

# **Introduction of Japan's Offshore Wind Policy**

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# 1. The 6<sup>th</sup> Energy Strategic Plan -Points of outlook for energy supply and demand in FY2030-

- The 6<sup>th</sup> Energy Strategic Plan was approved by the Cabinet in October 2021, raising the percentage of renewable energy to 36-38% by FY2030. The share of wind power is 5% of that total.

		(2019 ⇒ previous energy mix)	Energy mix in FY2030 (ambitious outlook)	
<b>Energy efficiency improvement</b>		(16.55 million kl ⇒ 50.30 million kl)	<b>62 million kl</b>	
Final energy consumption (without energy conservation)		(350 million kl ⇒ 377 million kl)	350 million kl	
<b>Power generation mix</b> Electricity generated: 1,065 TWh ⇒ Approx. 934 TWh	<b>Renewable energy</b>	(18% ⇒ 22-24%)	<b>36-38%</b>	※If progress is made in utilization and implementation of R&D of renewable energy currently underway, 38% or higher will be aimed at.  (details of renewable) solar 14~16% wind 5% geothermal 1% hydropower 11% biomass 5%
	<b>Hydrogen/Ammonia</b>	(0% ⇒ 0%)	<b>1%</b>	
	<b>Nuclear</b>	(6% ⇒ 20-22%)	<b>20-22%</b>	
	<b>LNG</b>	(37% ⇒ 27%)	<b>20%</b>	
	<b>Coal</b>	(32% ⇒ 26%)	<b>19%</b>	
	<b>Oil, etc.</b>	(7% ⇒ 3%)	<b>2%</b>	
<b>( + non-energy related gases/sinks )</b>			<b>46%</b>	
<b>GHG reduction rate</b>		(14% ⇒ 26%)	Continuing strenuous efforts in its challenge to meet the lofty goal of cutting its emission by 50%	

## 2. Measures to introduce offshore wind power

- **Japan's Vision for Offshore Wind Power Industry (December 2020)**
  - ✓ Target by Government
    - ◆ Introduction Target ; **10GW by 2030, 30-45GW by 2040**
  - ✓ Targets by Industry
    - ◆ Cost reduction target ; 8-9 yen/kwh by 2030-2035
  - ✓ Supports to build reliable supply chain and R&D
- **Current Status of Offshore Wind Promotion Act (April 2019~)**
  - ✓ Round 1 auctions are finalized(Mitsubishi won 1.7GW)
  - ✓ Round 2 auction(Akita) is in progress
  - ✓ Many pipelines; 7 promising zones, 10 preparation zones

### 3. Results of Round1 auctions

- The results for 3 areas of Round1 auctions were published in December 2021.

#### (1) Noshiro City·Mitane Town·Oga City, Akita Pref.

Winner: Mitsubishi etc.(0.48GW)

FIT price: 13.26yen/kWh

#### (2) Yurihonjo City (North·South), Akita Pref.

Winner: Mitsubishi etc.(0.82GW)

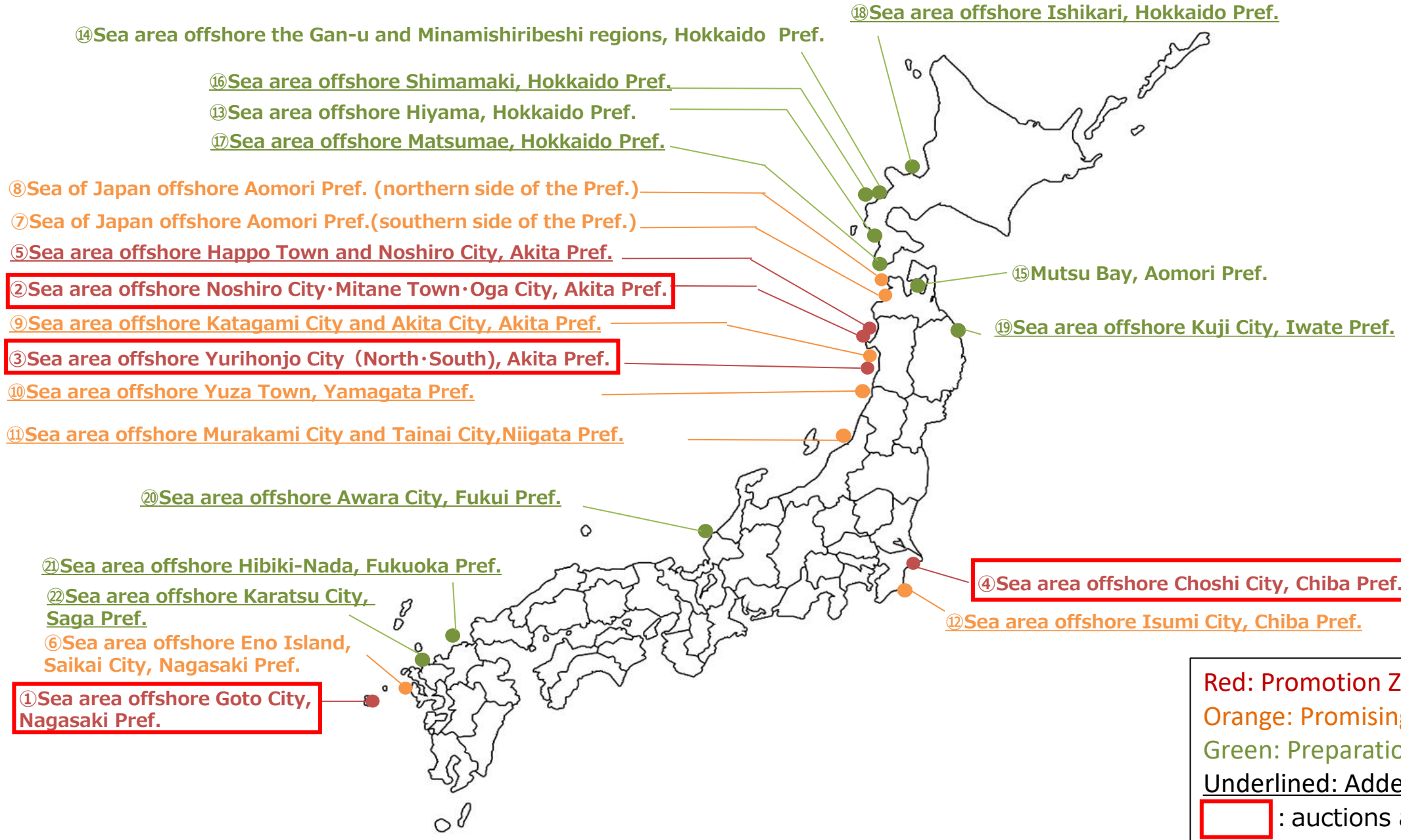
FIT price: 11.99yen/kWh

#### (3) Choshi City, Chiba Pref.

Winner: Mitsubishi etc.(0.4GW)

FIT price: 16.49yen/kWh

# 4. Current Status



## 5. Demonstration of Japanese version of Centralized model

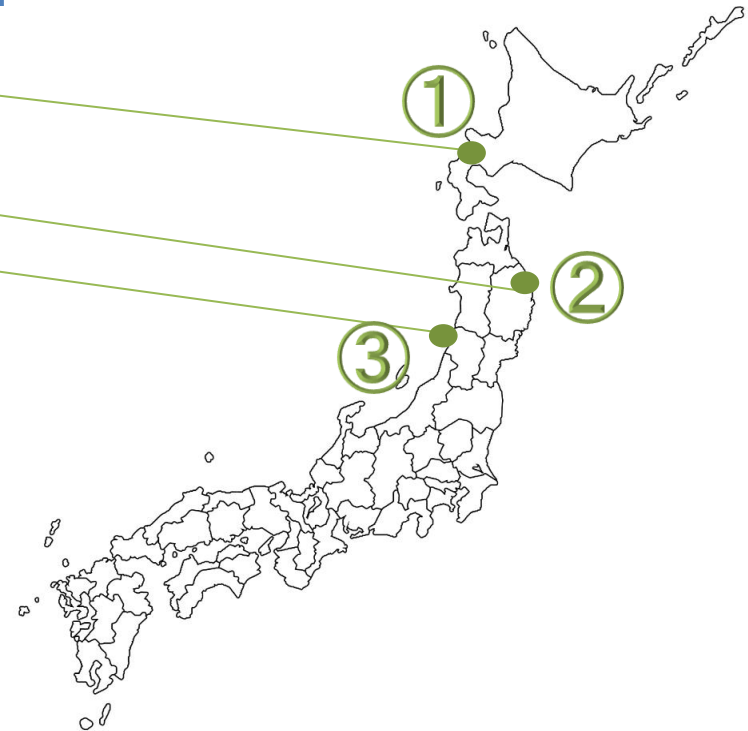
- **GOJ establish more efficient approaches to conducting wind surveys and seafloor/oceanographic surveys necessary in project development by carrying out demonstration projects (~FY 2022) led by GOJ to accelerate project formation.**

### ✓ 3 Demonstration areas

1. Gan-u and Minamishiribeshi regions, Hokkaido Pref.
2. Hirono Town, Iwate Pref.
3. Sakata City, Yamagata Pref.

### ✓ Survey Items

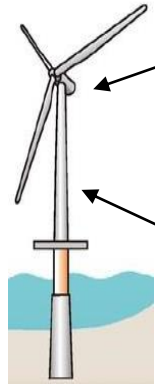
1. Wind conditions
2. Weather conditions
3. Seafloor/Oceanographic survey
4. Environmental Impact Assessment
5. Fishery Impact Survey



# 6. Green Innovation Fund

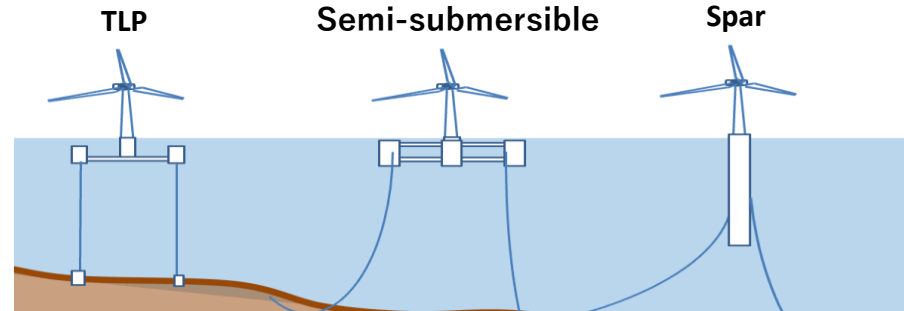
## Phase 1: Development of elemental technologies [Budget amount: up to 34.5 billion yen]

### ① Wind Turbine Technology



- Nacelle internal components  
【Daido Metal】: Bearing  
【Ishibashi】: Accelerator  
【NTN】: Bearing
- Tower  
【Komai Haltech】

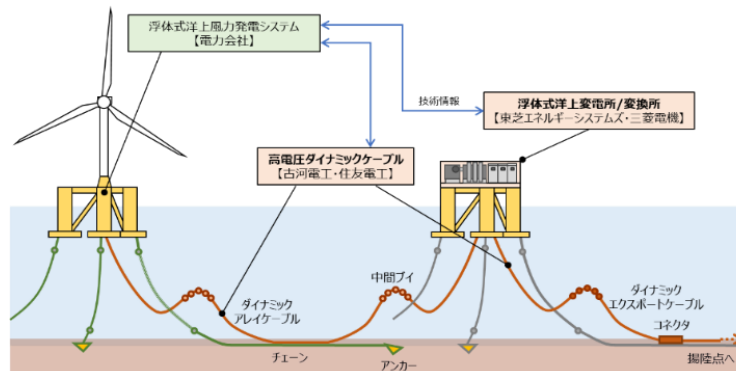
### ② Manufacturing and Installing Floating Foundations



- ① Modec etc.
- ② Hitachi Zosen etc.
- ③ Japan Marin United etc.
- ④ Tokyo Gas
- ⑤ TEPCO RP etc.
- ⑥ Toda Corporation

### ③ Wind-Related Electrical System Technology

【TEPCO RP etc.】  
Dynamic Cable Offshore Substation



Source :  
HP of TEPCO RP

### ④ Operation and Maintenance Technology

- 【Kansai Electric Power etc.】  
Drone Inspection
- 【Furukawa Electric etc.】  
Cable Laying Vessel (CLV)
- 【Tokyo Kisen etc.】  
Service Operations Vessel (SOV)
- 【TEPCO RP, Toshiba】 【Hokutaku】 【NTN】 【Toda Corporation】  
Digital Platform

## Phase 2: Demonstration of floating system [Budget amount: up to 85 billion yen]

Conduct demonstrations of the integrated use of related technologies in the overall system while also utilizing these elemental technologies

# Thank you

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*Ministry of Economy, Trade and Industry*