Notable Development on Oil and Gas in *Chinese Taipei*

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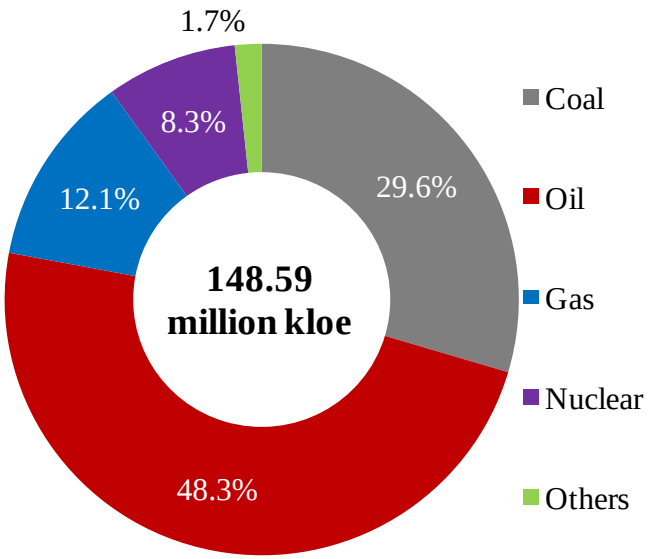
Highlights of Recent Changes in Supply and Demand on Oil and Gas in Chinese Taipei

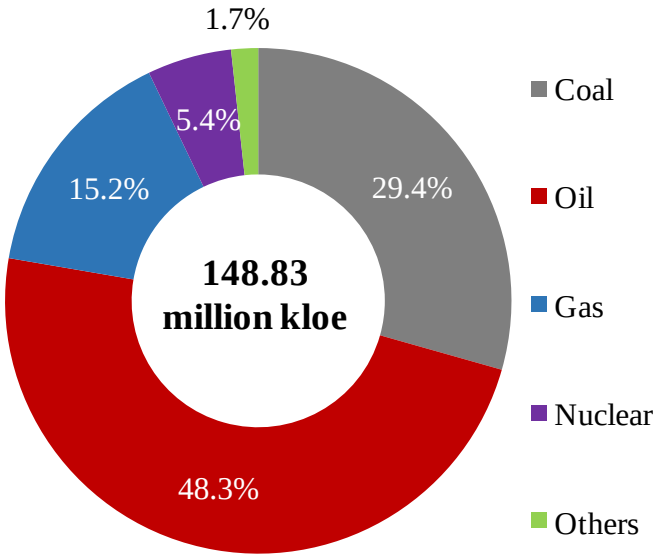
Energy Supply

- In 2018, the total energy supply of Chinese Taipei was 148.59 million KLOE.
- Oil and gas accounted for 48.3% and 15.2% respectively.
- Over the past five years, the annual growth rate of energy supply averaged less than 0.1%.

Energy Supply (2014)



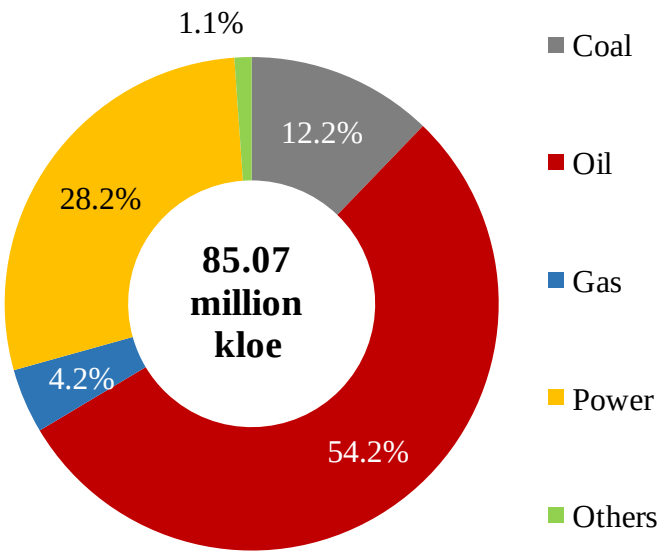
Energy Supply (2018)



Energy Consumption

- In 2018, the total energy consumption of Chinese Taipei amounted to 86.83 million KLOE, mainly in the form of petroleum products (53.4%), followed by power (29.1%), coal and coal products (11.3%), natural gas (5.4%), and others (0.9%).
- Energy consumption increased at an annual average rate of 0.5% over the past 5 years. The share of gas increased by 1.2% while the share of oil decreased by 0.8%.

Energy Consumption (2014)



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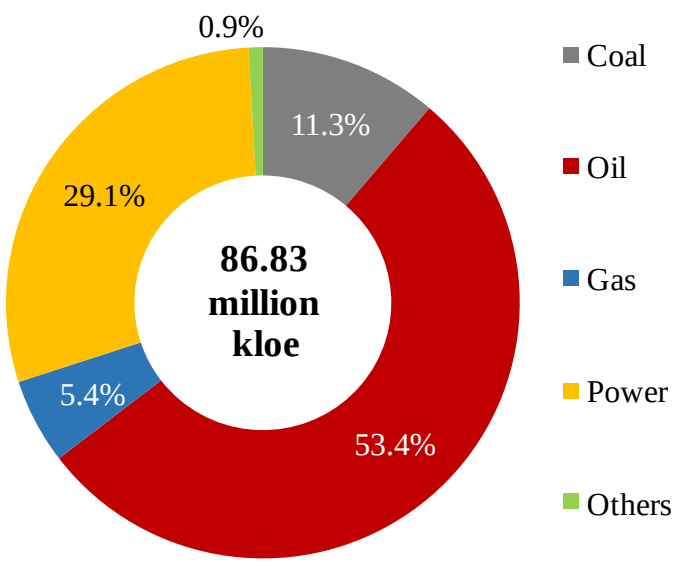
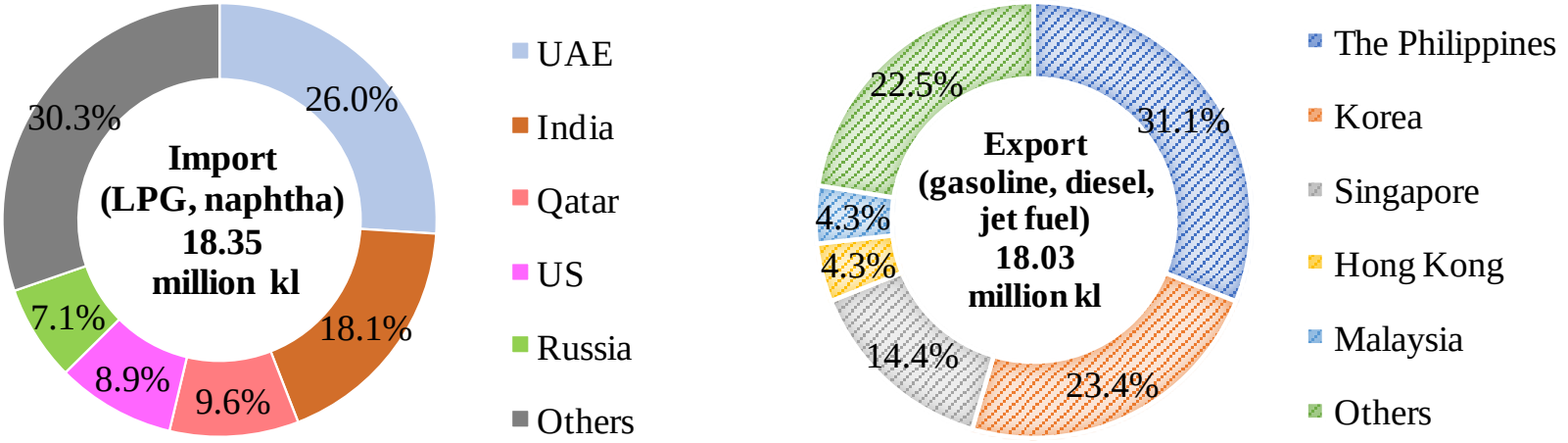


Oil Supply and Demand

- In 2018, the refining capacity of Chinese Taipei reached 1.14 million b/d.
- The oil product supply and consumption of Chinese Taipei were 76.97 million kiloliters and 72.47 million kiloliters respectively.
- The domestic shortage of LPG and naphtha was overcome by imports from UAE, India, Qatar, the United States, and Russia.
- The excess production of gasoline, diesel fuel, and jet fuel was exported to neighboring economies, such as the Philippines, Korea, Singapore, Hong Kong and Malaysia.

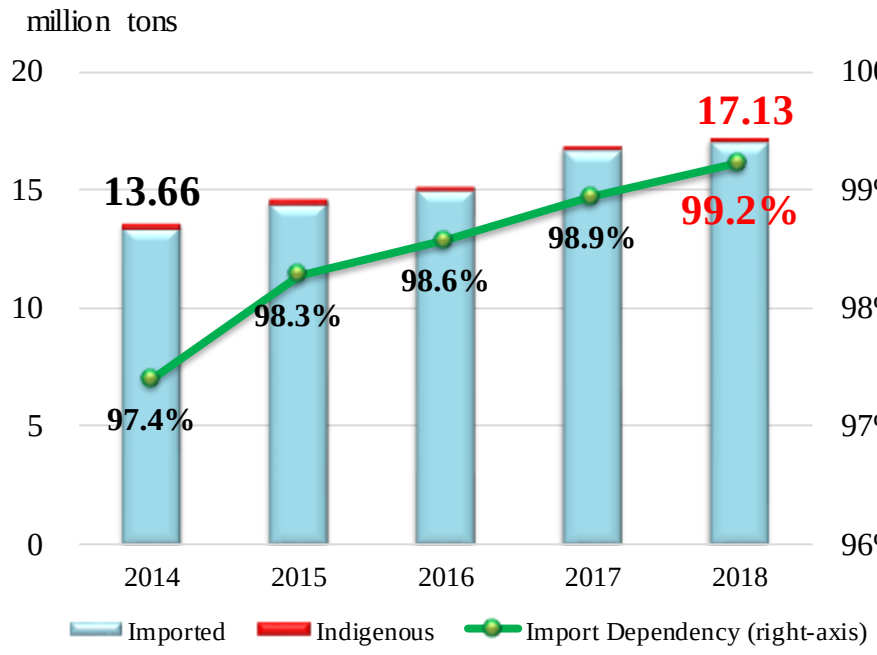
Oil Product Imports by Origin & Exports by Destination (2018)



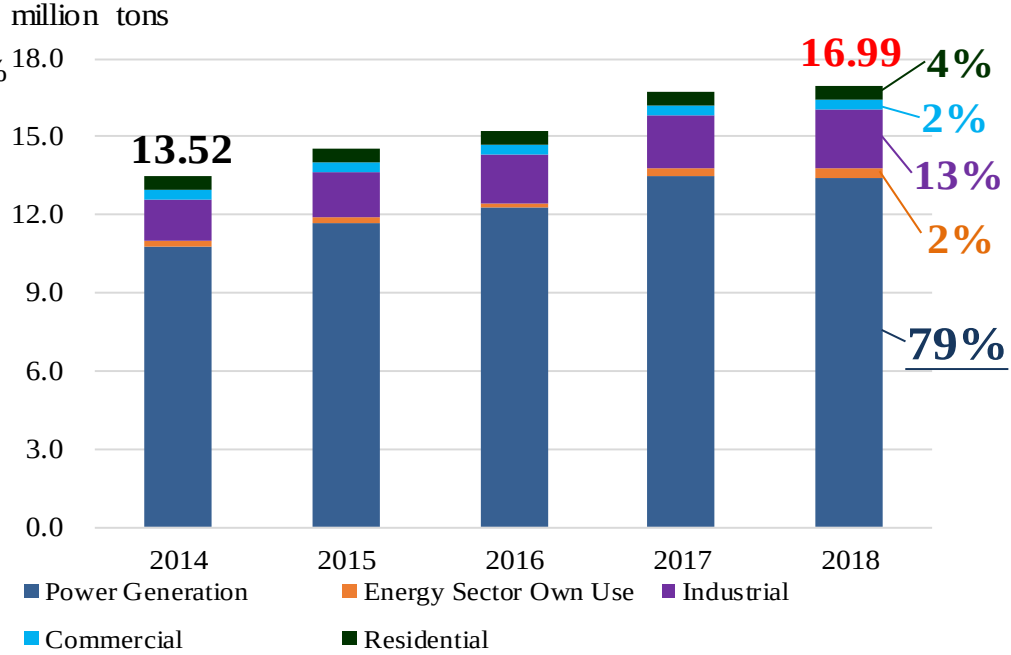
Natural Gas Supply and Demand

- In 2018, the amount of natural gas supply was 17.13 million tons, and the import dependency was 99.2%.
- The amount of natural gas consumption of Chinese Taipei was 16.99 million tons. In addition, 79% of natural gas was consumed by the power generation sector.

Natural Gas Supply



Natural Gas Consumption



Notable Development on Oil and Gas In Chinese Taipei

Notable Development on Oil in Chinese Taipei (1/2)

Strategic Petroleum Reserves

- **Legal Basis**
  - Petroleum Administration Act Article 24
- **Legal Context**

Government

Minimum: 30 days

Oil refinery operators and importers

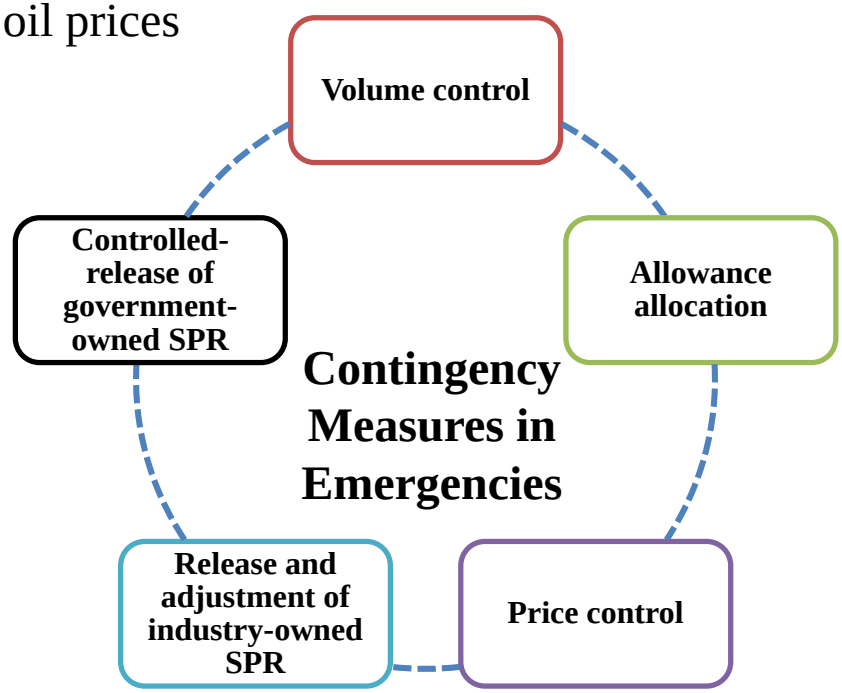
Minimum: 60 days

- **Current Status**
  - ☞ 2018: 129 days
    - ✓ Government-owned: 40 days
    - ✓ Industry-owned: 89 days

Notable Development on Oil in Chinese Taipei (2/2)

Oil Governing Measures in Emergencies

- **Legal Basis**
  - Petroleum Administration Act Article 21
  - Measure Governing Oil in Emergency Management
- **Conditions**
  - Domestic oil supply or national security is at risk due to oil shortage or drastic fluctuations in oil prices
- **Measures**



Notable Development on Gas in Chinese Taipei (1/2)

☼ Gas Security Stockpile Regulation Development

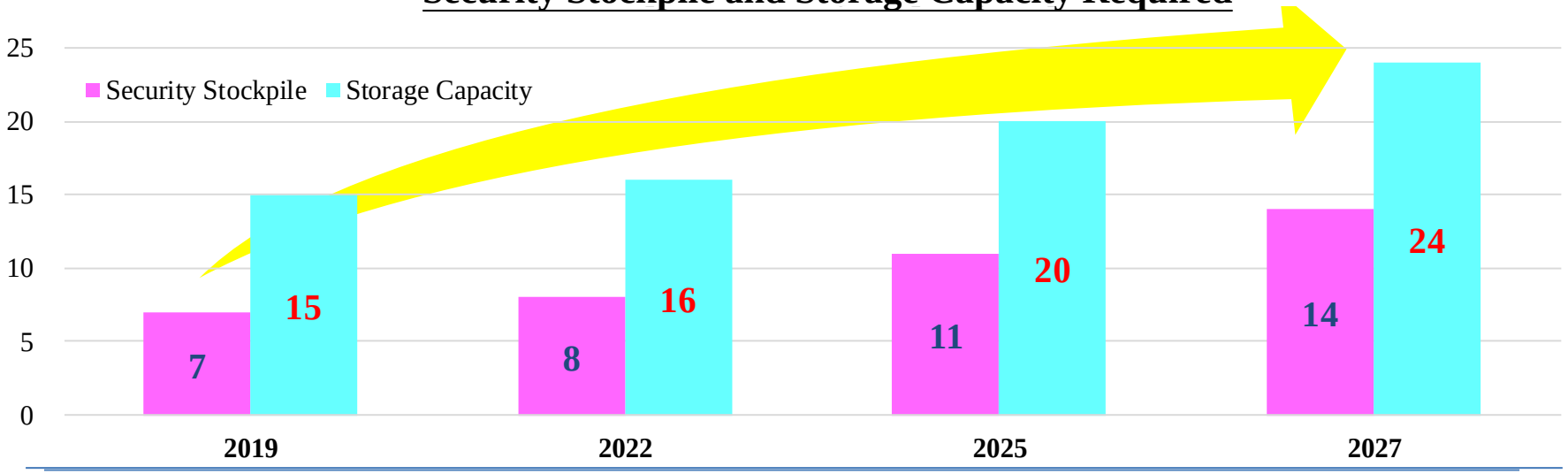
➢ Legal Basis

- Natural Gas Enterprise Act Article 31
- Capacity of Storage Tank for Natural Gas Production and Import Business

➢ Current Status

- In 2019, the security stockpile required is 7 days and the storage capacity required is 15 days.
- By 2027, the security stockpile required will be 24 days.

Security Stockpile and Storage Capacity Required



Notable Development on Gas in Chinese Taipei (2/2)

☼ Gas Supply Emergency Measures

➢ Legal Basis

- Natural Gas Enterprise Act Article 45
- Regulations Governing Regulatory Measures Regarding Natural Gas Supply and Sell Price

➢ Conditions

- The available storage of LNG is lower than the required volume (approximately 180,000 tons).

Contingency Measures in Emergencies

Regulation Mechanism (Reduce gas supply usage)

Phase 1
- Power plants (10%)
- Cogeneration system (5%)
- Industrial sectors (5%)

Phase 2
- Power plants (10%)
- Cogeneration system (5%)
- Industrial sectors (5%)

Phase 3
- Transportation (10%)
- Public natural gas utilities (10%)

APEC Cooperation

APEC Cooperation (1/3)

➢ APEC Workshop on LNG Trade Facilitation

Date：December 6-7, 2018
Hosted by：Chinese Taipei and the United States
Venue：Taipei, Chinese Taipei
Participants：100

	Workshop Topics
1	Global LNG Trade Development
2	Facilitating APEC LNG Trade: Policy Perspective
3	Facilitating APEC LNG Trade: Market Perspective
4	Facilitating APEC LNG Trade: Infrastructures, Technology Advancement, and Corporate Perspective
5	Cooperation Prospect in APEC LNG Trade

APEC Cooperation (2/3)

➢ Summary of Conclusions

1. Create a sound environment for LNG development
   - **1)** **Member economies** are encouraged to **develop sustainable and viable energy policies**, as well as supportive regulations that **help mobilize steady and balanced LNG supply and demand** in the Asia-Pacific region.
   - **2)** **Economies** could **introduce long-term, firm, consistent policies** to **reduce the uncertainty and risk** associated with the development of markets and to **support LNG trade**.
   - **3)** **Policy makers** could **identify and address barriers** to LNG trade and development, **support in building necessary infrastructure**, and **create a favorable and competitive fiscal environment** to attract investment and LNG market development projects.
   - 4) Member economies are **encouraged** to **promote the development of innovative technologies** as well as opportunities to **increase the role of natural gas as a transportation fuel**.

APEC Cooperation (3/3)

2. Facilitate regional LNG market transparency
    1) **LNG industries** could **raise the flexibility of the LNG contract** and **the liquidity of the market** and **improve the accessibility of infrastructure**.
    2) **An LNG trading hub** could be the combination of a **physical trading hub for spot transactions** and **an exchange-based futures market**, where **price signals can be generated and disseminated** based on a larger number of transactions by a diverse set of market participants.
    3) **LNG industries** could increasingly participate in and adopt a **benchmark physical and financial LNG price index into Asian market**.
3. Promote Multilateral Cooperation
    1) Under the framework of APEC, it is encouraged to **pursue cross fora cooperation with other international organizations** to **enhance synergy on LNG trade issues** among all policy bodies of APEC.
    2) It is encouraged to **expedite sharing of best practices** to **shorten the learning curve** of market participants in each member economy to facilitate LNG trade.

Thank you very much

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