | 84.36  | 0.23    | 99.77              |  |
| 10   | Jazan                 | 220,238                           | 28.46   | 71.54  | 11.73   | 88.27  | 4.22    | 95.78              |  |
| 11   | Najran                | 106,141                           | 36.75   | 63.25  | 25.72   | 74.28  | 6.08    | 93.92              |  |
| 12   | Al-Bahah              | 83,387                            | 10.83   | 89.17  | 28.60   | 71.40  | 0.26    | 99.74              |  |
| 13   | Al-Jouf               | 78,502                            | 13.45   | 86.55  | 20.16   | 79.84  | 0.20    | 99.80              |  |
| To   | otal of the Kingdom   | 5,466,910                         | 8.93    | 91.07  | 11.61   | 88.39  | 0.48    | 99.52              |  |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



## Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Kingdom

Table 25

|                      | Number of Units  | Type of Usage | Biomass Used |      |                    |
|----------------------|------------------|---------------|--------------|------|--------------------|
|                      | Number of States |               | Wood         | Coal | Agricultural Waste |
| Total of the Kingdom | 5,466,910        | cooking/ BBQ  | 3.25         | 9.28 | 0.27               |
|                      |                  | Heating       | 6.47         | 3.27 | 0.25               |
|                      |                  | Other         | 0.03         | 0.44 | 0.02               |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in Riyadh

Table 25-1

| S/N | Administrative Region                  | Administrative Region Number of Units | Type of Usage | Biomass Used |                    |      |
|-----|--|---------------------------------------|---------------|--------------|--------------------|------|
| 3/1 | Administrative Region Number of Offics | Type of osage                         | Wood          | Coal         | Agricultural Waste |      |
|     |  |                                       | cooking/ BBQ  | 0.78         | 8.05               | 0.02 |
| 1   | 1 Riyadh                               | 1,350,639                             | Heating       | 10.14        | 1.73               | 0.05 |
|     |  |                                       |               | 0.00         | 0.00               | 0.00 |

Reference: Household Energy Survey 2017



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in Makkah

Table 25-2

| S/N  | Administrative Region Number of Units | Number of Units | Type of Usage | Biomass Used |                    |      |
|------|---------------------------------------|-----------------|---------------|--------------|--------------------|------|
| 3/14 |                                       | Type of osage   | Wood          | Coal         | Agricultural Waste |      |
|      |                                       |                 | cooking/ BBQ  | 1.56         | 6.93               | 0.04 |
| 2    | 2 Makkah                              | 1,495,392       | Heating       | 1.23         | 4.02               | 0.04 |
|      |                                       |                 |               | 0.00         | 1.26               | 0.02 |

Reference: Household Energy Survey 2017



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Madinah

Table 25-3

| S/N  | S/N Administrative Region Number of Units | Number of Units | Type of Usage | Biomass Used |      |                    |
|------|---|-----------------|---------------|--------------|------|--------------------|
| 3/14 |   | Number of omis  |               | Wood         | Coal | Agricultural Waste |
|      | 3 Madinah                                 | Madinah 376,129 | cooking/ BBQ  | 1.51         | 5.56 | 0.36               |
| 3    |   |                 | Heating       | 3.58         | 3.02 | 0.88               |
|      |   |                 | Other         | 0.00         | 0.13 | 0.00               |

Reference: Household Energy Survey 2017

### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Al-Qassim

**Table 25-4** 

| S/N | Administrative Region | Number of Units | Type of Usage |       | Biomass Used       |      |
|-----|-----------------------|-----------------|---------------|-------|--------------------|------|
|     |                       |                 | Wood          | Coal  | Agricultural Waste |      |
|     |                       |                 | cooking/ BBQ  | 0.27  | 5.28               | 0.16 |
| 4   | Al-Qassim             | 272,078         | Heating       | 19.12 | 1.69               | 0.43 |
|     |                       |                 | Other         | 0.00  | 0.00               | 0.00 |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Eastern Region

Table 25-5

| S/N  | Administrative Region Number of Units | Jnits Type of Usage -  | Biomass Used |      |                    |      |
|------|---------------------------------------|------------------------|--------------|------|--------------------|------|
| 3/14 |                                       |                        | Wood         | Coal | Agricultural Waste |      |
|      |                                       |                        | cooking/ BBQ | 0.25 | 18.49              | 0.00 |
| 5    | 5 Eastern Region                      | Eastern Region 758,916 | Heating      | 3.17 | 1.77               | 0.00 |
|      |                                       |                        | Other        | 0.03 | 0.08               | 0.00 |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Asir

Table 25-6

| S/N  | Administrative Region                  | nistrative Region Number of Units | Type of Usage | Biomass Used |                    |      |
|------|--|-----------------------------------|---------------|--------------|--------------------|------|
| 3/14 | Administrative Region Number of Offics | Type of osage                     | Wood          | Coal         | Agricultural Waste |      |
|      |  | Asir 398,969                      | cooking/ BBQ  | 6.68         | 2.94               | 0.00 |
| 6    | 6 Asir                                 |                                   | Heating       | 9.20         | 4.80               | 0.00 |
|      |  |                                   | Other         | 0.18         | 0.18               | 0.18 |

Reference: Household Energy Survey 2017



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Tabuk

Table 25-7

| S/N  | Administrative Region Number of Units | Type of Usage | Biomass Used |      |                    |      |
|------|---------------------------------------|---------------|--------------|------|--------------------|------|
| 3/11 |                                       |               | Wood         | Coal | Agricultural Waste |      |
|      |                                       | Tabuk 166,845 | cooking/ BBQ | 1.95 | 2.17               | 0.05 |
| 7    | 7 Tabuk                               |               | Heating      | 7.67 | 1.65               | 0.05 |
|      |                                       |               | Other        | 0.11 | 0.00               | 0.05 |

Reference: Household Energy Survey 2017



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Hail

Table 25-8

| S/N          | Administrative Region                 | Administrative Region Number of Units | Type of Usage | Biomass Used |                    |      |
|--------------|---------------------------------------|---------------------------------------|---------------|--------------|--------------------|------|
| <i>3/</i> 10 | Administrative negion Number of onits | Type of Osage                         | Wood          | Coal         | Agricultural Waste |      |
|              |                                       | Hail 111,826                          | cooking/ BBQ  | 5.57         | 14.16              | 0.28 |
| 8            | 8 Hail                                |                                       | Heating       | 14.75        | 5.93               | 1.67 |
|              |                                       |                                       | Other         | 0.06         | 0.06               | 0.05 |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Northern Borders

Table 25-9

| S/N  | Administrative Region Number of Units | nits Type of Usage -    | Biomass Used |      |                    |      |
|------|---------------------------------------|-------------------------|--------------|------|--------------------|------|
| 3/14 |                                       |                         | Wood         | Coal | Agricultural Waste |      |
|      |                                       | Northern Borders 47,848 | cooking/ BBQ | 0.42 | 15.17              | 0.23 |
| 9    | 9 Northern Borders                    |                         | Heating      | 4.07 | 4.57               | 0.06 |
|      |                                       |                         | Other        | 0.00 | 0.06               | 0.11 |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Jazan

Table 25-10

| S/N  | Administrative Region Number of Units | Type of Usage - | Biomass Used |       |                    |      |
|------|---------------------------------------|-----------------|--------------|-------|--------------------|------|
| 3/14 |                                       |                 | Wood         | Coal  | Agricultural Waste |      |
|      | 10 Jazan                              | Jazan 220,238   | cooking/ BBQ | 28.46 | 9.77               | 4.22 |
| 10   |                                       |                 | Heating      | 0.00  | 2.55               | 0.23 |
|      |                                       |                 | Other        | 0.00  | 0.12               | 0.05 |

Reference: Household Energy Survey 2017



#### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Najran

Table 25-11

| S/N           | Administrative Region    | Number of Units | Type of Usage |       | Biomass Used |                                   |
|---------------|--------------------------|-----------------|---------------|-------|--------------|-----------------------------------|
| -5/1 <b>1</b> | Autilitistrative Negrori | Number of omes  | Type or olage | Wood  | Coal         | Agricultural Waste                |
|               |                          |                 | cooking/ BBQ  | 25.07 | 21.75        | Agricultural Waste 1.99 4.72 0.00 |
| 11            | Najran 106,141           | 106,141         | Heating       | 26.88 | 12.00        | 4.72                              |
|               |                          |                 | Other         | 0.00  | 0.12         | 0.00                              |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



#### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Al-Bahah

Table 25-12

| S/N           | Administrative Region | Number of Units | Biomass Used Type of Usage |       |       |                    |
|---------------|-----------------------|-----------------|----------------------------|-------|-------|--------------------|
| -5/1 <b>1</b> | Administrative Region | Number of omes  | Type of Gage               | Wood  | Coal  | Agricultural Waste |
|               |                       |                 | cooking/ BBQ               | 8.77  | 27.54 | 0.26               |
| 12            | Al-Bahah 83,387       | Heating         | 5.53                       | 12.67 | 0.26  |                    |
|               |                       |                 | Other                      | 0.00  | 0.09  | 0.09               |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



#### Percentage of Housing Units Which Use Biomass (Wood, Coal and Agricultural Waste) in the Al-Jouf

Table 25-13

| S/N  | Administrative Region   | Number of Units | Type of Usage |       | Biomass Used |                    |
|------|-------------------------|-----------------|---------------|-------|--------------|--------------------|
| 3/11 | Autilitistrative Region | Number of omes  | Type of Osuge | Wood  | Coal         | Agricultural Waste |
|      |                         |                 | cooking/ BBQ  | 3.47  | 14.82        | 0.05               |
| 13   | Al-Jouf 78,502          | 78,502          | Heating       | 12.64 | 8.63         | 0.20               |
|      |                         |                 | Other         | 0.58  | 3.69         | 0.00               |

<sup>\*</sup>usage of wood, coal and agricultural waste in (2016)



#### Percentage of Households Who Use Diesel (Fuel oil) in the Administrative Regions

Table 26

| S/N | Administrative Region | Number of Units | Yes (%) | No (%) | Total (%) |
|-----|-----------------------|-----------------|---------|--------|-----------|
| 1   | Riyadh                | 1,350,639       | 0.08    | 99.92  | 100.00    |
| 2   | Makkah                | 1,495,392       | 0.10    | 99.90  | 100.00    |
| 3   | Madinah               | 376,129         | 0.09    | 99.91  | 100.00    |
| 4   | Al-Qassim             | 272,078         | 0.05    | 99.95  | 100.00    |
| 5   | Eastern Region        | 758,916         | 0.55    | 99.45  | 100.00    |
| 6   | Asir                  | 398,969         | 0.79    | 99.21  | 100.00    |
| 7   | Tabuk                 | 166,845         | 0.06    | 99.94  | 100.00    |
| 8   | Hail                  | 111,826         | 0.12    | 99.88  | 100.00    |
| 9   | Northern Borders      | 47,848          | 0.11    | 99.89  | 100.00    |
| 10  | Jazan                 | 220,238         | 2.97    | 97.03  | 100.00    |
| 11  | Najran                | 106,141         | 1.03    | 98.97  | 100.00    |
| 12  | Al-Bahah              | 83,387          | 0.09    | 99.91  | 100.00    |
| 13  | Al-Jouf               | 78,502          | 0.12    | 99.88  | 100.00    |
|     | Total of the Kingdom  | 5,466,910       | 0.34    | 99.66  | 100       |

<sup>\*</sup>Fuel usage in (2016)



#### Consumption of Diesel (Fuel Oil) in Housing Units by Type of Usage in the Administrative Regions

Table 27

| S/N                  | Administrative Region | Type of Usage | Units Using Diesel | Total Volume C | onsumed (Litre)  |
|----------------------|-----------------------|---------------|--------------------|----------------|------------------|
| 3/IN                 | Auministrative Region | Type of Osage | Percentage         | Winter         | Rest of the Year |
| 1                    | Riyadh                |               | 0.08               | 118,340        | 87,648           |
| 2                    | Makkah                |               | 0.10               | 89,524         | 158,161          |
| 3                    | Madinah               |               | 0.09               | 51,638         | 119,690          |
| 4                    | Al-Qassim             |               | 0.05               | 28,389         | 49,680           |
| 5                    | Eastern Region        |               | 0.55               | 106,713        | 114,635          |
| 6                    | Asir                  |               | 0.79               | 67,197         | 103,001          |
| 7                    | Tabuk                 | Electricity   | 0.06               | 4,948          | 11,875           |
| 8                    | Hail                  | Licetricity   | 0.12               | 71,295         | 4,214            |
| 9                    | Northern Borders      |               | 0.11               | 21,244         | 2,631            |
| 10                   | Jazan                 |               | 2.97               | 44,024         | 89,124           |
| 11                   | Najran                |               | 1.03               | 31,494         | 55,758           |
| 12                   | Al-Bahah              |               | 0.09               | 1,405          | 1,405            |
| 13                   | Al-Jouf               |               | 0.12               | 22,693         | 25,532           |
| Total of the Kingdom |                       |               | 0.34               | 658,904        | 823,354          |

<sup>\*</sup>Fuel usage in (2016)



# Usage of Diesel (Fuel Oil) in Housing Units by Type of Used Equipment and Weekly Average Operation Hours in the Administrative Regions

Table 28

| S/N  | Administrative Region   | Type of Usage | Equipment Used    | Total Number of Equipment | Weekly Average o | of Operation hours |    |
|------|-------------------------|---------------|-------------------|---------------------------|------------------|--------------------|----|
| 3/1V | Autilitistrative Region | Type of Osage | Equipment osca    | Total Number of Equipment | Winter           | Rest of the Year   |    |
| 1    | Riyadh                  |               |                   | 1,423                     | 27               | 25                 |    |
| 2    | Makkah                  |               |                   | 4,520                     | 47               | 54                 |    |
| 3    | Madinah                 |               |                   | 342                       | 42               | 35                 |    |
| 4    | Al-Qassim               |               |                   | 284                       | 36               | 42                 |    |
| 5    | Eastern Region          |               |                   | 5,386                     | 42               | 35                 |    |
| 6    | Asir                    |               |                   | 4,412                     | 28               | 14                 |    |
| 7    | Tabuk                   | Electricity   | Private Generator | 199                       | 14               | 24                 |    |
| 8    | Hail                    | Electricity   | Private Generator | 133                       | 42               | 21                 |    |
| 9    | Northern Borders        |               |                   | 454                       | 49               | 35                 |    |
| 10   | Jazan                   |               |                   | 4,001                     | 35               | 28                 |    |
| 11   | Najran                  |               |                   | 1,811                     | 28               | 39                 |    |
| 12   | Al-Bahah                |               |                   |                           | 170              | 21                 | 14 |
| 13   | Al-Jouf                 |               |                   | 296                       | 40               | 55                 |    |
|      | Total of the Kingdom    |               |                   | 23,431                    | 37               | 33                 |    |

<sup>\*</sup>Fuel usage in (2016)



#### Percentage of Households Who Use Gas (Kerosene) in the Administrative Regions

Table 29

| S/N | Administrative Region | Number of Units | Yes (%) | No (%) | Total (%) |
|-----|-----------------------|-----------------|---------|--------|-----------|
| 1   | Riyadh                | 1,350,639       | 0.90    | 99.10  | 100.00    |
| 2   | Makkah                | 1,495,392       | 0.07    | 99.93  | 100.00    |
| 3   | Madinah               | 376,129         | 0.50    | 99.50  | 100.00    |
| 4   | Al-Qassim             | 272,078         | 0.87    | 99.13  | 100.00    |
| 5   | Eastern Region        | 758,916         | 0.58    | 99.42  | 100.00    |
| 6   | Asir                  | 398,969         | 2.30    | 97.70  | 100.00    |
| 7   | Tabuk                 | 166,845         | 1.61    | 98.39  | 100.00    |
| 8   | Hail                  | 111,826         | 8.68    | 91.32  | 100.00    |
| 9   | Northern Borders      | 47,848          | 34.97   | 65.03  | 100.00    |
| 10  | Jazan                 | 220,238         | 0.59    | 99.41  | 100.00    |
| 11  | Najran                | 106,141         | 0.33    | 99.67  | 100.00    |
| 12  | Al-Bahah              | 83,387          | 0.43    | 99.57  | 100.00    |
| 13  | Al-Jouf               | 78,502          | 17.65   | 82.35  | 100.00    |
|     | Total of the Kingdom  | 5,466,910       | 1.39    | 98.61  | 100.00    |

<sup>\*</sup>Fuel usage in (2016)



#### Consumption of Gas (Kerosene) in Housing Units in the Administrative Regions

Table 30

| S/N          | Administrative Region   | Total Number of Units  | Percentage of Units Using | Total Volume C | onsumed (Litre)  |
|--------------|-------------------------|------------------------|---------------------------|----------------|------------------|
| <i>3/1</i> 1 | Autilinistrative Region | Total Number of Offics | Diesel                    | Winter         | Rest of the Year |
| 1            | Riyadh                  | 1,350,639              | 0.90                      | 1,479,783      | 151,500          |
| 2            | Makkah                  | 1,495,392              | 0.07                      | 19,876         | 66,343           |
| 3            | Madinah                 | 376,129                | 0.50                      | 46,800         | 59,140           |
| 4            | Al-Qassim               | 272,078                | 0.87                      | 402,693        | 5,678            |
| 5            | Eastern Region          | 758,916                | 0.58                      | 2,123,508      | 18,407           |
| 6            | Asir                    | 398,969                | 2.30                      | 160,462        | 387,695          |
| 7            | Tabuk                   | 166,845                | 1.61                      | 74,219         | 37,802           |
| 8            | Hail                    | 111,826                | 8.68                      | 2,201,199      | 217,295          |
| 9            | Northern Borders        | 47,848                 | 34.97                     | 5,720,880      | 665,806          |
| 10           | Jazan                   | 220,238                | 0.59                      | 21,451         | 29,953           |
| 11           | Najran                  | 106,141                | 0.33                      | 29,671         | 29,671           |
| 12           | Al-Bahah                | 83,387                 | 0.43                      | 76,580         | 78,688           |
| 13           | Al-Jouf                 | 78,502                 | 17.65                     | 4,801,648      | 241,528          |
|              | Total of the Kingdom    | 5,466,910              | 1.38                      | 17,158,770     | 1,989,506        |

<sup>\*</sup>Fuel usage in (2016)



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in the Kingdom

Table 31

|       |                | Usage Type          | Used Equipment Type      | Weekly Average of Operation  Number of Used Equipment |                  | of Operation hours |
|-------|----------------|---------------------|--------------------------|---|------------------|--------------------|
|       | Usage Type     | Osed Equipment Type | number of osea Equipment | Winter  | Rest of the Year |                    |
| Total | of the Kingdom | Heating             | Portable Gas Heater      | 116,364   | 46               | 5                  |
|       | Water Heating  | Gas Babur           | 1,840                    | 67  | 6                |                    |
|       |                | Cooking             | Gas Babur                | 9,931   | 10               | 11                 |

<sup>\*</sup>Fuel usage in (2016)



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Riyadh

Table 31-1

| S/I  | I Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|------|-------------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
| 3/11 | Auministrative Region   |               | osed Equipment Type |                          | Winter                            | Rest of the Year |
|      |                         | Heating       | Portable Gas Heater | 15,228                   | 43                                | 5                |
| 1    | Riyadh                  | Water Heating | Gas Babur           | 219                      | 84                                | 15               |
|      |                         | Cooking       | Gas Babur           | 0                        | 0                                 | 0                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Makkah

Table 31-2

|  | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|--|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|  | <i>3/</i> IN |                       | Usage Type    | osed Equipment Type |                          | Winter                            | Rest of the Year |
|  |              | Makkah                | Heating       | Portable Gas Heater | 0                        | 0                                 | 0                |
|  | 2            |                       | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|  |              | Cooking               | Gas Babur     | 2,256               | 14                       | 14                                |                  |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Madinah

Table 31-3

| S/N  | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
| 3/11 | Administrative Region | osuge type    |                     |                          | Winter                            | Rest of the Year |
|      | Madinah               | Heating       | Portable Gas Heater | 3,565                    | 35                                | 12               |
| 3    |                       | Water Heating | Gas Babur           | 342                      | 47                                | 13               |
|      |                       | Cooking       | Gas Babur           | 846                      | 12                                | 12               |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Al-Qassim

Table 31-4

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3</i> /1N |                       |               |                     |                          | Winter                            | Rest of the Year |
|   |              | Al-Qassim             | Heating       | Portable Gas Heater | 3,691                    | 25                                | 0                |
|   | 4            |                       | Water Heating | Gas Babur           | 142                      | 4                                 | 3                |
|   |              |                       | Cooking       | Gas Babur           | 195                      | 3                                 | 3                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Eastern Region

Table 31-5

| 9 | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> IN | Administrative Region |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 9,634                    | 73                                | 2                |
|   | 5            | Eastern Region        | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|   |              |                       | Cooking       | Gas Babur           | 0                        | 0                                 | 0                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Asir

Table 31-6

|  | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|--|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|  | <i>3</i> /1N |                       |               |                     |                          | Winter                            | Rest of the Year |
|  |              |                       | Heating       | Portable Gas Heater | 5,614                    | 7                                 | 5                |
|  | 6            | Asir                  | Water Heating | Gas Babur           | 353                      | 4                                 | 4                |
|  |              |                       | Cooking       | Gas Babur           | 3,747                    | 8                                 | 8                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Tabuk

Table 31-7

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> 1N |                       |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 2,771                    | 49                                | 15               |
|   | 7            | Tabuk                 | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|   |              |                       | Cooking       | Gas Babur           | 0                        | 0                                 | 0                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Hail

Table 31-8

| 9 | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3</i> /1N |                       |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 19,373                   | 56                                | 4                |
|   | 8            | Hail                  | Water Heating | Gas Babur           | 133                      | 80                                | 16               |
|   |              |                       | Cooking       | Gas Babur           | 277                      | 33                                | 39               |

<sup>\*</sup>Fuel usage in (2016)



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Northern Borders

Table 31-9

| 9 | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3</i> /1V |                       |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 30,936                   | 43                                | 5                |
|   | 9            | Northern Borders      | Water Heating | Gas Babur           | 158                      | 19                                | 1                |
|   |              |                       | Cooking       | Gas Babur           | 525                      | 8                                 | 5                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Jazan

Table 31-10

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> IN | riammstrative negion  |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 0                        | 0                                 | 0                |
|   | 10           | Jazan                 | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|   |              |                       | Cooking       | Gas Babur           | 1,700                    | 6                                 | 10               |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Najran

Table 31-11

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> IN | riammstrative negion  |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 0                        | 0                                 | 0                |
|   | 11           | Najran                | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|   |              |                       | Cooking       | Gas Babur           | 71                       | 2                                 | 2                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Al-Bahah

Table 31-12

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> IN | Administrative Region |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 703                      | 29                                | 11               |
|   | 12           | Al-Bahah              | Water Heating | Gas Babur           | 0                        | 0                                 | 0                |
|   |              |                       | Cooking       | Gas Babur           | 0                        | 0                                 | 0                |

Reference: Household Energy Survey 2017



# Usage of Gas (Kerosene) in Housing Units by the Average of Operation Hours in Al-Jouf

Table 31-13

| S | S/N          | Administrative Region | Usage Type    | Used Equipment Type | Number of Used Equipment | Weekly Average of Operation hours |                  |
|---|--------------|-----------------------|---------------|---------------------|--------------------------|-----------------------------------|------------------|
|   | <i>3/</i> IN | Administrative negion |               |                     |                          | Winter                            | Rest of the Year |
|   |              |                       | Heating       | Portable Gas Heater | 24,850                   | 57                                | 5                |
|   | 13           | Al-Jouf               | Water Heating | Gas Babur           | 493                      | 66                                | 11               |
|   |              |                       | Cooking       | Gas Babur           | 312                      | 16                                | 15               |

Reference: Household Energy Survey 2017



#### Percentage of Households Who Use (LPG) Butane Gas in the Administrative Regions

Table 32

| S/N | Administrative Region | Yes (%) | No (%) | Total (%) |
|-----|-----------------------|---------|--------|-----------|
| 1   | Riyadh                | 91.90   | 8.10   | 100.00    |
| 2   | Makkah                | 97.19   | 2.81   | 100.00    |
| 3   | Madinah               | 91.91   | 8.09   | 100.00    |
| 4   | Al-Qassim             | 98.98   | 1.02   | 100.00    |
| 5   | Eastern Region        | 77.09   | 22.91  | 100.00    |
| 6   | Asir                  | 99.24   | 0.76   | 100.00    |
| 7   | Tabuk                 | 99.03   | 0.97   | 100.00    |
| 8   | Hail                  | 99.10   | 0.90   | 100.00    |
| 9   | Northern Borders      | 98.94   | 1.06   | 100.00    |
| 10  | Jazan                 | 99.88   | 0.12   | 100.00    |
| 11  | Najran                | 97.96   | 2.04   | 100.00    |
| 12  | Al-Bahah              | 99.46   | 0.54   | 100.00    |
| 13  | Al-Jouf               | 97.38   | 2.62   | 100.00    |
|     | Total of the Kingdom  | 93.20   | 6.80   | 100.00    |

<sup>\*</sup>Fuel usage in (2016)



# Consumption of (LPG) Butane Gas in Houses According to By Type (Cylinder/Tank) in the Administrative Regions

Table 33

| S/N | Administrative Region | Percentage of Households<br>Using LPG | Cylinder    | Tank        |
|-----|-----------------------|---------------------------------------|-------------|-------------|
| 1   | Riyadh                | 91.90                                 | 176,220,817 | 116,616,311 |
| 2   | Makkah                | 97.19                                 | 210,399,627 | 62,023,412  |
| 3   | Madinah               | 91.91                                 | 51,862,932  | 8,169,572   |
| 4   | Al-Qassim             | 98.98                                 | 28,400,058  | 27,670,513  |
| 5   | Eastern Region        | 77.09                                 | 81,262,831  | 13,870,008  |
| 6   | Asir                  | 99.24                                 | 63,221,109  | 9,088,914   |
| 7   | Tabuk                 | 99.03                                 | 27,380,007  | 1,495,005   |
| 8   | Hail                  | 99.10                                 | 23,262,318  | 144,102     |
| 9   | Northern Borders      | 98.94                                 | 8,798,720   | 533,146     |
| 10  | Jazan                 | 99.88                                 | 31,513,755  | 3,776,967   |
| 11  | Najran                | 97.96                                 | 16,944,600  | 127,657     |
| 12  | Al-Bahah              | 99.46                                 | 11,176,833  | 693,720     |
| 13  | Al-Jouf               | 97.38                                 | 11,205,051  | 4,702,939   |
|     | Total of the Kingdom  | 93.20                                 | 741,648,655 | 248,912,267 |

<sup>\*</sup>Fuel usage in (2016)



# Number of Refilling Times of (LPG) Butane Gas in Houses According By Type (Cylinder/Tank) in the Administrative Regions

Table 34

| S/N | Administrative Region | Percentage of Households<br>Using LPG | Cylinder   | Tank    |
|-----|-----------------------|---------------------------------------|------------|---------|
| 1   | Riyadh                | 91.90                                 | 15,487,887 | 124,871 |
| 2   | Makkah                | 97.19                                 | 18,660,870 | 54,023  |
| 3   | Madinah               | 91.91                                 | 4,514,008  | 8,498   |
| 4   | Al-Qassim             | 98.98                                 | 2,521,611  | 34,158  |
| 5   | Eastern Region        | 77.09                                 | 7,138,894  | 26,302  |
| 6   | Asir                  | 99.24                                 | 5,512,683  | 10,394  |
| 7   | Tabuk                 | 99.03                                 | 2,425,734  | 1,630   |
| 8   | Hail                  | 99.10                                 | 2,065,601  | 144     |
| 9   | Northern Borders      | 98.94                                 | 781,381    | 1,019   |
| 10  | Jazan                 | 99.88                                 | 2,796,514  | 8,234   |
| 11  | Najran                | 97.96                                 | 1,492,272  | 128     |
| 12  | Al-Bahah              | 99.46                                 | 990,448    | 698     |
| 13  | Al-Jouf               | 97.38                                 | 951,703    | 10,312  |
|     | Total of the Kingdom  | 93.20                                 | 65,339,607 | 280,407 |

<sup>\*</sup>Fuel usage in (2016)



# Total Annual Cost in Saudi Riyal of Refilling (LPG) Butane Gas in Houses According By Type (Cylinder/Tank) in the Administrative Regions

Table 35

| S/N  | Administrative Region  | Number of Houses  | Percentage of Houses | Total Cost in Saudi Riyal A | According to the Type of<br>er/Tank |
|------|------------------------|-------------------|----------------------|-----------------------------|-------------------------------------|
| 3/14 |                        | Number of floures | Using LPG            | Cylinder                    | Tank                                |
| 1    | Riyadh                 | 1,339,663         | 91.90                | 266,289,234                 | 67,221,009                          |
| 2    | Makkah                 | 1,491,367         | 97.19                | 317,937,213                 | 35,743,549                          |
| 3    | Madinah                | 372,051           | 91.91                | 78,370,652                  | 4,708,813                           |
| 4    | Al-Qassim 261,832      |                   | 98.98                | 42,915,644                  | 15,951,575                          |
| 5    | Eastern Region 762,114 |                   | 77.09                | 122,797,166                 | 8,008,616                           |
| 6    | Asir                   | 384,704           | 99.24                | 95,534,120                  | 5,238,099                           |
| 7    | Tabuk                  | 165,959           | 99.03                | 41,374,233                  | 861,318                             |
| 8    | Hail                   | 111,123           | 99.10                | 35,151,948                  | 83,003                              |
| 9    | Northern Borders       | 47,218            | 98.94                | 13,295,843                  | 307,839                             |
| 10   | Jazan                  | 220,025           | 99.88                | 47,620,785                  | 2,182,015                           |
| 11   | Najran                 | 106,005           | 97.96                | 25,605,174                  | 73,530                              |
| 12   | Al-Bahah               | 81,742            | 99.46                | 16,889,436                  | 399,692                             |
| 13   | Al-Jouf                | 77,760            | 97.38                | 16,932,077                  | 2,717,052                           |
|      | Total of the Kingdom   | 5,421,563         | 93.20                | 1,120,713,524               | 143,496,110                         |

<sup>\*</sup>Fuel usage in (2016)



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in the Kingdom Houses

Table 36

|                      | Type of Use T | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|----------------------|---------------|------------------------|------------------------------------|--------------------------------|------------------|
| Total of The Kingdom |               |                        |                                    | Winter                         | Rest of the Year |
|                      | Heating       | Gas Heater             | 108,980                            | 30                             | 9                |
|                      | Cooking       | Gas Stove              | 5,604,728                          | 19                             | 22               |

<sup>\*</sup>Fuel usage in (2016)



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Riyadh Houses

Table 36-1

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3/</i> IN |                       |             |                        |                                    | Winter                         | Rest of the Year |
| 1   | 1            | Riyadh                | Heating     | Gas Heater             | 44,153                             | 32                             | 3                |
|     | '            |                       | Cooking     | Gas Stove              | 1,523,340                          | 20                             | 26               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Makkah Houses

Table 36-2

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3/</i> IN |                       |             |                        |                                    | Winter                         | Rest of the Year |
| 2   | 2            | Makkah                | Heating     | Gas Heater             | 6,266                              | 35                             | 11               |
|     | _            |                       | Cooking     | Gas Stove              | 1,598,043                          | 19                             | 22               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Madinah Houses

Table 36-3

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3/</i> IN |                       |             |                        |                                    | Winter                         | Rest of the Year |
| 3   | 2            | Madinah               | Heating     | Gas Heater             | 4,249                              | 40                             | 10               |
|     | 2            |                       | Cooking     | Gas Stove              | 342,936                            | 16                             | 17               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Al-Qassim Houses

Table 36-4

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3/</i> IN |                       |             |                        |                                    | Winter                         | Rest of the Year |
| 4   | Л            | Al-Qassim             | Heating     | Gas Heater             | 3,407                              | 7                              | 2                |
|     | 4            |                       | Cooking     | Gas Stove              | 263,088                            | 11                             | 12               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Eastern Region Houses

Table 36-5

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3</i> /1N |                       |             |                        |                                    | Winter                         | Rest of the Year |
|     | 5            | Eastern Region        | Heating     | Gas Heater             | 10,800                             | 18                             | 10               |
|     | 5            |                       | Cooking     | Gas Stove              | 625,303                            | 19                             | 21               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Asir Houses

Table 36-6

| S/N | c /NI | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|-------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | 3/IN  |                       |             |                        |                                    | Winter                         | Rest of the Year |
| 6   | 6     | Asir                  | Heating     | Gas Heater             | 8,866                              | 25                             | 23               |
|     | O     |                       | Cooking     | Gas Stove              | 415,885                            | 24                             | 26               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Tabuk Houses

Table 36-7

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3/</i> IN |                       |             |                        |                                    | Winter                         | Rest of the Year |
|     | 7            | Tabuk                 | Heating     | Gas Heater             | 6,721                              | 20                             | 10               |
|     | ,            |                       | Cooking     | Gas Stove              | 164,516                            | 14                             | 16               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Hail Houses

Table 36-8

| S/N | S/NI        | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|-------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <b>3/1N</b> |                       |             |                        |                                    | Winter                         | Rest of the Year |
|     | 8           | Hail                  | Heating     | Gas Heater             | 10,799                             | 48                             | 22               |
|     | 0           |                       | Cooking     | Gas Stove              | 116,991                            | 21                             | 21               |

Reference: Household Energy Survey 2017



# Average Operation Hours per Week of (LPG) Butane Gas Equipments in Northern Borders Houses

Table 36-9

| S/N | C/NI         | Administrative Region | Type of Use | Type of Equipment Used | total Number of<br>Equipments Used | Average Operation Hours / Week |                  |
|-----|--------------|-----------------------|-------------|------------------------|------------------------------------|--------------------------------|------------------|
|     | <i>3</i> /1N |                       |             |                        |                                    | Winter                         | Rest of the Year |
|     | 0            | Northern Borders      | Heating     | Gas Heater             | 5,514                              | 30                             | 11               |
|     | 9            |                       | Cooking     | Gas Stove              | 52,314                             | 18                             | 19               |

Reference: Household Energy Survey 2017



### Average Operation Hours per Week of (LPG) Butane Gas Equipments in Jazan Houses

Table 36-10

| S/N | Administrative Pegion | dministrative Region Type of Use Type of Equipment Used |                        | total Number of | Average Operation Hours / Week |                  |
|-----|-----------------------|---|------------------------|-----------------|--------------------------------|------------------|
| 3/  | Auministrative Region | Type of Use   | Type of Equipment osed | Equipments Used | Winter                         | Rest of the Year |
| 1   | 10                    | Heating   | Gas Heater             | 0               | 0                              | 0                |
| 10  | Jazan                 | Cooking   | Gas Stove              | 229,525         | 18                             | 20               |

Reference: Household Energy Survey 2017



### Average Operation Hours per Week of (LPG) Butane Gas Equipments in Najran Houses

Table 36-11

| c  | /NI       | Administrative Region | e Region Type of Use Type of Equipment Used |                        | total Number of | Average Operation Hours / Week |                  |
|----|-----------|-----------------------|---|------------------------|-----------------|--------------------------------|------------------|
| 3) | S/N       | Administrative Region | Type of ose                                 | Type of Equipment oseu | Equipments Used | Winter                         | Rest of the Year |
| 1  | 11 Najran | Heating               | Gas Heater                                  | 2,256                  | 9               | 4                              |                  |
|    |           | <del>Naj</del> ran    | Cooking                                     | Gas Stove              | 105,755         | 16                             | 17               |

Reference: Household Energy Survey 2017



### Average Operation Hours per Week of (LPG) Butane Gas Equipments in Al-Bahah Houses

Table 36-12

| S/N | /NI         | Administrative Pegien | dministrative Region Type of Use Type of Equipment Used |                        | total Number of | Average Operation Hours / Week |                  |
|-----|-------------|-----------------------|---|------------------------|-----------------|--------------------------------|------------------|
| 3/  | 5/11        | Administrative Region | Type of Ose   | Type of Equipment osed | Equipments Used | Winter                         | Rest of the Year |
| 1   | 12 Al-Bahah | Heating               | Gas Heater  | 2,993                  | 14              | 4                              |                  |
| ľ   |             | Al-Dallall            | Cooking   | Gas Stove              | 86,952          | 17                             | 23               |

Reference: Household Energy Survey 2017



### Average Operation Hours per Week of (LPG) Butane Gas Equipments in Al-Jouf Houses

Table 36-13

| S/N  | Administrative Region Type of Use |             | Type of Equipment Used | Type of Equipment Used total Number of |        | Average Operation Hours / Week |  |
|------|-----------------------------------|-------------|------------------------|--|--------|--------------------------------|--|
| 3/11 | Administrative Region             | Type of Ose | Type of Equipment osed | Equipments Used                        | Winter | Rest of the Year               |  |
| 12   | 13 Al-Jouf -                      | Heating     | Gas Heater             | 2,955                                  | 32     | 12                             |  |
| 13   |                                   | Cooking     | Gas Stove              | 80,079                                 | 17     | 19                             |  |

Reference: Household Energy Survey 2017



#### Percentage of Houses Supplied with Electricity in the Administrative Regions

Table 37

| S/N  | Administrative Degice | Electricity <i>i</i> | Availability | Total (%) |
|------|-----------------------|----------------------|--------------|-----------|
| 3/IN | Administrative Region | Yes (%)              | No (%)       | 10tai (%) |
| 1    | Riyadh                | 100.00               | 0.00         | 100.00    |
| 2    | Makkah                | 100.00               | 0.00         | 100.00    |
| 3    | Madinah               | 99.82                | 0.18         | 100.00    |
| 4    | Al-Qassim             | 100.00               | 0.00         | 100.00    |
| 5    | Eastern Region        | 100.00               | 0.00         | 100.00    |
| 6    | Asir 100.00           |                      | 0.00         | 100.00    |
| 7    | Tabuk                 | 100.00               | 0.00         | 100.00    |
| 8    | Hail                  | 100.00               | 0.00         | 100.00    |
| 9    | Northern Borders      | 100.00               | 0.00         | 100.00    |
| 10   | Jazan                 | 100.00               | 0.00         | 100.00    |
| 11   | Najran                | 99.60                | 0.40         | 100.00    |
| 12   | Al-Bahah              | 99.66                | 0.34         | 100.00    |
| 13   | Al-Jouf               | 100.00               | 0.00         | 100.00    |
|      | Total of the Kingdom  | 99.97                | 0.03         | 100.00    |

<sup>\*</sup>Fuel usage in (2016)



# Percentage of Houses According to the Type of Electricity Meter in the Administrative Regions

Table 38

| S/N  | Administrative Region | Type of Elec | tricity Meter | Total (%)  |
|------|-----------------------|--------------|---------------|------------|
| 3/11 |                       | Private (%)  | Shared (%)    | 10001 (70) |
| 1    | Riyadh                | 83.33        | 16.67         | 100.00     |
| 2    | Makkah                | 82.80        | 17.20         | 100.00     |
| 3    | Madinah               | 81.54        | 18.46         | 100.00     |
| 4    | Al-Qassim             | 81.61        | 18.39         | 100.00     |
| 5    | Eastern Region        | 83.94        | 16.06         | 100.00     |
| 6    | Asir                  | 80.85        | 19.15         | 100.00     |
| 7    | Tabuk                 | 83.97        | 16.03         | 100.00     |
| 8    | Hail                  | 80.69        | 19.31         | 100.00     |
| 9    | Northern Borders      | 92.97        | 7.03          | 100.00     |
| 10   | Jazan                 | 79.64        | 20.36         | 100.00     |
| 11   | Najran                | 75.72        | 24.28         | 100.00     |
| 12   | Al-Bahah              | 74.55        | 25.45         | 100.00     |
| 13   | Al-Jouf               | 83.84        | 16.16         | 100.00     |
|      | Total of the Kingdom  | 82.52        | 17.48         | 100.00     |

<sup>\*</sup>Fuel usage in (2016)



## Percentage of Houses Supplied with Electricity Regulator in the Administrative Regions

Table 39

| S/N  | Administrative Region | Electricity Regul | ator Availability | Total (%)  |
|------|-----------------------|-------------------|-------------------|------------|
| 3/11 | Auministrative Region | Yes (%)           | No (%)            | 10tai (70) |
| 1    | Riyadh                | 15.01             | 84.99             | 100.00     |
| 2    | Makkah                | 26.33             | 73.67             | 100.00     |
| 3    | Madinah               | 8.23              | 91.77             | 100.00     |
| 4    | Al-Qassim             | 10.84             | 89.16             | 100.00     |
| 5    | Eastern Region        | 9.99              | 90.01             | 100.00     |
| 6    | Asir                  | 13.54             | 86.46             | 100.00     |
| 7    | Tabuk                 | 15.58             | 84.42             | 100.00     |
| 8    | Hail                  | 10.20             | 89.80             | 100.00     |
| 9    | Northern Borders      | 14.12             | 85.88             | 100.00     |
| 10   | Jazan                 | 8.05              | 91.95             | 100.00     |
| 11   | Najran                | 7.03              | 92.97             | 100.00     |
| 12   | Al-Bahah              | 13.70             | 86.30             | 100.00     |
| 13   | Al-Jouf               | 14.79             | 85.21             | 100.00     |
|      | Total of the Kingdom  | 16.10             | 83.90             | 100.00     |

<sup>\*</sup>Fuel usage in (2016)



### Houses Total Consumption and Cost of Electricity in the Administrative Regions

Table 40

| S/N          | Administrative Region | Wir               | nter               | Rest of t         | the Year           |
|--------------|-----------------------|-------------------|--------------------|-------------------|--------------------|
| <i>3/1</i> 1 | Administrative Region | Consumption (KWh) | Cost (Saudi Riyal) | Consumption (KWh) | Cost (Saudi Riyal) |
| 1            | Riyadh                | 9,656,113,095     | 646,321,545        | 58,311,208,859    | 5,000,680,818      |
| 2            | Makkah                | 10,225,556,784    | 673,039,064        | 54,951,107,564    | 5,151,689,961      |
| 3            | Madinah               | 2,458,903,536     | 161,679,183        | 12,934,995,238    | 1,155,048,654      |
| 4            | Al-Qassim             | 1,682,430,848     | 115,254,648        | 8,702,062,275     | 714,747,363        |
| 5            | Eastern Region        | 5,262,775,052     | 359,183,065        | 30,727,730,092    | 3,165,695,573      |
| 6            | Asir                  | 4,146,428,089     | 275,512,195        | 20,464,106,366    | 1,969,645,445      |
| 7            | Tabuk                 | 1,111,825,199     | 73,810,717         | 4,585,245,842     | 360,078,967        |
| 8            | Hail                  | 1,056,543,109     | 73,455,021         | 3,925,871,299     | 321,251,274        |
| 9            | Northern Borders      | 461,492,447       | 28,935,954         | 1,680,672,755     | 124,393,718        |
| 10           | Jazan                 | 2,324,786,701     | 149,979,131        | 12,330,297,464    | 1,136,274,519      |
| 11           | Najran                | 767,280,686       | 54,296,995         | 4,024,055,708     | 451,502,210        |
| 12           | Al-Bahah              | 633,322,853       | 42,419,719         | 2,444,806,140     | 202,643,572        |
| 13           | Al-Jouf               | 1,047,155,811     | 53,629,863         | 4,541,531,311     | 243,302,753        |
|              | Total of the Kingdom  | 40,834,614,211    | 2,707,517,100      | 219,623,690,912   | 19,996,954,830     |

<sup>\*</sup>Fuel usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses in the Kingdom

Table 41

|                      | Use Type                          | Number of Equipment Used | Average Operati | on Hours / Week  |
|----------------------|-----------------------------------|--------------------------|-----------------|------------------|
|                      | ose type Number of Equipment osed |                          | Winter          | Rest of the Year |
|                      | Heating                           | 7,544,778                | 56              | 12               |
|                      | Water Heating                     | 9,427,111                | 69              | 25               |
| Total of the Kingdom | Air Condition                     | 26,034,896               | 20              | 60               |
|                      | Lightening                        | 168,998,952              | 51              | 55               |
|                      | Cooking                           | 2,850,026                | 11              | 14               |
|                      | Food Preservation                 | 7,701,242                | 134             | 137              |
|                      | Total                             | 222,557,004              | 61              | 60               |

Reference: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Riyadh

Table 41-1

| S/N  | Administrative Region | Use Type          | Number of Equipment Used | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|--------------------------|--------------------------------|------------------|--|
| 3/11 | Administrative Region | Use Type          | Number of Equipment oseu | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 2,792,631                | 68                             | 11               |  |
|      |                       | Water Heating     | 2,596,795                | 77                             | 12               |  |
|      |                       | Air Condition     | 7,004,317                | 11                             | 67               |  |
| 1    | Riyadh                | Lightening        | 41,959,158               | 53                             | 60               |  |
|      |                       | Cooking           | 719,518                  | 12                             | 14               |  |
|      |                       | Food Preservation | 2,096,412                | 141                            | 146              |  |
|      |                       | Total             | 57,168,830               | 65                             | 61               |  |

Reference: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Makkah

Table 41-2

| S/N  | Administrative Region | Use Type          | Number of Equipment Used | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|--------------------------|--------------------------------|------------------|--|
| 3/14 | Administrative Region | ose Type          | Number of Equipment oseu | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 587,706                  | 54                             | 16               |  |
|      |                       | Water Heating     | 1,861,587                | 55                             | 35               |  |
|      |                       | Air Condition     | 6,807,833                | 32                             | 65               |  |
| 2    | Makkah                | Lightening        | 41,496,932               | 55                             | 58               |  |
|      |                       | Cooking           | 702,342                  | 11                             | 13               |  |
|      |                       | Food Preservation | 1,894,004                | 143                            | 144              |  |
|      |                       | Total             | 53,350,405               | 64                             | 69               |  |

Reference: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Madinah

Table 41-3

| S/N  | Administrative Region | Use Type          | Number of Equipment Used | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|--------------------------|--------------------------------|------------------|--|
| 3/11 | Administrative Region | Use Type          | Number of Equipment oseu | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 401,054                  | 65                             | 5                |  |
|      |                       | Water Heating     | 528,202                  | 85                             | 14               |  |
|      |                       | Air Condition     | 1,730,861                | 14                             | 61               |  |
| 3    | Madinah               | Lightening        | 7,801,408                | 52                             | 55               |  |
|      |                       | Cooking           | 164,710                  | 9                              | 11               |  |
|      |                       | Food Preservation | 487,034                  | 137                            | 139              |  |
|      |                       | Total             | 11,113,268               | 64                             | 60               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Al-Qassim

Table 41-4

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|--|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 557,066                    | 30                             | 2                |  |
|      |                       | Water Heating     | 681,838                    | 44                             | 5                |  |
|      |                       | Air Condition     | 1,308,897                  | 7                              | 33               |  |
| 4    | Al-Qassim             | Lightening        | 7,989,771                  | 26                             | 30               |  |
|      |                       | Cooking           | 149,443                    | 4                              | 7                |  |
|      |                       | Food Preservation | 484,975                    | 85                             | 85               |  |
|      |                       | Total             | 11,171,990                 | 36                             | 32               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Eastern Region

Table 41-5

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |
|      |                       | Heating           | 1,220,194                  | 54                             | 5                |
|      |                       | Water Heating     | 1,774,810                  | 79                             | 21               |
|      |                       | Air Condition     | 3,742,680                  | 6                              | 67               |
| 5    | Eastern Region        | Lightening        | 34,628,558                 | 56                             | 59               |
|      |                       | Cooking           | 599,140                    | 12                             | 16               |
|      |                       | Food Preservation | 1,159,189                  | 138                            | 141              |
|      |                       | Total             | 43,124,570                 | 60                             | 59               |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Asir

Table 41-6

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |
|      |                       | Heating           | 767,633                    | 62                             | 38               |
|      |                       | Water Heating     | 662,122                    | 100                            | 94               |
|      |                       | Air Condition     | 1,376,678                  | 30                             | 51               |
| 6    | Asir                  | Lightening        | 13,927,462                 | 53                             | 56               |
|      |                       | Cooking           | 163,252                    | 13                             | 13               |
|      |                       | Food Preservation | 468,602                    | 150                            | 151              |
|      |                       | Total             | 17,365,749                 | 71                             | 72               |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Tabuk

Table 41-7

| S/N  | Administrative Region | Use Type          | Number of Equipment Used – | Average Operation Hours / Week |                  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |
|      |                       | Heating           | 295,265                    | 28                             | 8                |
|      |                       | Water Heating     | 313,436                    | 45                             | 19               |
|      |                       | Air Condition     | 711,444                    | 17                             | 40               |
| 7    | Tabuk                 | Lightening        | 3,326,809                  | 40                             | 43               |
|      |                       | Cooking           | 57,491                     | 8                              | 9                |
|      |                       | Food Preservation | 199,882                    | 91                             | 95               |
|      |                       | Total             | 4,904,328                  | 42                             | 40               |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Hail

Table 41-8

| S/N          | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |  |
|--------------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|--|
| <i>3/</i> 1V | Auministrative Region |                   | Number of Equipment osed   | Winter                         | Rest of the Year |  |
|              |                       | Heating           | 306,907                    | 60                             | 9                |  |
|              |                       | Water Heating     | 310,032                    | 102                            | 17               |  |
|              |                       | Air Condition     | 585,620                    | 28                             | 70               |  |
| 8            | Hail                  | Lightening        | 4,299,884                  | 51                             | 52               |  |
|              |                       | Cooking           | 68,415                     | 9                              | 9                |  |
|              |                       | Food Preservation | 204,235                    | 164                            | 165              |  |
|              |                       | Total             | 5,775,093                  | 75                             | 62               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Northern Borders

Table 41-9

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|--|
| 3/14 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 95,312                     | 38                             | 5                |  |
|      |                       | Water Heating     | 79,219                     | 38                             | 10               |  |
|      |                       | Air Condition     | 229,604                    | 24                             | 50               |  |
| 9    | Northern Borders      | Lightening        | 1,245,869                  | 51                             | 53               |  |
|      |                       | Cooking           | 23,024                     | 7                              | 7                |  |
|      |                       | Food Preservation | 69,664                     | 115                            | 122              |  |
|      |                       | Total             | 1,742,692                  | 51                             | 50               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Jazan

Table 41-10

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |
|      |                       | Heating           | 24,170                     | 26                             | 8                |
|      |                       | Water Heating     | 88,227                     | 19                             | 13               |
|      |                       | Air Condition     | 1,383,932                  | 39                             | 51               |
| 10   | Jazan                 | Lightening        | 4,002,277                  | 54                             | 57               |
|      |                       | Cooking           | 77,591                     | 12                             | 14               |
|      |                       | Food Preservation | 289,073                    | 114                            | 116              |
|      |                       | Total             | 5,865,270                  | 57                             | 62               |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Najran

Table 41-11

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|--|
| 3/14 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 162,998                    | 26                             | 2                |  |
|      |                       | Water Heating     | 264,542                    | 32                             | 14               |  |
|      |                       | Air Condition     | 510,582                    | 9                              | 35               |  |
| 11   | Najran                | Lightening        | 3,692,457                  | 30                             | 33               |  |
|      |                       | Cooking           | 59,070                     | 9                              | 11               |  |
|      |                       | Food Preservation | 131,755                    | 74                             | 79               |  |
|      |                       | Total             | 4,821,404                  | 31                             | 33               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Al-Bahah

Table 41-12

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |
|      |                       | Heating           | 158,292                    | 46                             | 25               |
|      |                       | Water Heating     | 160,267                    | 50                             | 48               |
|      |                       | Air Condition     | 299,679                    | 25                             | 41               |
| 12   | Al-Bahah              | Lightening        | 2,728,905                  | 32                             | 40               |
|      |                       | Cooking           | 41,803                     | 11                             | 19               |
|      |                       | Food Preservation | 111,874                    | 134                            | 139              |
|      |                       | Total             | 3,500,821                  | 54                             | 57               |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses in Al-Jouf

Table 41-13

| S/N  | Administrative Region | Use Type          | Number of Equipment Used — | Average Operation Hours / Week |                  |  |
|------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|--|
| 3/14 | Administrative Region |                   | Number of Equipment oseu   | Winter                         | Rest of the Year |  |
|      |                       | Heating           | 175,550                    | 62                             | 22               |  |
|      |                       | Water Heating     | 106,034                    | 66                             | 21               |  |
|      |                       | Air Condition     | 342,770                    | 29                             | 48               |  |
| 13   | Al-Jouf               | Lightening        | 1,899,460                  | 36                             | 40               |  |
|      |                       | Cooking           | 24,227                     | 12                             | 13               |  |
|      |                       | Food Preservation | 104,543                    | 119                            | 122              |  |
|      |                       | Total             | 2,652,584                  | 58                             | 52               |  |

Source: Household Energy Survey 2017



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in the Kingdom

Table 42

|                      | Heating Equipment N | Number of Equipment Used - | Average Operation hours / week |                  |
|----------------------|---------------------|----------------------------|--------------------------------|------------------|
|                      |                     |                            | Winter                         | Rest of the Year |
| Total of the Kingdom | Heater              | 3,372,710                  | 76                             | 21               |
| Total of the Kingdom | Radiant Heaters     | 1,809,008                  | 36                             | 4                |
|                      | Oil Heater          | 2,162,336                  | 49                             | 7                |
|                      | Fan Heater          | 200,128                    | 39                             | 4                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Riyadh

Table 42-1

| C/N  | S/N Administrative Region | Heating Equipment N | Number of Equipment Used - | Average Operation hours / week |                  |
|------|---------------------------|---------------------|----------------------------|--------------------------------|------------------|
| 3/11 |                           |                     |                            | Winter                         | Rest of the Year |
|      |                           | Heater              | 1,580,591                  | 94                             | 17               |
| 1    | Riyadh                    | Radiant Heaters     | 525,605                    | 39                             | 5                |
|      | Niyadii                   | Oil Heater          | 633,974                    | 50                             | 4                |
|      |                           | Fan Heater          | 52,461                     | 32                             | 5                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Makkah

Table 42-2

| S/N Administr | Administrative Region | Heating Equipment | Number of Equipment Used | Average Operation hours / week |                  |
|---------------|-----------------------|-------------------|--------------------------|--------------------------------|------------------|
|               | Administrative Region |                   |                          | Winter                         | Rest of the Year |
|               |                       | Heater            | 326,661                  | 66                             | 24               |
| 2             | Makkah                | Radiant Heaters   | 55,971                   | 38                             | 3                |
|               | IVIANAII              | Oil Heater        | 186,884                  | 37                             | 3                |
|               |                       | Fan Heater        | 17,635                   | 42                             | 3                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Madinah

Table 42-3

| S/N | Administrative Region | Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|-----|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
|     | Auministrative Region |                   |                            | Winter                         | Rest of the Year |
|     |                       | Heater            | 183,910                    | 83                             | 8                |
| 3   | Madinah               | Radiant Heaters   | 36,165                     | 30                             | 1                |
|     |                       | Oil Heater        | 123,408                    | 54                             | 1                |
|     |                       | Fan Heater        | 57,571                     | 48                             | 2                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Al-Qassim

Table 42-4

| S/N          | Administrative Region | Heating Equipment  | nt Number of Equipment Used - | Average Operation hours / week |                  |
|--------------|-----------------------|--------------------|-------------------------------|--------------------------------|------------------|
| <i>3/</i> 14 | Administrative Region | rieating Equipment |                               | Winter                         | Rest of the Year |
|              |                       | Heater             | 163,660                       | 29                             | 5                |
| 4            | Al-Qassim             | Radiant Heaters    | 225,866                       | 18                             | 2                |
| 4            |                       | Oil Heater         | 158,187                       | 52                             | 1                |
|              |                       | Fan Heater         | 9,352                         | 18                             | 2                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating)in Eastern Region

Table 42-5

| S/N  | Administrative Region | on Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|------|-----------------------|----------------------|----------------------------|--------------------------------|------------------|
| 3/14 | Administrative Region |                      |                            | Winter                         | Rest of the Year |
|      |                       | Heater               | 418,167                    | 78                             | 10               |
| 5    | Eastern Region        | Radiant Heaters      | 395,427                    | 38                             | 3                |
| ,    |                       | Oil Heater           | 393,629                    | 46                             | 2                |
|      |                       | Fan Heater           | 12,970                     | 47                             | 1                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Asir

Table 42-6

| S/N          | Administrative Region | Heating Equipment | Number of Equipment Used | Average Operation hours / week |                  |
|--------------|-----------------------|-------------------|--------------------------|--------------------------------|------------------|
| <i>3/</i> 14 | Auministrative Region |                   |                          | Winter                         | Rest of the Year |
|              |                       | Heater            | 310,591                  | 80                             | 72               |
| 6            | Asir                  | Radiant Heaters   | 95,870                   | 51                             | 12               |
| ь            |                       | Oil Heater        | 355,870                  | 53                             | 22               |
|              |                       | Fan Heater        | 5,303                    | 53                             | 23               |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Tabuk

Table 42-7

| C/NI | S/N Administrative Region | Heating Equipment Number of Equip | Number of Equipment Used | Average Operation hours / week |                  |
|------|---------------------------|-----------------------------------|--------------------------|--------------------------------|------------------|
| 3/11 |                           |                                   | Number of Equipment oseu | Winter                         | Rest of the Year |
|      |                           | Heater                            | 62,584                   | 23                             | 9                |
| 7    | Tabuk                     | Radiant Heaters                   | 163,871                  | 29                             | 6                |
| ,    | Tabuk                     | Oil Heater                        | 67,640                   | 33                             | 10               |
|      |                           | Fan Heater                        | 1,170                    | 22                             | 1                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Hail

Table 42-8

| S/N  | Administrative Region | e Region Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|------|-----------------------|----------------------------|----------------------------|--------------------------------|------------------|
| 3/14 | Auministrative Region |                            |                            | Winter                         | Rest of the Year |
|      |                       | Heater                     | 58,878                     | 57                             | 15               |
| 8    | Hail                  | Radiant Heaters            | 153,069                    | 48                             | 8                |
| 0    |                       | Oil Heater                 | 83,943                     | 93                             | 6                |
|      |                       | Fan Heater                 | 11,018                     | 39                             | 5                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Northern Borders

Table 42-9

| S/N Administ | Administrative Region | Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|--------------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
|              | Auministrative Region |                   |                            | Winter                         | Rest of the Year |
|              |                       | Heater            | 46,983                     | 33                             | 8                |
| 9            | Northern Borders      | Radiant Heaters   | 37,447                     | 42                             | 4                |
| 9            |                       | Oil Heater        | 10,074                     | 40                             | 3                |
|              |                       | Fan Heater        | 808                        | 53                             | 3                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Jazan

Table 42-10

| C/NI | S/N Administrative Region | Heating Equipment Number of Eq | Number of Equipment Used - | Average Operation hours / week |                  |
|------|---------------------------|--------------------------------|----------------------------|--------------------------------|------------------|
| 3/11 |                           |                                | Number of Equipment osed   | Winter                         | Rest of the Year |
|      |                           | Heater                         | 24,170                     | 26                             | 8                |
| 10   | Jazan                     | Radiant Heaters                | 0                          | 0                              | 0                |
| 10   |                           | Oil Heater                     | 0                          | 0                              | 0                |
|      |                           | Fan Heater                     | 0                          | 0                              | 0                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Najran

Table 42-11

| S/N Admir | Administrative Region | Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|-----------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
|           | Administrative Region |                   |                            | Winter                         | Rest of the Year |
|           |                       | Heater            | 43,483                     | 17                             | 4                |
| 11        | Najran                | Radiant Heaters   | 29,732                     | 23                             | 1                |
| "         | ivaji ai i            | Oil Heater        | 62,382                     | 29                             | 2                |
|           |                       | Fan Heater        | 27,400                     | 41                             | 1                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Al-Bahah

Table 42-12

| S/N Ad | Administrative Region | Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|--------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
|        | Auministrative Region |                   |                            | Winter                         | Rest of the Year |
|        |                       | Heater            | 53,646                     | 67                             | 59               |
| 12     | Al-Bahah              | Radiant Heaters   | 24,570                     | 33                             | 6                |
| 12     |                       | Oil Heater        | 76,310                     | 39                             | 13               |
|        |                       | Fan Heater        | 3,765                      | 34                             | 7                |

<sup>\*</sup>Electricity usage in (2016)



### Weekly Operation Hours Average of Electrical Energy Uses for (Heating) in Al-Jouf

Table 42-13

| S/N          | Administrative Region | Heating Equipment | Number of Equipment Used - | Average Operation hours / week |                  |
|--------------|-----------------------|-------------------|----------------------------|--------------------------------|------------------|
| <i>3/</i> 10 | Administrative Region |                   |                            | Winter                         | Rest of the Year |
|              |                       | Heater            | 99,386                     | 74                             | 39               |
| 13           | Al-Jouf               | Radiant Heaters   | 65,415                     | 43                             | 3                |
| 15           |                       | Oil Heater        | 10,034                     | 72                             | 3                |
|              |                       | Fan Heater        | 675                        | 52                             | 11               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in the Kingdom

Table 43

| Total of the Kingdom | Used Equipment for Water  Number of Used Equipme |           | Average Operation Hours / Week |    |
|----------------------|--|-----------|--------------------------------|----|
|                      | Heating Number of osed Equipment                 | Winter    | Rest of the Year               |    |
|                      | Electrical Heater                                | 7,593,691 | 99                             | 33 |
|                      | Electrical Kettle                                | 1,833,278 | 9                              | 11 |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Riyadh

Table 43-1

| S/N Administrative Region | Administrative Region | Used Equipment for Water | Number of Used Equipment | Average Operation Hours / Week |    |
|---------------------------|-----------------------|--------------------------|--------------------------|--------------------------------|----|
|                           | Heating               | Number of osea Equipment | Winter                   | Rest of the Year               |    |
|                           | Piyadh                | Electrical Heater        | 2,095,197                | 116                            | 12 |
| '                         | 1 Riyadh              | Electrical Kettle        | 501,597                  | 11                             | 12 |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Makkah

Table 43-2

| S/N  | S/N Administrative Region Used Equipment for Water Heating | Number of Used Equipment    | Average Operation Hours / Week |        |                  |
|------|--|-----------------------------|--------------------------------|--------|------------------|
| 3/14 |  | Heating Number of Osed Equi | Number of osea Equipment       | Winter | Rest of the Year |
|      | Makkab   | Electrical Heater           | 1,404,684                      | 79     | 47               |
| — Z  | 2 Makkah   | Electrical Kettle           | 456,903                        | 11     | 12               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Madinah

Table 43-3

| S/N Administrative Region | Administrative Pegion | Used Equipment for Water Heating Number of Used Equipment | Average Operation Hours / Week |        |                  |
|---------------------------|-----------------------|---|--------------------------------|--------|------------------|
|                           | Administrative Region |   | Number of Osea Equipment       | Winter | Rest of the Year |
|                           | 3 Madinah             | Electrical Heater   | 438,634                        | 115    | 16               |
| _3                        |                       | Electrical Kettle   | 89,568                         | 9      | 10               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Al-Qassim

Table 43-4

| S/N Administrative Region | Used Equipment for Wa   | Used Equipment for Water | Number of Used Equipment – | Average Operation Hours / Week |                  |
|---------------------------|-------------------------|--------------------------|----------------------------|--------------------------------|------------------|
|                           | Autilitistrative Region | Heating                  |                            | Winter                         | Rest of the Year |
|                           | 4 Al-Qassim             | Electrical Heater        | 561,562                    | 66                             | 4                |
| -4                        |                         | Electrical Kettle        | 120,135                    | 4                              | 6                |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Eastern Region

Table 43-5

| S/NI         | S/N Administrative Region Used Equipment for Water Heating | Number of Used Equipment      | Average Operation Hours / Week |        |                  |
|--------------|--|-------------------------------|--------------------------------|--------|------------------|
| <i>3/1</i> 1 |  | Heating Number of osed Equipm | Number of osea Equipment       | Winter | Rest of the Year |
| _            | Eastern Pegion   | Electrical Heater             | 1,403,405                      | 119    | 29               |
| 5            | 5 Eastern Region   | Electrical Kettle             | 371,404                        | 8      | 9                |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Asir

Table 43-6

| S/NI | S/N Administrative Region | Used Equipment for Water | /ater Number of Used Equipment | Average Operation Hours / Week |                  |
|------|---------------------------|--------------------------|--------------------------------|--------------------------------|------------------|
| 3/11 |                           | Heating                  | Number of osea Equipment       | Winter                         | Rest of the Year |
|      | Asir                      | Electrical Heater        | 558,204                        | 143                            | 134              |
| -6   | 6 Asir                    | Electrical Kettle        | 103,918                        | 10                             | 10               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Tabuk

Table 43-7

| C/NI         | S/N Administrative Region Used Equipment for Water Heating | Number of Used Equipment | Average Operation Hours / Week |        |                  |
|--------------|--|--------------------------|--------------------------------|--------|------------------|
| <i>3</i> /1V |  | Heating                  | Number of Osea Equipment       | Winter | Rest of the Year |
| _            | Tabuk  | Electrical Heater        | 265,429                        | 59     | 23               |
| ,            | 7 Tabuk  | Electrical Kettle        | 48,007                         | 6      | 7                |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Hail

Table 43-8

| S/N  | S/N Administrative Region Used Equipment for Water | Used Equipment for Water | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|--|--------------------------|--------------------------|--------------------------------|------------------|
| 3/11 |  | Heating                  | Number of osed Equipment | Winter                         | Rest of the Year |
|      | Hail   | Electrical Heater        | 275,208                  | 132                            | 20               |
| 0    | 8 Hail   | Electrical Kettle        | 34,824                   | 6                              | 7                |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Northern Borders

Table 43-9

| S/NI | S/N Administrative Region Used Equipment for W<br>Heating | Used Equipment for Water | Number of Used Equipment — | Average Operation Hours / Week |                  |
|------|---|--------------------------|----------------------------|--------------------------------|------------------|
| 3/11 |   | Heating                  |                            | Winter                         | Rest of the Year |
|      | Northorn Pordors  | Electrical Heater        | 67,337                     | 51                             | 11               |
| _ 9  | 9 Northern Borders  | Electrical Kettle        | 11,882                     | 6                              | 6                |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Jazan

Table 43-10

| S/N A | Administrative Region | Used Equipment for Water  Heating  Number of Used Equipment | Number of Used Equipment | Average Operation Hours / Week |    |
|-------|-----------------------|---|--------------------------|--------------------------------|----|
| 3/11  | Administrative Region |   | Winter                   | Rest of the Year               |    |
| 40    | lazan                 | Electrical Heater   | 51,259                   | 28                             | 17 |
| 10    | 10 Jazan              | Electrical Kettle   | 36,968                   | 9                              | 9  |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Najran

Table 43-11

| S/N Administrative Region | Administrative Region | Used Equipment for Water<br>Heating | Number of Used Equipment – | Average Operation Hours / Week |                  |
|---------------------------|-----------------------|-------------------------------------|----------------------------|--------------------------------|------------------|
|                           | Administrative Region |                                     |                            | Winter                         | Rest of the Year |
| 11                        | NI=:                  | Electrical Heater                   | 243,404                    | 36                             | 15               |
|                           | Najran                | Electrical Kettle                   | 21,138                     | 9                              | 10               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Al-Bahah

Table 43-12

| S/N | Administrative Region  Heating | Used Equipment for Water | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|--------------------------------|--------------------------|--------------------------|--------------------------------|------------------|
|     |                                | Heating Humber of osed E | Number of osea Equipment | Winter                         | Rest of the Year |
| 12  | Al-Bahah                       | Electrical Heater        | 138,451                  | 66                             | 62               |
|     |                                | Electrical Kettle        | 21,816                   | 7                              | 13               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Water Heating) in Al-Jouf

Table 43-13

| S/N | Used Equipment for Wa<br>Administrative Region<br>Heating | Used Equipment for Water | Number of Used Equipment – | Average Operation Hours / Week |                  |
|-----|---|--------------------------|----------------------------|--------------------------------|------------------|
|     |   | Heating                  |                            | Winter                         | Rest of the Year |
| 13  | Al-Jouf   | Electrical Heater        | 90,917                     | 83                             | 25               |
|     |   | Electrical Kettle        | 15,117                     | 10                             | 10               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in the Kingdom

Table 44

|                      | Used Equipment for Air Conditioning Number of Used Equipment | Number of Head Facility and | Average Operation Hours / Week |    |
|----------------------|--|-----------------------------|--------------------------------|----|
|                      |  | Winter                      | Rest of the Year               |    |
|                      | Fan  | 3,800,280                   | 23                             | 38 |
| Total of the Kingdom | Window AC  | 16,758,106                  | 21                             | 64 |
|                      | Split AC   | 5,090,043                   | 15                             | 64 |
|                      | Evaporative Cooler   | 173,350                     | 5                              | 59 |
|                      | Central AC   | 205,118                     | 27                             | 93 |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Riyadh

Table 44-1

| S/N | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|-----------------------|--|--------------------------|--------------------------------|------------------|
|     |                       |  | Number of osea Equipment | Winter                         | Rest of the Year |
|     |                       | Fan                                    | 477,866                  | 9                              | 40               |
|     |                       | Window AC                              | 4,063,935                | 12                             | 68               |
| 1   | Riyadh                | Split AC                               | 2,302,628                | 12                             | 70               |
|     |                       | Evaporative Cooler                     | 99,660                   | 3                              | 64               |
|     |                       | Central AC                             | 60,228                   | 9                              | 81               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Makkah

Table 44-2

| S/N     | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|---------|-----------------------|--|--------------------------|--------------------------------|------------------|
| 3/N Aum | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|         |                       | Fan                                    | 1,332,844                | 34                             | 46               |
|         |                       | Window AC                              | 4,915,821                | 31                             | 71               |
| 2       | Makkah                | Split AC                               | 513,747                  | 29                             | 63               |
|         |                       | Evaporative Cooler                     | 6,966                    | 29                             | 94               |
|         |                       | Central AC                             | 34,551                   | 52                             | 88               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Madinah

Table 44-3

| S/N Administrat | Administrative Device | Used Equipment for Air<br>Conditioning | Number of Head Favings ont | Average Operation Hours / Week |                  |
|-----------------|-----------------------|--|----------------------------|--------------------------------|------------------|
|                 | Administrative Region |  | Number of Used Equipment   | Winter                         | Rest of the Year |
|                 |                       | Fan                                    | 299,462                    | 19                             | 35               |
|                 |                       | Window AC                              | 1,305,139                  | 13                             | 68               |
| 3               | Madinah               | Split AC                               | 108,698                    | 10                             | 64               |
|                 |                       | Evaporative Cooler                     | 5,122                      | 5                              | 62               |
|                 |                       | Central AC                             | 12,439                     | 34                             | 51               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Al-Qassim

Table 44-4

| S/N | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|-----------------------|--|--------------------------|--------------------------------|------------------|
|     | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|     |                       | Fan                                    | 153,588                  | 2                              | 11               |
|     |                       | Window AC                              | 760,051                  | 8                              | 33               |
| 4   | Al-Qassim             | Split AC                               | 355,222                  | 10                             | 41               |
|     |                       | Evaporative Cooler                     | 39,467                   | 1                              | 45               |
|     |                       | Central AC                             | 568                      | 10                             | 8                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Eastern Region

Table 44-5

| S/N A | Administrative Region | Used Equipment for Air Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|-------|-----------------------|-------------------------------------|--------------------------|--------------------------------|------------------|
| 3/14  | Administrative Region |                                     | Number of osea Equipment | Winter                         | Rest of the Year |
|       |                       | Fan                                 | 212,664                  | 5                              | 25               |
|       |                       | Window AC                           | 2,147,363                | 5                              | 67               |
| 5     | Eastern Region        | Split AC                            | 1,283,272                | 5                              | 71               |
|       |                       | Evaporative Cooler                  | 6,007                    | 27                             | 50               |
|       |                       | Central AC                          | 93,373                   | 23                             | 114              |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Asir

Table 44-6

| S/N  | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment – | Average Operation Hours / Week |                  |
|------|-----------------------|--|----------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region |  |                            | Winter                         | Rest of the Year |
|      |                       | Fan                                    | 309,860                    | 29                             | 41               |
|      |                       | Window AC                              | 883,847                    | 30                             | 54               |
| 6    | Asir                  | Split AC                               | 180,858                    | 31                             | 53               |
|      |                       | Evaporative Cooler                     | 1,287                      | 26                             | 39               |
|      |                       | Central AC                             | 827                        | 29                             | 56               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Tabuk

Table 44-7

| S/N | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment – | Average Operation Hours / Week |                  |
|-----|-----------------------|--|----------------------------|--------------------------------|------------------|
|     | Administrative Region |  | Number of osea Equipment   | Winter                         | Rest of the Year |
|     |                       | Fan                                    | 135,868                    | 9                              | 29               |
|     |                       | Window AC                              | 538,769                    | 19                             | 43               |
| 7   | Tabuk                 | Split AC                               | 35,465                     | 16                             | 45               |
|     |                       | Evaporative Cooler                     | 748                        | 3                              | 22               |
|     |                       | Central AC                             | 594                        | 11                             | 60               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Hail

**Table 44-8** 

| S/N  | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|--|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Fan                                    | 81,837                   | 5                              | 30               |
|      |                       | Window AC                              | 399,762                  | 32                             | 76               |
| 8    | Hail                  | Split AC                               | 100,497                  | 32                             | 74               |
|      |                       | Evaporative Cooler                     | 3,308                    | 2                              | 71               |
|      |                       | Central AC                             | 216                      | 57                             | 136              |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Northern Borders

**Table 44-9** 

| S/N Admi | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|----------|-----------------------|--|--------------------------|--------------------------------|------------------|
|          | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|          |                       | Fan                                    | 39,906                   | 4                              | 22               |
|          |                       | Window AC                              | 158,234                  | 27                             | 55               |
| 9        | Northern Borders      | Split AC                               | 28,648                   | 28                             | 57               |
|          |                       | Evaporative Cooler                     | 795                      | 3                              | 49               |
|          |                       | Central AC                             | 925                      | 41                             | 58               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Jazan

Table 44-10

| S/N Ad | Administrative Region | Used Equipment for Air  Conditioning | Number of Used Equipment — | Average Operation Hours / Week |                  |
|--------|-----------------------|--------------------------------------|----------------------------|--------------------------------|------------------|
| 3/11   | Auministrative Region |                                      | Number of osea Equipment   | Winter                         | Rest of the Year |
|        |                       | Fan                                  | 489,353                    | 31                             | 37               |
|        |                       | Window AC                            | 842,680                    | 47                             | 64               |
| 10     | Jazan                 | Split AC                             | 49,545                     | 30                             | 37               |
|        |                       | Evaporative Cooler                   | 131                        | 4                              | 6                |
|        |                       | Central AC                           | 2,224                      | 15                             | 39               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Najran

Table 44-11

| S/N Administr | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|---------------|-----------------------|--|--------------------------|--------------------------------|------------------|
|               | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|               |                       | Fan                                    | 132,772                  | 7                              | 22               |
|               |                       | Window AC                              | 331,362                  | 11                             | 40               |
| 11            | Najran                | Split AC                               | 34,363                   | 11                             | 36               |
|               |                       | Evaporative Cooler                     | 8,945                    | 4                              | 26               |
|               |                       | Central AC                             | 139                      | 13                             | 38               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Al-Bahah

Table 44-12

| S/N Adm | Administrative Region | Used Equipment for Air  Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|---------|-----------------------|--------------------------------------|--------------------------|--------------------------------|------------------|
| 3/11    | Auministrative Region |                                      | Number of osea Equipment | Winter                         | Rest of the Year |
|         |                       | Fan                                  | 63,184                   | 15                             | 25               |
|         |                       | Window AC                            | 187,778                  | 28                             | 46               |
| 12      | Al-Bahah              | Split AC                             | 48,325                   | 26                             | 42               |
|         |                       | Evaporative Cooler                   | 244                      | 57                             | 59               |
|         |                       | Central AC                           | 148                      | 27                             | 48               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Air Conditioning) in Al-Jouf

Table 44-13

| S/N Adminis | Administrative Region | Used Equipment for Air<br>Conditioning | Number of Used Equipment | Average Operation Hours / Week |                  |
|-------------|-----------------------|--|--------------------------|--------------------------------|------------------|
|             | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|             |                       | Fan                                    | 71,076                   | 11                             | 38               |
|             |                       | Window AC                              | 222,093                  | 35                             | 50               |
| 13          | Al-Jouf               | Split AC                               | 48,776                   | 28                             | 50               |
|             |                       | Evaporative Cooler                     | 669                      | 5                              | 45               |
|             |                       | Central AC                             | 157                      | 37                             | 48               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in the Kingdom

Table 45

|                      | Used Equipment for the Lightening Number of Used Equipment | Number of Used Equipment | Average Operation Hours / Week |    |
|----------------------|--|--------------------------|--------------------------------|----|
|                      |  | Winter                   | Rest of the Year               |    |
| Total of the Kingdom | Regular Lamps  | 95,014,473               | 58                             | 63 |
|                      | Energy Saving Lamps  | 40,115,206               | 55                             | 58 |
|                      | Fluorescent Lamps  | 31,782,845               | 43                             | 46 |
|                      | Side Lamps   | 2,086,328                | 18                             | 20 |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Riyadh

Table 45-1

| S/N , | Administrative Region | Used Equipment for the Lightening | Number of Used Equipment - | Average Operation Hours / Week |                  |
|-------|-----------------------|-----------------------------------|----------------------------|--------------------------------|------------------|
|       | Administrative Region |                                   |                            | Winter                         | Rest of the Year |
| 1     |                       | Regular Lamps                     | 20,398,537                 | 54                             | 63               |
|       | Riyadh                | Energy Saving Lamps               | 8,514,567                  | 57                             | 60               |
|       | *                     | Fluorescent Lamps                 | 12,443,174                 | 57                             | 62               |
|       |                       | Side Lamps                        | 602,880                    | 21                             | 24               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Makkah

Table 45-2

| S/N Administrati | Administrative Region | Used Equipment for the<br>Lightening | Number of Used Equipment | Average Operation Hours / Week |                  |
|------------------|-----------------------|--------------------------------------|--------------------------|--------------------------------|------------------|
|                  | Administrative Region |                                      |                          | Winter                         | Rest of the Year |
|                  |                       | Regular Lamps                        | 24,628,859               | 65                             | 69               |
| 2                | Makkah                | Energy Saving Lamps                  | 13,458,828               | 58                             | 61               |
| 2                |                       | Fluorescent Lamps                    | 3,067,186                | 24                             | 26               |
|                  |                       | Side Lamps                           | 342,059                  | 16                             | 17               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Madinah

Table 45-3

| S/N  | Administrative Region | Used Equipment for the Lightening  Number of Used Equipment | Number of Head Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Region |   | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps   | 6,252,432                | 60                             | 64               |
| 3    | Madinah               | Energy Saving Lamps   | 1,109,908                | 50                             | 51               |
| 3    |                       | Fluorescent Lamps   | 381,230                  | 19                             | 21               |
|      |                       | Side Lamps  | 57,838                   | 17                             | 17               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Al-Qassim

Table 45-4

| S/N | Administrative Region | Used Equipment for the Lightening Number of Used | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|-----------------------|--|--------------------------|--------------------------------|------------------|
|     | Administrative Region |  | Number of osea Equipment | Winter                         | Rest of the Year |
|     |                       | Regular Lamps                                    | 2,374,309                | 24                             | 31               |
| 4   | Al-Qassim             | Energy Saving Lamps                              | 2,246,046                | 39                             | 41               |
| 4   | AI-Qassiiii           | Fluorescent Lamps                                | 3,249,043                | 26                             | 29               |
|     |                       | Side Lamps                                       | 120,373                  | 10                             | 12               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Eastern Region

Table 45-5

| S/N Adm | Administrative Region | Used Equipment for the<br>Lightening | Number of Used Equipment - | Average Operation Hours / Week |                  |
|---------|-----------------------|--------------------------------------|----------------------------|--------------------------------|------------------|
|         | Administrative Region |                                      |                            | Winter                         | Rest of the Year |
|         |                       | Regular Lamps                        | 20,039,241                 | 66                             | 71               |
| 5       | Eastern Region        | Energy Saving Lamps                  | 10,922,626                 | 66                             | 69               |
| 5       | Lasterii Regiori      | Fluorescent Lamps                    | 3,089,466                  | 45                             | 46               |
|         |                       | Side Lamps                           | 577,226                    | 20                             | 20               |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Asir

Table 45-6

| S/N          | Administrative Region | Used Equipment for the Lightening  Number of Used Equipment | Number of Used Equipment | Average Operation Hours / Week |    |
|--------------|-----------------------|---|--------------------------|--------------------------------|----|
| <i>3/</i> 10 | Administrative Region |   | Winter                   | Rest of the Year               |    |
|              |                       | Regular Lamps   | 6,663,285                | 52                             | 56 |
| 6            | Asir                  | Energy Saving Lamps   | 1,805,260                | 51                             | 56 |
| 6            | ASII                  | Fluorescent Lamps   | 5,287,166                | 59                             | 61 |
|              |                       | Side Lamps  | 171,751                  | 28                             | 31 |

Source: Household Energy Survey 2017



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Tabuk

Table 45-7

| S/N Administ | Administrative Region | Used Equipment for the Lightening | Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-----------------------|-----------------------------------|--------------------------|--------------------------------|------------------|
|              | Administrative Region |                                   | Number of osea Equipment | Winter                         | Rest of the Year |
|              |                       | Regular Lamps                     | 2,972,307                | 44                             | 46               |
| 7            | Tabuk                 | Energy Saving Lamps               | 199,887                  | 29                             | 34               |
| ,            |                       | Fluorescent Lamps                 | 133,521                  | 32                             | 36               |
|              |                       | Side Lamps                        | 20,996                   | 10                             | 14               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Hail

Table 45-8

| S/N  | Administrative Region | Used Equipment for the  Lightening  Number of | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---|--------------------------|--------------------------------|------------------|
| 3/11 |                       |   | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps                                 | 2,309,103                | 56                             | 58               |
| 0    | Hail                  | Energy Saving Lamps                           | 469,473                  | 41                             | 41               |
| 0    | Hall                  | Fluorescent Lamps                             | 1,503,985                | 50                             | 52               |
|      |                       | Side Lamps                                    | 17,323                   | 12                             | 12               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Northern Borders

Table 45-9

| S/N  | Administrative Region | Used Equipment for the Lightening | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|-----------------------------------|--------------------------|--------------------------------|------------------|
| 3/14 |                       |                                   |                          | Winter                         | Rest of the Year |
|      |                       | Regular Lamps                     | 1,122,709                | 56                             | 57               |
| 9    | Northern Borders      | Energy Saving Lamps               | 3,994                    | 29                             | 29               |
| 9    |                       | Fluorescent Lamps                 | 108,513                  | 39                             | 42               |
|      |                       | Side Lamps                        | 10,652                   | 20                             | 20               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Jazan

Table 45-10

| S/N  | Administrative Region | Used Equipment for the Lightening | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|-----------------------------------|--------------------------|--------------------------------|------------------|
| 3/14 |                       |                                   | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps                     | 3,087,744                | 67                             | 70               |
| 10   | Jazan                 | Energy Saving Lamps               | 307,203                  | 42                             | 44               |
| 10   |                       | Fluorescent Lamps                 | 562,790                  | 23                             | 27               |
|      |                       | Side Lamps                        | 44,540                   | 15                             | 16               |

Source: Household Energy Survey 2017

\*Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Najran

Table 45-11

| S/N  | Administrative Region | Used Equipment for the Lightening Number o | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|--|--------------------------|--------------------------------|------------------|
| 3/14 |                       |  | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps                              | 1,694,466                | 33                             | 36               |
| 11   | Najran                | Energy Saving Lamps                        | 178,172                  | 15                             | 16               |
| Ü    |                       | Fluorescent Lamps                          | 1,741,108                | 36                             | 40               |
|      |                       | Side Lamps                                 | 78,711                   | 10                             | 12               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Al-Bahah

Table 45-12

| S/N  | Administrative Region | Used Equipment for the Lightening Number of Used Equipme | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|--|--------------------------|--------------------------------|------------------|
| 3/14 |                       |  | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps  | 1,990,482                | 40                             | 47               |
| 12   | Al-Bahah              | Energy Saving Lamps                                      | 540,986                  | 31                             | 45               |
| 12   |                       | Fluorescent Lamps  | 172,498                  | 15                             | 20               |
|      |                       | Side Lamps   | 24,939                   | 12                             | 17               |

Source: Household Energy Survey 2017

\*Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Lightening) in Al-Jouf

Table 45-13

| S/N  | Administrative Region | Used Equipment for the Lightening Number of l | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---|--------------------------|--------------------------------|------------------|
| 3/14 |                       |   | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | Regular Lamps                                 | 1,480,999                | 37                             | 40               |
| 13   | Al-Jouf               | Energy Saving Lamps                           | 358,256                  | 45                             | 44               |
|      |                       | Fluorescent Lamps                             | 43,166                   | 25                             | 39               |
|      |                       | Side Lamps                                    | 17,039                   | 20                             | 24               |

Source: Household Energy Survey 2017

\*Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in the Kingdom

Table 46

|                      | Used Equipment for the Cooking Number of Used Equipment — | Number of Used Equipment | Average Operation Hours / Week |    |
|----------------------|---|--------------------------|--------------------------------|----|
| Total of the Kingdom |   | Winter                   | Rest of the Year               |    |
|                      | Electric Stove  | 1,012,484                | 17                             | 21 |
|                      | Microwave   | 1,706,923                | 8                              | 10 |
|                      | Electric Grill  | 130,218                  | 8                              | 9  |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Riyadh

Table 46-1

| S/N          | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| <i>3/</i> IN | Administrative Region | osed Equipment for the Cooking | Number of Osea Equipment | Winter                         | Rest of the Year |
|              |                       | Electric Stove                 | 192,203                  | 22                             | 24               |
| 1            | ·                     | Microwave                      | 493,134                  | 8                              | 11               |
|              |                       | Electric Grill                 | 33,852                   | 11                             | 12               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Makkah

Table 46-2

| 5 | /N  | Administrative Region Used Equipment for the | Used Equipment for the Cooking | ooking Number of Used Equipment – | Average Operation Hours / Week |                  |
|---|-----|--|--------------------------------|-----------------------------------|--------------------------------|------------------|
| 3 | /14 |  | Osed Equipment for the Cooking |                                   | Winter                         | Rest of the Year |
|   |     |  | Electric Stove                 | 295,797                           | 15                             | 18               |
|   | 2   |  | Microwave                      | 388,137                           | 8                              | 10               |
|   |     |  | Electric Grill                 | 18,407                            | 7                              | 7                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Madinah

Table 46-3

| 5/N   | Administrative Region Used Equipment for the Cool | Used Equipment for the Cooking | Number of Used Equipment – | Average Operation Hours / Week |                  |
|-------|---|--------------------------------|----------------------------|--------------------------------|------------------|
| D/ IN |   | Osed Equipment for the Cooking |                            | Winter                         | Rest of the Year |
|       |   | Electric Stove                 | 57,266                     | 10                             | 12               |
| 3     |   | Microwave                      | 104,896                    | 8                              | 10               |
|       |   | Electric Grill                 | 2,548                      | 13                             | 16               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Al-Qassim

Table 46-4

| S/N  | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| 3/10 |                       |                                |                          | Winter                         | Rest of the Year |
|      |                       | Electric Stove                 | 32,827                   | 6                              | 8                |
| 4    |                       | Microwave                      | 104,728                  | 4                              | 6                |
|      |                       | Electric Grill                 | 11,888                   | 4                              | 4                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Eastern Region

Table 46-5

| S/N          | Administrative Region Used Eq | Used Equipment for the Cooking | Used Equipment for the Cooking Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-------------------------------|--------------------------------|---|--------------------------------|------------------|
| <i>3/</i> 1N |                               | Osed Equipment for the Cooking |   | Winter                         | Rest of the Year |
|              |                               | Electric Stove                 | 246,879   | 21                             | 28               |
| 5            |                               | Microwave                      | 309,010   | 6                              | 9                |
|              |                               | Electric Grill                 | 43,251  | 5                              | 6                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Asir

Table 46-6

| S/ | S/N    | Administrative Region Used Equipment for the Cooking | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|----|--------|--|--------------------------------|--------------------------|--------------------------------|------------------|
|    | 3/ I N |  | Osed Equipment for the Cooking | Number of osea Equipment | Winter                         | Rest of the Year |
|    |        | Asir   | Electric Stove                 | 63,349                   | 18                             | 19               |
|    | 6      |  | Microwave                      | 90,712                   | 10                             | 10               |
|    |        |  | Electric Grill                 | 9,191                    | 9                              | 9                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Tabuk

Table 46-7

| S/N | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| 3/1 |                       |                                |                          | Winter                         | Rest of the Year |
|     |                       | Electric Stove                 | 20,996                   | 9                              | 11               |
| 7   |                       | Microwave                      | 36,198                   | 7                              | 8                |
|     |                       | Electric Grill                 | 297                      | 9                              | 23               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Hail

Table 46-8

| S/N          | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| <i>3/</i> IN | Administrative Region |                                |                          | Winter                         | Rest of the Year |
|              |                       | Electric Stove                 | 23,500                   | 13                             | 13               |
| 8            | Hail                  | Microwave                      | 42,105                   | 6                              | 7                |
|              |                       | Electric Grill                 | 2,738                    | 10                             | 10               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Northern Borders

Table 46-9

| S/N  | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| 3/11 |                       |                                |                          | Winter                         | Rest of the Year |
|      |                       | Electric Stove                 | 5,319                    | 10                             | 12               |
| 9    | Northern Borders      | Microwave                      | 17,318                   | 6                              | 6                |
|      |                       | Electric Grill                 | 388                      | 9                              | 9                |

Source: Household Energy Survey 2017

\*Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Jazan

Table 46-10

| S/N          | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| <i>3/</i> IN |                       |                                |                          | Winter                         | Rest of the Year |
|              |                       | Electric Stove                 | 26,525                   | 17                             | 20               |
| 10           | Jazan                 | Microwave                      | 49,607                   | 9                              | 10               |
|              |                       | Electric Grill                 | 1,459                    | 8                              | 11               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Najran

Table 46-11

| S/  | N | Administrative Region | egion Used Equipment for the Cooking | Number of Used Equipment - | Average Operation Hours / Week |                  |
|-----|---|-----------------------|--------------------------------------|----------------------------|--------------------------------|------------------|
| 3/1 |   | Administrative Region |                                      |                            | Winter                         | Rest of the Year |
|     |   | Najran                | Electric Stove                       | 28,627                     | 11                             | 12               |
| 1   | 1 |                       | Microwave                            | 26,294                     | 8                              | 9                |
|     |   |                       | Electric Grill                       | 4,149                      | 9                              | 11               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Al-Bahah

Table 46-12

| S/ | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|----|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| 3/ | Auministrative Region |                                |                          | Winter                         | Rest of the Year |
|    |                       | Electric Stove                 | 14,029                   | 13                             | 19               |
| 13 | Al-Bahah              | Microwave                      | 27,109                   | 10                             | 20               |
|    |                       | Electric Grill                 | 665                      | 4                              | 5                |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Cooking) in Al-Jouf

Table 46-13

| S.  | 'N | Administrative Region | Used Equipment for the Cooking | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|----|-----------------------|--------------------------------|--------------------------|--------------------------------|------------------|
| 3/1 |    | Auministrative Region |                                |                          | Winter                         | Rest of the Year |
|     |    | Al-Jouf               | Electric Stove                 | 5,168                    | 18                             | 21               |
| 1   | 13 |                       | Microwave                      | 17,675                   | 9                              | 10               |
|     |    |                       | Electric Grill                 | 1,384                    | 20                             | 22               |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in the Kingdom

Table 47

|                      | Used Equipment in Food                | Number of Used Equipment | Average Operati  | on Hours / Week |
|----------------------|---------------------------------------|--------------------------|------------------|-----------------|
| Total of the Kingdom | Preservation Number of Osed Equipment | Winter                   | Rest of the Year |                 |
|                      | Fridge                                | 5,743,530                | 133              | 136             |
|                      | Freezer                               | 1,957,279                | 138              | 140             |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Riyadh

Table 47-1

| S/N  | Administrative Region | Used Equipment in Food | Number of Used Equipment — | Average Operation Hours / Week |                  |
|------|-----------------------|------------------------|----------------------------|--------------------------------|------------------|
| 3/14 | Auministrative Region | Preservation           | Number of osea Equipment   | Winter                         | Rest of the Year |
| 1    | Riyadh                | Fridge                 | 1,479,679                  | 139                            | 145              |
|      |                       | Freezer                | 616,734                    | 146                            | 147              |

<sup>\*</sup>Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Makkah

Table 47-2

| S/N  | Administrative Region | Used Equipment in Food  Number of Used Equipment —  Preservation | Number of Used Equipment | Average Operation Hours / Week |     |
|------|-----------------------|--|--------------------------|--------------------------------|-----|
| 3/14 | Administrative Region |  | Winter                   | Rest of the Year               |     |
| 2    | Makkah                | Fridge   | 1,493,624                | 142                            | 144 |
| _2   |                       | Freezer  | 399,947                  | 146                            | 147 |

Source: Household Energy Survey 2017

\*Electricity usage in (2016)



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Madinah

Table 47-3

| S/N  | Used Administrative Region | Used Equipment in Food            | ent in Food  Number of Used Equipment | Average Operation Hours / Week |                  |
|------|----------------------------|-----------------------------------|---------------------------------------|--------------------------------|------------------|
| 3/14 |                            | Preservation Number of osed Equip | Number of osea Equipment              | Winter                         | Rest of the Year |
| 2    | Madinah                    | Fridge                            | 379,641                               | 137                            | 139              |
| 3    |                            | Freezer                           | 107,393                               | 135                            | 137              |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Al-Qassim

Table 47-4

| S/N | Administrative Region | Used Equipment in Food Administrative Region Preservation | Number of Used Equipment — | Average Operation Hours / Week |                  |
|-----|-----------------------|---|----------------------------|--------------------------------|------------------|
|     | Administrative negion |   |                            | Winter                         | Rest of the Year |
| 4   | Al-Qassim             | Fridge  | 298,165                    | 83                             | 83               |
|     |                       | Freezer   | 186,810                    | 89                             | 89               |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Eastern Region

Table 47-5

| S/N | Administrative Region | Used Equipment in Food | sed Equipment in Food  Number of Used Equipment  Preservation | Average Operation Hours / Week |                  |
|-----|-----------------------|------------------------|---|--------------------------------|------------------|
|     |                       | Preservation           |   | Winter                         | Rest of the Year |
| 5   | Eastern Region        | Fridge                 | 851,516   | 137                            | 141              |
|     |                       | Freezer                | 307,673   | 141                            | 143              |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Asir

Table 47-6

| S/N | Used Equipment in Food Administrative Region Preservation | Number of Used Equipment —           | Average Operation Hours / Week |        |                  |
|-----|---|--------------------------------------|--------------------------------|--------|------------------|
|     |   | Preservation Number of osed Equipmen | Number of osea Equipment       | Winter | Rest of the Year |
| 6   | Asir  | Fridge                               | 386,742                        | 149    | 150              |
| _6  |   | Freezer                              | 81,860                         | 154    | 155              |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Tabuk

Table 47-7

| S/N | Used Equipment in Food Administrative Region Preservation | od Number of Used Equipment           | Average Operation Hours / Week |                  |     |
|-----|---|---------------------------------------|--------------------------------|------------------|-----|
|     |   | Preservation Number of osed Equipment | Winter                         | Rest of the Year |     |
| 7   | Tabuk   | Fridge                                | 165,646                        | 89               | 93  |
|     |   | Freezer                               | 34,237                         | 101              | 104 |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Hail

Table 47-8

| S/N | Used Equipment in Food Administrative Region Preservation | Used Equipment in Food                | Number of Used Equipment — | Average Operation Hours / Week |     |
|-----|---|---------------------------------------|----------------------------|--------------------------------|-----|
|     |   | Preservation Number of osed Equipment | Winter                     | Rest of the Year               |     |
| 8   | Hail  | Fridge                                | 132,259                    | 164                            | 165 |
|     |   | Freezer                               | 71,975                     | 165                            | 166 |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Northern Borders

Table 47-9

| S/N | Used Equipment in Food Administrative Region Preservation | Used Equipment in Food | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----|---|------------------------|--------------------------|--------------------------------|------------------|
|     |   | Preservation           | Number of osea Equipment | Winter                         | Rest of the Year |
| 9   | Northern Borders  | Fridge                 | 50,344                   | 115                            | 122              |
|     |   | Freezer                | 19,319                   | 115                            | 123              |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Jazan

Table 47-10

| S/N | Used Equipment in Food Administrative Region Preservation | Number of Used Equipment —            | Average Operation Hours / Week |                  |     |
|-----|---|---------------------------------------|--------------------------------|------------------|-----|
|     |   | Preservation Number of osed Equipment | Winter                         | Rest of the Year |     |
| 10  | Jazan   | Fridge                                | 238,997                        | 112              | 115 |
| 10  |   | Freezer                               | 50,075                         | 121              | 122 |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Najran

Table 47-11

| S/N | Administrative Region | Used Equipment in Food | Number of Used Equipment 📙 | Average Operation Hours / Week |                  |
|-----|-----------------------|------------------------|----------------------------|--------------------------------|------------------|
|     |                       | Preservation           |                            | Winter                         | Rest of the Year |
| 11  | Najran                | Fridge                 | 105,584                    | 66                             | 70               |
|     |                       | Freezer                | 26,171                     | 106                            | 112              |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Al-Bahah

Table 47-12

| S/N | Used Equipment in Food Administrative Region Preservation | Number of Used Equipment —            | Average Operation Hours / Week |                  |     |
|-----|---|---------------------------------------|--------------------------------|------------------|-----|
|     |   | Preservation Number of osed Equipment | Winter                         | Rest of the Year |     |
| 12  | Al-Bahah  | Fridge                                | 82,451                         | 132              | 137 |
|     |   | Freezer                               | 29,423                         | 139              | 142 |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for (Food Preservation) in Al-Jouf

Table 47-13

| S/N | Administrative Region | Used Equipment in Food                | Number of Used Equipment — | Average Operation Hours / Week |     |
|-----|-----------------------|---------------------------------------|----------------------------|--------------------------------|-----|
|     |                       | Preservation Number of Osea Equipment | Winter                     | Rest of the Year               |     |
| 12  | Al-Jouf               | Fridge                                | 78,882                     | 115                            | 120 |
| 13  |                       | Freezer                               | 25,661                     | 130                            | 129 |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in the Kingdom

Table 48

|                       | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
|                       | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|                       | TV                  | 8,204,783                | 37                             | 41               |
|                       | Washing Machine     | 5,315,575                | 9                              | 13               |
|                       | Iron                | 4,366,405                | 7                              | 9                |
| Total for the Kingdom | Vacuum Cleaner      | 4,014,942                | 7                              | 10               |
|                       | Dishwasher          | 179,033                  | 10                             | 12               |
|                       | Water Cooler        | 2,060,191                | 70                             | 120              |
| -                     | Water Bump (Dynamo) | 2,267,278                | 11                             | 15               |
|                       | PC                  | 2,740,014                | 15                             | 18               |
|                       | Gaming Devices      | 1,368,031                | 18                             | 21               |

<sup>\*</sup> Electricity Usage in 2016



# Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Riyadh

Table 48-1

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Auministrative Region | osea Equipment      | Number of osed Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 2,309,120                | 39                             | 45               |
|      |                       | Washing Machine     | 1,352,075                | 10                             | 14               |
|      |                       | Iron                | 1,093,377                | 7                              | 11               |
|      |                       | Vacuum Cleaner      | 1,031,546                | 7                              | 11               |
| 1    | Riyadh                | Dishwasher          | 66,496                   | 11                             | 14               |
|      |                       | Water Cooler        | 820,470                  | 61                             | 125              |
|      |                       | Water Bump (Dynamo) | 552,975                  | 10                             | 15               |
|      |                       | PC                  | 804,155                  | 16                             | 19               |
|      |                       | Gaming Devices      | 391,667                  | 17                             | 22               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Makkah

Table 48-2

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 2,085,302                | 43                             | 48               |
|      |                       | Washing Machine     | 1,442,713                | 10                             | 14               |
|      |                       | Iron                | 1,252,923                | 7                              | 9                |
|      |                       | Vacuum Cleaner      | 1,068,792                | 8                              | 10               |
| 2    | Makkah                | Dishwasher          | 25,404                   | 11                             | 14               |
|      |                       | Water Cooler        | 453,890                  | 108                            | 128              |
|      |                       | Water Bump (Dynamo) | 517,604                  | 12                             | 16               |
|      |                       | PC                  | 685,327                  | 17                             | 20               |
|      |                       | Gaming Devices      | 373,512                  | 20                             | 24               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Madinah

Table 48-3

| S/N          | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|--------------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| <i>3</i> /1N | Administrative Region | osea Equipment      | Number of osed Equipment | Winter                         | Rest of the Year |
|              |                       | TV                  | 468,803                  | 35                             | 39               |
|              |                       | Washing Machine     | 342,459                  | 9                              | 11               |
|              |                       | Iron                | 292,994                  | 6                              | 8                |
|              |                       | Vacuum Cleaner      | 275,352                  | 6                              | 9                |
| 3            | Madinah               | Dishwasher          | 12,431                   | 6                              | 6                |
|              |                       | Water Cooler        | 100,402                  | 87                             | 130              |
|              |                       | Water Bump (Dynamo) | 95,978                   | 22                             | 24               |
|              |                       | PC                  | 153,725                  | 16                             | 17               |
|              |                       | Gaming Devices      | 48,621                   | 19                             | 20               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Al-Qassim

Table 48-4

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 339,362                  | 17                             | 21               |
|      |                       | Washing Machine     | 258,988                  | 5                              | 6                |
|      |                       | Iron                | 211,103                  | 3                              | 4                |
|      |                       | Vacuum Cleaner      | 194,374                  | 3                              | 4                |
| 4    | Al-Qassim             | Dishwasher          | 12,030                   | 3                              | 6                |
|      |                       | Water Cooler        | 96,867                   | 23                             | 75               |
|      |                       | Water Bump (Dynamo) | 179,801                  | 6                              | 9                |
|      |                       | PC                  | 149,006                  | 11                             | 14               |
|      |                       | Gaming Devices      | 59,832                   | 15                             | 20               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Eastern Region

Table 48-5

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Region | osea Equipment      | Number of osed Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 1,320,817                | 34                             | 38               |
|      |                       | Washing Machine     | 738,193                  | 9                              | 13               |
|      |                       | Iron                | 599,503                  | 6                              | 8                |
|      |                       | Vacuum Cleaner      | 588,862                  | 6                              | 8                |
| 5    | Eastern Region        | Dishwasher          | 36,904                   | 13                             | 13               |
|      |                       | Water Cooler        | 303,418                  | 53                             | 126              |
|      |                       | Water Bump (Dynamo) | 275,443                  | 20                             | 22               |
|      |                       | PC                  | 563,829                  | 13                             | 16               |
|      |                       | Gaming Devices      | 251,169                  | 15                             | 17               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Asir

Table 48-6

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 474,754                  | 42                             | 44               |
|      |                       | Washing Machine     | 377,567                  | 12                             | 13               |
|      |                       | Iron                | 295,631                  | 9                              | 11               |
|      |                       | Vacuum Cleaner      | 317,423                  | 10                             | 12               |
| 6    | Asir                  | Dishwasher          | 11,199                   | 12                             | 13               |
|      |                       | Water Cooler        | 24,930                   | 119                            | 134              |
|      |                       | Water Bump (Dynamo) | 233,272                  | 9                              | 12               |
|      |                       | PC                  | 124,874                  | 18                             | 21               |
|      |                       | Gaming Devices      | 64,297                   | 20                             | 22               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Tabuk

**Table 48-7** 

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 240,231                  | 26                             | 29               |
|      |                       | Washing Machine     | 159,325                  | 6                              | 8                |
|      |                       | Iron                | 133,266                  | 4                              | 6                |
|      |                       | Vacuum Cleaner      | 119,624                  | 5                              | 7                |
| 7    | Tabuk                 | Dishwasher          | 2,933                    | 5                              | 7                |
|      |                       | Water Cooler        | 29,768                   | 40                             | 71               |
|      |                       | Water Bump (Dynamo) | 41,739                   | 12                             | 20               |
|      |                       | PC                  | 42,210                   | 9                              | 10               |
|      |                       | Gaming Devices      | 28,360                   | 12                             | 16               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Hail

Table 48-8

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 186,928                  | 44                             | 46               |
|      |                       | Washing Machine     | 115,203                  | 10                             | 12               |
|      |                       | Iron                | 87,526                   | 7                              | 8                |
|      |                       | Vacuum Cleaner      | 90,842                   | 6                              | 8                |
| 8    | Hail                  | Dishwasher          | 2,151                    | 10                             | 11               |
|      |                       | Water Cooler        | 59,526                   | 22                             | 151              |
|      |                       | Water Bump (Dynamo) | 90,627                   | 7                              | 11               |
|      |                       | PC                  | 36,959                   | 14                             | 15               |
|      |                       | Gaming Devices      | 21,784                   | 22                             | 23               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Northern Borders

Table 48-9

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Negron | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 74,922                   | 36                             | 38               |
|      |                       | Washing Machine     | 48,036                   | 8                              | 9                |
|      |                       | Iron                | 36,427                   | 5                              | 6                |
|      |                       | Vacuum Cleaner      | 38,525                   | 6                              | 7                |
| 9    | Northern Borders      | Dishwasher          | 170                      | 5                              | 5                |
|      |                       | Water Cooler        | 22,196                   | 16                             | 57               |
|      |                       | Water Bump (Dynamo) | 29,446                   | 6                              | 8                |
|      |                       | PC                  | 11,101                   | 11                             | 13               |
|      |                       | Gaming Devices      | 13,810                   | 14                             | 16               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Jazan

Table 48-10

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 322,006                  | 30                             | 33               |
|      |                       | Washing Machine     | 228,141                  | 11                             | 13               |
|      |                       | Iron                | 162,163                  | 7                              | 9                |
|      |                       | Vacuum Cleaner      | 78,692                   | 8                              | 10               |
| 10   | Jazan                 | Dishwasher          | 916                      | 25                             | 27               |
|      |                       | Water Cooler        | 71,340                   | 107                            | 112              |
|      |                       | Water Bump (Dynamo) | 104,976                  | 7                              | 9                |
|      |                       | PC                  | 79,216                   | 15                             | 17               |
|      |                       | Gaming Devices      | 61,007                   | 16                             | 19               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Najran

Table 48-11

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/14 | Administrative Region | osea Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 146,645                  | 24                             | 27               |
|      |                       | Washing Machine     | 96,145                   | 5                              | 6                |
|      |                       | Iron                | 75,936                   | 4                              | 4                |
|      |                       | Vacuum Cleaner      | 78,516                   | 4                              | 5                |
| 11   | Najran                | Dishwasher          | 3,766                    | 5                              | 6                |
|      |                       | Water Cooler        | 14,209                   | 18                             | 25               |
|      |                       | Water Bump (Dynamo) | 63,955                   | 6                              | 8                |
|      |                       | PC                  | 33,091                   | 11                             | 12               |
|      |                       | Gaming Devices      | 20,951                   | 14                             | 16               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Al-Bahah

Table 48-12

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region | osed Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 111,957                  | 29                             | 38               |
|      |                       | Washing Machine     | 80,816                   | 9                              | 15               |
|      |                       | Iron                | 65,469                   | 8                              | 13               |
|      |                       | Vacuum Cleaner      | 68,347                   | 7                              | 13               |
| 12   | Al-Bahah              | Dishwasher          | 3,443                    | 7                              | 13               |
|      |                       | Water Cooler        | 27,729                   | 58                             | 79               |
|      |                       | Water Bump (Dynamo) | 39,106                   | 6                              | 10               |
|      |                       | PC                  | 36,544                   | 14                             | 22               |
|      |                       | Gaming Devices      | 17,491                   | 12                             | 21               |

<sup>\*</sup> Electricity Usage in 2016



### Weekly Operation Hours Average of Electrical Energy Uses for Some Equipments in Al-Jouf

Table 48-13

| S/N  | Administrative Region | Used Equipment      | Number of Used Equipment | Average Operation Hours / Week |                  |
|------|-----------------------|---------------------|--------------------------|--------------------------------|------------------|
| 3/11 | Administrative Region | osed Equipment      | Number of osea Equipment | Winter                         | Rest of the Year |
|      |                       | TV                  | 123,937                  | 26                             | 29               |
|      |                       | Washing Machine     | 75,915                   | 8                              | 11               |
|      |                       | Iron                | 60,088                   | 5                              | 7                |
|      |                       | Vacuum Cleaner      | 64,047                   | 6                              | 8                |
| 13   | Al-Jouf               | Dishwasher          | 1,191                    | 14                             | 15               |
|      |                       | Water Cooler        | 35,447                   | 34                             | 90               |
|      |                       | Water Bump (Dynamo) | 42,356                   | 13                             | 25               |
|      |                       | PC                  | 19,978                   | 10                             | 11               |
|      |                       | Gaming Devices      | 15,530                   | 16                             | 17               |

<sup>\*</sup> Electricity Usage in 2016



## Percentage of Air-conditioning Temperature Used Within the House in the Administrative Regions

Table 49

| S/N | Administrative Region | Low (%) | Medium (%) | High (%) |
|-----|-----------------------|---------|------------|----------|
| 1   | Riyadh                | 10.21   | 77.66      | 12.13    |
| 2   | Makkah                | 10.97   | 70.21      | 18.82    |
| 3   | Madinah               | 15.15   | 68.58      | 16.27    |
| 4   | Al-Qassim             | 16.22   | 78.39      | 5.39     |
| 5   | Eastern Region        | 16.11   | 71.77      | 12.12    |
| 6   | Asir                  | 14.97   | 80.79      | 4.24     |
| 7   | Tabuk                 | 11.61   | 65.90      | 22.49    |
| 8   | Hail                  | 7.41    | 78.94      | 13.65    |
| 9   | Northern Borders      | 9.40    | 79.94      | 10.66    |
| 10  | Jazan                 | 10.78   | 66.93      | 22.29    |
| 11  | Najran                | 9.48    | 74.38      | 16.14    |
| 12  | Al-Bahah              | 9.31    | 83.61      | 7.08     |
| 13  | Al-Jouf               | 12.65   | 68.98      | 18.37    |
|     | Total of the Kingdom  | 12.23   | 73.54      | 14.23    |



#### Percentage of Heating Temperature Used Within the House in the Administrative Regions

Table 50

| S/N | Administrative Region | Low (%) | Medium (%) | High (%) |
|-----|-----------------------|---------|------------|----------|
| 1   | Riyadh                | 25.43   | 70.93      | 3.64     |
| 2   | Makkah                | 41.43   | 56.05      | 2.52     |
| 3   | Madinah               | 36.89   | 60.34      | 2.77     |
| 4   | Al-Qassim             | 21.98   | 75.33      | 2.69     |
| 5   | Eastern Region        | 20.07   | 75.55      | 4.38     |
| 6   | Asir                  | 22.78   | 70.79      | 6.43     |
| 7   | Tabuk                 | 28.48   | 61.67      | 9.85     |
| 8   | Hail                  | 12.88   | 80.86      | 6.26     |
| 9   | Northern Borders      | 9.08    | 81.61      | 9.31     |
| 10  | Jazan                 | 65.80   | 32.30      | 1.90     |
| 11  | Najran                | 30.00   | 62.80      | 7.20     |
| 12  | Al-Bahah              | 11.22   | 83.59      | 5.19     |
| 13  | Al-Jouf               | 13.82   | 71.48      | 14.70    |
|     | Total of the Kingdom  | 29.1    | 66.71      | 4.19     |



## Percentage of the Number of Households Interested in Reducing and Rationalizing Electricity Consumption in the Administrative Regions

Table 51

| S/N | Administrative Region | Interested (%) | Slightly Interested (%) | Not Interested (%) |
|-----|-----------------------|----------------|-------------------------|--------------------|
| 1   | Riyadh                | 56.30          | 37.30                   | 6.40               |
| 2   | Makkah                | 60.73          | 35.09                   | 4.18               |
| 3   | Madinah               | 62.94          | 34.19                   | 2.87               |
| 4   | Al-Qassim             | 53.82          | 35.10                   | 11.08              |
| 5   | Eastern Region        | 50.40          | 44.46                   | 5.14               |
| 6   | Asir                  | 52.68          | 41.12                   | 6.20               |
| 7   | Tabuk                 | 41.29          | 54.85                   | 3.86               |
| 8   | Hail                  | 55.40          | 40.51                   | 4.09               |
| 9   | Northern Borders      | 28.75          | 68.40                   | 2.85               |
| 10  | Jazan                 | 62.47          | 32.20                   | 5.33               |
| 11  | Najran                | 36.65          | 52.78                   | 10.57              |
| 12  | Al-Bahah              | 65.69          | 32.38                   | 1.93               |
| 13  | Al-Jouf               | 57.96          | 40.41                   | 1.63               |
|     | Total of the Kingdom  | 56.08          | 38.59                   | 5.33               |



## Percentage of the Number of Households Using Electrical Power Saving Devices in the Administrative Regions

Table 52

| S/N | Administrative Region | Yes (%) | No (%) |
|-----|-----------------------|---------|--------|
| 1   | Riyadh                | 24.86   | 75.14  |
| 2   | Makkah                | 29.90   | 70.10  |
| 3   | Madinah               | 27.90   | 72.10  |
| 4   | Al-Qassim             | 25.74   | 74.26  |
| 5   | Eastern Region        | 30.73   | 69.27  |
| 6   | Asir                  | 11.49   | 88.51  |
| 7   | Tabuk                 | 15.64   | 84.36  |
| 8   | Hail                  | 18.57   | 81.43  |
| 9   | Northern Borders      | 13.88   | 86.12  |
| 10  | Jazan                 | 20.74   | 79.26  |
| 11  | Najran                | 17.81   | 82.19  |
| 12  | Al-Bahah              | 24.17   | 75.83  |
| 13  | Al-Jouf               | 30.22   | 69.78  |
|     | Total of the Kingdom  | 25.63   | 74.37  |



## Percentage of Households Believing That Energy Conservation Measures Would Reduce their Financial Costs in the Administrative Regions

Table 53

| S/N | Administrative Region | Yes (%) | Slightly Yes (%) | No (%) |
|-----|-----------------------|---------|------------------|--------|
| 1   | Riyadh                | 55.39   | 38.84            | 5.77   |
| 2   | Makkah                | 58.02   | 37.61            | 4.37   |
| 3   | Madinah               | 52.79   | 43.21            | 4.00   |
| 4   | Al-Qassim             | 49.84   | 41.98            | 8.18   |
| 5   | Eastern Region        | 54.46   | 42.09            | 3.45   |
| 6   | Asir                  | 45.79   | 47.56            | 6.65   |
| 7   | Tabuk                 | 42.31   | 52.08            | 5.61   |
| 8   | Hail                  | 56.09   | 40.14            | 3.77   |
| 9   | Northern Borders      | 33.91   | 64.57            | 1.52   |
| 10  | Jazan                 | 51.20   | 42.68            | 6.12   |
| 11  | Najran                | 35.95   | 54.26            | 9.79   |
| 12  | Al-Bahah              | 58.54   | 38.65            | 2.81   |
| 13  | Al-Jouf               | 57.61   | 40.92            | 1.47   |
|     | Total of the Kingdom  | 53.81   | 41.17            | 5.02   |



## Percentage of Households Who Are Willing to Spend Some Money on Energy Saving Devices in the Administrative Regions

Table 54

| S/N | Administrative Region | Yes (%) | Unsure (%) | No (%) |
|-----|-----------------------|---------|------------|--------|
| 1   | Riyadh                | 47.10   | 30.22      | 22.68  |
| 2   | Makkah                | 48.41   | 32.16      | 19.43  |
| 3   | Madinah               | 46.32   | 35.65      | 18.03  |
| 4   | Al-Qassim             | 39.17   | 40.04      | 20.79  |
| 5   | Eastern Region        | 43.98   | 40.36      | 15.66  |
| 6   | Asir                  | 34.89   | 38.91      | 26.20  |
| 7   | Tabuk                 | 31.68   | 49.97      | 18.35  |
| 8   | Hail                  | 38.21   | 37.48      | 24.31  |
| 9   | Northern Borders      | 29.12   | 50.21      | 20.67  |
| 10  | Jazan                 | 46.75   | 41.27      | 11.98  |
| 11  | Najran                | 33.08   | 44.92      | 22.00  |
| 12  | Al-Bahah              | 43.13   | 36.38      | 20.49  |
| 13  | Al-Jouf               | 41.96   | 41.03      | 17.01  |
|     | Total of the Kingdom  | 44.48   | 35.56      | 19.96  |



#### Percentage of Most Effective Advertising Method Thought for Energy Conservation in the Administrative Regions

Table 55

| Tubic |                       |       |                             |       |            |                   |         |         |       |              |             |                              |       |
|-------|-----------------------|-------|-----------------------------|-------|------------|-------------------|---------|---------|-------|--------------|-------------|------------------------------|-------|
| S/N   | Administrative Region | TV    | Newspapers<br>and Magazines | Radio | Billboards | Electricity Bills | Schools | Mosques | SMSs  | Social Media | Phone Bills | Awareness at Sports Stadiums | Other |
| 1     | Riyadh                | 20.10 | 5.80                        | 6.10  | 9.10       | 7.50              | 5.80    | 4.80    | 11.70 | 22.80        | 3.40        | 2.10                         | 0.80  |
| 2     | Makkah                | 19.40 | 7.00                        | 7.10  | 11.10      | 8.70              | 5.80    | 5.30    | 9.50  | 18.40        | 4.50        | 2.30                         | 0.80  |
| 3     | Madinah               | 19.00 | 6.00                        | 6.80  | 8.70       | 7.90              | 7.10    | 6.30    | 9.10  | 20.40        | 4.50        | 3.10                         | 1.10  |
| 4     | Al-Qassim             | 20.40 | 5.60                        | 3.90  | 8.70       | 7.90              | 8.10    | 6.70    | 12.90 | 20.30        | 3.80        | 1.30                         | 0.30  |
| 5     | Eastern Region        | 15.80 | 6.70                        | 6.80  | 9.80       | 9.20              | 6.60    | 5.80    | 9.60  | 17.20        | 6.70        | 4.10                         | 1.70  |
| 6     | Asir                  | 13.70 | 9.10                        | 8.50  | 9.40       | 7.50              | 9.00    | 10.10   | 8.40  | 12.50        | 5.80        | 4.10                         | 1.90  |
| 7     | Tabuk                 | 22.00 | 9.20                        | 8.60  | 11.60      | 9.30              | 6.60    | 5.30    | 7.50  | 14.60        | 3.10        | 1.50                         | 0.70  |
| 8     | Hail                  | 24.90 | 6.40                        | 5.60  | 8.20       | 10.20             | 4.80    | 4.10    | 11.10 | 18.70        | 4.30        | 1.20                         | 0.50  |
| 9     | Northern Borders      | 19.20 | 6.30                        | 4.60  | 11.60      | 9.30              | 9.00    | 6.40    | 5.60  | 18.10        | 6.30        | 3.00                         | 0.40  |
| 10    | Jazan                 | 13.40 | 9.70                        | 10.40 | 10.90      | 8.40              | 9.30    | 7.80    | 9.20  | 12.60        | 4.90        | 2.90                         | 0.60  |
| 11    | Najran                | 19.00 | 9.00                        | 5.10  | 10.10      | 7.90              | 7.80    | 9.40    | 9.30  | 16.30        | 3.60        | 1.70                         | 0.70  |
| 12    | Al-Bahah              | 18.60 | 6.40                        | 6.20  | 8.10       | 7.60              | 10.60   | 10.00   | 8.00  | 16.20        | 5.00        | 3.10                         | 0.20  |
| 13    | Al-Jouf               | 23.80 | 4.10                        | 5.30  | 8.50       | 13.90             | 6.30    | 4.50    | 7.30  | 18.20        | 3.60        | 2.90                         | 1.50  |
| T     | Total of the Kingdom  | 18.40 | 7.00                        | 6.90  | 9.90       | 8.40              | 6.70    | 6.10    | 9.90  | 18.40        | 4.60        | 2.70                         | 1.00  |



## Percentage of Annual Costs of Electricity and Other Sources of Fuel to Total Annual Household Income Expenditure in the Administrative Region

Table 56

| S/N  | Administrative Region |              |             | Percentage (%) |              |               |
|------|-----------------------|--------------|-------------|----------------|--------------|---------------|
| 3/IN | Auministrative Region | Less than 5% | From 5 -10% | From 11 -15%   | From 16 -20% | More than 20% |
| 1    | Riyadh                | 32.60        | 38.16       | 15.96          | 6.26         | 7.02          |
| 2    | Makkah                | 40.89        | 37.16       | 15.93          | 3.88         | 2.14          |
| 3    | Madinah               | 35.22        | 38.46       | 13.36          | 5.68         | 7.28          |
| 4    | Al-Qassim             | 33.10        | 42.20       | 18.64          | 4.43         | 1.63          |
| 5    | Eastern Region        | 23.09        | 35.95       | 23.86          | 10.51        | 6.59          |
| 6    | Asir                  | 10.41        | 23.32       | 19.23          | 20.37        | 26.67         |
| 7    | Tabuk                 | 21.68        | 45.08       | 24.49          | 5.49         | 3.26          |
| 8    | Hail                  | 24.63        | 30.72       | 25.28          | 9.00         | 10.37         |
| 9    | Northern Borders      | 29.49        | 48.54       | 17.86          | 3.73         | 0.38          |
| 10   | Jazan                 | 34.40        | 33.31       | 12.16          | 7.25         | 12.88         |
| 11   | Najran                | 16.57        | 26.65       | 19.58          | 19.48        | 17.72         |
| 12   | Al-Bahah              | 24.98        | 55.40       | 14.82          | 0.94         | 3.86          |
| 13   | Al-Jouf               | 21.46        | 41.95       | 18.25          | 12.55        | 5.79          |
| То   | otal of the Kingdom   | 30.95        | 36.70       | 17.71          | 7.49         | 7.15          |



#### Percentage of Water Source of Houses in the Administrative Regions

Table 57

| Table        | 3,                      |                    |               |          |
|--------------|-------------------------|--------------------|---------------|----------|
| S/N          | Administrative Region   |                    | Water Source  |          |
| <i>3/1</i> V | Autilitistiative Region | Public Network (%) | Tank Cars (%) | Well (%) |
| 1            | Riyadh                  | 90.18              | 8.91          | 0.91     |
| 2            | Makkah                  | 68.39              | 30.26         | 1.35     |
| 3            | Madinah                 | 76.77              | 20.37         | 2.86     |
| 4            | Al-Qassim               | 82.26              | 15.50         | 2.24     |
| 5            | Eastern Region          | 95.70              | 3.55          | 0.75     |
| 6            | Asir                    | 46.79              | 50.45         | 2.76     |
| 7            | Tabuk                   | 74.94              | 21.23         | 3.83     |
| 8            | Hail                    | 72.04              | 26.34         | 1.62     |
| 9            | Northern Borders        | 93.60              | 6.39          | 0.01     |
| 10           | Jazan                   | 70.83              | 21.31         | 7.86     |
| 11           | Najran                  | 46.37              | 46.99         | 6.64     |
| 12           | Al-Bahah                | 70.92              | 24.68         | 4.40     |
| 13           | Al-Jouf                 | 90.01              | 7.81          | 2.18     |
|              | Total of the Kingdom    | 76.98              | 20.70         | 2.32     |



### Percentage of Water Source (Public Network) According to the Type of Houses in the Administrative Regions

Table 58

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 79.39                 | 91.66     | 71.62                                | 92.11                 | 93.71         | 66.42     |
| 2   | Makkah                | 46.63                 | 50.87     | 64.78                                | 59.31                 | 77.23         | 59.27     |
| 3   | Madinah               | 39.81                 | 97.13     | 71.88                                | 93.38                 | 94.19         | 80.67     |
| 4   | Al-Qassim             | 42.22                 | 91.86     | 83.62                                | 91.32                 | 93.20         | 51.92     |
| 5   | Eastern Region        | 91.10                 | 98.12     | 95.88                                | 94.30                 | 96.95         | 73.88     |
| 6   | Asir                  | 12.81                 | 20.45     | 32.14                                | 56.54                 | 65.20         | 14.29     |
| 7   | Tabuk                 | 48.31                 | 90.62     | 83.33                                | 92.79                 | 96.40         | 32.61     |
| 8   | Hail                  | 46.50                 | 85.32     | 83.33                                | 86.44                 | 87.86         | 66.67     |
| 9   | Northern Borders      | 93.93                 | 92.32     | 88.67                                | 98.16                 | 93.64         | 84.40     |
| 10  | Jazan                 | 56.51                 | 77.70     | 45.79                                | 76.56                 | 88.16         | 40.00     |
| 11  | Najran                | 28.98                 | 41.34     | 30.00                                | 58.42                 | 61.59         | 48.48     |
| 12  | Al-Bahah              | 44.43                 | 73.29     | 66.88                                | 73.36                 | 76.70         | 81.14     |
| 13  | Al-Jouf               | 88.32                 | 90.24     | 93.88                                | 91.45                 | 92.99         | 75.76     |
| Te  | otal of the Kingdom   | 51.51                 | 81.28     | 68.82                                | 82.65                 | 86.43         | 63.78     |



# Percentage of Water Source (Public Network) According to the Type of Possession in the Administrative Regions

Table 59

| Table | 33                    |           |                 |                         |
|-------|-----------------------|-----------|-----------------|-------------------------|
| S/N   | Administrative Region |           | Possession Type |                         |
| 3/14  | Auministrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1     | Riyadh                | 88.08     | 94.86           | 75.56                   |
| 2     | Makkah                | 53.62     | 77.08           | 57.83                   |
| 3     | Madinah               | 58.83     | 94.67           | 67.25                   |
| 4     | Al-Qassim             | 79.22     | 93.08           | 64.30                   |
| 5     | Eastern Region        | 96.34     | 96.36           | 90.83                   |
| 6     | Asir                  | 32.43     | 62.86           | 37.50                   |
| 7     | Tabuk                 | 57.44     | 96.11           | 40.22                   |
| 8     | Hail                  | 63.88     | 86.91           | 58.57                   |
| 9     | Northern Borders      | 93.08     | 95.12           | 85.64                   |
| 10    | Jazan                 | 61.30     | 86.13           | 69.36                   |
| 11    | Najran                | 37.96     | 56.18           | 48.10                   |
| 12    | Al-Bahah              | 64.47     | 77.96           | 77.14                   |
| 13    | Al-Jouf               | 89.18     | 94.88           | 62.60                   |
|       | Total of the Kingdom  | 67.43     | 86.48           | 68.87                   |



#### Percentage of Water Source (Tank Cars) According to the Type of Houses in the Administrative Regions

Table 60

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 17.38                 | 8.34      | 26.91                                | 7.89                  | 6.07          | 22.69     |
| 2   | Makkah                | 49.93                 | 40.42     | 33.98                                | 38.73                 | 22.56         | 39.96     |
| 3   | Madinah               | 51.38                 | 2.34      | 28.12                                | 6.62                  | 5.64          | 16.83     |
| 4   | Al-Qassim             | 54.38                 | 7.26      | 8.62                                 | 7.47                  | 5.88          | 39.23     |
| 5   | Eastern Region        | 8.90                  | 1.76      | 4.12                                 | 4.94                  | 2.73          | 13.38     |
| 6   | Asir                  | 75.53                 | 78.13     | 64.29                                | 42.55                 | 33.77         | 82.85     |
| 7   | Tabuk                 | 46.19                 | 6.25      | 10.61                                | 5.57                  | 3.49          | 46.38     |
| 8   | Hail                  | 52.53                 | 14.42     | 15.15                                | 12.71                 | 10.73         | 18.52     |
| 9   | Northern Borders      | 6.07                  | 7.68      | 11.14                                | 1.84                  | 6.36          | 15.60     |
| 10  | Jazan                 | 29.14                 | 17.77     | 40.72                                | 22.64                 | 10.52         | 0.00      |
| 11  | Najran                | 62.43                 | 47.50     | 57.38                                | 33.17                 | 34.75         | 50.51     |
| 12  | Al-Bahah              | 46.76                 | 24.46     | 25.31                                | 21.01                 | 20.32         | 15.45     |
| 13  | Al-Jouf               | 7.01                  | 7.32      | 6.12                                 | 5.26                  | 6.16          | 18.79     |
| To  | otal of the Kingdom   | 42.62                 | 17.17     | 27.45                                | 16.03                 | 13.01         | 28.73     |



## Percentage of Water Source (Tank Cars) According to the Type of Possession in the Administrative Regions

Table 61

| S/N          | Administrative Region |           | Possession Type |                         |  |  |  |
|--------------|-----------------------|-----------|-----------------|-------------------------|--|--|--|
| <i>3</i> /1V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |  |  |  |
| 1            | Riyadh                | 11.79     | 5.10            | 18.11                   |  |  |  |
| 2            | Makkah                | 43.21     | 22.51           | 40.91                   |  |  |  |
| 3            | Madinah               | 40.06     | 5.14            | 10.48                   |  |  |  |
| 4            | Al-Qassim             | 18.99     | 6.44            | 27.54                   |  |  |  |
| 5            | Eastern Region        | 3.45      | 3.59            | 3.67                    |  |  |  |
| 6            | Asir                  | 62.38     | 37.04           | 58.75                   |  |  |  |
| 7            | Tabuk                 | 37.51     | 3.89            | 41.90                   |  |  |  |
| 8            | Hail                  | 35.52     | 11.61           | 32.86                   |  |  |  |
| 9            | Northern Borders      | 6.89      | 4.88            | 14.36                   |  |  |  |
| 10           | Jazan                 | 28.25     | 11.14           | 1.61                    |  |  |  |
| 11           | Najran                | 49.74     | 43.63           | 47.02                   |  |  |  |
| 12           | Al-Bahah              | 29.93     | 19.08           | 19.46                   |  |  |  |
| 13           | Al-Jouf               | 7.32      | 4.88            | 28.46                   |  |  |  |
|              | Total of the Kingdom  | 29.09     | 13.18           | 24.55                   |  |  |  |



#### Percentage of Water Source (Well) According to the Type of Houses in the Administrative Regions

Table 62

| Table |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-------|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N   | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1     | Riyadh                | 3.23                  | 0.00      | 1.47                                 | 0.00                  | 0.22          | 10.89     |
| 2     | Makkah                | 3.44                  | 8.71      | 1.24                                 | 1.96                  | 0.21          | 0.77      |
| 3     | Madinah               | 8.81                  | 0.53      | 0.00                                 | 0.00                  | 0.17          | 2.50      |
| 4     | Al-Qassim             | 3.40                  | 0.88      | 7.76                                 | 1.21                  | 0.92          | 8.85      |
| 5     | Eastern Region        | 0.00                  | 0.12      | 0.00                                 | 0.76                  | 0.32          | 12.74     |
| 6     | Asir                  | 11.66                 | 1.42      | 3.57                                 | 0.91                  | 1.03          | 2.86      |
| 7     | Tabuk                 | 5.50                  | 3.13      | 6.06                                 | 1.64                  | 0.11          | 21.01     |
| 8     | Hail                  | 0.97                  | 0.26      | 1.52                                 | 0.85                  | 1.41          | 14.81     |
| 9     | Northern Borders      | 0.00                  | 0.00      | 0.19                                 | 0.00                  | 0.00          | 0.00      |
| 10    | Jazan                 | 14.35                 | 4.53      | 13.49                                | 0.80                  | 1.32          | 60.00     |
| 11    | Najran                | 8.59                  | 11.16     | 12.62                                | 8.41                  | 3.66          | 1.01      |
| 12    | Al-Bahah              | 8.81                  | 2.25      | 7.81                                 | 5.63                  | 2.98          | 3.41      |
| 13    | Al-Jouf               | 4.67                  | 2.44      | 0.00                                 | 3.29                  | 0.85          | 5.45      |
| То    | otal of the Kingdom   | 6.06                  | 1.57      | 3.73                                 | 1.32                  | 0.63          | 7.55      |



# Percentage of Water Source (Well) According to the Type of Possession in the Administrative Regions

Table 63

|     |                       |           | Possession Type |                         |
|-----|-----------------------|-----------|-----------------|-------------------------|
| S/N | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1   | Riyadh                | 0.13      | 0.04            | 6.33                    |
| 2   | Makkah                | 3.17      | 0.41            | 1.26                    |
| 3   | Madinah               | 1.11      | 0.19            | 22.27                   |
| 4   | Al-Qassim             | 1.79      | 0.48            | 8.16                    |
| 5   | Eastern Region        | 0.21      | 0.05            | 5.50                    |
| 6   | Asir                  | 5.19      | 0.10            | 3.75                    |
| 7   | Tabuk                 | 5.05      | 0.00            | 17.88                   |
| 8   | Hail                  | 0.60      | 1.48            | 8.57                    |
| 9   | Northern Borders      | 0.03      | 0.00            | 0.00                    |
| 10  | Jazan                 | 10.45     | 2.73            | 29.03                   |
| 11  | Najran                | 12.30     | 0.19            | 4.88                    |
| 12  | Al-Bahah              | 5.60      | 2.96            | 3.40                    |
| 13  | Al-Jouf               | 3.50      | 0.13            | 8.94                    |
|     | Total of the Kingdom  | 3.48      | 0.40            | 7.00                    |



### Percentage of Drinking-Water Source Within Houses in the Administrative Regions

Table 64

| Table |                       |                    |               |                       |                   |           |
|-------|-----------------------|--------------------|---------------|-----------------------|-------------------|-----------|
| S/N   | Administrative Region |                    |               | Drinking Water Source |                   |           |
| 3/14  | Administrative Region | Public Network (%) | Tank Cars (%) | Well (%)              | Water Bottles (%) | Other (%) |
| 1     | Riyadh                | 25.03              | 11.94         | 0.56                  | 61.96             | 0.51      |
| 2     | Makkah                | 21.04              | 9.64          | 0.79                  | 68.35             | 0.18      |
| 3     | Madinah               | 32.96              | 18.25         | 1.34                  | 47.04             | 0.41      |
| 4     | Al-Qassim             | 50.94              | 22.26         | 0.65                  | 24.65             | 1.50      |
| 5     | Eastern Region        | 28.06              | 22.80         | 0.40                  | 48.46             | 0.28      |
| 6     | Asir                  | 30.55              | 49.28         | 0.45                  | 19.72             | 0.00      |
| 7     | Tabuk                 | 29.02              | 12.81         | 3.28                  | 54.75             | 0.14      |
| 8     | Hail                  | 23.91              | 41.81         | 0.63                  | 32.20             | 1.45      |
| 9     | Northern Borders      | 16.33              | 63.71         | 0.10                  | 19.86             | 0.00      |
| 10    | Jazan                 | 16.87              | 16.49         | 1.10                  | 65.48             | 0.06      |
| 11    | Najran                | 15.18              | 21.71         | 3.78                  | 59.20             | 0.13      |
| 12    | Al-Bahah              | 26.77              | 11.18         | 1.71                  | 59.96             | 0.38      |
| 13    | Al-Jouf               | 28.74              | 35.61         | 0.26                  | 35.32             | 0.07      |
| To    | otal of the Kingdom   | 25.93              | 22.49         | 0.98                  | 50.24             | 0.36      |



### Percentage of Drinking-Water Source (Public Network) According to the Type of Houses in the Administrative Regions

Table 65

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 26.02                 | 35.52     | 13.60                                | 31.87                 | 19.22         | 27.04     |
| 2   | Makkah                | 16.51                 | 6.25      | 22.29                                | 19.48                 | 23.84         | 15.64     |
| 3   | Madinah               | 18.06                 | 29.15     | 10.29                                | 33.91                 | 42.36         | 35.17     |
| 4   | Al-Qassim             | 36.86                 | 63.28     | 58.10                                | 54.74                 | 54.63         | 11.22     |
| 5   | Eastern Region        | 11.82                 | 34.54     | 13.20                                | 24.07                 | 27.98         | 41.72     |
| 6   | Asir                  | 4.84                  | 7.76      | 23.13                                | 27.93                 | 48.20         | 2.86      |
| 7   | Tabuk                 | 18.65                 | 25.94     | 36.36                                | 26.23                 | 39.48         | 3.62      |
| 8   | Hail                  | 20.84                 | 33.29     | 5.30                                 | 35.59                 | 21.13         | 12.35     |
| 9   | Northern Borders      | 21.99                 | 10.25     | 16.67                                | 28.70                 | 11.88         | 34.40     |
| 10  | Jazan                 | 13.73                 | 10.54     | 21.33                                | 4.88                  | 23.84         | 0.00      |
| 11  | Najran                | 15.89                 | 7.99      | 11.38                                | 19.37                 | 17.66         | 5.05      |
| 12  | Al-Bahah              | 8.48                  | 26.21     | 10.16                                | 13.87                 | 27.82         | 57.16     |
| 13  | Al-Jouf               | 19.16                 | 32.88     | 21.22                                | 17.11                 | 32.25         | 26.06     |
| To  | otal of the Kingdom   | 17.19                 | 29.93     | 19.52                                | 28.49                 | 28.28         | 25.08     |



## Percentage of Drinking-Water Source (Public Network) According to the Possession of Houses in the Administrative Regions

Table 66

| S/N  | Administrative Region |           | Possession Type |                         |  |  |  |
|------|-----------------------|-----------|-----------------|-------------------------|--|--|--|
| 3/14 | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |  |  |  |
| 1    | Riyadh                | 33.06     | 21.89           | 19.74                   |  |  |  |
| 2    | Makkah                | 16.73     | 24.67           | 12.19                   |  |  |  |
| 3    | Madinah               | 32.90     | 35.62           | 20.92                   |  |  |  |
| 4    | Al-Qassim             | 54.00     | 55.06           | 30.74                   |  |  |  |
| 5    | Eastern Region        | 22.30     | 26.33           | 52.89                   |  |  |  |
| 6    | Asir                  | 17.63     | 45.11           | 20.88                   |  |  |  |
| 7    | Tabuk                 | 29.73     | 31.83           | 12.29                   |  |  |  |
| 8    | Hail                  | 28.93     | 18.16           | 17.50                   |  |  |  |
| 9    | Northern Borders      | 15.13     | 18.08           | 11.11                   |  |  |  |
| 10   | Jazan                 | 12.91     | 23.40           | 12.90                   |  |  |  |
| 11   | Najran                | 15.01     | 17.16           | 8.39                    |  |  |  |
| 12   | Al-Bahah              | 18.58     | 28.80           | 44.49                   |  |  |  |
| 13   | Al-Jouf               | 24.36     | 33.17           | 21.95                   |  |  |  |
|      | Total of the Kingdom  | 24.07     | 27.60           | 25.15                   |  |  |  |



### Percentage of Drinking-Water Source (Tank Cars) According to the Type of Houses in the Administrative Regions

Table 67

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 32.76                 | 15.82     | 38.60                                | 13.11                 | 5.39          | 20.62     |
| 2   | Makkah                | 21.91                 | 18.48     | 7.55                                 | 13.01                 | 5.01          | 11.00     |
| 3   | Madinah               | 51.62                 | 1.17      | 26.09                                | 1.45                  | 2.29          | 15.00     |
| 4   | Al-Qassim             | 55.62                 | 22.74     | 21.72                                | 30.82                 | 9.45          | 11.54     |
| 5   | Eastern Region        | 56.16                 | 27.02     | 27.73                                | 41.71                 | 14.91         | 31.21     |
| 6   | Asir                  | 83.69                 | 80.18     | 56.52                                | 40.79                 | 29.96         | 72.22     |
| 7   | Tabuk                 | 24.55                 | 0.00      | 13.64                                | 13.11                 | 4.45          | 19.57     |
| 8   | Hail                  | 62.60                 | 50.00     | 15.15                                | 35.51                 | 15.94         | 29.63     |
| 9   | Northern Borders      | 69.58                 | 69.19     | 72.86                                | 56.33                 | 61.69         | 4.00      |
| 10  | Jazan                 | 22.00                 | 8.85      | 24.70                                | 16.48                 | 10.44         | 60.00     |
| 11  | Najran                | 28.70                 | 30.59     | 45.54                                | 17.30                 | 12.94         | 14.14     |
| 12  | Al-Bahah              | 29.24                 | 2.25      | 61.77                                | 9.66                  | 3.72          | 5.26      |
| 13  | Al-Jouf               | 73.18                 | 30.93     | 63.06                                | 50.92                 | 28.35         | 13.94     |
| To  | otal of the Kingdom   | 40.54                 | 30.72     | 35.60                                | 26.83                 | 12.58         | 17.30     |



## Percentage of Drinking-Water Source (Tank Cars) According to the Possession of Houses in the Administrative Regions

Table 68

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 20.85     | 6.45            | 14.42                   |
| 2            | Makkah                | 17.82     | 5.80            | 6.80                    |
| 3            | Madinah               | 34.46     | 2.86            | 23.14                   |
| 4            | Al-Qassim             | 33.84     | 11.45           | 13.11                   |
| 5            | Eastern Region        | 35.90     | 15.97           | 14.46                   |
| 6            | Asir                  | 64.02     | 33.56           | 48.75                   |
| 7            | Tabuk                 | 21.30     | 4.41            | 20.11                   |
| 8            | Hail                  | 59.13     | 19.39           | 30.71                   |
| 9            | Northern Borders      | 68.74     | 61.30           | 49.40                   |
| 10           | Jazan                 | 19.83     | 9.75            | 46.77                   |
| 11           | Najran                | 35.69     | 6.57            | 14.35                   |
| 12           | Al-Bahah              | 11.37     | 8.25            | 14.86                   |
| 13           | Al-Jouf               | 50.75     | 23.68           | 37.40                   |
|              | Total of the Kingdom  | 34.38     | 13.68           | 17.91                   |



#### Percentage of Drinking-Water Source (Well) According to the Type of Houses in the Administrative Regions

Table 69

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 1.79                  | 0.21      | 1.47                                 | 0.45                  | 0.44          | 1.56      |
| 2   | Makkah                | 1.56                  | 5.11      | 0.00                                 | 0.20                  | 0.35          | 0.00      |
| 3   | Madinah               | 2.68                  | 0.00      | 2.90                                 | 0.00                  | 0.83          | 0.00      |
| 4   | Al-Qassim             | 1.03                  | 0.35      | 0.00                                 | 0.26                  | 0.99          | 0.64      |
| 5   | Eastern Region        | 0.34                  | 0.04      | 1.03                                 | 0.76                  | 0.48          | 0.00      |
| 6   | Asir                  | 0.19                  | 0.77      | 2.23                                 | 0.70                  | 0.19          | 0.00      |
| 7   | Tabuk                 | 7.37                  | 1.56      | 3.03                                 | 0.00                  | 0.95          | 2.97      |
| 8   | Hail                  | 0.59                  | 0.00      | 3.03                                 | 0.00                  | 1.17          | 0.00      |
| 9   | Northern Borders      | 0.20                  | 0.00      | 0.29                                 | 0.29                  | 0.01          | 0.00      |
| 10  | Jazan                 | 1.84                  | 0.07      | 0.24                                 | 0.80                  | 0.63          | 0.00      |
| 11  | Najran                | 5.81                  | 7.47      | 0.31                                 | 5.32                  | 1.54          | 1.01      |
| 12  | Al-Bahah              | 3.61                  | 0.04      | 5.00                                 | 2.52                  | 1.12          | 0.95      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.12          | 1.82      |
| To  | otal of the Kingdom   | 2.35                  | 0.77      | 1.37                                 | 0.77                  | 0.54          | 0.88      |



## Percentage of Drinking-Water Source (Well) According to the Possession of Houses in the Administrative Regions

Table 70

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.21      | 0.40            | 1.98                    |
| 2            | Makkah                | 1.51      | 0.36            | 1.08                    |
| 3            | Madinah               | 1.21      | 1.45            | 1.31                    |
| 4            | Al-Qassim             | 0.41      | 0.80            | 0.98                    |
| 5            | Eastern Region        | 0.23      | 0.37            | 1.02                    |
| 6            | Asir                  | 0.82      | 0.00            | 1.25                    |
| 7            | Tabuk                 | 6.30      | 0.90            | 2.85                    |
| 8            | Hail                  | 0.14      | 0.82            | 2.86                    |
| 9            | Northern Borders      | 0.11      | 0.10            | 0.00                    |
| 10           | Jazan                 | 1.61      | 0.17            | 3.23                    |
| 11           | Najran                | 6.90      | 0.30            | 2.56                    |
| 12           | Al-Bahah              | 0.82      | 3.06            | 2.04                    |
| 13           | Al-Jouf               | 0.00      | 0.13            | 2.44                    |
|              | Total of the Kingdom  | 1.39      | 0.52            | 1.63                    |



### Percentage of Drinking-Water Source (Water Bottles) According to the Type of Houses in the Administrative Regions

Table 71

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 39.25                 | 47.70     | 46.33                                | 53.81                 | 74.49         | 50.78     |
| 2   | Makkah                | 60.01                 | 69.78     | 70.16                                | 66.00                 | 70.60         | 73.36     |
| 3   | Madinah               | 26.73                 | 68.62     | 57.82                                | 64.64                 | 54.52         | 49.83     |
| 4   | Al-Qassim             | 6.49                  | 12.97     | 20.18                                | 12.88                 | 32.43         | 73.39     |
| 5   | Eastern Region        | 31.00                 | 37.71     | 58.04                                | 33.46                 | 56.47         | 27.07     |
| 6   | Asir                  | 11.28                 | 11.29     | 18.12                                | 30.58                 | 21.65         | 24.92     |
| 7   | Tabuk                 | 49.43                 | 70.94     | 46.97                                | 60.66                 | 54.90         | 73.84     |
| 8   | Hail                  | 15.05                 | 15.04     | 75.00                                | 27.21                 | 60.98         | 49.38     |
| 9   | Northern Borders      | 8.23                  | 20.56     | 10.18                                | 14.68                 | 26.27         | 61.60     |
| 10  | Jazan                 | 62.43                 | 80.54     | 53.73                                | 76.25                 | 65.09         | 40.00     |
| 11  | Najran                | 49.60                 | 53.12     | 42.77                                | 56.33                 | 67.50         | 79.80     |
| 12  | Al-Bahah              | 58.67                 | 71.50     | 23.07                                | 73.95                 | 67.22         | 36.63     |
| 13  | Al-Jouf               | 7.44                  | 35.58     | 15.45                                | 31.34                 | 39.01         | 57.48     |
| То  | otal of the Kingdom   | 39.89                 | 38.01     | 43.25                                | 43.28                 | 58.40         | 56.14     |



## Percentage of Drinking-Water Source (Water Bottles) According to the Possession of Houses in the Administrative Regions

Table 72

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 45.06     | 70.86           | 63.63                   |
| 2            | Makkah                | 63.64     | 69.02           | 79.93                   |
| 3            | Madinah               | 30.79     | 59.79           | 54.63                   |
| 4            | Al-Qassim             | 10.97     | 30.60           | 52.87                   |
| 5            | Eastern Region        | 40.98     | 57.19           | 31.63                   |
| 6            | Asir                  | 17.53     | 21.33           | 29.12                   |
| 7            | Tabuk                 | 42.60     | 62.63           | 64.75                   |
| 8            | Hail                  | 10.60     | 59.66           | 48.22                   |
| 9            | Northern Borders      | 16.02     | 20.52           | 39.49                   |
| 10           | Jazan                 | 65.65     | 66.53           | 37.10                   |
| 11           | Najran                | 42.27     | 75.81           | 74.70                   |
| 12           | Al-Bahah              | 68.48     | 59.89           | 38.61                   |
| 13           | Al-Jouf               | 24.89     | 42.89           | 38.21                   |
|              | Total of the Kingdom  | 39.75     | 57.95           | 55.51                   |



#### Percentage of Drinking-Water Source (Other) According to the Type of Houses in the Administrative Regions

Table 73

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.18                  | 0.75      | 0.00                                 | 0.76                  | 0.46          | 0.00      |
| 2   | Makkah                | 0.01                  | 0.38      | 0.00                                 | 1.31                  | 0.20          | 0.00      |
| 3   | Madinah               | 0.91                  | 1.06      | 2.90                                 | 0.00                  | 0.00          | 0.00      |
| 4   | Al-Qassim             | 0.00                  | 0.66      | 0.00                                 | 1.30                  | 2.50          | 3.21      |
| 5   | Eastern Region        | 0.68                  | 0.69      | 0.00                                 | 0.00                  | 0.16          | 0.00      |
| 6   | Asir                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 7   | Tabuk                 | 0.00                  | 1.56      | 0.00                                 | 0.00                  | 0.22          | 0.00      |
| 8   | Hail                  | 0.92                  | 1.67      | 1.52                                 | 1.69                  | 0.47          | 8.64      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.15          | 0.00      |
| 10  | Jazan                 | 0.00                  | 0.00      | 0.00                                 | 1.59                  | 0.00          | 0.00      |
| 11  | Najran                | 0.00                  | 0.83      | 0.00                                 | 1.68                  | 0.36          | 0.00      |
| 12  | Al-Bahah              | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.12          | 0.00      |
| 13  | Al-Jouf               | 0.22                  | 0.61      | 0.27                                 | 0.63                  | 0.27          | 0.70      |
| To  | otal of the Kingdom   | 0.22                  | 0.61      | 0.27                                 | 0.63                  | 0.27          | 0.70      |



# Percentage of Drinking-Water Source (Other) According to the Possession of Houses in the Administrative Regions

Table 74

| S/N  | Administrative Region |           | Possession Type |                         |
|------|-----------------------|-----------|-----------------|-------------------------|
| 3/IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1    | Riyadh                | 0.82      | 0.40            | 0.23                    |
| 2    | Makkah                | 0.30      | 0.15            | 0.00                    |
| 3    | Madinah               | 0.64      | 0.28            | 0.00                    |
| 4    | Al-Qassim             | 0.78      | 2.09            | 2.30                    |
| 5    | Eastern Region        | 0.59      | 0.14            | 0.00                    |
| 6    | Asir                  | 0.00      | 0.00            | 0.00                    |
| 7    | Tabuk                 | 0.07      | 0.23            | 0.00                    |
| 8    | Hail                  | 1.20      | 1.97            | 0.71                    |
| 9    | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10   | Jazan                 | 0.00      | 0.15            | 0.00                    |
| 11   | Najran                | 0.13      | 0.16            | 0.00                    |
| 12   | Al-Bahah              | 0.75      | 0.00            | 0.00                    |
| 13   | Al-Jouf               | 0.00      | 0.13            | 0.00                    |
|      | Total of the Kingdom  | 0.42      | 0.33            | 0.24                    |



### Percentage of Drinking-Water Source (Other) According to the Possession of Houses in the Administrative Regions

Table 75

| S/N  | Administrative Region |                      | Water             | Storage                  |         |
|------|-----------------------|----------------------|-------------------|--------------------------|---------|
| 3/11 | Administrative Region | Cement Reservoir (%) | Tin Reservoir (%) | Fiberglass Reservoir (%) | N/A (%) |
| 1    | Riyadh                | 68.94                | 1.45              | 29.45                    | 0.16    |
| 2    | Makkah                | 92.81                | 1.03              | 4.89                     | 1.27    |
| 3    | Madinah               | 94.00                | 0.88              | 3.18                     | 1.94    |
| 4    | Al-Qassim             | 75.97                | 3.94              | 19.97                    | 0.12    |
| 5    | Eastern Region        | 28.02                | 0.71              | 65.78                    | 5.49    |
| 6    | Asir                  | 95.01                | 2.00              | 2.99                     | 0.00    |
| 7    | Tabuk                 | 64.43                | 0.91              | 34.66                    | 0.00    |
| 8    | Hail                  | 86.41                | 2.27              | 11.14                    | 0.18    |
| 9    | Northern Borders      | 78.68                | 2.15              | 19.17                    | 0.00    |
| 10   | Jazan                 | 29.90                | 20.75             | 49.35                    | 0.00    |
| 11   | Najran                | 79.36                | 18.05             | 2.59                     | 0.00    |
| 12   | Al-Bahah              | 78.96                | 5.26              | 15.78                    | 0.00    |
| 13   | Al-Jouf               | 39.64                | 16.22             | 43.42                    | 0.72    |
|      | Total of the Kingdom  | 70.54                | 4.18              | 24.14                    | 1.14    |



#### Percentage of Water Storage (Cement Reservoir) According to the Type of Houses in the Administrative Regions

Table 76

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 37.13                 | 69.92     | 61.91                                | 72.12                 | 71.85         | 66.47     |
| 2   | Makkah                | 91.07                 | 97.50     | 91.24                                | 93.83                 | 93.42         | 87.68     |
| 3   | Madinah               | 84.61                 | 99.47     | 83.04                                | 99.57                 | 99.07         | 93.16     |
| 4   | Al-Qassim             | 69.98                 | 77.40     | 75.34                                | 76.52                 | 78.56         | 69.62     |
| 5   | Eastern Region        | 24.22                 | 34.91     | 21.65                                | 42.28                 | 23.13         | 58.40     |
| 6   | Asir                  | 80.98                 | 93.20     | 99.11                                | 99.28                 | 98.82         | 72.22     |
| 7   | Tabuk                 | 51.75                 | 37.50     | 36.52                                | 73.93                 | 73.27         | 76.38     |
| 8   | Hail                  | 86.58                 | 95.87     | 83.33                                | 93.30                 | 79.30         | 69.63     |
| 9   | Northern Borders      | 80.12                 | 77.10     | 73.81                                | 78.36                 | 79.27         | 81.20     |
| 10  | Jazan                 | 28.16                 | 41.08     | 46.38                                | 30.08                 | 27.49         | 0.00      |
| 11  | Najran                | 65.98                 | 76.92     | 79.04                                | 85.88                 | 91.14         | 73.74     |
| 12  | Al-Bahah              | 71.23                 | 88.75     | 82.19                                | 86.01                 | 78.37         | 79.33     |
| 13  | Al-Jouf               | 45.98                 | 53.37     | 40.81                                | 45.00                 | 36.74         | 26.06     |
| To  | otal of the Kingdom   | 66.97                 | 69.95     | 69.17                                | 74.99                 | 71.64         | 70.41     |



# Percentage of Water Storage (Cement Reservoir) According to the Type of Possession in the Administrative Regions

Table 77

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 68.16     | 70.96           | 62.25                   |
| 2            | Makkah                | 94.35     | 92.91           | 87.05                   |
| 3            | Madinah               | 96.20     | 95.35           | 78.91                   |
| 4            | Al-Qassim             | 76.13     | 76.98           | 72.85                   |
| 5            | Eastern Region        | 30.61     | 23.32           | 41.41                   |
| 6            | Asir                  | 94.60     | 96.05           | 87.26                   |
| 7            | Tabuk                 | 58.70     | 66.14           | 79.10                   |
| 8            | Hail                  | 94.07     | 79.82           | 66.97                   |
| 9            | Northern Borders      | 78.71     | 79.08           | 75.47                   |
| 10           | Jazan                 | 33.34     | 24.52           | 25.81                   |
| 11           | Najran                | 79.19     | 84.96           | 58.75                   |
| 12           | Al-Bahah              | 84.67     | 73.25           | 72.69                   |
| 13           | Al-Jouf               | 49.54     | 35.30           | 18.29                   |
|              | Total of the Kingdom  | 72.10     | 70.25           | 66.67                   |



### Percentage of Water Storage (Tin Reservoir) According to the Type of Houses in the Administrative Regions

Table 78

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 3.73                  | 0.14      | 8.31                                 | 0.37                  | 0.80          | 9.77      |
| 2   | Makkah                | 3.41                  | 0.49      | 0.70                                 | 0.13                  | 0.29          | 1.93      |
| 3   | Madinah               | 2.13                  | 0.00      | 4.93                                 | 0.00                  | 0.17          | 0.00      |
| 4   | Al-Qassim             | 8.63                  | 3.85      | 0.69                                 | 3.42                  | 3.49          | 1.92      |
| 5   | Eastern Region        | 3.08                  | 0.04      | 0.52                                 | 1.33                  | 0.57          | 0.96      |
| 6   | Asir                  | 7.61                  | 1.19      | 0.89                                 | 0.61                  | 0.83          | 11.11     |
| 7   | Tabuk                 | 1.90                  | 0.00      | 0.00                                 | 0.00                  | 0.11          | 2.90      |
| 8   | Hail                  | 4.39                  | 0.33      | 4.55                                 | 0.85                  | 1.29          | 2.72      |
| 9   | Northern Borders      | 4.04                  | 0.94      | 2.00                                 | 0.87                  | 2.14          | 0.00      |
| 10  | Jazan                 | 38.41                 | 6.42      | 21.69                                | 6.08                  | 5.87          | 60.00     |
| 11  | Najran                | 30.77                 | 19.36     | 11.11                                | 11.90                 | 7.43          | 26.26     |
| 12  | Al-Bahah              | 6.43                  | 1.29      | 0.78                                 | 2.14                  | 4.07          | 13.13     |
| 13  | Al-Jouf               | 34.91                 | 4.39      | 14.29                                | 11.84                 | 13.06         | 25.15     |
| To  | otal of the Kingdom   | 11.44                 | 1.85      | 4.93                                 | 2.08                  | 1.92          | 8.37      |

المصدر : مسم الطاقة المنزلي ٢٠ ١٧م



# Percentage of Water Storage (Tin Reservoir) According to the Type of Possession in the Administrative Regions

Table 79

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 1.13      | 0.84            | 4.73                    |
| 2            | Makkah                | 1.18      | 0.64            | 3.00                    |
| 3            | Madinah               | 1.18      | 0.66            | 0.61                    |
| 4            | Al-Qassim             | 4.63      | 2.48            | 5.49                    |
| 5            | Eastern Region        | 0.64      | 0.61            | 1.32                    |
| 6            | Asir                  | 1.04      | 2.89            | 3.75                    |
| 7            | Tabuk                 | 0.86      | 0.38            | 3.69                    |
| 8            | Hail                  | 0.55      | 2.65            | 11.43                   |
| 9            | Northern Borders      | 2.30      | 1.88            | 3.25                    |
| 10           | Jazan                 | 25.63     | 12.28           | 35.48                   |
| 11           | Najran                | 16.46     | 14.33           | 39.76                   |
| 12           | Al-Bahah              | 2.76      | 6.05            | 10.41                   |
| 13           | Al-Jouf               | 10.93     | 16.35           | 41.87                   |
|              | Total of the Kingdom  | 4.75      | 2.97            | 7.81                    |



### Percentage of Water Storage (Fiberglass Reservoir) According to the Type of Houses in the Administrative Regions

Table 80

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 57.35                 | 29.94     | 29.04                                | 27.51                 | 27.35         | 22.98     |
| 2   | Makkah                | 4.96                  | 2.01      | 8.06                                 | 5.39                  | 4.58          | 10.00     |
| 3   | Madinah               | 7.01                  | 0.53      | 12.03                                | 0.43                  | 0.76          | 5.17      |
| 4   | Al-Qassim             | 21.39                 | 18.75     | 23.97                                | 20.06                 | 17.95         | 27.18     |
| 5   | Eastern Region        | 70.65                 | 51.63     | 75.77                                | 45.74                 | 73.14         | 38.73     |
| 6   | Asir                  | 11.41                 | 5.61      | 0.00                                 | 0.11                  | 0.35          | 16.67     |
| 7   | Tabuk                 | 46.35                 | 62.50     | 63.48                                | 26.07                 | 26.62         | 20.72     |
| 8   | Hail                  | 9.03                  | 3.80      | 12.12                                | 5.85                  | 18.94         | 26.42     |
| 9   | Northern Borders      | 15.84                 | 21.96     | 24.19                                | 20.77                 | 18.59         | 18.80     |
| 10  | Jazan                 | 33.43                 | 52.50     | 31.93                                | 63.84                 | 66.64         | 40.00     |
| 11  | Najran                | 3.25                  | 3.72      | 9.85                                 | 2.22                  | 1.43          | 0.00      |
| 12  | Al-Bahah              | 22.34                 | 9.96      | 17.03                                | 11.85                 | 17.56         | 7.54      |
| 13  | Al-Jouf               | 19.11                 | 42.24     | 44.90                                | 43.16                 | 49.23         | 46.97     |
| To  | otal of the Kingdom   | 20.85                 | 25.71     | 25.64                                | 21.79                 | 25.58         | 20.51     |



# Percentage of Water Storage (Fiberglass Reservoir) According to the Type of Possession in the Administrative Regions

Table 81

| S/N  | Administrative Region |           | Possession Type |                         |
|------|-----------------------|-----------|-----------------|-------------------------|
| 3/IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1    | Riyadh                | 30.64     | 27.98           | 32.87                   |
| 2    | Makkah                | 3.99      | 4.60            | 9.77                    |
| 3    | Madinah               | 2.41      | 3.14            | 6.51                    |
| 4    | Al-Qassim             | 19.24     | 20.22           | 21.66                   |
| 5    | Eastern Region        | 62.31     | 74.02           | 39.14                   |
| 6    | Asir                  | 4.36      | 1.06            | 8.99                    |
| 7    | Tabuk                 | 40.44     | 33.48           | 17.21                   |
| 8    | Hail                  | 5.38      | 17.53           | 19.46                   |
| 9    | Northern Borders      | 18.99     | 19.04           | 21.28                   |
| 10   | Jazan                 | 41.03     | 63.20           | 38.71                   |
| 11   | Najran                | 4.35      | 0.71            | 1.49                    |
| 12   | Al-Bahah              | 12.57     | 20.70           | 16.90                   |
| 13   | Al-Jouf               | 39.53     | 48.10           | 32.52                   |
|      | Total of the Kingdom  | 22.37     | 26.04           | 21.89                   |



#### Percentage of Water Storage (N/A) According to the Type of Houses in the Administrative Regions

Table 82

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 1.79                  | 0.00      | 0.74                                 | 0.00                  | 0.00          | 0.78      |
| 2   | Makkah                | 0.56                  | 0.00      | 0.00                                 | 0.65                  | 1.71          | 0.39      |
| 3   | Madinah               | 6.25                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 1.67      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 1.28      |
| 5   | Eastern Region        | 2.05                  | 13.42     | 2.06                                 | 10.65                 | 3.16          | 1.91      |
| 6   | Asir                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 7   | Tabuk                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 8   | Hail                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.47          | 1.23      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 11  | Najran                | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 12  | Al-Bahah              | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.97          | 1.82      |
| To  | otal of the Kingdom   | 0.95                  | 2.51      | 0.27                                 | 1.14                  | 0.94          | 0.82      |



# Percentage of Water Storage (N/A) According to the Type of Possession in the Administrative Regions

Table 83

| S/N  | Administrative Region |           | Possession Type |                         |
|------|-----------------------|-----------|-----------------|-------------------------|
| 3/11 | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1    | Riyadh                | 0.07      | 0.22            | 0.15                    |
| 2    | Makkah                | 0.48      | 1.85            | 0.18                    |
| 3    | Madinah               | 0.21      | 0.85            | 13.97                   |
| 4    | Al-Qassim             | 0.00      | 0.32            | 0.00                    |
| 5    | Eastern Region        | 6.44      | 2.05            | 18.13                   |
| 6    | Asir                  | 0.00      | 0.00            | 0.00                    |
| 7    | Tabuk                 | 0.00      | 0.00            | 0.00                    |
| 8    | Hail                  | 0.00      | 0.00            | 2.14                    |
| 9    | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10   | Jazan                 | 0.00      | 0.00            | 0.00                    |
| 11   | Najran                | 0.00      | 0.00            | 0.00                    |
| 12   | Al-Bahah              | 0.00      | 0.00            | 0.00                    |
| 13   | Al-Jouf               | 0.00      | 0.25            | 7.32                    |
|      | Total of the Kingdom  | 0.80      | 0.81            | 4.08                    |



### Percentage of Houses Sanitation Type in the Administrative Regions

Table 84

| S/N          | Administrative Region |                    | Type of S           | ianitation  |         |
|--------------|-----------------------|--------------------|---------------------|-------------|---------|
| <i>3/1</i> V | Administrative Region | Public Network (%) | Private Network (%) | Manhole (%) | N/A (%) |
| 1            | Riyadh                | 73.62              | 0.81                | 25.32       | 0.25    |
| 2            | Makkah                | 59.21              | 0.57                | 40.12       | 0.10    |
| 3            | Madinah               | 50.39              | 3.26                | 45.55       | 0.80    |
| 4            | Al-Qassim             | 66.21              | 0.15                | 33.42       | 0.22    |
| 5            | Eastern Region        | 85.22              | 0.73                | 13.91       | 0.14    |
| 6            | Asir                  | 44.37              | 0.14                | 55.27       | 0.22    |
| 7            | Tabuk                 | 55.63              | 0.11                | 42.82       | 1.44    |
| 8            | Hail                  | 29.52              | 0.31                | 70.12       | 0.05    |
| 9            | Northern Borders      | 40.25              | 0.00                | 59.69       | 0.06    |
| 10           | Jazan                 | 7.77               | 0.17                | 91.82       | 0.24    |
| 11           | Najran                | 5.05               | 4.86                | 89.11       | 0.98    |
| 12           | Al-Bahah              | 2.09               | 1.24                | 96.46       | 0.21    |
| 13           | Al-Jouf               | 41.52              | 0.12                | 58.06       | 0.30    |
|              | Total of the Kingdom  | 59.96              | 0.83                | 38.94       | 0.27    |



#### Percentage of Sanitation Type (Public Network) According to the Type of Houses in the Administrative Regions

Table 85

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 29.06                 | 72.32     | 39.09                                | 75.77                 | 84.57         | 37.24     |
| 2   | Makkah                | 33.63                 | 24.24     | 64.47                                | 39.46                 | 70.98         | 56.22     |
| 3   | Madinah               | 9.57                  | 89.37     | 55.86                                | 91.35                 | 64.55         | 75.04     |
| 4   | Al-Qassim             | 23.11                 | 71.95     | 66.98                                | 68.74                 | 84.25         | 34.45     |
| 5   | Eastern Region        | 67.66                 | 84.58     | 88.79                                | 70.69                 | 90.15         | 66.93     |
| 6   | Asir                  | 9.66                  | 16.19     | 40.53                                | 45.97                 | 64.47         | 19.44     |
| 7   | Tabuk                 | 26.54                 | 46.86     | 48.11                                | 66.82                 | 79.36         | 20.98     |
| 8   | Hail                  | 4.77                  | 45.24     | 12.79                                | 46.88                 | 44.04         | 32.11     |
| 9   | Northern Borders      | 30.79                 | 43.85     | 39.71                                | 34.93                 | 46.04         | 11.91     |
| 10  | Jazan                 | 3.38                  | 14.89     | 11.55                                | 13.66                 | 9.63          | 0.00      |
| 11  | Najran                | 0.58                  | 21.92     | 13.77                                | 4.75                  | 4.58          | 0.00      |
| 12  | Al-Bahah              | 0.93                  | 0.82      | 1.63                                 | 10.58                 | 1.43          | 0.00      |
| 13  | Al-Jouf               | 53.28                 | 31.22     | 62.82                                | 39.24                 | 42.24         | 28.55     |
| То  | otal of the Kingdom   | 24.15                 | 61.61     | 49.81                                | 62.01                 | 72.38         | 43.95     |



# Percentage of Sanitation Type (Public Network) According to the Type of Possession in the Administrative Regions

Table 86

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 65.33     | 82.50           | 59.47                   |
| 2            | Makkah                | 38.14     | 73.43           | 49.09                   |
| 3            | Madinah               | 35.46     | 63.22           | 53.68                   |
| 4            | Al-Qassim             | 57.63     | 82.26           | 50.77                   |
| 5            | Eastern Region        | 82.27     | 87.84           | 82.87                   |
| 6            | Asir                  | 28.63     | 60.55           | 44.93                   |
| 7            | Tabuk                 | 41.78     | 74.00           | 22.98                   |
| 8            | Hail                  | 28.80     | 33.48           | 16.49                   |
| 9            | Northern Borders      | 38.18     | 37.24           | 77.87                   |
| 10           | Jazan                 | 6.73      | 9.95            | 0.00                    |
| 11           | Najran                | 4.95      | 6.07            | 1.73                    |
| 12           | Al-Bahah              | 2.60      | 1.83            | 0.00                    |
| 13           | Al-Jouf               | 42.69     | 41.79           | 31.94                   |
|              | Total of the Kingdom  | 46.24     | 71.94           | 54.43                   |



#### Percentage of Sanitation Type (Private Network) According to the Type of Houses in the Administrative Regions

Table 87

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 0.00                  | 0.60      | 0.00                                 | 0.63                  | 1.20          | 0.00      |
| 2   | Makkah                | 0.67                  | 0.00      | 0.00                                 | 0.00                  | 0.66          | 0.00      |
| 3   | Madinah               | 9.27                  | 2.14      | 2.98                                 | 0.00                  | 0.42          | 1.66      |
| 4   | Al-Qassim             | 0.69                  | 0.00      | 0.00                                 | 0.00                  | 0.20          | 0.00      |
| 5   | Eastern Region        | 5.48                  | 0.12      | 0.00                                 | 0.00                  | 0.37          | 2.54      |
| 6   | Asir                  | 0.33                  | 0.28      | 0.00                                 | 0.00                  | 0.10          | 0.00      |
| 7   | Tabuk                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.21          | 0.00      |
| 8   | Hail                  | 0.35                  | 0.26      | 0.00                                 | 0.86                  | 0.26          | 0.00      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.47          | 0.00      |
| 11  | Najran                | 0.20                  | 3.72      | 0.00                                 | 9.48                  | 9.43          | 0.91      |
| 12  | Al-Bahah              | 4.62                  | 0.00      | 1.61                                 | 0.84                  | 0.37          | 0.46      |
| 13  | Al-Jouf               | 0.51                  | 0.00      | 0.00                                 | 0.00                  | 0.10          | 0.00      |
| To  | otal of the Kingdom   | 1.86                  | 0.40      | 0.24                                 | 0.48                  | 0.75          | 0.46      |



# Percentage of Sanitation Type (Private Network) According to the Type of Possession in the Administrative Regions

Table 88

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.61      | 0.48            | 2.97                    |
| 2            | Makkah                | 0.63      | 0.61            | 0.00                    |
| 3            | Madinah               | 6.77      | 0.67            | 0.46                    |
| 4            | Al-Qassim             | 0.00      | 0.37            | 0.00                    |
| 5            | Eastern Region        | 0.75      | 0.67            | 0.98                    |
| 6            | Asir                  | 0.09      | 0.20            | 0.00                    |
| 7            | Tabuk                 | 0.14      | 0.10            | 0.00                    |
| 8            | Hail                  | 0.23      | 0.52            | 0.00                    |
| 9            | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10           | Jazan                 | 0.09      | 0.30            | 0.00                    |
| 11           | Najran                | 2.42      | 5.58            | 12.53                   |
| 12           | Al-Bahah              | 1.77      | 0.51            | 0.00                    |
| 13           | Al-Jouf               | 0.16      | 0.11            | 0.00                    |
|              | Total of the Kingdom  | 1.05      | 0.60            | 1.36                    |



### Percentage of Sanitation Type (Manhole) According to the Type of Houses in the Administrative Regions

Table 89

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 69.83                 | 26.68     | 60.91                                | 23.44                 | 14.18         | 61.99     |
| 2   | Makkah                | 65.63                 | 75.38     | 35.53                                | 60.54                 | 28.31         | 42.92     |
| 3   | Madinah               | 78.90                 | 8.49      | 39.67                                | 8.65                  | 34.95         | 22.47     |
| 4   | Al-Qassim             | 76.20                 | 28.05     | 33.02                                | 31.26                 | 14.94         | 65.55     |
| 5   | Eastern Region        | 26.86                 | 15.30     | 11.21                                | 28.93                 | 9.33          | 29.89     |
| 6   | Asir                  | 89.70                 | 83.25     | 59.47                                | 53.73                 | 35.34         | 77.78     |
| 7   | Tabuk                 | 73.14                 | 53.11     | 50.15                                | 33.18                 | 20.33         | 60.93     |
| 8   | Hail                  | 94.88                 | 54.50     | 87.21                                | 52.26                 | 55.48         | 67.89     |
| 9   | Northern Borders      | 69.21                 | 56.15     | 60.29                                | 65.07                 | 53.82         | 88.09     |
| 10  | Jazan                 | 96.34                 | 85.11     | 88.45                                | 85.53                 | 89.73         | 100.00    |
| 11  | Najran                | 98.63                 | 74.36     | 86.23                                | 84.98                 | 85.66         | 89.96     |
| 12  | Al-Bahah              | 93.99                 | 99.18     | 96.76                                | 88.58                 | 98.11         | 98.56     |
| 13  | Al-Jouf               | 46.21                 | 68.78     | 37.18                                | 60.76                 | 57.52         | 68.85     |
| Т   | otal of the Kingdom   | 73.50                 | 37.77     | 49.79                                | 37.32                 | 26.75         | 53.74     |



# Percentage of Sanitation Type (Manhole) According to the Type of Possession in the Administrative Regions

Table 90

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> N | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 33.72     | 16.93           | 36.91                   |
| 2            | Makkah                | 61.12     | 25.88           | 50.73                   |
| 3            | Madinah               | 56.91     | 35.92           | 42.37                   |
| 4            | Al-Qassim             | 42.37     | 17.18           | 48.41                   |
| 5            | Eastern Region        | 16.91     | 11.40           | 15.56                   |
| 6            | Asir                  | 71.01     | 39.16           | 53.81                   |
| 7            | Tabuk                 | 57.80     | 25.70           | 63.19                   |
| 8            | Hail                  | 70.97     | 65.85           | 83.51                   |
| 9            | Northern Borders      | 61.69     | 62.76           | 22.13                   |
| 10           | Jazan                 | 92.80     | 89.75           | 100.00                  |
| 11           | Najran                | 92.38     | 87.88           | 79.77                   |
| 12           | Al-Bahah              | 95.36     | 97.66           | 99.67                   |
| 13           | Al-Jouf               | 56.99     | 57.63           | 68.06                   |
|              | Total of the Kingdom  | 52.51     | 27.35           | 42.97                   |



#### Percentage of Sanitation Type (N/A) According to the Type of Houses in the Administrative Regions

Table 91

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 1.11                  | 0.40      | 0.00                                 | 0.16                  | 0.05          | 0.77      |
| 2   | Makkah                | 0.07                  | 0.38      | 0.00                                 | 0.00                  | 0.05          | 0.86      |
| 3   | Madinah               | 2.26                  | 0.00      | 1.49                                 | 0.00                  | 0.08          | 0.83      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.61          | 0.00      |
| 5   | Eastern Region        | 0.00                  | 0.00      | 0.00                                 | 0.38                  | 0.15          | 0.64      |
| 6   | Asir                  | 0.31                  | 0.28      | 0.00                                 | 0.30                  | 0.09          | 2.78      |
| 7   | Tabuk                 | 0.32                  | 0.00      | 1.74                                 | 0.00                  | 0.10          | 18.09     |
| 8   | Hail                  | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.22          | 0.00      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.14          | 0.00      |
| 10  | Jazan                 | 0.28                  | 0.00      | 0.00                                 | 0.81                  | 0.17          | 0.00      |
| 11  | Najran                | 0.59                  | 0.00      | 0.00                                 | 0.79                  | 0.33          | 9.13      |
| 12  | Al-Bahah              | 0.46                  | 0.00      | 0.00                                 | 0.00                  | 0.09          | 0.98      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.14          | 2.60      |
| To  | otal of the Kingdom   | 0.50                  | 0.22      | 0.16                                 | 0.19                  | 0.10          | 1.85      |



# Percentage of Sanitation Type (N/A) According to the Type of Possession in the Administrative Regions

Table 92

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.34      | 0.09            | 0.65                    |
| 2            | Makkah                | 0.11      | 0.08            | 0.18                    |
| 3            | Madinah               | 0.86      | 0.19            | 3.49                    |
| 4            | Al-Qassim             | 0.00      | 0.19            | 0.82                    |
| 5            | Eastern Region        | 0.07      | 0.09            | 0.59                    |
| 6            | Asir                  | 0.27      | 0.09            | 1.26                    |
| 7            | Tabuk                 | 0.28      | 0.20            | 13.83                   |
| 8            | Hail                  | 0.00      | 0.15            | 0.00                    |
| 9            | Northern Borders      | 0.13      | 0.00            | 0.00                    |
| 10           | Jazan                 | 0.38      | 0.00            | 0.00                    |
| 11           | Najran                | 0.25      | 0.47            | 5.97                    |
| 12           | Al-Bahah              | 0.27      | 0.00            | 0.33                    |
| 13           | Al-Jouf               | 0.16      | 0.47            | 0.00                    |
|              | Total of the Kingdom  | 0.25      | 0.11            | 1.24                    |



### Percentage of Houses Waste Disposal Methods in the Administrative Regions

Table 93

| S/N  | Administrative Region |                        | Waste Disposal Method |        |
|------|-----------------------|------------------------|-----------------------|--------|
| 3/IN | Administrative Region | Public waste Container | combustion            | Burial |
| 1    | Riyadh                | 99.65                  | 0.35                  | 0.00   |
| 2    | Makkah                | 100.00                 | 0.00                  | 0.00   |
| 3    | Madinah               | 98.10                  | 1.89                  | 0.01   |
| 4    | Al-Qassim             | 100.00                 | 0.00                  | 0.00   |
| 5    | Eastern Region        | 99.97                  | 0.03                  | 0.00   |
| 6    | Asir                  | 99.72                  | 0.28                  | 0.00   |
| 7    | Tabuk                 | 99.92                  | 0.08                  | 0.00   |
| 8    | Hail                  | 99.11                  | 0.81                  | 0.08   |
| 9    | Northern Borders      | 100.00                 | 0.00                  | 0.00   |
| 10   | Jazan                 | 99.77                  | 0.18                  | 0.05   |
| 11   | Najran                | 99.20                  | 0.69                  | 0.11   |
| 12   | Al-Bahah              | 99.57                  | 0.43                  | 0.00   |
| 13   | Al-Jouf               | 99.74                  | 0.26                  | 0.00   |
|      | Total of the Kingdom  | 99.66                  | 0.33                  | 0.01   |



### Percentage Waste Disposal Method (Public waste Container) According to the Type of Houses in the Administrative Regions

Table 94

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 96.42                 | 100.00    | 97.79                                | 100.00                | 100.00        | 98.44     |
| 2   | Makkah                | 99.96                 | 100.00    | 100.00                               | 100.00                | 100.00        | 99.61     |
| 3   | Madinah               | 94.34                 | 100.00    | 98.55                                | 100.00                | 99.92         | 97.50     |
| 4   | Al-Qassim             | 100.00                | 100.00    | 100.00                               | 100.00                | 100.00        | 100.00    |
| 5   | Eastern Region        | 100.00                | 100.00    | 100.00                               | 100.00                | 99.99         | 99.36     |
| 6   | Asir                  | 99.56                 | 100.00    | 98.93                                | 99.97                 | 99.66         | 100.00    |
| 7   | Tabuk                 | 99.83                 | 100.00    | 100.00                               | 100.00                | 99.96         | 100.00    |
| 8   | Hail                  | 97.97                 | 99.13     | 100.00                               | 100.00                | 100.00        | 100.00    |
| 9   | Northern Borders      | 100.00                | 100.00    | 100.00                               | 100.00                | 100.00        | 100.00    |
| 10  | Jazan                 | 99.73                 | 100.00    | 98.80                                | 99.20                 | 100.00        | 100.00    |
| 11  | Najran                | 99.48                 | 100.00    | 100.00                               | 100.00                | 100.00        | 89.90     |
| 12  | Al-Bahah              | 98.69                 | 100.00    | 97.97                                | 99.58                 | 100.00        | 99.43     |
| 13  | Al-Jouf               | 100.00                | 100.00    | 100.00                               | 100.00                | 99.64         | 99.39     |
| То  | otal of the Kingdom   | 98.89                 | 99.94     | 99.33                                | 99.94                 | 99.95         | 98.76     |



### Percentage Waste Disposal Method (Public waste Container) According to the Type of Possession in the Administrative Regions

Table 95

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/</i> IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 99.87     | 100.00          | 97.71                   |
| 2            | Makkah                | 99.97     | 100.00          | 99.82                   |
| 3            | Madinah               | 98.59     | 100.00          | 87.34                   |
| 4            | Al-Qassim             | 100.00    | 100.00          | 100.00                  |
| 5            | Eastern Region        | 100.00    | 100.00          | 99.76                   |
| 6            | Asir                  | 99.73     | 99.87           | 97.47                   |
| 7            | Tabuk                 | 99.86     | 99.95           | 100.00                  |
| 8            | Hail                  | 98.63     | 99.59           | 100.00                  |
| 9            | Northern Borders      | 100.00    | 100.00          | 100.00                  |
| 10           | Jazan                 | 99.68     | 99.93           | 100.00                  |
| 11           | Najran                | 99.55     | 100.00          | 94.49                   |
| 12           | Al-Bahah              | 99.19     | 100.00          | 99.93                   |
| 13           | Al-Jouf               | 100.00    | 100.00          | 96.75                   |
|              | Total of the Kingdom  | 99.66     | 99.97           | 98.13                   |



#### Percentage Waste Disposal Method (Combustion) According to the Type of Houses in the Administrative Regions

Table 96

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 3.58                  | 0.00      | 2.21                                 | 0.00                  | 0.00          | 1.56      |
| 2   | Makkah                | 0.04                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.39      |
| 3   | Madinah               | 5.66                  | 0.00      | 1.45                                 | 0.00                  | 0.08          | 2.33      |
| 4   | Al-Qassim             | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 5   | Eastern Region        | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.01          | 0.64      |
| 6   | Asir                  | 0.44                  | 0.00      | 1.07                                 | 0.03                  | 0.33          | 0.00      |
| 7   | Tabuk                 | 0.17                  | 0.00      | 0.00                                 | 0.00                  | 0.04          | 0.00      |
| 8   | Hail                  | 1.83                  | 0.82      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 9   | Northern Borders      | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 0.00      |
| 10  | Jazan                 | 0.16                  | 0.00      | 1.20                                 | 0.80                  | 0.00          | 0.00      |
| 11  | Najran                | 0.39                  | 0.00      | 0.00                                 | 0.00                  | 0.00          | 9.09      |
| 12  | Al-Bahah              | 1.31                  | 0.00      | 2.03                                 | 0.42                  | 0.00          | 0.57      |
| 13  | Al-Jouf               | 0.00                  | 0.00      | 0.00                                 | 0.00                  | 0.36          | 0.61      |
| То  | otal of the Kingdom   | 1.07                  | 0.07      | 0.67                                 | 0.06                  | 0.05          | 1.17      |



# Percentage Waste Disposal Method (Combustion) According to the Type of Possession in the Administrative Regions

Table 97

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> 1 | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 0.13      | 0.00            | 2.29                    |
| 2            | Makkah                | 0.03      | 0.00            | 0.18                    |
| 3            | Madinah               | 1.41      | 0.00            | 12.58                   |
| 4            | Al-Qassim             | 0.00      | 0.00            | 0.00                    |
| 5            | Eastern Region        | 0.00      | 0.00            | 0.24                    |
| 6            | Asir                  | 0.27      | 0.12            | 2.53                    |
| 7            | Tabuk                 | 0.14      | 0.05            | 0.00                    |
| 8            | Hail                  | 1.28      | 0.33            | 0.00                    |
| 9            | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10           | Jazan                 | 0.25      | 0.07            | 0.00                    |
| 11           | Najran                | 0.23      | 0.00            | 5.51                    |
| 12           | Al-Bahah              | 0.81      | 0.00            | 0.07                    |
| 13           | Al-Jouf               | 0.00      | 0.00            | 3.25                    |
|              | Total of the Kingdom  | 0.31      | 0.03            | 1.86                    |



#### Percentage Waste Disposal Method (Burial) According to the Type of Houses in the Administrative Regions

Table 98

|     |                       |                       | Type of Housing Unit |                                      |                       |               |           |  |  |
|-----|-----------------------|-----------------------|----------------------|--------------------------------------|-----------------------|---------------|-----------|--|--|
| S/N | Administrative Region | Traditional House (%) | Villa (%)            | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |  |  |
| 1   | Riyadh                | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 2   | Makkah                | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 3   | Madinah               | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.17      |  |  |
| 4   | Al-Qassim             | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 5   | Eastern Region        | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 6   | Asir                  | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.01          | 0.00      |  |  |
| 7   | Tabuk                 | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 8   | Hail                  | 0.20                  | 0.05                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 9   | Northern Borders      | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 10  | Jazan                 | 0.11                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 11  | Najran                | 0.13                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 1.01      |  |  |
| 12  | Al-Bahah              | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| 13  | Al-Jouf               | 0.00                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.00      |  |  |
| То  | otal of the Kingdom   | 0.04                  | 0.00                 | 0.00                                 | 0.00                  | 0.00          | 0.07      |  |  |



# Percentage Waste Disposal Method (Burial) According to the Type of Possession in the Administrative Regions

Table 99

| S/N  | Administrative Region |           | Possession Type |                         |
|------|-----------------------|-----------|-----------------|-------------------------|
| 3/14 | Administrative Negron | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1    | Riyadh                | 0.00      | 0.00            | 0.00                    |
| 2    | Makkah                | 0.00      | 0.00            | 0.00                    |
| 3    | Madinah               | 0.00      | 0.00            | 0.09                    |
| 4    | Al-Qassim             | 0.00      | 0.00            | 0.00                    |
| 5    | Eastern Region        | 0.00      | 0.00            | 0.00                    |
| 6    | Asir                  | 0.00      | 0.01            | 0.00                    |
| 7    | Tabuk                 | 0.00      | 0.00            | 0.00                    |
| 8    | Hail                  | 0.09      | 0.08            | 0.00                    |
| 9    | Northern Borders      | 0.00      | 0.00            | 0.00                    |
| 10   | Jazan                 | 0.07      | 0.00            | 0.00                    |
| 11   | Najran                | 0.22      | 0.00            | 0.00                    |
| 12   | Al-Bahah              | 0.00      | 0.00            | 0.00                    |
| 13   | Al-Jouf               | 0.00      | 0.00            | 0.00                    |
|      | Total of the Kingdom  | 0.03      | 0.00            | 0.01                    |



### Percentage of Houses Waste Disposal Frequency in the Administrative Regions

Table 100

| S/N          | Administrative Region |           | Waste Disposal number of times |                 |
|--------------|-----------------------|-----------|--------------------------------|-----------------|
| <i>3/1</i> 1 | Administrative Region | Daily (%) | More Than Once a Week(%)       | Once a Week (%) |
| 1            | Riyadh                | 61.50     | 35.13                          | 3.37            |
| 2            | Makkah                | 36.15     | 52.61                          | 11.24           |
| 3            | Madinah               | 48.71     | 36.79                          | 14.50           |
| 4            | Al-Qassim             | 66.92     | 28.96                          | 4.12            |
| 5            | Eastern Region        | 62.43     | 31.53                          | 6.04            |
| 6            | Asir                  | 31.14     | 43.67                          | 25.19           |
| 7            | Tabuk                 | 28.66     | 55.69                          | 15.65           |
| 8            | Hail                  | 55.27     | 29.83                          | 14.90           |
| 9            | Northern Borders      | 72.50     | 24.98                          | 2.52            |
| 10           | Jazan                 | 66.03     | 26.89                          | 7.08            |
| 11           | Najran                | 34.91     | 51.57                          | 13.52           |
| 12           | Al-Bahah              | 35.68     | 48.94                          | 15.38           |
| 13           | Al-Jouf               | 45.48     | 45.92                          | 8.60            |
|              | Total of the Kingdom  | 49.90     | 40.64                          | 9.46            |



#### Percentage of Waste Disposal Frequency (Daily) According to the Type of Houses in the Administrative Regions

Table 101

|     |                       | Type of Housing Unit  |           |                                      |                       |               |           |  |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|--|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |  |
| 1   | Riyadh                | 59.80                 | 73.29     | 33.51                                | 61.82                 | 58.66         | 43.76     |  |
| 2   | Makkah                | 27.78                 | 39.39     | 35.82                                | 41.74                 | 39.19         | 22.76     |  |
| 3   | Madinah               | 32.68                 | 66.94     | 57.80                                | 47.71                 | 54.86         | 55.99     |  |
| 4   | Al-Qassim             | 51.78                 | 82.82     | 57.24                                | 79.81                 | 55.76         | 71.18     |  |
| 5   | Eastern Region        | 86.43                 | 74.85     | 57.55                                | 65.64                 | 56.77         | 32.10     |  |
| 6   | Asir                  | 23.50                 | 19.59     | 29.89                                | 28.00                 | 38.68         | 16.66     |  |
| 7   | Tabuk                 | 30.84                 | 53.14     | 23.71                                | 40.27                 | 29.05         | 4.35      |  |
| 8   | Hail                  | 48.13                 | 67.86     | 41.44                                | 59.66                 | 54.95         | 44.58     |  |
| 9   | Northern Borders      | 84.35                 | 75.73     | 73.91                                | 73.61                 | 65.60         | 48.28     |  |
| 10  | Jazan                 | 65.69                 | 74.28     | 84.23                                | 55.78                 | 64.16         | 54.12     |  |
| 11  | Najran                | 22.14                 | 45.74     | 43.84                                | 49.09                 | 41.72         | 21.30     |  |
| 12  | Al-Bahah              | 17.16                 | 31.40     | 20.07                                | 59.74                 | 42.43         | 25.58     |  |
| 13  | Al-Jouf               | 52.58                 | 56.10     | 71.29                                | 53.75                 | 43.74         | 10.79     |  |
| To  | otal of the Kingdom   | 40.86                 | 65.78     | 43.51                                | 56.50                 | 48.73         | 37.13     |  |



# Percentage of Waste Disposal Frequency (Daily) According to the Type of Possession in the Administrative Regions

Table 102

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> V | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 65.68     | 60.73           | 51.60                   |
| 2            | Makkah                | 33.76     | 40.00           | 19.20                   |
| 3            | Madinah               | 41.53     | 57.12           | 39.73                   |
| 4            | Al-Qassim             | 73.68     | 62.49           | 61.05                   |
| 5            | Eastern Region        | 72.63     | 58.96           | 44.62                   |
| 6            | Asir                  | 29.17     | 33.27           | 29.99                   |
| 7            | Tabuk                 | 37.84     | 24.25           | 7.99                    |
| 8            | Hail                  | 56.21     | 56.64           | 42.11                   |
| 9            | Northern Borders      | 82.09     | 70.84           | 17.94                   |
| 10           | Jazan                 | 65.58     | 67.18           | 58.08                   |
| 11           | Najran                | 38.59     | 33.88           | 23.15                   |
| 12           | Al-Bahah              | 34.93     | 42.77           | 25.07                   |
| 13           | Al-Jouf               | 50.81     | 43.30           | 25.82                   |
|              | Total of the Kingdom  | 51.86     | 50.34           | 39.19                   |



### Percentage of Waste Disposal Frequency (More Than Once a Week) According to the Type of Houses in the Administrative Regions

Table 103

|     |                       | Type of Housing Unit  |           |                                      |                       |               |           |  |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|--|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |  |
| 1   | Riyadh                | 31.02                 | 25.72     | 55.60                                | 36.28                 | 38.43         | 41.65     |  |
| 2   | Makkah                | 51.25                 | 58.32     | 49.47                                | 56.28                 | 52.70         | 50.77     |  |
| 3   | Madinah               | 41.15                 | 28.85     | 39.23                                | 45.02                 | 36.14         | 19.10     |  |
| 4   | Al-Qassim             | 38.20                 | 16.74     | 36.70                                | 19.76                 | 39.03         | 22.38     |  |
| 5   | Eastern Region        | 12.19                 | 24.66     | 38.41                                | 33.59                 | 35.44         | 37.49     |  |
| 6   | Asir                  | 45.17                 | 51.99     | 22.07                                | 54.08                 | 39.78         | 41.67     |  |
| 7   | Tabuk                 | 51.80                 | 46.86     | 56.03                                | 56.41                 | 58.57         | 55.14     |  |
| 8   | Hail                  | 25.79                 | 26.48     | 52.68                                | 33.70                 | 35.66         | 21.08     |  |
| 9   | Northern Borders      | 14.60                 | 23.54     | 24.13                                | 25.00                 | 30.84         | 23.82     |  |
| 10  | Jazan                 | 24.34                 | 24.36     | 15.77                                | 42.61                 | 28.87         | 22.94     |  |
| 11  | Najran                | 60.11                 | 51.22     | 45.20                                | 42.93                 | 47.78         | 45.24     |  |
| 12  | Al-Bahah              | 51.38                 | 58.68     | 65.39                                | 35.17                 | 45.56         | 56.26     |  |
| 13  | Al-Jouf               | 46.72                 | 40.00     | 28.71                                | 39.64                 | 48.52         | 49.59     |  |
| To  | otal of the Kingdom   | 41.07                 | 30.78     | 42.73                                | 39.43                 | 43.35         | 39.95     |  |



### Percentage of Waste Disposal Frequency (More Than Once a Week) According to the Type of Possession in the Administrative Regions

Table 104

| S/N          | Administrative Region |           | Possession Type |                         |
|--------------|-----------------------|-----------|-----------------|-------------------------|
| <i>3/1</i> 1 | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1            | Riyadh                | 32.10     | 36.21           | 39.95                   |
| 2            | Makkah                | 55.49     | 50.41           | 55.87                   |
| 3            | Madinah               | 39.46     | 34.77           | 34.92                   |
| 4            | Al-Qassim             | 23.48     | 34.11           | 30.32                   |
| 5            | Eastern Region        | 25.65     | 34.56           | 36.97                   |
| 6            | Asir                  | 46.98     | 40.05           | 46.29                   |
| 7            | Tabuk                 | 50.84     | 60.17           | 54.89                   |
| 8            | Hail                  | 29.28     | 31.60           | 25.74                   |
| 9            | Northern Borders      | 17.25     | 25.38           | 76.28                   |
| 10           | Jazan                 | 26.51     | 27.08           | 38.70                   |
| 11           | Najran                | 52.88     | 52.58           | 42.30                   |
| 12           | Al-Bahah              | 50.19     | 41.84           | 56.98                   |
| 13           | Al-Jouf               | 45.17     | 45.40           | 54.60                   |
|              | Total of the Kingdom  | 39.36     | 41.20           | 43.07                   |



### Percentage of Waste Disposal Frequency (Once a Week) According to the Type of Houses in the Administrative Regions

Table 105

|     |                       |                       |           | Type of Ho                           | ousing Unit           |               |           |
|-----|-----------------------|-----------------------|-----------|--------------------------------------|-----------------------|---------------|-----------|
| S/N | Administrative Region | Traditional House (%) | Villa (%) | Storey in a Traditional<br>House (%) | Storey in a Villa (%) | Apartment (%) | Other (%) |
| 1   | Riyadh                | 9.18                  | 0.99      | 10.89                                | 1.90                  | 2.91          | 14.59     |
| 2   | Makkah                | 20.97                 | 2.29      | 14.71                                | 1.98                  | 8.11          | 26.47     |
| 3   | Madinah               | 26.17                 | 4.22      | 2.98                                 | 7.27                  | 9.00          | 24.91     |
| 4   | Al-Qassim             | 10.02                 | 0.44      | 6.06                                 | 0.43                  | 5.21          | 6.44      |
| 5   | Eastern Region        | 1.38                  | 0.49      | 4.04                                 | 0.77                  | 7.79          | 30.41     |
| 6   | Asir                  | 31.33                 | 28.42     | 48.04                                | 17.92                 | 21.54         | 41.67     |
| 7   | Tabuk                 | 17.36                 | 0.00      | 20.26                                | 3.32                  | 12.38         | 40.51     |
| 8   | Hail                  | 26.08                 | 5.66      | 5.88                                 | 6.64                  | 9.39          | 34.34     |
| 9   | Northern Borders      | 1.05                  | 0.73      | 1.96                                 | 1.39                  | 3.56          | 27.90     |
| 10  | Jazan                 | 9.97                  | 1.36      | 0.00                                 | 1.61                  | 6.97          | 22.94     |
| 11  | Najran                | 17.75                 | 3.04      | 10.96                                | 7.98                  | 10.50         | 33.46     |
| 12  | Al-Bahah              | 31.46                 | 9.92      | 14.54                                | 5.09                  | 12.01         | 18.16     |
| 13  | Al-Jouf               | 0.70                  | 3.90      | 0.00                                 | 6.61                  | 7.74          | 39.62     |
| То  | otal of the Kingdom   | 18.07                 | 3.44      | 13.76                                | 4.06                  | 7.92          | 22.92     |



# Percentage of Waste Disposal Frequency (Once a Week) According to the Type of Possession in the Administrative Regions

Table 106

| S/N  | Administrative Region |           | Possession Type |                         |
|------|-----------------------|-----------|-----------------|-------------------------|
| 3/IN | Administrative Region | Owned (%) | Rented (%)      | Offered by Employer (%) |
| 1    | Riyadh                | 2.22      | 3.06            | 8.45                    |
| 2    | Makkah                | 10.75     | 9.59            | 24.93                   |
| 3    | Madinah               | 19.01     | 8.11            | 25.35                   |
| 4    | Al-Qassim             | 2.84      | 3.40            | 8.63                    |
| 5    | Eastern Region        | 1.72      | 6.48            | 18.41                   |
| 6    | Asir                  | 23.85     | 26.68           | 23.72                   |
| 7    | Tabuk                 | 11.32     | 15.58           | 37.12                   |
| 8    | Hail                  | 14.51     | 11.76           | 32.15                   |
| 9    | Northern Borders      | 0.67      | 3.78            | 5.78                    |
| 10   | Jazan                 | 7.91      | 5.74            | 3.22                    |
| 11   | Najran                | 8.53      | 13.54           | 34.55                   |
| 12   | Al-Bahah              | 14.88     | 15.39           | 17.95                   |
| 13   | Al-Jouf               | 4.02      | 11.30           | 19.58                   |
|      | Total of the Kingdom  | 8.79      | 8.45            | 17.74                   |