Country Experience on Energy Statistics Compilation

Dean Joseph A. Villanueva
Production Accounts Division (PAD)
Macroeconomic Accounts Service (MAS)

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Outline of Presentation

I. Framework for Compiling Energy Statistics in the Philippines

II. Coordination Mechanisms in the Compilation of Energy Statistics

III. Sources of Energy Statistics

IV. Plans in Energy Statistics Compilation
I. Framework for Compiling Energy Statistics

The Philippine Statistical System

- The Philippine Statistical System is composed of policy-making bodies, data producers, users, research and training institutions, and data providers.
- It is a government-wide system of providing statistical information and services to the public.
- The Philippine Statistical Act of 2013 creates the Philippine Statistics Authority, for the purposes of policy coordination on sectoral statistics, censuses and technical coordination, civil registration and central support and field statistical services.
I. Framework for Compiling Energy Statistics

The Philippine Statistics Authority
I. Framework for Compiling Energy Statistics

National Accounts of the Philippines

- Unified framework compiling main economic aggregates; provides information on economic interactions taking place between different sectors of the economy.
- The Philippine System of National Accounts currently adopts the 2008 System of National Accounts

System of Environmental and Economic Accounting

- Accounting framework that integrates economic and environmental data to provide a view of the interrelationships between the economy and the environment.
I. Framework for Compiling Energy Statistics

Philippine Statistical Development Plan (PSDP)

• The PSDP is a mechanism for setting the directions, thrusts and priorities of the Philippine Statistical System in the medium term for the generation and dissemination of relevant, timely and quality official statistics.

Interagency Committee on Environment and Natural Resource Statistics (IAC-ENRS)

• The committee shall serve as a forum for the exchange of expertise to resolve technical issues on environment and disaster statistics
• One of the Technical Working Groups of IAC-ENRS is on Energy Resource Statistics
II. Coordination Mechanisms

Functions of the TWG-ERS

• Serves as a forum of discussion and resolution of concerns
• Review and enhance concepts, techniques, and methodologies
• Identify and recommend statistical measures, strategies, and policies
• Address statistical requirements in the Philippine Statistical Development Program
III. Sources of Energy Statistics

Census and Annual Survey of Philippine Business and Industries (CPBI and ASPBI)

• The data from establishment-based surveys can yield economic indicators such as value added, labor productivity, average compensation, among others.

• These indicators are used to evaluate the performance of the industries for national and regional development planning and monitoring.

• The establishment census and survey could generate information on the level of energy consumption as well as the production activities of establishments primarily engaged in the generation, transmission and distribution of energy resources.
III. Sources of Energy Statistics

Compendium of the Philippine Environment Statistics

- The Philippine Framework for the Development of Environment Statistics (PFDES) bridged the lack of an organized and integrated framework in the collection and utilization of environment statistics
- The PFDES provided a systematic approach for the development of environment statistics
- It served as a framework for data collection institutions to make their data more usable in socioeconomic and environmental programs and policies
- The Compendium of Philippine Environment Statistics (CPES) was first published in 2000
III. Sources of Energy Statistics

Component 2 of CPES: Environmental Resources and Their Use

• This component covers subcomponents non-energy mineral resources, energy resources, land, soil resources, biological resources, and water resources

Energy Resources

• FDES includes commercially recoverable stocks, production, and use of energy resources as priority statistics
• The Department of Energy (DOE) has been mandated to monitor energy supply and demand but it only assesses potential resources upon requests of local government units
III. Sources of Energy Statistics

Energy Balance Sheet

<table>
<thead>
<tr>
<th>Non-renewable energy sources</th>
<th>Primary energy sources</th>
<th>Renewable energy sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>Natural gas</td>
<td>Crude oil and condensate</td>
</tr>
<tr>
<td>3,693.9</td>
<td>2,654.0</td>
<td>716.0</td>
</tr>
<tr>
<td>Imports (+)</td>
<td>9,119.8</td>
<td>(10,471.3)</td>
</tr>
<tr>
<td>Exports (-)</td>
<td>(1,530.1)</td>
<td>(719.2)</td>
</tr>
<tr>
<td>International Marine Bankers (-)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>International Civil Aviation (-)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stock Change (+/-)</td>
<td>-</td>
<td>(35.8)</td>
</tr>
<tr>
<td>Total Primary Energy Supply</td>
<td>11,615.8</td>
<td>2,854.0</td>
</tr>
<tr>
<td>Refinery (Crude Run)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Power Generation</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transmission/Dist. Loss (-)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Energy Sector Use &amp; Loss (-)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Domestic Supply</td>
<td>2,350.1</td>
<td>26.4</td>
</tr>
</tbody>
</table>

Statistical Difference

% Statistical Difference

Total Final Energy Consumption 2,350.1 40.8 146.6 281.5

Industry 2,217.9 49.8 110.3 281.5
Transport - - - -
Residential - - - -
Commercial - - - -
Agh., Fishery & Forestry 132.1 - - -
Others, Non-Energy Use - - - -
Self-Sufficiency (%) 15.1

Values that do not exceed 0.05 have been rounded off to and appear as 0.0. Zero values appear as -.
Self-sufficiency was derived as the ratio of net domestic supply by the total primary energy supply.
Source: Department of Energy

<table>
<thead>
<tr>
<th>Secondary energy sources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil products</td>
<td>5,830.4</td>
</tr>
<tr>
<td>Electricity</td>
<td>21,449.5</td>
</tr>
</tbody>
</table>

Indigenous - 26,878.6
Imports (+) 9,809.6 29,654.2
Exports (-) (1,323.9) (3,078.5)
International Marine Bankers (-) (27.1) (27.1)
International Civil Aviation (-) (1,215.6) (1,215.6)
Stock Change (+/-) (93.3) 125.4
Total Primary Energy Supply 7,283.3 81,747.0
Refinery (Crude Run) 9,072.2 (503.8)
Power Generation - -
Transmission/Dist. Loss (-) (643.3) (643.3)
Energy Sector Use & Loss (-) (612.6) (611.5)
Net Domestic Supply 15,912.3 5,830.4 21,449.5

Statistical Difference 462.0
% Statistical Difference 15

Total Final Energy Consumption 15,0386 5,830.4 20,978.9

Industry 1,382.5 1,935.6 6,750
Transport 10,151.0 8.5 10,557.3
Residential 976.1 1,595.9 6,731.3
Commercial 1,291.7 1,727.0 4,397.7
Agh. Fishery & Forestry 193.6 203.2 400.6
Others, Non-Energy Use 1,046.8 - 1,178.5

Self-Sufficiency (%) 81.9

Values that do not exceed 0.05 have been rounded off to and appear as 0.0. Zero values appear as -.
Self-sufficiency was derived as the ratio of net domestic supply by the total primary energy supply.
Source: Department of Energy
IV. Plans in Energy Statistics Compilation

Major Statistical Development Programs, 2018-2023

• Institutionalization of the conduct of Household Energy Consumption Survey (HECS) and the Survey of Energy Consumption of Establishments (SECE)
• Conduct of cross-sectoral energy consumption surveys
• Inclusion of the Energy Balance Table (EBT) in the System of Designated Statistics (DOE, 2018-2023)
• Compilation of a complete set of Energy Accounts based on the 2012 SEEA
• Preparation of the Manual on Energy Statistics for the Philippines
• Dissemination of key energy statistics and energy report publications