NINETH MEETING OF OSLO GROUP OF ENERGY STATISTICS
AT
Abu Dhabi, United Arab Emirates
5 – 8TH MAY, 2014

A PRESENTATION ON
ENERGY DATA DISSEMINATION
PRACTICES IN GHANA

by
Salifu Addo
Energy Commission, Ghana
CONTENT OF PRESENTATION

• Introduction
• Legal framework for energy data collection and dissemination;
• Types of data collected;
• Who are our energy data suppliers?;
• Organization of data collection;
• Overview Ghana Energy Statistics;
• Energy data dissemination practices;
• Challenges;
• Way Forward;
INTRODUCTION

• Importance of energy data in energy policy research and decision-making;

• Hence, the legal framework for energy data collection and dissemination is enshrined in Energy Commission Act 1997 (Act 541);
The Energy Commission Act 1997 (Act 541) established the Energy Commission as a statutory body empowered to undertake the following functions among others to:

- Be Ghana Government’s energy policy advisor by making national energy policy recommendations to the Minister for Energy;

- Prepare indicative energy plans to ensure that energy demand and supply are met in a sustainable manner;

- Formulate national policies for the development and utilization of indigenous energy resources;
LEGAL FRAMEWORK

Legal mandate of function of the Commission include the following;

- To promote energy efficiency and productive uses of electricity, natural gas and petroleum products;

- To license utilities for the transmission, wholesale supply, distribution and sale of electricity and natural gas;

- To secure a comprehensive energy database for national energy planning and policy research;
TYPES OF DATA COLLECTED

- Electricity (Generation, Transmission, Import/export Distribution, Consumption by customer classification)
- Crude oil & Petroleum products (Domestic Production, import/export, consumption by fuels)
- Woodfuels (production, export, consumption)
- Energy consumption patterns in the sectors of the economy;
- Energy resources
- Macroeconomic and Demographic Data
WHO ARE OUR ENERGY DATA SUPPLIERS?

Volta River Authority (VRA)
Independent Power Producers (IPPs)
Ghana Grid Company (GRIDCo)
Electricity Company of Ghana (ECG)
Northern Electricity Distribution Company (NEDCo)

Ghana National Petroleum Company (GNPC)
Tema Oil Refinery (TOR)
National Petroleum Authority (NPA)

Ghana Community Network System (GCNet)

Electricity Data

Petroleum Data

Woodfuel Data

Administrative Data
ORGANIZATION OF DATA COLLECTION

ELECTRICITY

- Generation – VRA, IPPs
- Transmission, Import/Export – GRIDCo
- Distribution – ECG, NEDCo,
- Consumption – ECG, NEDCo, Surveys

WOODFUELS
- Charcoal Export - GCNet

GSS
- Demographic Data
- Macroeconomic Data; drivers of energy use

P Petrolium
- Crude oil Reserve/Prod – GNPC
- Refined Products – TOR
- Import/Export – TOR, NPA
- Consumption – NPA,

SURVEYS
- Sectoral Energy Consumption by fuel type etc

DATA ANALYZED

ANNUAL ENERGY STATISTICS
OVERVIEW OF GHANA'S ENERGY STATISTICS
CONTENT OF ENERGY STATISTICS

Section One: Energy Indicators and Energy Balance

Section Two: Primary Energy Use and Final Energy Consumption

Section Three: Electricity

Section Four: Petroleum

Section Five: Woodfuels

Section Six: Energy Prices
<table>
<thead>
<tr>
<th>SUPPLY AND CONSUMPTION</th>
<th>Crude Oil</th>
<th>Natural Gas</th>
<th>Petroleum Products</th>
<th>Wood</th>
<th>Charcoal</th>
<th>Hydro</th>
<th>Electricity</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>5,371.8</td>
<td>-</td>
<td>-</td>
<td>3,553.9</td>
<td>-</td>
<td>708.0</td>
<td>-</td>
<td>9,633.7</td>
</tr>
<tr>
<td>Imports</td>
<td>1,328.3</td>
<td>291.6</td>
<td>3,070.4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.3</td>
<td>4,692.7</td>
</tr>
<tr>
<td>Exports</td>
<td>-5,210.9</td>
<td>-</td>
<td>-216.5</td>
<td>-</td>
<td>-0.7</td>
<td>-</td>
<td>-10.5</td>
<td>-5,438.6</td>
</tr>
<tr>
<td>Stock Changes</td>
<td>-160.9</td>
<td>-</td>
<td>-171.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-331.9</td>
</tr>
<tr>
<td>Total Primary Energy Supply</td>
<td>1,328.4</td>
<td>291.6</td>
<td>2,682.9</td>
<td>3,553.9</td>
<td>-0.7</td>
<td>708.0</td>
<td>-8.2</td>
<td>8,555.9</td>
</tr>
<tr>
<td>Electricity Plants</td>
<td>-881.1</td>
<td>-290.0</td>
<td>-5.2</td>
<td>-</td>
<td>-</td>
<td>-708.0</td>
<td>1,106.6</td>
<td>-777.7</td>
</tr>
<tr>
<td>Petroleum Refinery</td>
<td>-446.5</td>
<td>-</td>
<td>437.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-8.7</td>
</tr>
<tr>
<td>Charcoal Kilns</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-1,989.5</td>
<td>1,112.2</td>
<td>-</td>
<td>-</td>
<td>-877.2</td>
</tr>
<tr>
<td>Own use</td>
<td>-41.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-6.9</td>
<td>-48.1</td>
</tr>
<tr>
<td>Losses</td>
<td>-27.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-132.7</td>
<td>-160.0</td>
</tr>
<tr>
<td>Final Energy Consumption</td>
<td>-</td>
<td>-</td>
<td>3,300.1</td>
<td>1,564.4</td>
<td>1,111.6</td>
<td>-</td>
<td>910.2</td>
<td>6,886.2</td>
</tr>
<tr>
<td>Residential Sector</td>
<td>-</td>
<td>-</td>
<td>151.3</td>
<td>1,311.8</td>
<td>899.4</td>
<td>-</td>
<td>433.2</td>
<td>2,795.7</td>
</tr>
<tr>
<td>Commerce &amp; Services Sector</td>
<td>-</td>
<td>-</td>
<td>22.9</td>
<td>31.0</td>
<td>86.1</td>
<td>-</td>
<td>152.9</td>
<td>292.9</td>
</tr>
<tr>
<td>Industry</td>
<td>-</td>
<td>-</td>
<td>380.1</td>
<td>221.6</td>
<td>126.1</td>
<td>-</td>
<td>322.2</td>
<td>1,050.0</td>
</tr>
<tr>
<td>Agriculture &amp; Fisheries Sector</td>
<td>-</td>
<td>-</td>
<td>101.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.8</td>
<td>102.8</td>
</tr>
<tr>
<td>Transport</td>
<td>-</td>
<td>-</td>
<td>2,644.8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,644.8</td>
</tr>
<tr>
<td>Statistical Difference</td>
<td>-67.8</td>
<td>1.7</td>
<td>-126.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>48.6</td>
<td>-143.7</td>
</tr>
</tbody>
</table>
TOTAL PRIMARY ENERGY SUPPLY

- 2000:
  - Wood: 61%
  - Oil: 29%
  - Hydro: 10%

- 2013:
  - Wood: 42%
  - Oil: 47%
  - Hydro: 8%
  - Natural Gas: 3%
The principle of official statistics is that, data must be compiled and made available on an impartial basis by official statistical agency to ensure that citizens and users have access to official information. Statistics becomes useful when it is made available to those who need an use them.

The Commission as much as possible follows the basic procedures in disseminating energy statistics. These include;
ENERGY DATA DISSEMINATION PRACTICES CONT’D

➢ Timeliness

• Recognized the importance of Statistics when made available to users in a timely manner;
• Ensure that Data is made available to all users at the same time and under the same condition;
• Committed to releasing data as early as possible. Energy statistics are normally released by the end of the first half of every year;

➢ Reference Period

• Period clearly stated and is for a calendar year;
• Contains data up to the end of the preceding year in which the data is being published;

➢ Data Available at no Cost

• Data is disseminated free of charge at no cost and is available and accessible to everyone;
ENERGY DATA DISSEMINATION PRACTICES CONT’D

- Confidentiality
  - Information on particular individuals, households, firm or enterprise is strictly kept confidential and not given out to external persons or organization;

- Feedback
  - The Commission encourages user feedback recognizing it as an impart aspect of disseminating statistics;

- Means of Dissemination
  - Posting of National Energy Statistics on the Commission’s website (www.energycom.gov.gh);
CHALLENGES

• **Timeliness**
  Data suppliers unable to supply data early enough to meet publication schedule;

• **Data Inconsistency**
  Some of data made available to the Commission different from what the utilities publish in annual reports etc;

• **Non Response to survey Questionnaire**
  Respondents unwillingness to respond to survey questionnaires affect the collection compilation and dissemination of Energy Statistics;

• **Internet**
  Different data from different sources on the same entity or product are available on the internet;
WAY FORWARD

• Setting up of a Committee made up of data suppliers and the Commission to ensure that data are accurate consistent and coherent;

• Improve on the level of awareness and knowledge in Energy Statistics among the citizenry;

• Capacity building in Energy Statistics for staff;

• Establishing an Energy Database (NEDPIC)

• Continue to explain to data suppliers the need to release data request on time;

• Educate survey respondents on the importance of releasing information during surveys;
THANK YOU