



# Proposals for the Coexistence of Offshore Wind with Local Communities and the Fishing Industry

July 2022

Renewable Energy Institute

## **Acknowledgements**

In creating this report, numerous suggestions were received from the Study Group on the Coexistence of Offshore Wind with Local Communities and the Fishing Industry, as well as other experts in related fields. We would like to express our sincere gratitude to everyone who cooperated in this study.

This report was written by the Offshore Wind Study Team at Renewable Energy Institute.

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## **About Renewable Energy Institute**

Renewable Energy Institute is a non-profit think tank which aims to build a sustainable, rich society based on renewable energy. It was established in August 2011, in the aftermath of the Fukushima Daiichi Nuclear Power Plant accident, by its founder Mr. Son Masayoshi, Chairman & CEO of SoftBank Corp., with his own resources.

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## Introduction

Large-scale deployment of renewable energy is the cornerstone to achieving a sustainable society. One such energy source is offshore wind, electricity generated on the ocean, which has great potential. In recent years, countries around the world have been accelerating its deployment, and costs have fallen. In light of the recent international energy crisis and supply-and-demand crunch domestically, the role of offshore wind in national energy security and accelerating decarbonization has become even more important.

In particular, for Japan, which has a long coastline and an enormous sea area, the sixth-largest exclusive economic zone in the world, offshore wind is an extremely promising renewable energy. The Japanese government has been creating policies that support the deployment of offshore wind, starting with the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities (Renewable Energy Sea Area Utilization Act), which was introduced in 2018. In 2020, the Public-Private Council on Enhancement of Industrial Competitiveness for Offshore Wind Power Generation, a joint public-private initiative, published the *Overview of the Vision for Offshore Wind Power Industry (the first edition)*, which sets a goal of completing offshore wind projects of up to 45 GW by 2040. Continuing on from Goto Islands and other pioneering projects, in 2021, developers were decided via a bidding process of Round 1 for 1.67 GW in three locations, and full-fledged development of offshore wind finally got underway in Japan.

Though momentum is mounting, it is unclear specifically how the goal of 45 GW in projects cited in the above *Vision for Offshore Wind Power* stands to be achieved. One factor involved is the difficulty in selecting areas for development. How can offshore wind projects coexist harmoniously with local communities? The search for answers continues. Renewable energy is inevitably decentralized and so closely rooted in local areas. As such, it is important that projects proceed with the consent of the local community. Offshore wind power projects, too, are premised on harmonious coexistence with local communities, which include people in the fishing industry.

Projects that are pushed forward without sufficient communication can invite misunderstanding and opposition. Offshore wind, however, has adequate potential for spurring the revitalization of local areas. The recent energy crisis and the climate crisis are forcing Japan to further accelerate offshore wind power development, with expansion but not contraction. In order to realize sustainable project developments, local communities' understanding to the industry, as well as active participation and cooperation, are essential.

Currently in Japan, each offshore wind developer enters a region and makes contact with fishermen, fishing cooperatives, and local authorities to foster the soil for offshore wind development. As a result, there are cases where each developer's own activities cause confusion in the community. Inadequate fisheries impact studies and undiscussed regional and fisheries promotion measures also hinder dialogue for development. This is due to the fact that there are still few examples of offshore wind development or model cases for regional coordination in Japan, and that transparent rules have not yet been made clear to the various stakeholders. Rules for communication and regional coordination processes are urgently needed to avoid regional confusion.

It is with this awareness of the problems that Renewable Energy Institute established the Study Group on the Coexistence of Offshore Wind with Local Communities and the Fishing Industry. With the help of the group's experts, we considered the types of rules and standards that would be necessary to make harmonious coexistence possible. We have compiled a number of proposals for this regional coexistence through an evaluation of current systems and comparisons with sample cases while also discussing progressive examples overseas and practices and customs specific to Japan.

Chapter 1 focuses on the importance of participation by community members, people in the fishing industry, and other stakeholders in discussions from the initial stage of a project's development and touches on the process for this. Chapter 2 discusses the importance of objective data for grounding discussions and rule creation and the content of surveys for this purpose. Chapter 3 takes up how offshore wind can coexist harmoniously with local communities from the standpoint of local and fishing industry promotion measures. Chapter 4 looks at systems and roles that are indispensable to the implementation of offshore wind policy. Chapter 5 proposes that the minimum requirements for the coexistence of offshore wind and local communities be compiled into a set of guidelines.

The aim of these recommendations is to make the regional coordination process for offshore wind development transparent and standardized, to give each stakeholder predictability, to gradually remove the uncertainties and inadequacies of offshore wind, to reduce regional confusion, and to expand and promote offshore wind in harmony with the community.

July 2022

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## List of Proposals

- Proposal 1 In areas where offshore wind is envisaged to be introduced, at an early stage, local authorities will take the initiative to organize study groups on offshore wind development. The national government financially supports such study groups.
- Proposal 2 The Fisheries Agency, in cooperation with the prefectures, should identify fishermen in actual operation and promote the preparation of a “Fishermen Map” that shows the status of fishermen in operation.
- Proposal 3 The national government should prepare transparent and objective rules for regional coordination and the prefectures implement those rules.
- Proposal 4 Standardize the fishery impact studies, including the entity conducting the survey, the burden of survey costs, the process for determining study methods, and the study item, frequency, and timing. The national government should compile them as guidelines.
- Proposal 5 In order to verify the exact impact, fishery impact studies should be conducted in parallel with regional coordination from an early stage of project planning. The national government and the selected operator will be responsible for the fisheries impact survey before and after the selection of the developer, respectively. In contrast, the actual survey will be commissioned by a third-party organization familiar with the sea area in the field, such as a prefectural fisheries experiment station.
- Proposal 6 For fisheries compensation, standardize the criteria for fishers receiving payment and the calculation method for compensation nationally. The standardized calculation method should calculate the compensation amount and implement settlements based on objective data. The national government should lead discussions to ensure that the whole process is carried out properly.
- Proposal 7 The data obtained from fisheries impact studies should be made public, bearing in mind the convenience of local fishermen and considering the impact after publication.
- Proposal 8 Regional and fisheries promotion measures should be discussed and prepared by the communities and fishermen concerned. The national government should standardize the process and, together with local authorities, present a standard framework for regional and fisheries promotion measures. It will also financially support the activities of the various regions.
- Proposal 9 Regional and fisheries development measures should be developed by local stakeholders and realized together with local authorities. For the budget for the realization of such promotion measures, in addition to the current funds provided by the operators, consideration should be given to applying the Power Supply Location Measures Grant Scheme to offshore wind power.

- Proposal 10 Establish a single command post for offshore wind policy. In addition, establish a one-stop contact point for project procedures to facilitate and speed up the processes and reduce the burdens of stakeholders and the administration.
- Proposal 11 Clarify the division of roles between the national and local governments. The prefectures are responsible for regional coordination, including the identification of stakeholders. Municipalities are responsible for the management of study groups and review meetings and are the main actors in the formulation and implementation of subsequent promotion measures. The national government financially supports these efforts and, as a national policy, ensures the introduction of a centralized method that is comparable to international standards and the development of marine spatial plans.
- Proposal 12 For rational and transparent regional coordination, a coordinator should be appointed on the side of the selected operator and regional stakeholders, the procedures for consultation should be clarified, and discussions should be based on objective data.
- Proposal 13 Local coordination should be included in the “Japanese Centralized System” being considered by the government. In particular, initial regional coordination should be carried out with prefectures and municipalities under national leadership.
- Proposal 14 The national government should formulate “Guidelines for Regional Coexistence (provisional title)”, while also listening to the opinions of local authorities and businesses. The guidelines are intended for operators, local authorities and residents, including fishermen, and specify the roles and procedures of each stakeholder according to the development process of offshore wind power, and are to be used as reference information for regional coordination and symbiosis.

## **Chapter 1: Offshore Wind Projects and Related Stakeholders**

Coordination with local community members and people involved in the fishing industry is one of the most important aspects of the development process for offshore wind projects. Under the Renewable Energy Sea Area Utilization Act, council meetings are to be held a number of times after an area is selected as a promising zone (Article 9 of the act; hereinafter, “statutory council meetings”), and these are indicated as the venue for discussing basic matters related to local coordination. And, under the act, the developer that later wins the bid for the project is to begin the actual local coordination process. However, project developers begin communicating with local residents and fishermen well before the first statutory council meeting is held in order to survey the area and verify grid connection potential, information it uses to determine project feasibility. In actual practice, local consensus-building and coordination are handled by individual project developers.

In order for an area to be designated as a promising zone, it is stipulated that stakeholders are to be identified and their agreement obtained regarding the start of council meetings (making it possible to establish the council), so such activities are an implicit assumption in how the system operates.

Direct contact between project developers and local residents, fishermen, and other local stakeholders helps developers grasp the situation with those stakeholders and sometimes smooths the relationship-building process. However, there is no consistency in how stakeholders are approached, and the information shared with them, so it is also sometimes the case that the information is biased or not shared in a timely manner, and this can confuse the process of local consensus-building. Also, in actual practice, it is difficult to gather and organize the opinions of local residents and fishermen at a limited number of statutory council meetings alone.

To avoid this situation, the local government needs to take the lead on local coordination without leaving it up to individual project developers, identify stakeholders at the initial stage of development, promote their understanding and participation, and build consensus locally while ensuring transparency and objectivity.

### **Section 1: Creation of a system led by the local government for promoting the understanding of local residents and fishermen**

Growth in offshore wind is important from a variety of perspectives, including from the standpoint of utilizing local renewable energy to create local energy cycles and achieve autonomy, generating employment, and promoting the local area’s decarbonization. In addition, when local residents and fishermen gain an understanding of offshore wind development, it can help regional revitalization through such projects is considered in the future.

Currently, statutory council meetings are stipulated as the venue for discussions on basic matters for consensus-building with local fishermen. However, by that point, stakeholders have already been identified, and actual discussions have begun. Prior to the stage of project development, promoting local residents’ understanding of offshore wind projects can be beneficial as well when discussions start with the project developer.

For example, in the zoning model demonstration projects of the Ministry of the Environment, study group sessions on offshore wind led by the local government are being held for local residents, and the same has been done with other ministry-level projects, including some associated with the Ministry of



Economy, Trade and Industry<sup>1</sup>. At such sessions, fishermen are able to share their concerns and anxieties about offshore wind. In addition, when the local government and local residents study and learn together, it also makes it possible for local residents and fishermen to have more constructive discussions on how the local region might benefit from an offshore wind project. In Scotland, to promote the understanding of local residents, efforts are made in areas where wind farms may be built in the future to present a number of scenarios on the possible impact to the area if an offshore wind farm is built and goes into operation. In this way, with the support of the national government, opportunities are created for the local government and local residents to learn about offshore wind and participate in considerations of it in connection with local and fishing industry promotion policies. This makes it possible for the statutory council meetings held later to proceed smoothly and lead to mutual understanding<sup>2</sup>.

Proposal 1	In areas where offshore wind is envisaged to be introduced, at an early stage, local authorities will take the initiative to organize study groups on offshore wind development. The national government financially supports such study groups.
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## Section 2: Identification of stakeholders at an early stage

One of the major challenges of local coordination is appropriately identifying stakeholders. The stakeholders in offshore wind projects are local residents and fishery cooperative members operating in areas regulated by fishery rights (Demarcated, Fixed gear, Common) that overlap with the project zones. In addition, in sea areas where offshore wind projects have the potential to affect the fishing industry, there are fishermen permitted by governor and by minister, and so-called “free fishermen” which does not require a license. If, for example, concerns are voiced from other prefectures about the impact of a project on the migratory routes of tuna and other fish, the scope of stakeholders expands further, and it becomes difficult for the project developer to determine on its own who should be included in the consensus-building process. Currently, project developers conduct interviews with prefectural governments and fishermen to identify fishermen who are currently active by referring to “Umishiru” (Maritime Domain Awareness Situational Indication Linkages) and other public data. However, this work puts an enormous burden on developers. Moreover, it is also possible that the developer is unable to adequately identify stakeholders. On the other hand, the Fisheries Agency grasps the operations of fishermen permitted by the minister, and the department in charge of fisheries in prefectural governments grasps fishermen operating in its area. For this reason, it would be appropriate for the national government (Fisheries Agency) to work with the departments in charge in prefectural governments to identify those stakeholders. Fishing industry coordination thus far has often had to depend on the memories of local fishermen, using an old lighthouse to draw a dividing line, for instance. Along with fishing industry fact-finding surveys, the government should integrate various data from Umishiru, local governments, local fishermen, automatic identification systems (AIS), smartphone apps, and others to create the “Fishermen Map” that clarifies their operational status. The national government would construct a mechanism for prefectural governments to identify stakeholders while also providing support in identifying stakeholders, including in surrounding sea areas and creating a “Fishermen Map”.

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<sup>1</sup> In the case of geothermal projects, for example, there is a program for promoting understanding of geothermal development that provides support for study group sessions on geothermal power in order to promote the understanding of hot springs resort operators concerned about its impact.

<sup>2</sup> Even when study sessions are organized by the local government with support from the national government, the local government should not seek to guide discussions; the discussions should be led by local residents and fishing industry operators.

For offshore wind to be developed going forward not only in coastal sea areas but farther offshore as well, the Fisheries Agency and prefectural governments need to share the information they possess, fishermen that are actually operating need to be identified, and a “Fishermen Map” needs to be created. This should begin as soon as possible.

Proposal 2	The Fisheries Agency, in cooperation with the prefectures, should identify fishermen in actual operation and promote the preparation of a “Fishermen Map” that shows the status of fishermen in operation.
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### **Section 3: Establishment of a transparent and objective local coordination process**

As of now, the main venue for local coordination is statutory council meetings. However, holding a few statutory council meetings is insufficient, and project developers need to coordinate with local communities for surveys and the like even before the meetings are held. There are no clear rules, so project developers conduct coordination separately, individually giving presentations on their plans to local residents and the fishermen, and there are differences in the timing and content of the information they convey, which leads to information gaps among stakeholders. Dissatisfaction and anxiety caused by such gaps can spread among local residents and fishermen and lead to confusion in the local area. In order to prevent such a situation, there urgently needs to be rules developed for project developers when they communicate with local stakeholders.

Firstly, in order to limit confusion caused by project developers conducting activities separately in the local area, local coordination needs to be unified. In an example from Yamagata Prefecture, local coordination was the responsibility of the prefecture, and the prefecture’s Energy Policy Promotion Division was the point of contact for project developers. Developers were requested by the prefecture to refrain from individually contacting fishermen and coastal communities and from conducting activities such as wind condition observations and environmental assessments. With the cooperation of project developers considering offshore wind projects in the prefecture, wind condition and sea area surveys were conducted jointly under the leadership of Yamagata Prefecture. By proceeding in this manner, surveys that had been performed separately by different developers were conducted efficiently, and the transparency and objectivity of information were ensured.

Looking ahead, in around 2025, the "Japanese Centralized System" is scheduled to be introduced, and after switching to the new system, efforts need to be made to ensure transparency and fairness by having the national government or local governments at the forefront, so that nontransparent, behind-closed-doors negotiations do not take place among individual project developers and individual fishermen and others.

Proposal 3	The national government should prepare transparent and objective rules for regional coordination and the prefectures implement those rules.
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## **Chapter 2: Importance of Objective Data**

Offshore wind development projects are required by law to conduct environmental impact assessments, but the methods used to survey the impact on the fishing industry are not consistent. It is essential that there are quantitative standards and measurements that make it possible to show local fishermen the kind of impact that will be caused by construction and operation.

Fishing industry impact studies are indispensable to learning the actual situation of the local fishing industry, identifying local stakeholders, determining the impact of project development, and establishing response measures and promotional measures that allow for the coexistence of offshore wind with the local fishing industry. For local coordination to be aimed at harmonious coexistence with the fishing industry, it needs to be conducted from an early stage and in tandem with fishing industry impact studies.

Fishery cooperatives track catch volumes for each area, but there is a lack of objective quantitative data on the impact on the fishing industry when a project is developed. As of the present, once a project developer is selected via the bidding process, the developer is to conduct a fishing industry impact study with content stated in the “Guidelines for Public Tender of Exclusive Occupancy and Use”. For this reason, survey data prior to wind farm construction is limited to a number of years before construction begins, and it is impossible to verify the impact on fishing through comparisons from before and after the plant is built. It is also important that studies continue even after the plant goes into operation.

As the first step, procedures for fishing industry impact studies should be established, and conducting studies before construction and after operations commence should be made mandatory.

### **Section 1: Standardization of fishing industry impact studies**

Fishing industry impact studies are not consistent between areas, and study methods differ with the developer and region. Therefore, study methods for acquiring objective data related to fishing industry impact need to be established, and efforts need to be made to standardize and share the information that forms the basis for transparent discussions.

Firstly, it would be useful to organize potential impacts on the fishing industry as gleaned through questionnaires and interviews with fishermen. The items needed in a study differ depending on the local environment and operating conditions. However, listening carefully to the concerns and anxieties of fishermen related to the impact on fishing and conducting the study in a way that addresses these concerns makes it possible to make transparent the risks involved and the measures to be taken for them.

Further, the studies should survey and measure not only the impact on ecosystems in the area around the planned location of the wind farm but also changes in catch volumes by local fishermen and changes in the movement of fish migrating from other sea areas. In particular, vibration and underwater sound are the impacts specific to offshore wind, so new survey methods appropriate to these impacts need to be standardized. It is possible, in terms of technology, to survey the migratory routes of fish that could be impacted by construction of an offshore wind farm. For example, there is a survey method called biologging that tracks the migratory routes of fish by attaching GPS to the fish, and such research is taking place in Japan as well. The government (specifically, New Energy and Industrial Technology Development Organization) is conducting a commissioned study on the fishing industry impact studies and has compiled some of the results. Through efforts such as this to standardize the content and method of fishing industry impact studies, study results are also standardized, and it becomes possible to unproblematically utilize the findings of studies even if they are administered by different bodies before and after the project developer is selected.

For offshore wind development, there are also indicators indispensable in considering policies for coexistence with local communities aside from the essential studies such as the above fishing industry impact studies and studies on sea wind conditions and marine phenomena. Indicators of the socioeconomic impact of projects on the local onshore economy, including marine products, are such examples. Standardizing indicators for scientific data to be collected makes it possible to compare and consider with the data of other areas, which makes objective comparison possible, and this can offer reassurance to project developers and local stakeholders. The objective data obtained from fishing industry impact studies and other surveys should be standardized in accordance with guidelines created by the national government and utilized in efforts to ensure harmonious coexistence with local communities.

Proposal 4	Standardize the fishery impact studies, including the entity conducting the survey, the burden of survey costs, the process for determining study methods, and the study item, frequency, and timing. The national government should compile them as guidelines.
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## Section 2: Clarification of who administers fishing industry impact studies

Currently, fishing industry impact studies are administered by the project developer after one has been selected, so the study is carried out in the several years between developer selection and the start of construction. However, in order to accurately verify the fishing industry impact, the fishing industry impact study needs to be conducted in tandem with local coordination from an early stage, so a study administrator needs to be designated from this early stage to conduct the study. In addition, data obtained from the study is not only the objective data needed for local coordination with local fishermen, but also a public good that could potentially be utilized in the fishing and marine products industry going forward.

The national government should therefore take the lead in conducting the fishing industry impact study before the project developer is selected, and after a developer is named, the study should be carried out by the developer while continuing to use the study methods standardized under the national government's leadership. The actual study should be commissioned to a third-party organization with specialized knowledge of the local sea area, such as a prefectural fisheries experiment station. In addition, the cost of fishing industry impact studies could be borne by the national government before the project developer is selected and by the developer after one is chosen. Even with existing environmental assessment studies, the developer conducts the study, so this proposal is in line with the existing system.

The national government is currently conducting model studies in three sea areas with a view to establishing the "Japanese Centralized System". The study includes fishing industry fact-finding surveys on such items as the species of fish caught, catch volumes, and routes of movement but does not cover fishing industry impact studies. It should be clarified that after the switchover to the new system, the national government will lead not only fishing industry fact-finding surveys but also fishing industry impact studies.

Proposal 5	In order to verify the exact impact, fishery impact studies should be conducted in parallel with regional coordination from an early stage of project planning. The national government and the selected operator will be responsible for the fisheries impact survey before and after the selection of the developer, respectively. In contrast, the actual survey will be commissioned by a third-party organization familiar with the sea area in the field, such as a prefectural fisheries experiment station.
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### Section 3: Mitigating and compensating fishing industry impact

When it is possible that the local fishing industry will be impacted by the construction of an offshore wind farm, mitigation measures need to be carried out to minimize that impact based on the local fishing industry's actual situation. Such measures could include arranging wind turbines not to interfere fishing operations, dampening noise with air curtains, and doing concrete construction work timed to avoid fish migrations. Separate alternatives also need to be ready for when it is impossible to prevent the fishing industry from being impacted. One of such policies is fishing industry compensation. Standardizing the criteria for which fishermen are eligible to receive compensation and the formulas used to calculate it nationwide is needed to ensure the transparency and predictability of procedures.

For the formulas used to calculate fishing industry compensation, there are guidelines for compensation criteria associated with public land acquisition (a Cabinet decision), standards for loss compensation associated with public land acquisition (created on the basis of the guidelines) and their bylaws (both of which are decisions of the Land Policy Liaison Council). For the fishing industry, compensation is calculated based on the average annual monetary value of the total catch, which is derived from the average annual catch amount and fish prices over a fixed period. Also, it is adjusted based on the future potential of marine resources and other factors. In order to make calculations with this formula, it is essential to have fishing industry impact studies and objective data on catch amounts from a number of years prior to plant construction and after the operations have commenced. The national government should support discussions based on objective data and standards so that measures can be appropriately conducted to mitigate impacts on the fishing industry that might arise from offshore wind projects and so that compensation can be appropriately provided when such impacts occur.

Proposal 6	For fisheries compensation, standardize the criteria for fishers receiving payment and the calculation method for compensation nationally. The standardized calculation method should calculate the compensation amount and implement settlements based on objective data. The national government should lead discussions to ensure that the whole process is carried out properly.
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### Section 4: Disclosure and sharing of scientific data

Fishing industry impact studies are a valuable resource and sharing survey data with fishermen can make it possible to create mechanisms for utilizing the data in the local fishing industry. Project developers are currently conducting fishing industry impact studies, and the data is owned by the developer that bore the cost of the study. For this reason, whether to share data obtained through fishing industry impact studies is at the discretion of project developers. For this study data to be shared, individual agreements could conceivably be concluded between project developers and local fishermen, but it would make it easier for the parties involved if the method used to calculate the data purchase price was standardized and disclosed. Or the national government could create a mechanism by which the government would purchase study data for an appropriate price for the purpose of sharing it with stakeholders, and this would incentivize project developers to transfer the data to the national government.

After the changeover to the "Japanese Centralized System", study data acquired by the national government should basically be disclosed free of charge and made available to be utilized by project developers and local fishermen. However, careful attention must be paid to the data items that are disclosed so as to avoid triggering illegal poaching and the like.

Proposal 7	The data obtained from fisheries impact studies should be made public, bearing in mind the convenience of local fishermen and considering the impact after publication.
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## **Chapter 3: Harmonious Coexistence with Local Communities**

Overseas, there are progressive programs and initiatives related to the harmonious coexistence between offshore wind and local communities. However, local characteristics need to be considered, including the fishing industry, and the initiatives of other countries cannot necessarily be applied just as they are. At the same time, Japan has almost no examples of full-fledged offshore wind deployment, therefore regions with offshore wind are currently searching for ways such projects can harmoniously coexist with local communities. As discussed in Chapter 1, when individual activities are conducted haphazardly, it can cause confusion in the local area. To prevent such confusion, it is important to have an adequate dialogue between project developers and local communities and to take measures to promote coordination with the local community and fishing industry.

Offshore wind is not only important as a measure to enhance national energy security, combat the climate crisis, and build a new economy, it is also the ultimate trump card for local energy independence and the further greening of local communities. Offshore wind projects can stimulate harbor activity, promote ship utilization, create new employment, and give rise to new tourism resources in the area. The energy produced by offshore wind can be used as green electricity to electrify local transportation and heating demand. Also, in the future, it could be used to produce green hydrogen and synthetic fuels to help decarbonize heavy industries and large-scale transport networks (ships and aircraft) in other regions.

In addition, measures that harness the new added value brought about by offshore wind should be actively incorporated into local promotion measures.

### **Section 1: Standardizing the process for creating local and fishing industry promotion measures**

Promotion measures for the local community and local fishing industry are needed in order to effectively take advantage of the economic benefits to the local area generated by offshore wind. To this point, project developers have led the process of creating local and fishing industry promotion measures, but it is local residents and fishermen who best know the local situation that should develop these measures.

The role of central and local governments is to present a framework and options for local and fishing industry promotion measures in advance, and the national government should also provide monetary support for the process of creating promotion measures in each area. Standardizing and disclosing this process would establish it as model that could be referenced by other regions as well. By providing this type of support, discussions proceed with the participation of local community members, operations of statutory council meetings are facilitated, and harmonious coexistence with the project developer selected makes progress. The role of municipalities is to support promotion measures led by local residents as the administrator.

In order to incorporate the independent opinions of fishermen, the process for creating local and fishing industry promotion measures might be conceived to proceed in three stages. In the first stage, local residents and fishermen take the lead at an early stage of the plan and discuss the local area and fishing industry. Utilizing the framework and support for promotion measures readied in advance by the national government, the local government becomes the administrator of a planning committee, and through this committee, led by local residents and fishermen, local and fishing industry promotion measures are considered. At the statutory council meetings held later, local and fishing industry promotion measures created by this planning committee are introduced. In the second stage, project developers that submitted bids for the promotion zone refer to the local and fishing industry promotion measures created by local residents and fishermen in the first stage and compete with each other on ideas related to those measures.

Finally, in the third stage, local fishermen and residents begin initiatives to make specific promotion measures a reality.

Local and fishing industry promotion measures are carried out autonomously by local residents, including fishermen, and the local government (the municipality or prefectural government) provides support by serving as the administrator for these activities. The national government provides support for these initiatives of the local government.

Proposal 8	Regional and fisheries promotion measures should be discussed and prepared by the communities and fishermen concerned. The national government should standardize the process and, together with local authorities, present a standard framework for regional and fisheries promotion measures. It will also financially support the activities of the various regions.
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## Section 2: Funding for local promotion measures

In the first round of offshore wind tender in 2021, the project developer was required to return money to the local community by making contributions to a fund, and there were two types of funds indicated depending on the area. One is linked to sales from power generation, and another is funded at a fixed amount regardless of sales. However, after the bids were opened, in some cases, the funds had not reached the expected level. Currently, the minimum requirements for local promotion measures and the outcomes of promotion measures are not clear. Therefore, project developers are unable to predict the level of financial burden. The deliberations involved are also a burden for local residents and local governments. If it can be decided in advance the scope of local residents eligible to receive benefits from the power generation business and the extent of this benefit, then it becomes possible for the project developer to consider business profitability and strategy based on these parameters. For local residents, the local government, and other local stakeholders, this would make clear the return to the local area from the construction of the wind farm, so it would also contribute to the local coordination process.

The relationship between local promotion measures and the project developer selected also needs to be made clear. Local residents and the local government should take the lead in the process of creating and implementing local promotion measures. Local promotion measures should be administered by the local government and utilize a budget provided for them based on the proposals of local residents and fishermen that came out of study sessions and the promotion measures planning meetings. And as for the budget for local promotion measures, in addition to the fund contributed by the current project developer, there are other ways of funding, such as expanding the scope of the grant program for power source located regions, applicable to large-scale wind farm projects, to utilize it in offshore wind.

For offshore wind to expand further, it will be important to transparently standardize the content and conditions of disbursements made to the local community from offshore wind projects.

Proposal 9	Regional and fisheries development measures should be developed by local stakeholders and realized together with local authorities. For the budget for the realization of such promotion measures, in addition to the current funds provided by the operators, consideration should be given to applying the Power Supply Location Measures Grant Scheme to offshore wind power.
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## Chapter 4: Necessary Systems and Frameworks

In current offshore wind development projects, the roles of the central and local governments are not clear, and harm has been done in some cases from the vertical sectioning system of policy officials. In order to successfully establish and implement the policies discussed thus far, it will be essential to rebuild implementation systems and systematic frameworks. Making these policies a reality will require building a systematic framework with consistent systems and roles clearly defined.

### Section 1: Consolidation of an offshore wind policy headquarters and establishment of a one-stop shop

Offshore wind policy is the jurisdiction of the Ministry of Economy, Trade and Industry, which mainly handles economic and energy policy, and the Ministry of Land, Infrastructure, Transport and Tourism, which handles sea area policy. However, other ministries and agencies are also involved in procedures, including the Ministry of the Environment, which handles climate change measures, the Fisheries Agency, which is in charge of fisheries policy, and the Cabinet Office, which handles regional revitalization. The same is the case for prefectural and municipal governments: offshore wind projects are spread across multiple departments. In this way, responsibility for offshore wind is subdivided in a siloed administrative structure, which inhibits speedy, consistent policy. Complex processes hinder smooth communication not only for project developers but also for local stakeholders, including fishermen.

This is why a one-stop shop related to offshore wind needs to be set up. This type of initiative is not rare overseas; such one-stop service portals exist in the Netherlands and Denmark, for example. One-stop shops are effective for two primary reasons. The first is they smooth and expedite procedures. Consolidating inquiries from offshore wind stakeholders in one location makes it possible to simplify approval procedures. Currently, procedures related to offshore wind required of project developers are dispersed throughout multiple ministries, agencies and local government bodies; they are cumbersome and time-consuming. In addition, there is redundancy in initiatives and support related to offshore wind, so consistency in these areas is needed as well. Secondly, a one-stop shop would prevent information related to offshore wind from being dispersed. When the contact points are dispersed, the information they gather is also dispersed, which potentially slows down improvements to offshore wind policy and the response to problems. In particular, the problem of harmonious coexistence with local communities, including the fishing industry, requires a close partnership with the local government and coordination with ministries and agencies.

For quick approval procedures and information management, there needs to be a headquarters for policy and a one-stop shop to consolidate the departments that execute those policies.

Proposal 10	Establish a single command post for offshore wind policy. In addition, establish a one-stop contact point for project procedures to facilitate and speed up the processes and reduce the burdens of stakeholders and the administration.
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## Section 2: Allocation of responsibilities between the central and local governments

A clear allocation of responsibilities has not been defined for local coordination, so depending on the sea area, there are differences in how local residents and project developers are handled. Depending on the locality, there is no main body in charge of coordination, so there are instances of major problems developing between local fishermen and the project developer. The division of responsibilities between the central and local governments needs to be clarified as early as possible.

Firstly, it is the prefectural government that should play a major role in local coordination. In particular, the prefectural department in charge of fisheries, which works to coordinate with the coastal fishing industry, has a good grasp of the current situation with the local fishing industry and so is able to identify stakeholders while coordinating with the Fisheries Agency. Some prefectures are already proactively conducting local coordination, so it is certainly possible for prefectural governments to handle local coordination with fishermen.

Next, for the study group sessions and planning committees for local residents, including fishermen, the municipal government should be in charge of administration. Offshore wind projects have the potential to be a major turning point for local community and fishing industry development. For municipalities engaged in measures to counteract the hollowing out of industry and population declines from aging and low birthrates, offshore wind policy has major potential for helping to develop sustainable local communities. Initiatives for local promotion measures, including for the fishing industry, also should basically be conducted with the local government and local residents working in unison.

The national government's role should be to provide a clear direction for policy on the deployment of offshore wind that coexists harmoniously with local communities and the fishing industry, to clarify the roles of prefectural and municipal governments, and to provide financial support. The national government's priorities should be the changeover to a centralized system that compares favorably internationally in order to facilitate the quick and efficient deployment of offshore wind and the creation of a marine spatial plan that defines how sea areas are to be used based on a comprehensive consideration of the various marine uses, including offshore wind and fishing, along with protection of the natural environment and other factors. Among these priorities, marine spatial planning requires the participation of many ministries, agencies, and stakeholders, and it is not an easy task. Still, in Europe, national governments are required to create these plans, and deliberations on them were carried out in the respective countries. To achieve the target for offshore wind deployment, specifying in advance the sea areas that should not be developed and the sea areas that may be developed while considering various economic and social factors, including the fishing industry, is extremely important from the standpoint of promoting consensus-building and ensuring transparency.

Proposal 11	Clarify the division of roles between the national and local governments. The prefectures are responsible for regional coordination, including the identification of stakeholders. Municipalities are responsible for the management of study groups and review meetings and are the main actors in the formulation and implementation of subsequent promotion measures. The national government financially supports these efforts and, as a national policy, ensures the introduction of a centralized method that is comparable to international standards and the development of marine spatial plans.
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### Section 3: Clarification of units in charge of local coordination

To prevent project developers each from interacting with stakeholders through dialogue and discussions at their own discretion, the units in charge of local coordination for project developers and stakeholders respectively need to be clarified. The units in charge could be a specific person or a fixed position in an organization.

Overseas, there is precedent for positions being established to handle local coordination of offshore wind projects. In Scotland, as a best practice for relationship-building between developers, the government, and fishermen, it is recommended that persons in charge of managing contact be selected within the developer (a dedicated fishing liaison officer) and local fishermen (a fishing industry representative) respectively after the developer is selected via a bidding process. They serve as representatives in negotiations between the developer and fishermen and are required to convey negotiated content to the groups they are in charge of, either the developer or the local fishermen, and to the government. Establishing a position dedicated to local coordination is an initiative that is necessary for local fishermen as well. For example, someone with good knowledge of the local fishing industry would be put in charge of coordinating on the fishing side along with someone who is currently active as a fisherman. The representative on the fishing industry side would be designated at an early stage in the plan and be put in charge of communicating the requests and demands of fishermen. After the project developer is selected, a fishing liaison officer of the developer would be designated, and the officer of the fishing industry representative would negotiate from their respective perspectives. In addition, if trouble arises related to the wind farm project, each of them would be the point of contact and would decide on a response based on objective data. Having unified points of contact for communication provides an important framework for helping ensure the transparency of coordination procedures.

Proposal 12	For rational and transparent regional coordination, a coordinator should be appointed on the side of the selected operator and regional stakeholders, the procedures for consultation should be clarified, and discussions should be based on objective data.
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### Section 4: Changeover to a centralized system and local coordination

Switching over to the "Japanese Centralized System" is currently being discussed in order to lessen the burden on developers involved in offshore wind and provide the groundwork for a fair, competitive market environment. The "Japanese Centralized System" is expected to provide developers consistent study results from wind and marine condition survey, environmental impact studies, seabed investigation, and others and ensure grid connections, but no mention has been made of local coordination. However, for project developers, the burden of local coordination is substantial, and for local residents and fishermen, coordinating with individual developers leads readily to confusion in the local area. The provision of information, including on the importance of expanding the deployment of offshore wind, and dialogue with the local community should be conducted firstly by the national government, not by developers. Local coordination in the initial phase should be led by the national government and conducted in partnership with prefectural and local governments. At the venues where communication actually takes place, specialized personnel (science communicators) need to be utilized and trained to move discussions forward from a neutral standpoint based on objective data.

Proposal 13	Local coordination should be included in the "Japanese Centralized System" being considered by the government. In particular, initial regional coordination should be carried out with prefectures and municipalities under national leadership.
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## **Chapter 5: Creation of Guidelines for Regional Coexistence**

As discussed thus far, the ad hoc way in which dialogue and coordination are currently being conducted locally in relation to offshore wind is causing a lack of transparency in negotiations and cumbersomeness in the process. Offshore wind development processes and stakeholders are complex, and it takes a great deal of time and effort for all stakeholders to come to a shared understanding. For this reason, there is a need of “Guidelines for Regional Coexistence (provisional title)” to be created as a reference for local stakeholders.

The guidelines would apply to project developers, local governments, and local residents, including fishermen, and would clarify roles and procedures for stakeholders in line with the development process for offshore wind projects. Through this, a system would be created for adequate communication between developers, local governments, and local residents and would make the actions of each actor transparent to allow for predictability for both local residents and developers. Further, by having the guidelines include examples, standards, and calculation parameters to refer to when devising local and fishing industry promotion measures, it becomes possible to ensure fairness and transparency between local areas nationwide. Also, an important part of the process for creating the guidelines would be the national government deepening their content through discussions with stakeholders, including local governments and project developers.

The following provides examples of items that could be included in the guidelines.

### **(1): Items related to the study and planning stage**

(Stage at which the potential for offshore wind is recognized and various studies begin)

- Identification of stakeholders in the targeted sea area (led by the prefectural government)
- Holding study group sessions for local residents, starting with fishermen (supported by the national government)
- Designation of persons in charge of the contact and liaison and decisions on communication methods and others
- Grasping of the current situation related to fishing industry activities (based on fishing industry impact studies and past catch data)
- Meetings to report study results, including the results of fishing industry impact studies, for local residents
- Consideration of local community and fishing industry promotion measures (led by local stakeholders and the local government, with the process supported by the national government)

### **(2): Items related to the preparations stage**

(Stage from selection as a promising zone to public tender of developers)

- Examples related to local contribution measures by project developers

### **(3): Items related to the construction and operation stage**

- Implementation of various studies, including fishing industry impact studies, and disclosure and sharing of data
- Designation of an officer in charge of the contact and liaison in the project developer and establishment of a venue for negotiations and information exchange with the representatives of stakeholders, including fishermen
- Implementation of meetings for regular progress reports related to offshore wind projects
- Response procedures and methods when trouble occurs in the local area in connection with a project

Proposal 14	The national government should formulate “Guidelines for Regional Coexistence (provisional title)”, while also listening to the opinions of local authorities and businesses. The guidelines are intended for operators, local authorities and residents, including fishermen, and specify the roles and procedures of each stakeholder according to the development process of offshore wind power, and are to be used as reference information for regional coordination and symbiosis.
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**Proposals for the Coexistence of Offshore Wind  
with Local Communities and the Fishing Industry**

July 2022

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