



Viewpoint

在日米国商工会議所意見書

日本におけるバーチャルPPAの実現と障壁削減により、企業による迅速かつ手頃な価格での再生可能エネルギー購入の拡大を

Recommendations on Enabling Virtual Power Purchase Agreements and Lowering Hurdles to Scaling Corporate Renewable Power Purchases Quickly and Affordably in Japan

エネルギー委員会
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BACKGROUND

As expressed in previous statements, the ACCJ offers full support for Japan's net-zero carbon goals by 2050 and had previously offered recommendations for deregulatory measures to enable large-scale renewable energy investment in Japan. The ACCJ wants to make sure that the Government of Japan (GOJ) does not miss out on the opportunity to harness the globally-proven potential of privately funded corporate renewable power purchase agreements (PPAs) to grow the supply of renewable energy (RE) quickly and affordably in Japan—without reliance on public subsidies, or at any other cost to Japanese taxpayers or electricity ratepayers.

While we have been encouraged by the discussions on expanding corporate renewable power purchase options—e.g., at working groups at the Ministry of Economy, Trade and Industry (METI) / Agency for Natural Resources and Energy (ANRE) and the Cabinet Office for Regulatory Reform—that have occurred since then, we remain concerned by the absence of critical measures that will be needed for market-driven corporate RE investments to accelerate in Japan at the scale that they have in other parts of the industrialized world. We have highlighted these below, along with our high-level recommendations for rectifying what is missing from current considerations.

RECOMMENDATIONS

1. Any exemption of the feed-in tariff (FIT) levy for non-FIT corporate PPAs should not be limited to PPAs with physical delivery.
2. The regulatory scheme should ensure that non-FIT Non-Fossil Fuel Certificates (NFCs) may be transferred bilaterally between RE developers and PPA-contracted consumers.
3. Japanese policymakers and regulators should focus on doing whatever can be done, for example specifying a mechanism in the appropriate regulations that references appropriate price indices, to ensure that the forthcoming FIP regime maintains a reference price as close as possible to wholesale market rates going forward.

背景

先般発表した声明に示されているように、在日米国商工会議所 (ACCJ) は、日本政府が発表した2050年までに温室効果ガスの排出量を実質ゼロにするという目標を全面的に支持しており、日本における大規模な再生可能エネルギー投資を可能にするための規制緩和策を提言してきた。公的補助金に頼ることなく、また日本の納税者や電力料金支払者に負担をかけることなく、日本における再生可能エネルギーの供給を迅速かつ手頃な価格で拡大するために、ACCJは、日本政府が、民間資金による企業の再生可能エネルギー電力購入契約 (PPA) の世界的に証明された可能性を逃さず利用するよう期待している。

ACCJの提言が公表されて以来、経済産業省/資源エネルギー庁のワーキンググループや内閣府の規制改革推進会議などで、企業による再生可能エネルギーの購入オプションの拡大に関する議論が行われているのは心強いことである。しかしながら、市場主導型の企業による再生可能エネルギーへの投資が他の先進国と同じ規模で日本で加速するために必要となる重要な措置が欠けていることに、ACCJは引き続き懸念を抱いている。以下では懸念される点を示し、現在の検討で欠けている点に対処するための提案を行う。

提言

1. 非FIT由来のコーポレートPPAに対する再エネ賦課金の免除は、物理的な電力供給を伴うPPAに限定すべきではない。
2. 非FITの非化石証書 (NFC) については、再生可能エネルギーの発電事業者とPPAを結んだ需要家との間で譲渡できるようにすべきである。
3. 日本の政策立案者と規制当局は、今後導入されるFIP制度について、卸売市場の料金にできるだけ近い基準価格を維持するためにできる限りの方策を講じるべきである。

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ISSUES

1. It is welcome and encouraging news that METI/ANRE is seeking to drive down the cost of renewable energy in Japan by advocating for an exemption from the FIT levy for businesses that purchase non-FIT renewable power via corporate PPAs.¹

However, corporate consumers remain concerned that the current discussion on this topic seems to be focused on only certain types of PPAs, and want to ensure that any exemption of the FIT levy for non-FIT corporate PPAs not be limited to PPAs with physical delivery.

Across much of the rest of the world, “virtual” PPAs, which require no physical delivery of power, have become one of the greatest drivers for new RE investment. Corporate RE consumers and developers are increasingly taking this approach to bring more renewable energy onto the grid flexibly and affordably, while helping local energy consumers avoid subsidy costs on their energy bills.

Corporate PPAs, which do not rely on subsidies like the FIT, will incentivize corporate users and private power producers to bring more renewable energy projects online and deliver clean energy to the grid at no cost to other consumers or energy users in Japan. In the past, while public funding has been essential to enable renewable energy to compete with fossil fuels on price per megawatt-hour (MWh), with corporate PPAs, the cost of building a renewable energy source, such as a solar or wind farm, is fully borne by the corporate purchaser or a private power producer.

A virtual PPA (VPPA) is a contract between a power producer and an offtaker (buyer) in which the price for the underlying electricity is settled under a contract for difference (CFD), typically over a fixed, extended period of time, without the requirement for any physical exchange or delivery of power. Under the CFD, the power producer and offtaker agree on a “strike price” for the electricity and a market-based reference price over the duration of the contract. When the market reference is lower than the strike price, the offtaker tops up the amount paid to the power producer to the strike price. When the market reference price is higher than the strike price, the power producer pays the difference to the offtaker.

VPPAs enable renewables developers to obtain project financing without needing to rely on public

問題点

1) 経済産業省/資源エネルギー庁が、コーポレートPPAを介して、固定価格買取制度 (FIT) の枠外で再生可能エネルギーを購入する企業の再エネ賦課金の免除を提唱することにより、日本における再生可能エネルギーのコストを下げようとしていることを歓迎する。¹

しかしながら、企業需要家は、現在の議論が特定の種類のPPAのみに集中しているように見えることに懸念を抱いており、非FIT由来のコーポレートPPAに対する再エネ賦課金の免除が、物理的な電力配送を伴うPPAに限定されないようにすべきであると考えている。

世界の多くの地域では、物理的な電力供給を必要としないバーチャルPPAが、新たな再生可能エネルギー投資の最大の推進力の一つとなっている。より多くの再生可能エネルギーを柔軟かつ手頃な価格で供給するために、再生可能エネルギーの企業需要家や発電事業者は、このアプローチをとることが多くなっている。一方で、エネルギー需要家は、補助金のためのコストが請求書に加算されることを回避することもできる。

再エネ賦課金のような補助金に頼らないコーポレートPPAは、より多くの再生可能エネルギープロジェクトを創出するよう企業需要家および発電事業者の双方を動機付け、日本の他の消費者やエネルギー利用者に負担をかけずにクリーンなエネルギーを送電網に供給することができる。従来、再生可能エネルギーがメガワット時 (MWh) あたりの価格で化石燃料と競合するためには、公的資金の投入が不可欠であったが、コーポレートPPAでは、太陽光発電所や風力発電所などの再生可能エネルギー源の建設費用を購入者である企業または発電事業者が全額負担することになる。

バーチャルPPAは、発電事業者とオフテイカー (買主) の間で結ばれる契約で、電力の物理的な交換や引渡しを必要とせず、通常は固定の長期間に渡る差額決済契約 (CfD) に基づいて基礎となる電力の価格が決済される。CfDでは、発電事業者と買主が、電力の「行使価格」と、契約期間中の市場ベースの「参照価格」に合意する。市場参照価格が行使価格よりも低い場合、買主はその差額を支払う。一方、参照価格が行使価格よりも高い場合、発電事業者はその差額を買主に支払う。

このように、バーチャルPPAは、発電事業者に電力の長期固定価格を提供することにより、再生可能エネルギーの発電事業者が公的な補助金に頼ることなくプロジェクトの資金を調達することを可能にする。再生可能エネルギーの購入者である企業が全額を負担する、より脱炭素型のグリッドミックスを実現するだけでなく、電力の物理的供給を必要とするPPAで

1. https://www.meti.go.jp/shingikai/enecho/denryoku_gas/denryoku_gas/pdf/031_04_00.pdf

1. https://www.meti.go.jp/shingikai/enecho/denryoku_gas/denryoku_gas/pdf/031_04_00.pdf

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subsidies by providing developers with a long-term, fixed price for power. Beyond delivering a more decarbonized grid mix paid for entirely by corporate purchasers of renewable power, VPPAs also have the added benefit of helping to scale development in a greater variety of and in more remote regions than is possible with PPAs that require physical delivery of power. VPPAs also result in greater trading volume of renewable power on the wholesale market, since the energy purchased in corporate VPPAs is sold on the wholesale electricity market at a defined settlement location (with the buyer continuing to get their electricity locally from their utility company at the utility's rate). The combined flexibility, convenience, and scalability of VPPAs thus makes this approach a clear win-win-win for corporate consumers, for RE developers, as well as for society at large.

VPPAs have the potential to be a great driver for growth in Japan as well, and thus should not be excluded from any considerations around exemption of the FIT levy for non-FIT corporate PPAs in Japan. Going forward, any exemptions applied to PPAs in Japan should be applied equally to all PPA types, without being limited to those dependent on physical delivery of power.

2. To further reduce barriers to corporate procurement of non-FIT RE, it is crucial that Japanese policymakers and regulators ensure that non-FIT non-fossil fuel certificates (NFCs) can be transferred bilaterally between RE developers and PPA-contracted consumers. We are encouraged to see discussion of this underway at METI,² and urge continued focus on resolving this impediment.

For corporate consumers in Japan to be able to claim credit against their global RE commitments, it is important that they be able to purchase RE that can be certified with environment attributes or renewable energy certificates (RECs), which in Japan's case generally means use of NFCs.

However, currently in Japan, the Non-Fossil Fuel Energy Promotion Act (*Koudoka hou*) limits transfer of non-FIT NFCs between developers and retailers. Bilateral, direct transfer of non-FIT NFCs between RE developers and end-use consumers—via VPPAs, for example, one of the most common means by which corporate RE PPAs are structured around the world today—is currently not permitted. This, on top

² https://www.meti.go.jp/shingikai/enecho/denryoku_gas/denryoku_gas/seido_kento/pdf/047_04_00.pdf

possible and becoming more diverse and more remote regions, the expansion of development is possible, and this is also a benefit. In addition, companies that purchase power through virtual PPA (VPPA) are able to purchase power from a specific settlement location in the wholesale market, and the purchaser continues to receive power from the utility company at the utility's rate. This makes it possible to purchase power from the wholesale market, and the volume of renewable power traded in the wholesale market increases. Flexibility, convenience, and scalability are all benefits of virtual PPA. Virtual PPA is a win-win-win for corporate consumers, power generators, and society as a whole.

Virtual PPA is also a potential driver for growth in Japan, and thus should not be excluded from any considerations around exemption of the FIT levy for non-FIT corporate PPAs in Japan. Going forward, any exemptions applied to PPAs in Japan should be applied equally to all PPA types, without being limited to those dependent on physical delivery of power.

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of potential filing obligations under the Commodity Derivatives Transaction Act, is one of the clearest regulatory hurdles to enabling VPPAs in Japan today. Ensuring that non-FIT NFCs can be transferred bilaterally between RE developers and PPA-contracted consumers should therefore be an important deregulatory focus for quickly scaling markets for non-FIT RE via corporate VPPAs in Japan.

Without revisions to enable the bilateral transfer of NFCs between developers and offtakers, corporate consumers are likely to look for alternatives, such as the International Renewable Energy Certificate (I-REC) system, an internationally recognized means of contracting for and tracking renewable energy claims from production to end-user under the Greenhouse Gas Protocol,³ which was recently approved for use in Japan (and which allows for interaction with NFCs, while avoiding the risk of double counting).

3. Finally, as Japan transitions from the FIT to a feed-in-premium (FIP) system starting in 2022, Japanese policymakers and regulators should focus on doing whatever can be done to make sure that the forthcoming FIP regime maintains a reference price as close as possible to wholesale market rates going forward.

This is a crucial point, which has not been adequately considered in recent Japanese policy deliberations, and yet which will have a critical impact on whether corporate renewable power PPAs will take off in Japan or not.

In Japan to date, high, fixed long-term Feed-in-Tariff (FIT) rates have driven a high reference price for PPAs, as RE developers have little incentive to sell renewable power at prices lower than FIT rates. Ensuring that the FIP reference price is maintained as closely as possible to wholesale electricity rates in 2022 and onwards will help to ensure that renewable power project developers in Japan are incentivized to take a serious look at PPAs, driving down costs to Japanese taxpayers and ratepayers, and enabling an equal playing field while creating the conditions for corporate renewable power PPAs to scale quickly in Japan.

3. https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance_Final_Sep126.pdf (p. 48) - English

https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance%20Translation%20Final%20%28Feb%206%202020%29%20SLV%20CES%20INSTITUTE%20%28PDF%29_5.pdf (p. 63) - Japanese

発電事業者と需要家の間でNFCの二者間移転を可能にする改正がなければ、企業需要家は、温室効果ガスプロトコル³に基づいて、発電からエンドユーザーまでの再生可能エネルギー請求権を契約し追跡するための国際的に認められた手段であるI-REC (International Renewable Energy Certificate) のような代替手段を探すことになるだろう。I-RECは、最近、日本での使用が承認され、これにより二重計上のリスクを回避しつつ、NFCとの相互作用が可能となる。

3) 最後に、2022年にFITからFIP (Feed-in-Premium) 制度に移行するにあたり、日本の政策立案者と規制当局は、今後のFIP制度が卸売市場の価格にできるだけ近い基準価格を維持するよう、できる限りの方策を講じるべきである。

これは最近の日本の政策審議では十分に議論されていないが、コーポレートPPAが日本で普及するかどうかにかつ決定的な影響を与える重要なポイントである。

日本ではこれまで、高額で長期固定の固定価格買取制度により、PPAの基準価格が高くなっていった。これは、再生可能エネルギー発電事業者が、FIT価格よりも低い価格で再生可能エネルギー電力を販売するインセンティブがほとんどないためである。FIP基準価格を2022年以降の卸電力料金にできる限り近づけることは、日本の再生可能エネルギー事業者がPPAを真剣に検討する動機付けとなり、日本の納税者や電力料金支払者の負担を下げ、平等な競争の場を実現し、再生可能エネルギーのコーポレートPPAが日本で迅速に拡大する条件を整えることにつながる。

結論

近年、コーポレートPPAは、世界的に見ても、再生可能エネルギーの導入を促進する最も重要な要因となっており、日本においても納税者やその他の電力料金支払者に負担をかけることなく、再生可能エネルギーの開発を加速させる大きな可能性を秘めている。上記の提言が、今日世界で使用されている最も拡張性と柔軟性のあるコーポレートPPAの選択肢であるバーチャルPPAを日本でも展開できるようにする一助となることを願っている。また、日本で企業の再生可能エネルギー投資を迅速かつ手頃な価格で拡大するためには、2022年以降、卸売市場の価格と密接に結びついたFIP基準価格を確保することでコストを削減することに加え、非FITのNFCを発電事業者から需要家に直接移転できるように障壁を下げることに、さらなる検討が必要である。

3. https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance%20Translation%20Final%20%28Feb%206%202020%29%20SLV%20CES%20INSTITUTE%20%28PDF%29_5.pdf

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CONCLUSION

In recent years, corporate renewable PPAs have been the most significant driver for the increasing uptake of RE globally, and have substantial potential to accelerate RE development at no cost to taxpayers or other electricity ratepayers in Japan. We hope that the recommendations above will help to ensure that virtual PPAs, the most scalable and flexible corporate RE PPA option used globally today, will be deployable in Japan as well. And to be able to scale corporate RE investment quickly and affordably in Japan, further consideration is needed around lowering hurdles by enabling the bilateral, direct transfer of non-FIT NFCs from developer to consumer, in addition to lowering costs by ensuring a FIP reference price tied closely to wholesale market rates in 2022 and beyond.