



METI

Ministry of Economy, Trade and Industry

Energy Emergency Response in Japan

9-11 December 2020
60th Energy Working Group Meeting

Agency for Natural Resources and Energy
Ministry of Economy, Trade and Industry, JAPAN

Response to COVID-19

Japanese Government Response to stable power and gas supply under the spread of COVID-19 infection

1. Request for continuous stable and appropriate supply

- Since the state of emergency was issued on April 7, based on the provisions of the Act on Special Countermeasures against New-Type Flu and Other Novel Infections, Ministry of Economy, Trade and Industry (METI) has requested electric power companies and gas companies to provide a stable supply of electricity and gas, and to ensure the safety of the site.

2. Request for postponement of payment of electricity and gas charges

- Based on the "emergency measures to deal with life anxiety" and declaration of emergency, since some companies and people have difficulty paying their fees, METI has requested electricity companies and gas companies to flexibly respond to the deferment of payment of electricity and gas fees.
- As a result, by June 8th, customers with a total of 110,000 or more electricity and 30,000 or more gas will be given a flexible payment postponement.

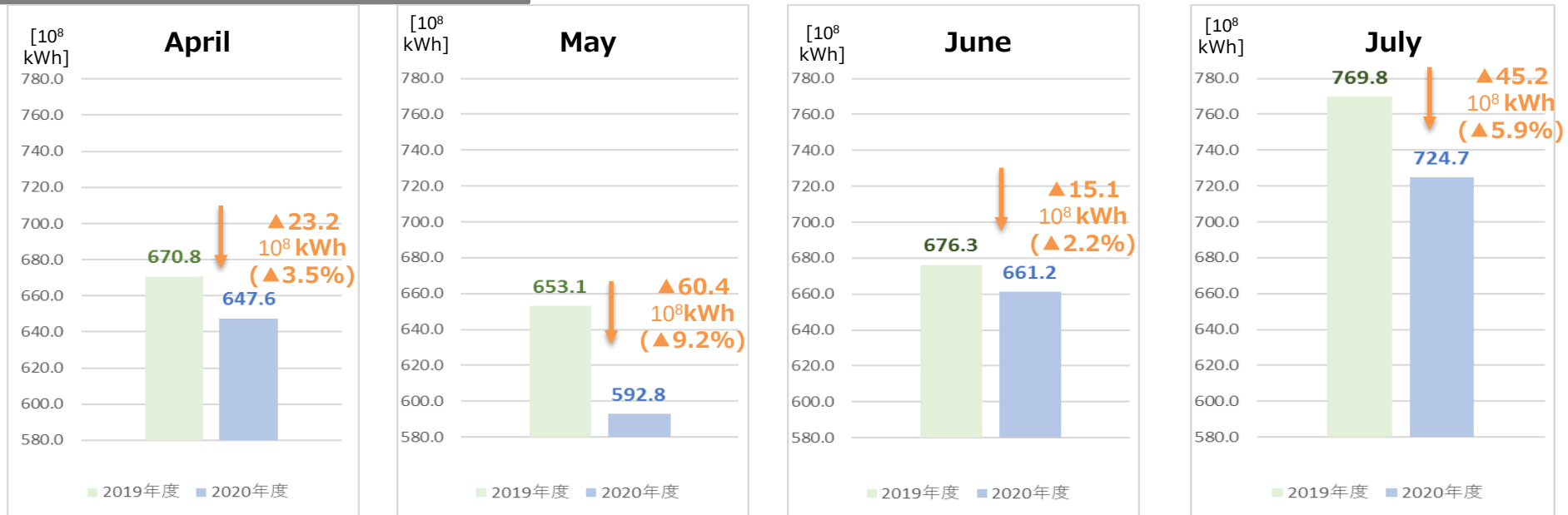
Requested content

- In addition to ensuring that the matters included in the business plan are implemented, when the staff of important facilities such as power plants, load dispatching center, and gas factories are affected, (1) scrutiny of personnel plans including securing alternative personnel , (2) Measures including utilization of alternative facilities, (3) Securing alternative suppliers in anticipation of prolonged supply chain disruption, etc., to implement measures to stably procure necessary goods and equipment. Make every effort to ensure a stable supply of electricity and gas and ensure the safety of the site by thoroughly implementing BCP compliance.
- To requests that construction companies, businesses that maintain and inspect equipment, security companies, and other businesses that are necessary to ensure a stable supply of electricity and gas and the safety of the site continue their business.

The COVID-19 and the influence on electric power supply

- Even under the spread of infectious diseases such as the COVID-19, it is important to take all possible measures to ensure a stable supply.
- Based on the Act on Special Countermeasures against New-Type Flu and Other Novel Infections, Electricity Companies have formulated a "Business Continuity Plan (BCP)" that includes maintaining operations to ensure a stable supply even if up to 40% of employees are absent. Electric power companies will respond based on this plan.
- In particular, at the central load dispatching center and power plant, which are the key to the stable supply of electric power, each group operates in a rotation in which the persons in charge do not contact each other. Electric power companies will also build a backup system that allows alternative personnel to operate even if an infected person is confirmed or a disaster occurs.
- As a result, **there is no problem with the stable supply of electric power.**

Trends in electricity demand



The COVID-19 and the influence on oil supply

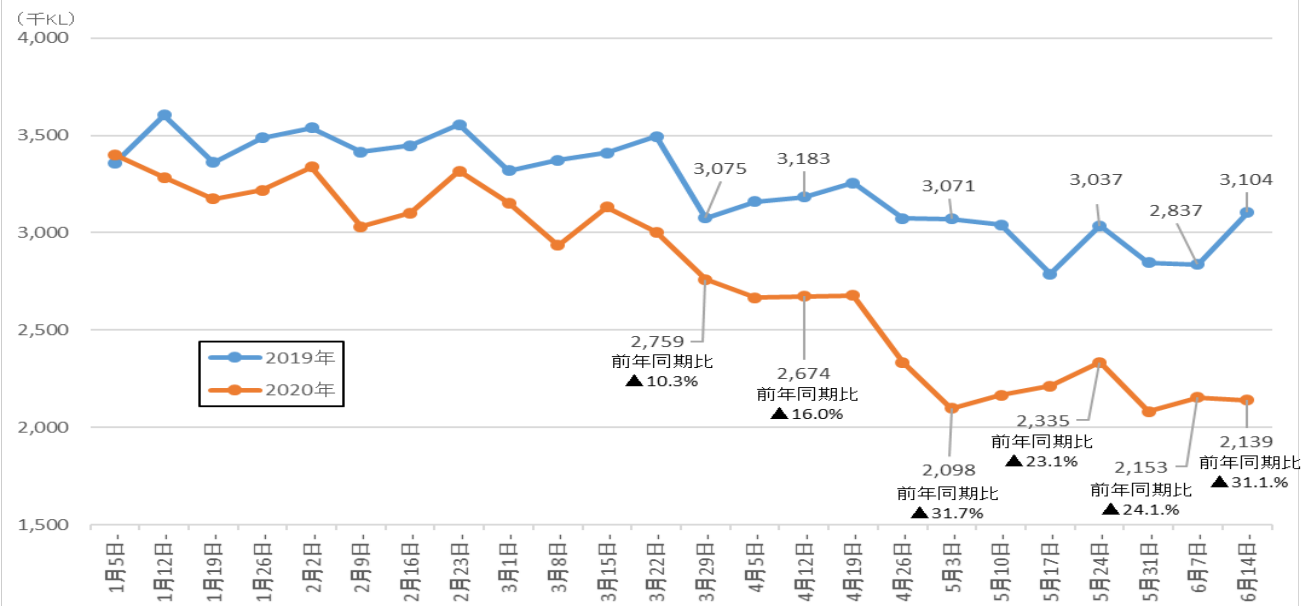
- Oil refineries and distributors have already formulated business continuity plans in preparation for the new strain of influenza.
- Based on this plan, each company thoroughly implemented infection prevention measures for priority continuing operations such as (1) refining, (2) logistics, and (3) sales.
- In addition, each company confirmed the response procedure in case an infection was found, secured alternative personnel, ensured plant safety, examined alternative procurement measures, etc., and thoroughly implemented measures to maintain a stable supply of petroleum products.
- Because of the implementation of these measures, **there is no problem with the stable supply of oil**, including crude oil procurement and logistics.
- Regarding periodic inspections, each company continued safe operation and stable supply while taking measures to prevent the spread of infectious diseases, such as reducing the number of workers and the scale of construction by limiting the construction to the minimum necessary such as legal inspections.

Measures to prevent the spread of infection in refineries

- Thorough prevention of infection such as wearing a mask / washing hands.
- Temperature measurement at the time of admission.
- Securing a certain distance to avoid close contact.
- Disinfection of operation panels in the instrument room.
- Build an alternative shift system in the event of an infected person.
- Review the schedule of regular repairs and reduce the scale.



Production results of Japanese petroleum products (weekly)



Source: Weekly Report on Crude Oil and Petroleum Product Supply Statistics (Petroleum Association of Japan)

Response to Natural Disaster

Recent Major Disasters

Typhoon #21 in September 2018

Landed with very strong power and caused large-scale blackout mainly in Kansai district

Power failure: 2.4 million houses
(areas such as Kansai/Chubu)

Note: More than 1000 utility poles went down, which required a long time for restoration.

From other EPC's

40 high voltage
mobile generators
113 other vehicles
377 workers



Hokkaido Eastern Iburi earthquake in September 2018

Blackout in entire Hokkaido area

Power failure: 2.95 million houses (entire Hokkaido area)

Note : Large-scale blackout after the earthquake.

Restart power stations one by one for recovery.

However, due to severe supply/demand situation, saving of electricity requested.

From other EPC's

151 high voltage
mobile generators
217 other vehicles
1706 workers



Typhoon #24 in 2018

Moved across Japan causing power cuts in the whole the region.

Power Failure: 1.8 million houses

Note: The typhoon passed through Japanese Archipelago causing power cuts throughout Japan, with severest damage on the western part of Shizuoka prefecture.

From other EPC's

10 high voltage
mobile generators
102 other vehicles
201 workers



Typhoon #15 in September 2019

Blackout in Chiba prefecture

Power Failure : 930 thousand houses

Note : Power outages have been prolonged due to the widespread damage and disconnection of utility poles caused by fallen trees and flying objects.

From Other EPC's

238 high voltage mobile
generators
4,000 workers



Strengthening Disaster Response

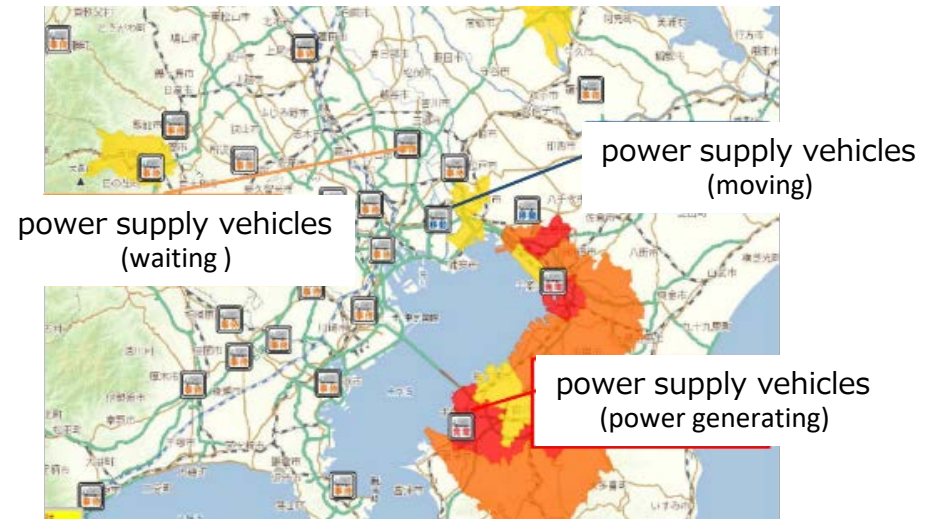
- It is extremely important for general power transmission and distribution business operators to take all possible measures to prepare for emergencies such as disasters from the viewpoint of stable supply of electric power, which is an important infrastructure. On the other hand, in Typhoon No. 15 last year, a long-term power outage became a problem.
- For this reason, based on the revised Electricity Business Act, 10 general power transmission and distribution companies jointly plan to prepare in advance for early recovery of power outages, cooperate in the event of a disaster, and cooperate with related organizations such as local governments and the Self-Defense Forces (Formulated a disaster cooperation plan). We will prepare for disasters such as this year's typhoon, taking into account the voices of the field.
- <Main contents of the plan>
- Unification of recovery methods, etc .: Introduced a "temporary recovery" method that can shorten the recovery work time at the site company-wide.
- Centralized management of power supply vehicles: With GPS function, etc., the location information and operating status of power supply vehicles including other companies can be grasped.
- 3. Joint training: Conducted in late July between electric power companies all over Japan without moving. Conducted again in November.
- Cooperation with prefectures: Promote the conclusion of agreements on road restoration and fallen tree disposal work procedures.

<Image of temporary restoration of utility poles>



Temporary restoration using reinforcement

<Image of centralized power supply car management system>



Oil Stockpiling

Japan's Oil Stockpiling System

1) Government oil stockpiling:

The Government of Japan owns oil stocks and JOGMEC manages the stocks according to the Oil Stockpiling Act.

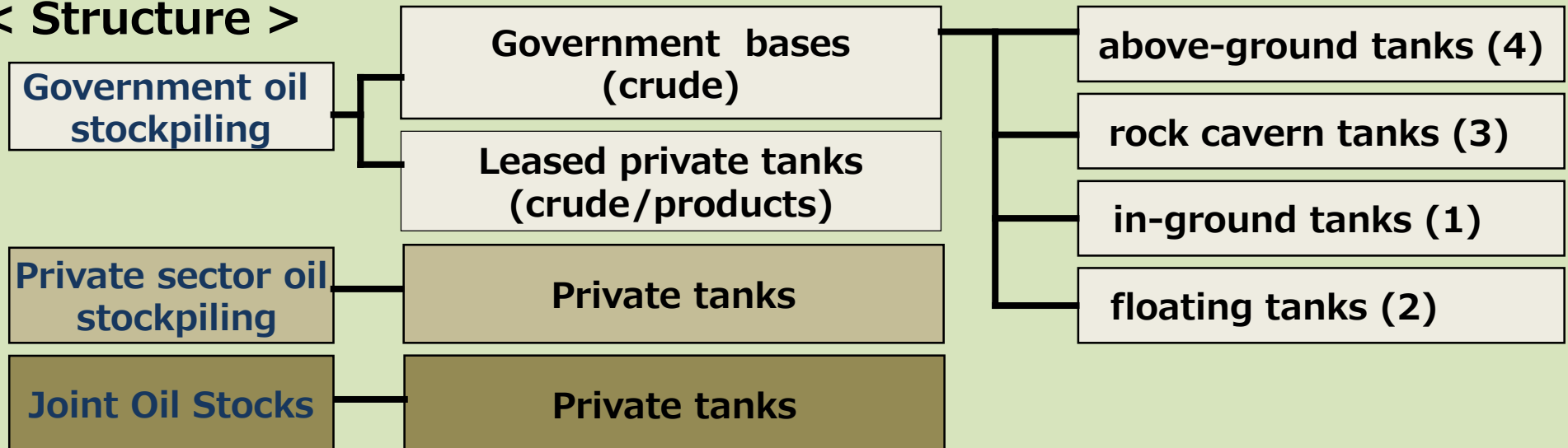
2) Private sector oil stockpiling:

Private companies such as oil refiners, distributors, and importers are obliged to maintain a certain amount of oil stocks in their tanks according to the Act.

3) Joint Oil Stocks with Oil producing countries:

The projects have been carried out with Saudi Arabia and UAE since 2009. On December, 2020, signing of an agreement with the Kuwait to start the new project.

< Structure >



Current Status of Stockpiling

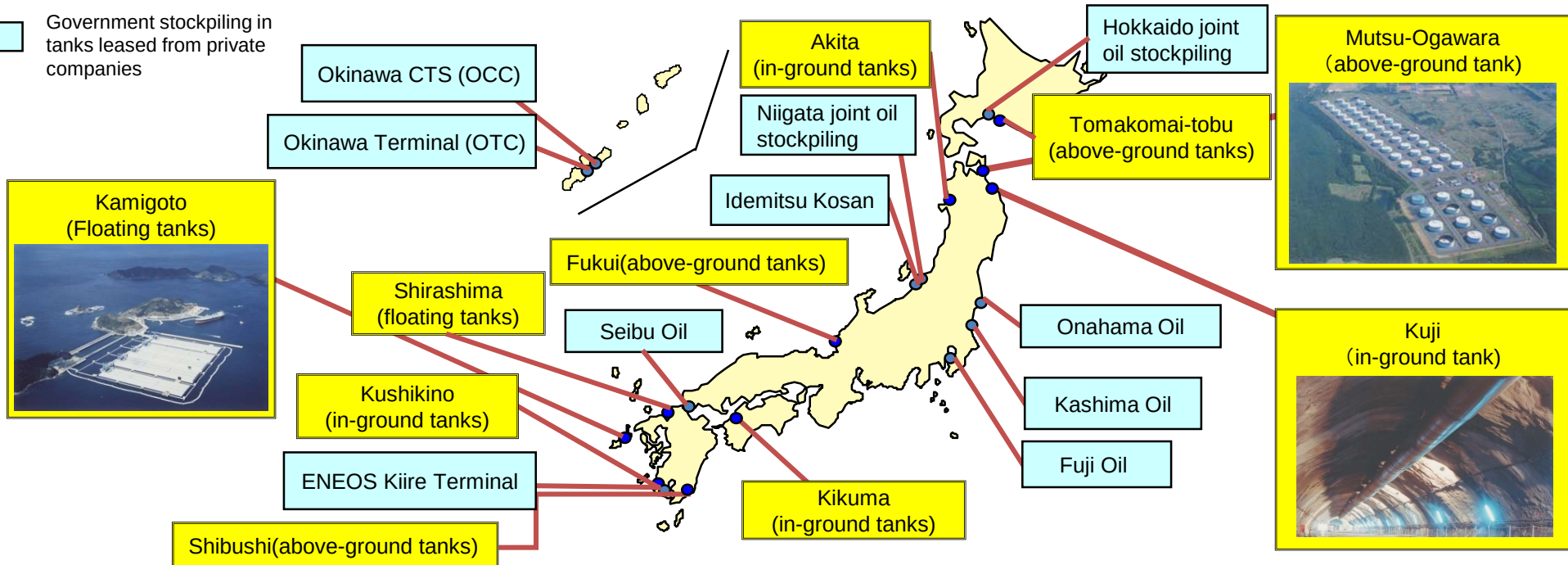
As of Sep 2020, the amount of stocks and locations are as follows:

- Government oil stockpiling: 118days (about 290 million Barrel)
- Private sector oil stockpiling: 81days (about 190 million Barrel)
- Joint oil storage: 6 days (about 14 million Barrel)
- Total :205 days (about 500 million Barrel)

Days are calculated by IEA methodology.
Amount is converted into product.

Location of government stockpiling bases for crude oil

-  Government stockpiling base
-  Government stockpiling in tanks leased from private companies



(※) The Joint Oil Storage is the oil stocks oil producing countries are storing in Japan. In case of emergency, the said oil stocks will be supplied to the Japanese oil companies on a priority basis.