DATA COLLECTION AND COMPILATION

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Energy data collection and compilation are difficult tasks and country practices in this respect vary significantly.
MEMBERS OF NATIONAL SYSTEM OF ENERGY STATISTICS

- National statistical offices,

- Governmental agencies responsible for implementation of energy policies like energy ministries/agencies, etc.).
Which agencies are responsible for energy statistics in Azerbaijan?
MODELS FOR THE ORGANIZATION OF A NATIONAL SYSTEM OF ENERGY STATISTICS:

- **Centralized system**, where one institution is in charge of the whole statistical process (from the collection, compilation to the dissemination of statistics),

- **Decentralized system**, where several institutions are involved and are responsible for different parts of the process.
The collection of energy data can be a complex and costly process and depends on country needs and circumstances, including the legal framework and institutional arrangements.
FREQUENCIES OF DATA COLLECTION

- **Annual data collection**, energy data relating to the basic and most appropriate information needs, like production, supply and consumption.

- **Infra annual data collections (quarterly, monthly, etc.)**, are conducted when frequent data is of high priority like: monthly oil production and trade.

- **Infrequent data collections (less frequent than annual)** conducted by countries either for specialized topics, to fill in gaps in the data collection like: large consumer surveys or censuses.
METHODS OF COLLECTING DATA

- Surveys (Enterprise/establishment/household)

- Census

- Administrative sources

- Data can be obtained directly or indirectly from appropriate economic units (e.g., enterprises or establishments and households) by means of censuses, surveys and/or administrative records.
EXAMPLE OF ADMINISTRATIVE DATA

- Oil extraction
- Production of natural gas
- Natural gas consumption
- Electricity generation
- Electricity consumption
SURVEY ON ENERGY CARRIERS CONSUMPTION AND ENVIRONMENTAL CHARACTERISTICS OF HOUSEHOLDS IN URBAN AREAS - IRAN, 2016
It was implemented in 2011 and 2016

- Face to face interview

- Respondent: Sample households who live in urban area.

- Geographical area: Urban cities in 30 provinces

- Number of sample in 2016: 10010

- Response rate in 2016: 95%
MAIN PURPOSE OF THIS SURVEY

- Estimate the amount of energy carriers consumption for heating, cooling, warm water, household equipment, lighting, vehicle

- Environmental characteristics of household (amount of waste, reuse of waste, using disposable appliance)

- Water resources and quality

- Use of fertilizers
THE QUESTIONNAIRE CONSISTS OF DIFFERENT TYPE:

- Characteristics of housing unit and household vehicles
- Swages and waste
- Water
- Fertilizer and pesticides
- Households equipment
- Heating equipment
- Cooling equipment
- Lighting
- Characteristics of household (number of members, age, education, employment)
### AREA, KEEPING WARM AND KEEPING COOL AREA OF HOUSING UNIT IN URBAN AREA

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Total area (m²)</th>
<th>Area that keep warm</th>
<th>Area that keep cool</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of housing unit in urban area</strong></td>
<td>17.7</td>
<td>1853</td>
<td>79.8</td>
<td>76.0</td>
</tr>
<tr>
<td><strong>Apartment</strong></td>
<td>8.0</td>
<td>781</td>
<td>88.6</td>
<td>86.0</td>
</tr>
<tr>
<td><strong>Not apartment</strong></td>
<td>9.7</td>
<td>1071</td>
<td>73.4</td>
<td>68.7</td>
</tr>
</tbody>
</table>
## PERCENTAGE OF HOUSEHOLD BY USING HEATING FACILITIES 2016

<table>
<thead>
<tr>
<th>Heating facilities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gas heater</td>
<td>73.5</td>
</tr>
<tr>
<td>Radiant</td>
<td>6.9</td>
</tr>
<tr>
<td>Oil heater</td>
<td>1.8</td>
</tr>
<tr>
<td>Package</td>
<td>8.7</td>
</tr>
<tr>
<td>Fire place</td>
<td>0.5</td>
</tr>
<tr>
<td>Oil lamp</td>
<td>1.5</td>
</tr>
<tr>
<td>Electricity heater</td>
<td>1.2</td>
</tr>
<tr>
<td>Natural gas heater and other</td>
<td>1.8</td>
</tr>
</tbody>
</table>
### PERCENTAGE OF HOUSEHOLD BY USING COOLING FACILITIES 2016

<table>
<thead>
<tr>
<th>cooling facilities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water cooler</td>
<td>56.8</td>
</tr>
<tr>
<td>Gas cooler</td>
<td>9.8</td>
</tr>
<tr>
<td>Fan</td>
<td>5.4</td>
</tr>
<tr>
<td>Water cooler and fan</td>
<td>14.0</td>
</tr>
<tr>
<td>Gas cooler and fan</td>
<td>11.5</td>
</tr>
<tr>
<td>Package</td>
<td>0.2</td>
</tr>
<tr>
<td>Chiller</td>
<td>0.5</td>
</tr>
<tr>
<td>Air conditioner</td>
<td>0.2</td>
</tr>
</tbody>
</table>
PERCENTAGE OF ROOF INSULATION OF RESIDENTIAL UNIT
UNSD, 2016, International Recommendations for Energy Statistics (IRES),

Statistical center of Iran (SCI), Survey on energy carriers consumption and
environmental characteristics of households in urban areas, 2016,
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