

RENEWABLE ENERGY BUSINESS AND OTHERS

With climate change risks emerging, we will aim to create a sustainable society.

Business Overview

The renewable energy business is building a system that can implement the development of onshore wind power generation sites for the design, construction, operation and maintenance of power plants through Cosmo Eco Power, a Group company. In addition, we are actively engaged in offshore wind power projects amid the development of laws for offshore wind power projects.

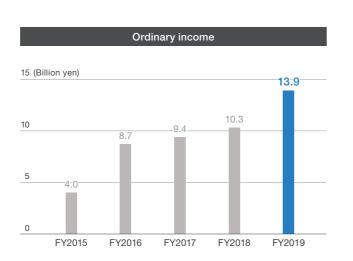
FY2019 Results and FY2020 Forecasts

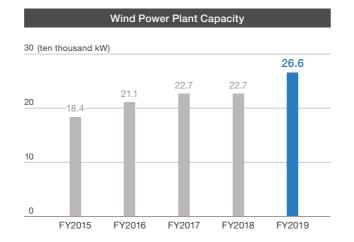
In FY2019, ordinary income increased by ¥3.6 billion from the previous year to ¥13.9 billion*, as Cosmo Eco Power started operating two new onshore sites: Watarai Wind Farm's Second Phase (Mie Prefecture; 22,000 kW) and Himekami Wind Farm (Iwate Prefecture, 18,000 kW). In FY2020, we expect ordinary income to decline by ¥4.4 billion from the previous year to ¥9.5 billion* due to an increase in development costs associated with full-scale entry into the offshore wind power business at Cosmo Eco Power. In the case of offshore wind power sites, we will move forward with offshore wind projects in four areas: Coast of Yurihonjo City, Akita Prefecture; Akita Port, Noshiro Port; Northwest Coast, Aomori Prefecture; and Akita Central Coast Sea Area.

*Including consolidating adjustment

Ordinary income

FY2019 results	¥13.9 billion (+¥3.6 billion year on year)
FY2020 forecasts	¥9.5 billion (-¥4.4 billion year on year)





Business strengths and strategies

Risks

Regulatory changes in power selling prices

- Intensification of competition in the offshore wind power business due to public tenders
- Offshore wind industry in Japan is in its establishment phase

Opportunities

- Expansion of offshore wind market
- Penetration of ESG investment*
- * ESG investment: Method of selecting investment destinations from the three viewpoints of the Environment, Social, and Governance

Strengths

- Development capabilities cultivated in onshore wind power generation
- Technical skills to achieve a high level of availability

Main Group companies

Cosmo Eco Power,
Cosmo Engineering,
Cosmo Trade and Service

Major assets (as of March 31, 2020)



Wind Power Plant Capacity
266.000 kW

Third largest in Japan, Domestic share of approx. 7%



Number of windmills 179 (24 regions)

Business strategies

In the renewable energy business, we recognize the following risks: Risks in Japan's power purchasing system, such as changing from fixed prices to variable prices; the risk of increasing competition with other companies in the offshore wind business in terms of cost competitiveness as a result of the public bidding method¹; and risks due to the fact that the offshore wind power industry in Japan is still in its infancy, characterized by a few human resources for development and weak supply chains in the offshore wind business. On the other hand, opportunities in the business environment include expansion of the offshore wind market, which is considered promising based on national policy; and amid growing interest in ESG investment worldwide, renewable energy is eco-friendly and the investment will be a strong tailwind for developing offshore wind projects.

One of the Group's strengths is its site development capability cultivated in onshore wind power, where it holds the third largest market share in Japan. We are also using our development capabilities, such as site excavation and coordination with local areas, to expand offshore wind power sites. In addition, we are maintaining a high availability rate in the operation of windmills for onshore wind power, and we will use O&M², which is our strength, in offshore wind power. In the future, we assume that a certain scale of facilities and a high availability rate will enable us to secure profits in an environment where profitability will decrease due to anticipated changes in the regulatory system.

- ¹ Public bidding is a method where guidelines and requirements are clearly stated on websites and bidding is widely accepted.
- ² O&M is an abbreviation for Operation & Maintenance, which entails the operation, maintenance and protection of facilities.



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Competitive advantages



Making use of development capabilities cultivated in onshore wind power in developing offshore wind power

Cosmo Eco Power is the first wind power company in Japan to specialize in wind power generation and boasts the third largest share of onshore wind power in Japan. It has constructed windmills in more than 25 regions. The site development capabilities cultivated in its relationships with local communities and local government officials in those regions are a major strength.

Site development is a long process. It begins with finding the right location for the wind conditions, and entails actually measuring wind-speed, ensuring routes for transporting large windmills and system limits for transmitting generated electricity, and responding to local regulations. After that, commercialization can only take place once the understanding of landowners, local neighborhood associations, and local governments is obtained. The key is gaining the understanding of the local community. Our goal is to ensure understanding of our business while respecting the other party, to resolve concerns and issues from the other party's perspective, and to realize our business. The strengths of Cosmo Eco Power are our ability to solve problems while staying close to the other party and our strong desire to realize our business. Because we accumulated a wealth of development know-how, we have maintained good relations with the communities in which we have developed these products. For example, to relieve the concerns of local residents in candidate locations, we allow them to tour and inspect sites where there are

already windmills, ensure the distance

from residents by devising appropriate layouts for the windmills, talk immediately to residents after the construction of the windmills if there are any issues, and realize business development with forest reserves, which are still rare in Japan, through tenacious negotiations. In addition, we have a variety of options for local contribution measures that have resolved the concerns of local communities through dialogue.

These strengths are being leveraged in offshore wind power projects that are expanding business. While there are

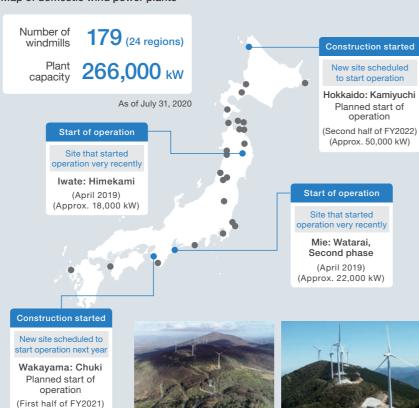
differences between landowners and fishermen, a project cannot be implemented without the understanding of the local community, and we have to be honest with residents to gain understanding.

In order to turn the sea breeze into power, we will continue to focus on local contribution measures and make efforts to devise ways to return benefits to local communities. At the same time, we will continue to be the Cosmo Eco Power that is honest with and close to local communities while being warmly regarded by them.

Mie: Watarai, Second phase

Map of domestic wind power plants

(Approx. 48,000 kW)





Technological ability to achieve a high level of availability

Cosmo Eco Power has advanced technical skills to carry out windmill maintenance in-house and boasts one of the industry's leading availability rates.

Many windmill manufacturers that introduced windmills in the past were eliminated from the industry, and the situation where we have to maintain windmills ourselves created an opportunity to enhance our technical skills in windmill maintenance. The culture of Cosmo Eco Power, which is characterized by a strong desire to try to make things safer, cheaper and

more efficient by ourselves, has been improving our technical skills. Windmills will continue to have the same issues if nothing is done. Technical improvement in maintenance means finding the cause of the problem and preventing it from reoccurring. In addition to the introduction of an automatic shutdown system in the event of lightning damage to blades, we have equipped many windmills with a vibration-induced failure prediction system. By proactively preventing failures, immediately checking and

resetting errors detected by 24-hour operation monitoring, and shortening the windmill shutdown period, we respond to defects and systematically manage them, which has led to Cosmo Eco Power's high availability rate. There are new challenges in offshore wind power, such as the inspection of marine equipment and the size of windmills, which we never experienced previously. However, we will take advantage of our experience so far and strive to make maintenance one of the pillars of our competitiveness.

Offshore wind projects in progress

Four business projects are being studied in the Tohoku area



Designated process for promoted area	Minimum period	
Gathering information from prefectures	3 months	
Designation of promising area (Northwest Coast, Aomori Prefecture)	1 month	
In-depth study	3 months	
Determination of promotion area plan	1 month	
Announcement of promotion area plan	2 months	

	Process for designation of selection of business operators	Minimum period
	Determination of promotion area (Coast of Yurihonjo City, Akita Prefecture)	
	Determination of guidelines for public tender of occupancy	2 months
	Commencement of public tender and submission of plans for public tender of occupancy by operators	6 months, in principle
	Review of public tender of occupancy plans	2 months
	Review of public tender of occupancy and determination of operators	3 months

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