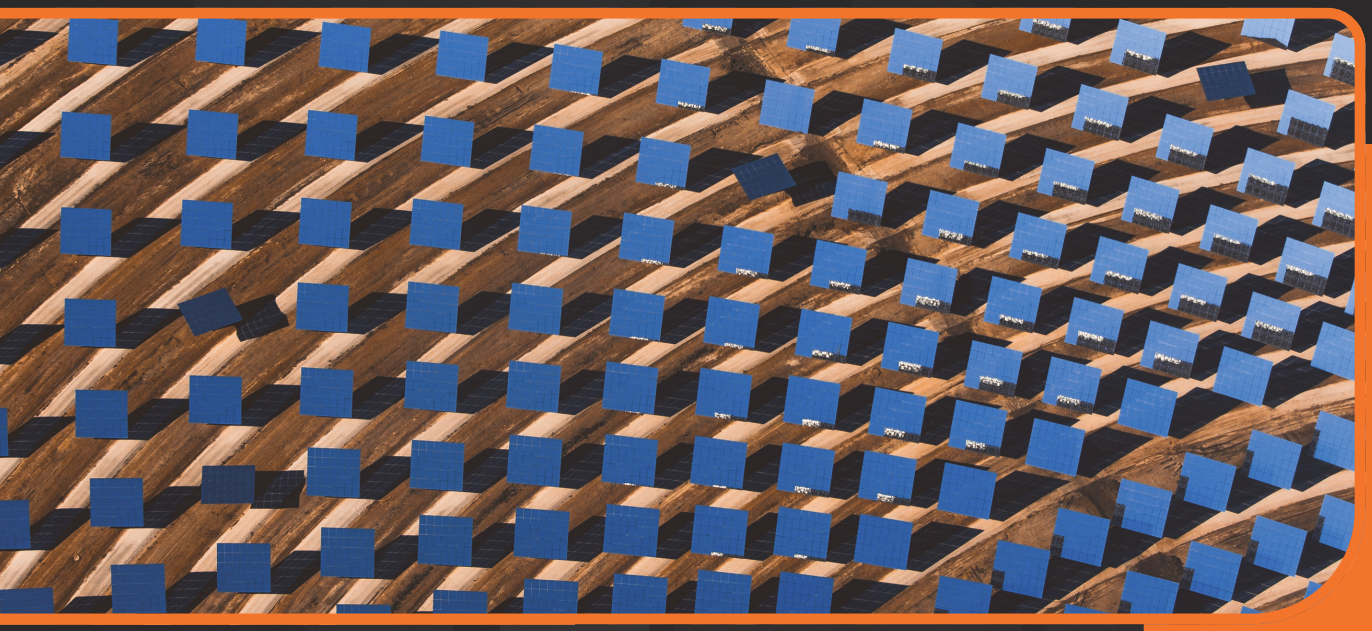
International
Comparative
Legal Guides



Practical cross-border insights into renewable energy law

Renewable Energy 2022

Second Edition

Contributing Editor:
Mhairi Main Garcia
Dentons & Co.

ICLG.com

Expert Analysis Chapter

Q&A Chapters

Japan

Nishimura & Asahi

Sadayuki Matsudaira

1 Overview of the Renewable Energy Sector

1.1 What is the basis of renewable energy policy and regulation in your jurisdiction and is there a statutory definition of 'renewable energy', 'clean energy' or equivalent terminology?

Under the Renewable Energy Act (Act on Special Measures Concerning the Procurement of Renewable Electric Energy by Operators of Electric Utilities), the definition of 'renewable energy' includes solar, wind, hydro, geothermal, biomass, and any other resource which may be designated by a cabinet order in the future.

Under the Act on Sophisticated Methods of Energy Supply Structures, the renewable energy resources include solar, wind, hydro, geothermal, heat from nature (including solar heat) and biomass.

1.2 Describe the main participants in the renewable energy sector and the roles which they each perform.

Since the introduction of the Feed-in Tariff (FIT) under the Renewable Energy Act in 2012, a variety of newcomers have participated in the renewable energy sector, such as trading companies, financial companies, real estate companies, venture companies specialised in renewable power, and their affiliates. Moreover, a significant number of foreign investors and developers who have experience in developing renewable power projects in other countries have participated in the Japanese renewable power market. In addition, recently, the traditional electricity utilities and their affiliates have also been participating enthusiastically in the renewable energy sector, especially since 2016, when the retail of electricity was fully deregulated, and the electricity retail market became competitive. Japanese banks are proactively providing finance to those projects, through both project finance schemes and corporate finance schemes.

1.3 Describe the government's role in the ownership and development of renewable energy and any policy commitments towards renewable energy, including applicable renewable energy targets.

Japan ratified the Paris Agreement in 2017, and the target is to reduce carbon emissions by 26.3% by 2030 in comparison with 2013, and by 80% by 2050. In addition, the Prime Minister Yoshihide Suga announced in October 2020 the new target to achieve carbon neutrality by 2050, and also announced in April 2021 a new, ambitious target to reduce carbon emissions by 46% by 2030 in comparison with 2013. The draft amended the fundamental energy plan of the Japanese government which was made public in July 2021 set a plan to procure 36% to 38% of the total electricity generation from renewable resources as of 2030.

In addition to the FIT under the Renewable Energy Act introduced in 2012, through which renewable power producers are entitled to sell electricity to the transmission and distribution utilities at a fixed price for a fixed term, there has been some further legislation for the development of renewable energy. For example, the Act on the Rational Use of Energy requires power generators to satisfy certain energy efficiency requirements. The Act on Sophisticated Methods of Energy Supply Structures requires all electricity retailers to procure at least 44% of their electricity from non-carbon power generation by 2030. The Act on Promotion of Global Warming Countermeasures requires large-scale electricity consumers to report the volume of their carbon emissions to the government annually. The amendment of the Act will enable local governments to set "promotion areas" regarding which the administrative procedures for the introduction of renewable energy projects will become simpler.

2 Renewable Energy Market

2.1 Describe the market for renewable energy in your jurisdiction. What are the main types of renewable energy deployed and what are the trends in terms of technology preference and size of facility?

Since the introduction of the FIT in 2012, solar photovoltaic (PV) projects (both utility-scale and households) have developed significantly. Onshore wind projects and biomass projects have also developed. While offshore wind projects have not yet developed due to the absence of a legal framework, the Japanese government has enacted a new law to entitle a selected developer to occupy a certain ocean area for 30 years. Thus, offshore wind projects are expected to develop in the future.

2.2 What role does the energy transition have in the level of commitment to, and investment in, renewables? What are the main drivers for change?

Under the Paris Agreement, Japan has announced its target to reduce carbon emissions by 26.3% by 2030 in comparison with 2013, and by 80% by 2050. To achieve this, the Japanese government has introduced and/or enhanced the FIT mechanism, a new law to make offshore wind projects feasible, as well as regulations requiring electricity retail companies to procure electricity from non-carbon resources. In addition, the government

has made efforts for the restarting and new development of nuclear power plants, as well as for the reduction of energy use on the consumers' side. Recently, the Japanese government has also started the discussion to prohibit old and inefficient coal power plants from operating by 2030. As such, the energy transition is one of the largest drivers for change.

2.3 What role, if any, has civil society played in the promotion of renewable energy?

Except for some industries (such as manufacturing industries consuming a lot of electricity) and local communities which suffer the nuisance arising from renewable energy projects (such as changes in the landscape, noise from wind projects, etc.), civil society is generally supportive of the development of the renewable energy sector. The introduction of the FIT in 2012 was carried out by the Japanese Democratic Party (left wing) soon after the huge earthquake in the north-west of Japan and the Fukushima nuclear accident. Even after the change of cabinet to the Liberal Democratic Party (right wing), the FIT has continued and new policies to further develop the sector (such as the introduction of a new law to promote offshore wind projects) have been adopted.

2.4 What is the legal and regulatory framework for the generation, transmission and distribution of renewable energy?

The Electricity Business Act provides the regulatory framework for the generation, transmission and distribution of electricity, including renewable energy electricity. A renewable power producer, of which the total generation capacity exceeds 10MW, is required to make a notification as a power generator to the Ministry of Economy, Industry and Trade (METI), and to comply with certain rules to make the grid stable. The transmission and distribution of renewable power projects are generally carried out by 10 large transmission and distribution utilities. These utilities are required to provide the grid service to renewable power producers, provided they satisfy certain requirements to maintain grid stability. Recently, local grid providers have been emerging, and they provide the grid service to renewable power producers by obtaining a transmission licence under the Act.

2.5 What are the main challenges that limit investment in, and development of, renewable energy projects?

There are a number of challenges. The first challenge is the frequent changes of policy and the difficulty of predicting future policy. One example is the introduction of a deadline on the commercial operation date (COD) for certain types of renewable power projects (including utility-scale solar PV projects) which had already obtained certification from METI without any requirement regarding a deadline on COD. The relevant project developers faced a situation where they would lose the high FIT purchase price unless they reached commercial operation by a certain deadline. The second challenge is grid connection issues. In particular, large-scale wind power projects have difficulty with grid connection, due to scarce grid capacity in rural areas in Japan. The enhanced curtailment risk in certain areas in Japan is a further challenge.

2.6 How are large utility-scale renewable power projects typically tendered?

A tender process is applicable to mega solar PV projects (2MW or larger), certain biomass power projects and offshore wind projects. For mega solar PV projects and certain biomass power projects, the tender process is generally held twice per year. The government decides the maximum capacity to be certified for each category and the maximum purchase price. The applicants who propose the lower purchase prices are selected until the total generation capacity of the selected applicants reaches the maximum capacity in the tender process. For offshore wind projects, the tender process is held for a project site in a certain ocean area designated by the government, and while the purchase price proposed by the applicants is an important factor in the selection, other factors such as the experience of the developer, the development plan and the contribution to the local community are also evaluated in the process.

2.7 To what extent is your jurisdiction's energy demand met through domestic renewable power generation?

In 2019, renewable energy accounted for only approximately 19.2% of the total electricity demand in Japan. Approximately 7.7% was from hydro projects, and approximately 7.6% was from solar PV, approximately 2.8% was from biomass projects, and approximately 1.1% was from other renewable projects. In the same year, approximately 35.1% of energy was from gas thermal power, approximately 28.2% was from coal thermal power, approximately 11.5% was from oil and other thermal power, and approximately 6.0% was from nuclear power.

3 Sale of Renewable Energy and Financial Incentives

3.1 What is the legal and regulatory framework for the sale of utility-scale renewable power?

Under the FIT, renewable power producers are entitled to sell the electricity generated from renewable power generators (certified by METI) to local general transmission and distribution utilities at a fixed price for a fixed term (generally 20 years).

In April 2022, the amendment of the Renewable Energy Act will become effective, and not FIT but Feed-in-Premium (FIP) will apply on 50kW or larger biomass (liquid fuel) projects, 1MW or larger solar PV, geothermal and small/medium hydro projects, and 10MW or larger biomass (other than liquid fuel) projects. Under the FIP, power producers will be entitled to receive a certain premium (of which amount equals to the difference between a certain standard price for the category and a certain reference price) in addition to the wholesale price or the agreed purchase price under the power purchase agreement (PPA) for a fixed term (generally 20 years).

3.2 Are there financial or regulatory incentives available to promote investment in/sale of utility-scale renewable power?

As mentioned in question 3.1 above, under the FIT, renewable power producers are entitled to sell the electricity generated from certified renewable power projects at a fixed price for a fixed period; this is the largest financial incentive available to promote investment. As mentioned above, from April 2022, the FIP will apply for certain renewable powers.

3.3 What are the main sources of financing for the development of utility-scale renewable power projects?

Japanese banks (in particular the four major Japanese banks, MUFG, SMBC, Mizuho and DBJ) are the main sources of

project financing for utility-scale renewable power projects. Other financial institutions such as trust banks, lease companies and securities companies are also sources of finance for utility-scale renewable projects. Foreign financial institutions also provide financing for such projects, particularly when the sponsors are foreign companies.

3.4 What is the legal and regulatory framework applicable to distributed/C&I renewable energy?

Distributed renewable power projects are also entitled to enjoy the FIT (or the FIP after April 2022). An electricity retail licence is not required if the power generator supplies electricity within a certain site or neighbouring sites without using the transmission line.

3.5 Are there financial or regulatory incentives available to promote investment in distributed/C&I renewable energy facilities?

In addition to the FIT (or the FIP after April 2022), which facilitates the development of renewable power projects, the wheeling service fee mechanism also provides incentives to promote investment in distributed renewable energy facilities. If a power project is developed on a particular site, and the generated electricity is supplied to a consumer on the same site or a neighbouring site without using the transmission line operated by a transmission utility, it will not be subject to the wheeling service fee. Furthermore, there have been discussions regarding introducing a mechanism under which if the generated electricity is supplied to a consumer within a local distribution line and without using a high voltage transmission line, a lower wheeling service fee will apply.

3.6 What are the main sources of financing for the development of distributed/C&I renewable energy facilities?

Equity investments by the developers as well as financing by banks (including local banks) and other financial institutions are the main sources of financing.

3.7 What is the legal and regulatory framework that applies for clean energy certificates/environmental attributes from renewable energy projects?

Non-fossil fuel value certificates can be issued for the generation of electricity from renewable power projects. Under the FIT, the Green Investment Promotion Organization (GIO), which provides funds for transmission utilities to pay the purchase price to renewable power generators, issues and sells the certificates to the market through the Japan Electric Power Exchange (JEPX). Renewable power projects which do not enjoy the FIT can issue the certificates by obtaining confirmation of the organisation designated by the Japanese government. These certificates can be traded on the market (through JEPX) and individually (outside the market).

3.8 Are there financial or regulatory incentives or mechanisms in place to promote the purchase of renewable energy by the private sector?

Electricity retail companies are obligated to procure at least 44% of their total procurement from non-fossil fuel sources by 2030, which means that it is necessary for these companies to procure non-fossil fuel value certificates from the market or individually of an amount corresponding to 44% of their total electricity procurement. Certain large electricity consumers are obligated to report the volume of carbon emissions annually to the government, and this information subsequently becomes publicly available. In order to enhance their reputation, large consumers are incentivised to procure electricity with a lower figure of carbon emissions.

4 Consents and Permits

4.1 What are the primary consents and permits required to construct, commission and operate utility-scale renewable energy facilities?

Depending on the area where the facility will be developed, the permissions of the local governor and/or other governmental authority will be necessary under the Agricultural Act, the Forest Act, the Natural Parks Act, the Landscape Act, and/or the City Planning Act, etc. In addition, an environmental impact assessment is required for certain large-scale hydro, wind, biomass and solar projects. Smaller projects might be subject to an environmental impact assessment under the local law. Recently, more local rules have been enacted due to criticisms regarding the disordered development of solar projects, etc.

4.2 What are the primary consents and permits required to construct, commission and operate distributed/C&I renewable energy facilities?

Depending on the area where the facility will be developed, the permission of the local governor will be necessary under the Agricultural Act, the Forest Act, etc. Recently, more local rules have been enacted due to criticisms regarding solar projects, etc.

4.3 What are the requirements for renewable energy facilities to be connected to and access the transmission network(s)?

The payment of a certain portion of the construction fees has recently become a necessary requirement for grid connection. In addition, certain requirements for maintaining grid stability must be satisfied, including a project entity's consent to curtailment without compensation. The maximum hours of curtailment without compensation differ depending on the area and the timing of the development.

4.4 What are the requirements for renewable energy facilities to be connected to and access the distribution network(s)?

The requirements for distribution networks are the same as those for transmission networks. Please refer to question 4.3 above.

4.5 Are microgrids able to operate? If so, what is the legislative basis and are there any financial or regulatory incentives available to promote investment in microgrids?

The Japanese government enacted an amendment to the Electricity Business Act in 2020. According to this amendment,

after 2022, distribution licences will be separate from transmission licences, and by obtaining a distribution licence from METI, microgrid business will be possible.

4.6 Are there health, safety and environment laws/regulations which should be considered in relation to specific types of renewable energy or which may limit the deployment of specific types of renewable energy?

There are multiple laws which should be considered in the development of renewable energy projects. Those laws include the following:

- The Forest Act regulates development works in the conservation forest areas and the forest areas included in the local forest plan. The Forest Act requires the developers to obtain the prior approval of the prefecture governor in order to conduct any development work in such areas.
- The Law on Prevention of Disasters Caused by Collapse of Steep Slopes regulates development works in the designated steep slopes areas.
- The Natural Parks Act regulates the development works in national park areas. The prior approval of or filing to the Ministry of Environment or the prefecture governor is required in order to carry out development work in such areas, depending on the area in a national park.
- The Environmental Impact Assessment Act requires certain industry-scale renewable projects to conduct an environmental impact assessment prior to starting the development.

5 Storage

5.1 What is the legal and regulatory framework which applies to energy storage and specifically the storage of renewable energy?

There is no clear legal framework which applies to energy storage. However, recently, based on a request from general transmission and distribution utilities, and in order to facilitate grid connection, some utility-scale renewable power projects have introduced behind-the-meter storage facilities.

5.2 Are there any financial or regulatory incentives available to promote the storage of renewable energy?

There are subsidy programmes for storage facilities, to be provided by the central government and certain local governments.

6 Foreign Investment and International Obligations

6.1 Are there any special requirements or limitations on foreign investors investing in renewable energy projects?

Under the inbound investment regulation, a prior notification to the Ministry of Finance and METI regarding the inbound investment in a renewable energy project is required. The waiting period for clearance is typically 30 days.

A foreign entity cannot be an applicant for a bid process for offshore wind projects. Therefore, foreign investors must set up a subsidiary in Japan or otherwise invest in a Japanese entity in order to participate in offshore wind projects in Japan.

6.2 Are there any currency exchange restrictions or restrictions on the transfer of funds derived from investment in renewable energy projects?

No; please note that for certain renewable power projects such as solar projects, project companies are required to pool a certain percentage of the sales amount for decommissioning, and the companies are not permitted to distribute that amount.

6.3 Are there any employment limitations or requirements which may impact on foreign investment in renewable energy projects?

Generally, no. For offshore wind projects, however, the number of local employees who would be employed by a project is one of the items to be evaluated in the bid process.

6.4 Are there any limitations or requirements related to equipment and materials which may impact on foreign investment in renewable energy projects?

Generally, no. For offshore wind projects, however, the extent to which a project will contribute to the creation of business and employment in Japan is one of the items to be evaluated in the bid process.

7 Competition and Antitrust

7.1 Which governmental authority or regulator is responsible for the regulation of competition and antitrust in the renewable energy sector?

In addition to the Fair Trade Commission, which is the regulatory body on general antitrust matters, METI and its Agency for Natural Resources and Energy, as well as the Electricity and Gas Market Surveillance Commission, are responsible for the regulation of competition and antitrust in the renewable energy sector.

7.2 What power or authority does the relevant governmental authority or regulator have to prohibit or take action in relation to anti-competitive practices?

The relevant governmental authorities have the authority to issue a correction order or to impose an administrative monetary penalty.

7.3 What are the key criteria applied by the relevant governmental authority or regulator to determine whether a practice is anti-competitive?

Grid connection is a typical anti-competitive issue for renewable projects. If a general transmission and distribution utility prioritises a renewable power producer in its group over a renewable power producer outside its group without any justifiable reason regarding grid connection, the Fair Trade Commission and METI will decide that such utility violates the antitrust regulation and the Electricity Business Act, and will issue a correction order or other administrative order.

8 Dispute Resolution

8.1 Provide a short summary of the dispute resolution framework (statutory or contractual) that typically applies in the renewable energy sector, including procedures applying in the context of disputes between any applicable government authority/regulator and the private sector.

Typically, the first instance of dispute resolution in the renewable energy sector is a district court, as in other sectors.

For certain disputes related to grid connection, arbitration and mediation led by the Electricity and Gas Market Surveillance Commission can be used under the Electricity Business Act.

For foreign investors, it may be possible to use international arbitration under the Energy Charter Treaty to protect their investment in Japan, by claiming a breach of the Treaty by the Japanese government.

8.2 Are alternative dispute resolution or tiered dispute resolution clauses common in the renewable energy sector?

In many agreements in renewable power projects, the first instance of dispute resolution is a district court, as in other sectors. In relation to biofuel supply agreements for biomass projects, it is sometimes seen that the dispute resolution mechanism is arbitration.

8.3 What interim or emergency relief can the courts grant?

A preliminary injunction might be available at a court if a court determines that damages (which will not be recovered easily) will occur on a plaintiff without a preliminary injunction.

8.4 Is your jurisdiction a party to and has it ratified the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards and/or the Convention on the Settlement of Investment Disputes between States and Nationals of Other States and/or any significant regional treaty for the recognition and enforcement of judgments and/or arbitral awards?

Yes, Japan is a party to and has ratified the New York Convention.

8.5 Are there any specific difficulties (whether as a matter of law or practice) in litigating, or seeking to enforce judgments or awards, against government authorities or the state?

The Japanese courts tend to respect the broad discretionary decision of the government authorities, particularly with regard to economic rights. Plaintiffs must provide clear arguments that their rights have been infringed by the government's action and that the government's action does not have any reasonable grounds.

8.6 Are there examples where foreign investors in the renewable energy sector have successfully obtained domestic judgments or arbitral awards seated in your jurisdiction against government authorities or the state?

There have not yet been any examples of this. Multiple foreign investors have made claims against the government regarding the reduction of the applicable purchase price for certain solar projects, which have not started commercial operation by a certain deadline designated by METI, and which deadline did not exist as of the issuance of METI's certification; however, there have not been any court decisions or arbitral awards in which such investors have successfully obtained a decision favourable for them.

9 Updates and Recent Developments

9.1 Please provide a summary of any recent cases, new legislation and regulations, policy announcements, trends and developments in renewables in your jurisdiction.

In 2020, the Japanese government enacted the amendment of the Renewable Energy Act (which will become effective in April 2022), by which an FIP instead of the FIT, will be introduced for certain types of renewable power projects (typically large-scale solar and wind projects). Under the FIP, renewable power projects will be entitled to receive the fixed premium amount (which is reviewed annually) plus the wholesale market price, which is volatile. The FIP aims to integrate these renewable energy projects into the general electricity market. The introduction of FIP and the decrease of the purchase price under FIP and FIP mechanisms lead to more corporate power purchase agreement projects, by which project developers may be able to expect the fixed amount of revenue from the high credit consumers, which is also preferable to project finance lenders.

In 2018, the Japanese government enacted a new act which provides a legal framework for an offshore wind project to exclusively use a certain ocean area for 30 years, for a selected developer, through a bid process. Through this law, the government expects to facilitate the development of offshore wind projects in Japan, and as of June 2021, the first bid winner was selected in the one ocean area, and the bid processes have started in three ocean areas. Multiple additional bid processes will also start in the coming years.

Sadayuki Matsudaira's main practice areas are transactions, projects and regulatory matters in the energy sector. Sadayuki has extensive expertise in renewable energy projects, and is providing advice for both international and domestic investors. He is the Regional Vice-Chair for Asia Pacific of Lex Mundi's Energy Group. He was elected as Leading Individual in Projects and Energy in *The Legal 500* Asia-Pacific 2021.

Nishimura & Asahi
Otemon Tower, 1-1-2 Otemachi
Chiyoda-ku
Tokyo 100-8124
Japan

Tel: +81 3 6250 6256
Email: s.matsudaira@nishimura.com
URL: www.nishimura.com

ICLG.com

Current titles in the ICLG series

Alternative Investment Funds
Anti-Money Laundering
Aviation Finance & Leasing
Aviation Law
Business Crime
Cartels & Leniency
Class & Group Actions
Competition Litigation
Construction & Engineering Law
Consumer Protection
Copyright
Corporate Governance
Corporate Immigration
Corporate Investigations
Corporate Tax
Cybersecurity
Data Protection
Derivatives
Designs
Digital Business
Digital Health
Drug & Medical Device Litigation
Employment & Labour Law
Enforcement of Foreign Judgments
Environment & Climate Change Law
Environmental, Social & Governance Law
Family Law
Fintech
Foreign Direct Investment Regimes
Franchise
Gambling
Insurance & Reinsurance
International Arbitration
Investor-State Arbitration
Lending & Secured Finance
Litigation & Dispute Resolution
Merger Control
Mergers & Acquisitions
Mining Law
Oil & Gas Regulation
Patents
Pharmaceutical Advertising
Private Client
Private Equity
Product Liability
Project Finance
Public Investment Funds
Public Procurement
Real Estate
Renewable Energy
Restructuring & Insolvency
Sanctions
Securitisation
Shipping Law
Technology Sourcing
Telecoms, Media & Internet
Trade Marks
Vertical Agreements and Dominant Firms

The International Comparative Legal Guides are published by: global legal group