

JWPA Wind Vision 2023

– Contribution of wind power toward the realization of a safe,
stable and sustainable society –



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Japan Wind Power Association

<https://jwpa.jp>

Future society that Japan should aim for

- In response to Russia's invasion of Ukraine, the international community has accelerated the introduction of renewable energy from the perspective of "energy and economic security" in addition to "decarbonization."
- In response to changes in the international situation, Japan's energy policy direction has also shifted to the realization of "Climate Change Countermeasures," "Energy and Economic Security," and "Green Transformation (GX) ."
- **Japan should aim for a "safe, stable and sustainable society" by promoting "transition to a decarbonized society", "enhancement of industry and energy resilience", and "internationally competitive industry creation and economic growth" .**
Wind power is positioned as the most important power source that contributes to the realization of our ideal society.

The future society that Japan should aim for and Contribution of Wind Power

Direction of industrial and energy policy

Climate change countermeasures

Related policies

2050 Carbon Neutral Declaration

Global Warming Countermeasure Plan

Energy and economic security

Green Growth Strategy

Strategic Energy Plan

Green Transformation (GX)

Basic Policy for the Realization of GX

Basic Plan on Ocean Policy

Vision for Future Society and Contribution of Wind Power

Transition to a decarbonized society

Strengthening industrial and energy resilience

Creation of internationally competitive industries and economic growth

Realization of a safe, stable and sustainable society

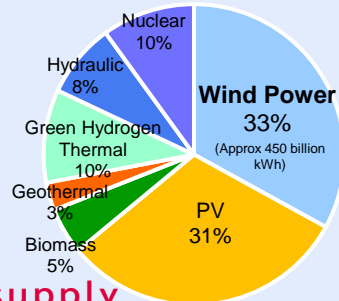


Targets for the wind power toward the realization of the future society

- **Setting ambitious and clear medium- to long-term targets is the most important and indispensable measure** for increasing the predictability of the market, attracting private sector investment, and fostering domestic industries with international competitiveness .
- JWPA proposes to set the target of **1/3 electricity supply by wind power in 2050**, for which **140GW wind power should be installed (onshore wind 40GW, fixed offshore wind 40GW, floating offshore wind 60GW)**. Also, we propose to **aim even higher installation to expand domestic green hydrogen supply**.
- 140 GW wind power will **achieve economic ripple effect of 6 trillion yen, job creation of 355K people and procurement cost reduction of fossil fuel of 2.5 trillion yen as of 2050**.

Introduction targets for 2050 toward the realization of the desired society

- **Supply 1/3 of electricity by wind power**
- **140GW wind power installation**
 - Onshore wind: 40GW
 - Fixed offshore wind: 40GW
 - Floating offshore wind: 60GW
- Aim for even higher installation to **expand domestic green hydrogen supply** (additional introduction of floating offshore wind of 30GW or more)



Benefits of introducing wind power (as of 2050)

Economic ripple effect: 6.0 trillion yen

Job creation effect: 355,000 people

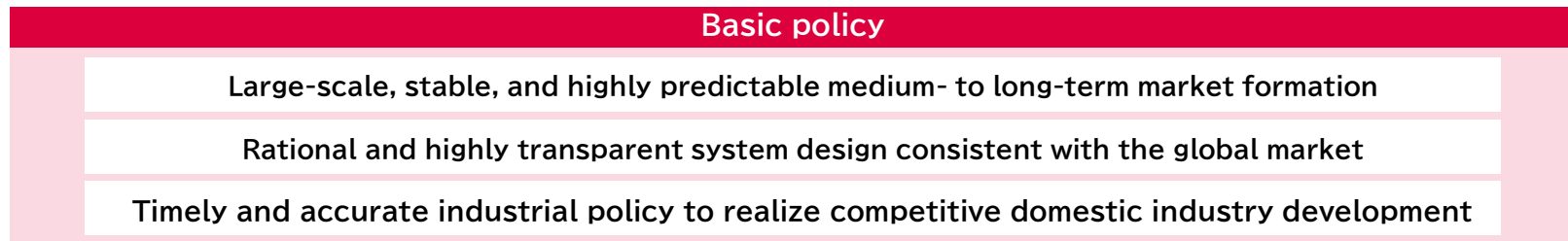
Fossil fuel procurement cost reduction effect: 2.5 trillion yen

* Economic ripple effect and Job creation effect are the sum of direct effect, indirect effect, and induced effect.

Necessary measures for realizing the future society and maximizing the introduction of wind power

- **Public and private sector should work together to rapidly deploy comprehensive and necessary measures** to realize a safe, stable, and sustainable society and maximize the introduction of wind power, which consists of transitioning to a decarbonized society, strengthening industrial and energy resilience, creating internationally competitive industries, and achieving economic growth.

Basic policy and overall picture of necessary measures to realize the future society



Necessary measures to be implemented

- 1 Setting ambitious and clear medium- to long-term targets
- 2 Formulation of a process chart (grand design) for achieving goals
- 3 Strategic industrial development support measures that draw an effective path

4. Maximum introduction of offshore wind

- 4.1 Formation of a solid project pipeline
- 4.2 Early commercialization and development of floating offshore wind
- 4.3 Expansion of sea area utilization to EEZ
- 4.4 Early realization of a highly effective central system
- 4.5 Planned development and acceleration of base ports

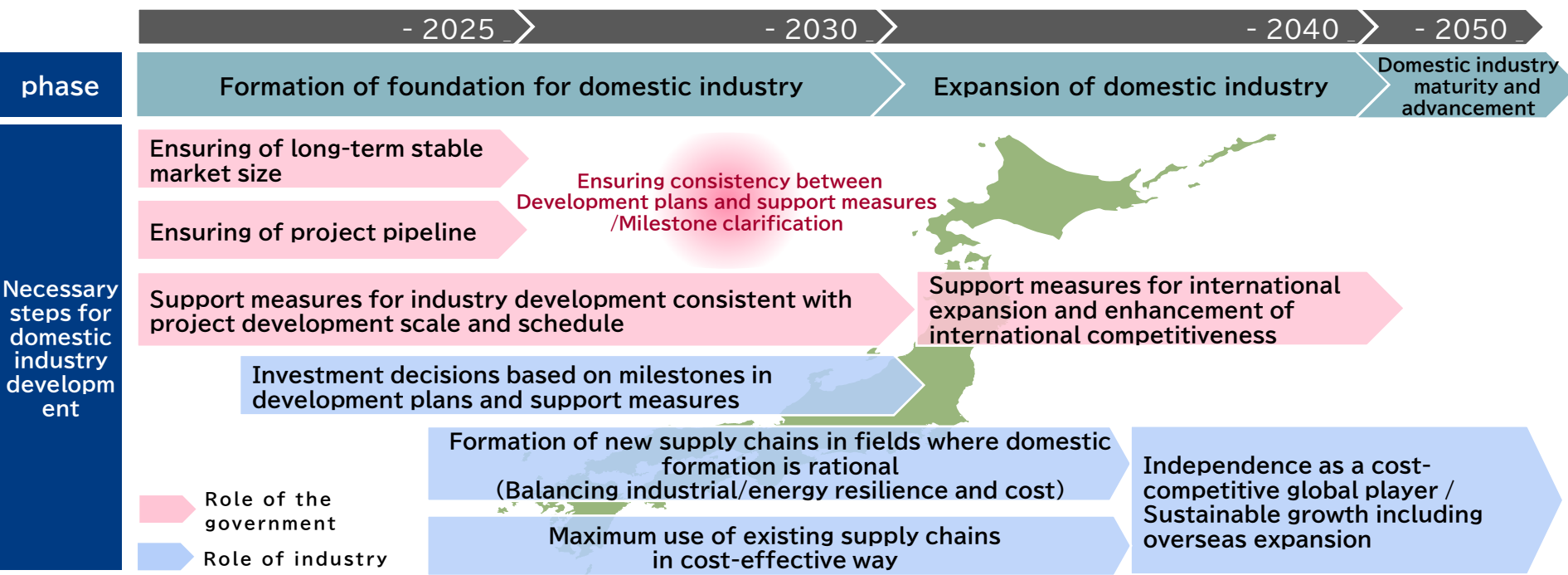
5. Maximum deployment of onshore wind

- 5.1 Resolving location restrictions and shortening lead time
- 5.2 Promoting long-term stable and community symbiotic replacement
6. Formation and operation of next-generation grid networks
7. Achieving economic independence and risk reduction
8. Securing, educating and training necessary human resources

Importance of a grand design and measures to foster domestic industries with international competitiveness

- In order to achieve the introduction target, it is essential for the public **and private sectors to formulate and share a process chart (grand design) that clearly indicates the critical path for implementing multifaceted and cross-ministerial measures in a comprehensive and consistent manner**, and to proceed effectively while confirming and verifying the progress of these measures.
- In particular, in order to foster domestic industries that are internationally competitive, it is necessary for the entire nation to take **effective and strategic measures to support the development of industries, considering the steps required for such development.**

Roadmap for Developing Domestic Industry with International Competitiveness



Toward the realization of a safe, stable and sustainable society and the expansion of wind power

- JWPA formulated **a new mission, vision and values in May 2021**, in order to adapt to the ever-changing environment and times, and to contribute to the realization of a sustainable society as a main power source.
- It is extremely important for both the public and private sectors to **openly discuss the introduction targets and necessary measures proposed in this Wind Vision, and for each party to fulfill its responsibilities** to the maximum extent possible. JWPA will play a leadership role as initiatively.

Mission

- Through the growth and expansion of wind power, we aim to deliver **a safe and stable life to people and realize a sustainable society**.

Vision

- To realize a decarbonized society, we will **bring together the knowledge, experience, and consensus of various fields** to lead the maximum introduction and operation of wind power.
- The aim is to make wind power an economically independent main power source and **to build an internationally competitive wind power industry**.

Value

- We will responsibly implement measures and policies necessary for the utilization of wind energy from **a long-term and national perspective**, without being biased toward the short-term interests of individual companies or industries.