Monthly Oil and Gas Data Collection System in Korea

2019. 6.

Center for Energy Information and Statistics
Himchul Shin
## 1. Background of Oil & Gas data collection

- **Comparison of Korea’s Oil and Gas Industry**
  - Marketization: Oil > Gas
  - Obligation to provide data: Oil > Gas

<table>
<thead>
<tr>
<th></th>
<th>Oil</th>
<th>Gas</th>
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<tbody>
<tr>
<td><strong>Public enterprise</strong></td>
<td>KNOC (Korea National Oil Company)</td>
<td>KOGAS (Korea Gas Corporation)</td>
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<tr>
<td><strong>Role of Public enterprise</strong></td>
<td>E &amp; P, Oil stockpiling, Disclosure of oil supply and demand information</td>
<td>The biggest importer natural gas, Supplies gas to domestic market</td>
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<td><strong>Legal Base</strong></td>
<td>Article 19 of Energy Law (Management and publication of energy related statistics) - can make…, can request the submission of data</td>
<td>Petroleum and Petroleum Alternative Fuel Business Act - reporting obligation and - included penalties</td>
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2. Oil Industry in Korea

- Most companies are private companies
  - According to the related law, there are 7 parts in the oil industry
2. Oil Data Collection

- Each parts submits monthly data to KNOC
- KEEI uses data from the KNOC

**Supply**
- Imports
- Production
- Stock changes

**Transformation**
- Generation
- District heating
- Gas manufacturing

**Demand**
- Industry
- Transport
- Residential
- Commercial
- Public services

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- Oil refinery operator
- Oil import and export operator
- Petroleum seller
- Alternative fuel producer
- Alternative fuel seller
- Pipeline operator
- Oil reserve obligation operator

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**KEEI** (Center for Energy Information and Statistics)

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**KNOC** (Petroleum Information Center)
2. Gas Industry in Korea

- Changes in domestic market environment
  - Originally there is only one natural gas import company in Korea (KOGAS)
  - Recently, LNG direct import companies are increasing

![Diagram of gas industry in Korea](image)
2. Gas Data Collection

- Data Submitters: KOGAS, Direct import companies, City gas association

**Supply**
- Imports
- Production
- Stock changes

**Transformation**
- Generation
- District heating
- Gas manufacturing

**Demand**
- Industry
- Transport
- Residential
- Commercial
- Public services

KOGAS

Direct import Companies

City gas association (34 companies)

KEEI (Center for Energy Information and Statistics)
3. How to Collect Data

- Timeline for Oil and Gas Statistics

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Data collection

Submit MOS gas data

Create domestic energy balance and statistics

Announce domestic energy statistics and Data collection again
3. How to Collect Data (Oil)

- There are 12 types of questionnaire
  - 6 main questionnaires

  - Supply & demand
  - Export & import
  - Crude oil import
  - Stockpile
  - Transaction
  - Pipeline transportation
3. How to Collect Data (Gas)

- Using two questionnaires (natural gas, city gas)
  - Natural gas includes imports and supplies (sales)
  - In the city gas table, consumption part is divided
4. Announcement of Statistics

- **Domestic publication**
  - Online: KESIS (Korea Energy Statistical Information System) (www.kesis.net)

- **International**: Submit to IEA
  - MOS, JODI (monthly), mini questionnaire, AQ (yearly)
5. Challenges

- No problem with petroleum data collection
- The problem of gas data collection
  - Increasing of natural gas direct import companies
    - No penalty even if they do not data submit
- Create a reporting system jointly with Gas industry division of the Ministry of Industry, Trade and Energy (in 2019)
Thank you