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情報基盤としての堅牢なトラッキン グシステム構築の提言

Policy recommendation for achieving robust and reliable tracking system

Kae Takase (Senior Manager, CDP Japan)

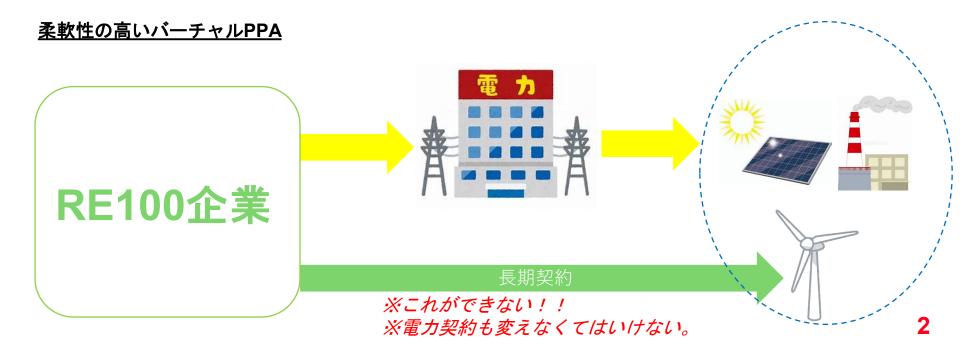
August 3rd , 2021

VPPAはなぜ日本でできないのか?



日本のEACsである非化石価値証書は小売電気事業者を介す必要あり

電力契約を変えずに、再エネから「再エネ属性証明」のみ長期購入することは不可能



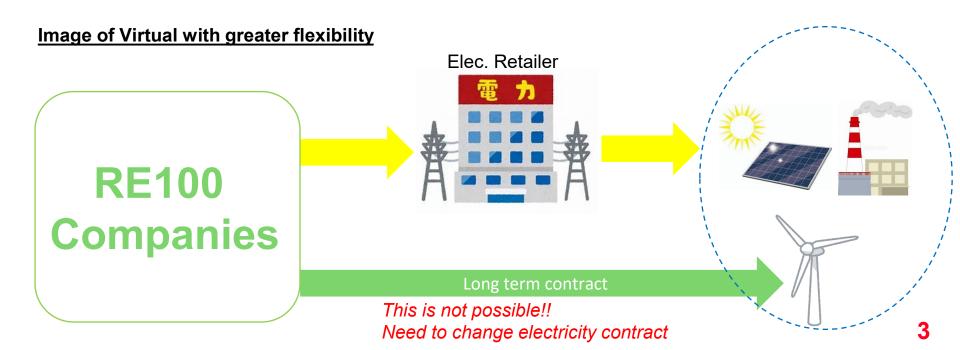
Why Virtual PPA not possible in Japan?

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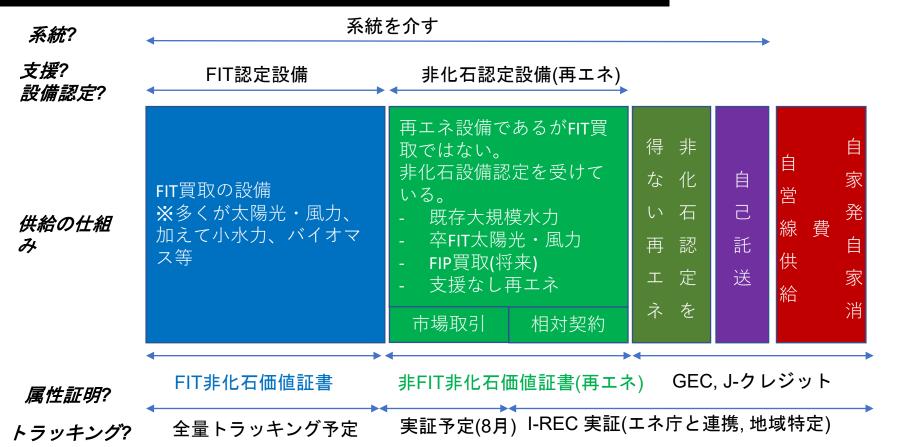
Japanese EACs (NFCs) have to bundle with electricity for consumers to purchase

It is not possible to contract only 'attributes'.



日本における再エネ属性証明

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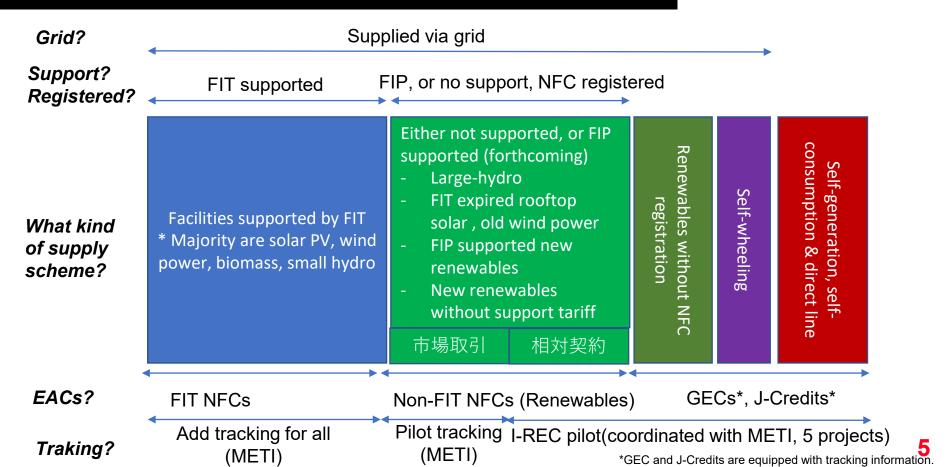


EACs in Japan

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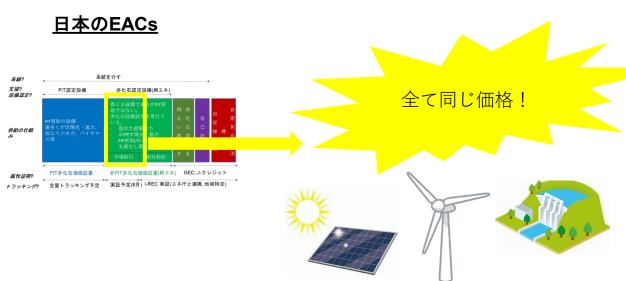
日本の属性トラッキングの課題(1)

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情報基盤であり、その上にオークションや相対、マーケットプレイスが構築

- 日本では、名無しの非化石価値証書の上に後付けで属性をつける。 (複雑化)
- 非化石価値証書(非FIT)はシングルプライスオークション

通常の形相対契約 (PPA,VPPA等) 規制達成? オークション? トラッキングシステム (情報基盤)



Challenges around Attribute Tracking in Japan (1)



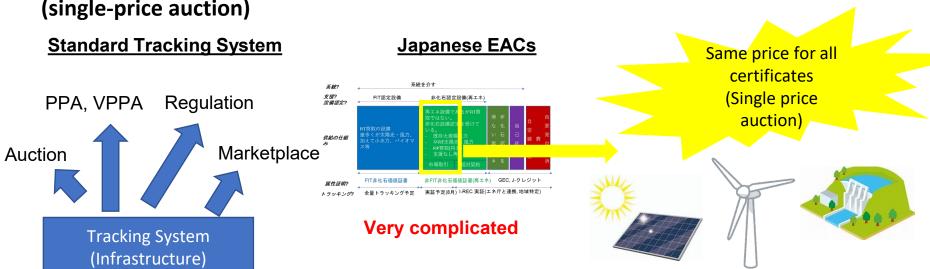


It is an information infrastructure on which auctions, relativism, and marketplaces are built.

In Japan, attributes are put on top of anonymous renewable non-fossil certificates (Very complicated)

All types of renewable non-fossil certificates (non-FIT) will end up with same price

(single-price auction)



日本の属性トラッキングの課題(2)

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償却ができない、FIT非化石のみ需要家購入可能に

- 「償却」というプロセスがない。
- FIT非化石のみ需要家が買えるように。FIT非化石は支援を受けたもの、かつ既存のもの。追加性の高い非FIT非化石こそがRE100の「積極的調達」であるが、ここはまだ道が見えない。

FIT非化石

非FIT非化石

追加性× 需要家直接購入〇 追加性〇

需要家直接購入×

+シングルプライス!



追加性のあるVPPAはどちらでもできない!

Challenges around Attribute Tracking in Japan (2)

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44-CDI

Cannot be cancelled/redeemed. Only FIT NFC (no additionality) can be purchased by consumers.

- There is no "cancellation/redemption" process.
- Only FIT NFC can be purchased directly by consumers; FIT NFC is supported and already built. Non-FIT NFC with high additionality is the center of "active procurement" of RE100, but it is not possible to purchase by customers.

FIT NFC

Non-FIT NFC

Additionality: No
Purchase by Consum

Additionality: Yes

Purchase by Consumers:Yes

Purchase by Consumers: No

Single price for all sources



では、どうしたらいいのか?

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ベスト:情報基盤としてのトラッキングシステムを民間が整備、政府は監督

- 少なくとも、オークション前提とした「非化石価値証書の上に」トラッキングを つけるのではなく、情報基盤としての「トラッキングの上に」、規制対応・オー クション・VPPA・マーケットプレイスが自由に構築できる考え方とする。
- ・ 堅牢なトラッキングシステムは、クリーンエネルギー閣僚級会合における提言で もいの一番に書かれている重要事項である。これが複雑で障害になる状況は、国 内で操業する企業にとって厳しい状況である。

複雑かつ課題多い







※CEMには日本(METI)も参加。

What should be done?

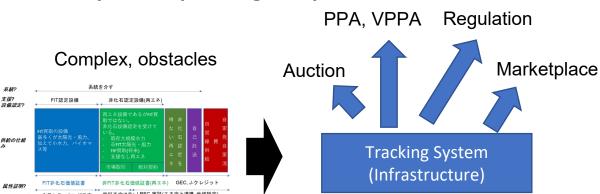
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Develop tracking system as information infrastructure, private sector to build & operate, government to oversee.

- At the very least, the idea should be that regulatory compliance, auctions, VPPAs, and marketplaces can be freely constructed "on top of tracking" which is an information infrastructure, rather than "on top of non-fossil value certificates" which are to be auctioned.
- A robust tracking system is the first and foremost recommendation of the Clean Energy Ministerial. The complexities and obstacles to this make it a difficult situation for companies operating in Japan.





*Japan (METI) also participate CEM.

CEM再エネ調達キャンペーンの提言

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CEM Corporate Sourcing of Renewables Campaign

Five Policy Recommendations

Input to discussions at the 9th Clean Energy Ministerial, Copenhagen, May 2018

The last years have seen an extraordinary growth in corporate sourcing of renewables. As renewable energy costs further decline and the appetite to contribute to the energy transformation grows, corporate demand will only accelerate. With a suitable enabling framework in place, corporate sourcing of renewables has the potential to trigger additional investment in renewables and contribute to governments meeting their energy and climate targets.

The strength and potential of corporate sourcing is vast as relatively few policy adjustments can enable a quick market pick-up, particularly in less-regulated power markets.

The following policy recommendations are a contribution to the CEM Corporate Sourcing of Renewables Campaign and are based on Campaign outputs. They are supported by its operating agent International Renewable Energy Agency (IRENA) and Campaign partners, Business Renewables Center (IRMI), Center for Resource Solutions (ICRS), Clean Energy Investment Accelerator, The Climate Group and CDP (RE100), RE-Source Platform, World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI), and WWF.

To fully capture the potential of corporate sourcing of renewables, governments may consider the following five policy recommendations:

 Support a credible and transparent system for issuing, tracking, and certifying energy attribute certificates (e.g. GOs in Europe, RECs in US).
 Credible and transparent market infrastructure, including formally recognised energy attribute certificates, tracking systems, and certification is crucial to enable renewable

attribute certificates, tracking systems, and certification is crucial to enable renewable electricity sourcing whether through corporate PPAs, utility purchases, unbundied certificates or direct investments in self-generation. Attribute certificates help clarify ownership and allows companies to make credible claims about their renewable electricity use. Governments may incorporate these market instruments into existing renewable energy trading mechanisms, policies, and practices to avoid double counting and double claiming.

- 提言1:信頼性があり透明なエネルギー属性証明の 発行・トラッキング・証明システムを支援すること(例えば、欧州の発電源証明(GO)、米国のRECs)
- ・ 提言2:どのような規模の企業の需要家と再エネ開発事業者間にて、<u>直接に取引ができるエネルギー</u>市場構造を構築すること。
- 提言3: 電力会社とともに、企業の再エネ調達の各 種手段を提供するようにすること。
- 提言4:自家消費用の再エネ発電への投資を刺激すること。
- 提言5:企業の再エネ調達を可能とするよう、規制 上の障壁を取り除き安定的枠組みを導入すること。

CEM Corporate Sourcing of Renewables campaign; Policy Recommendation





CEM Corporate Sourcing of Renewables Campaign

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 Support a credible and transparent system for issuing, tracking, and certifying energy attribute certificates (e.g. GOs in Europe, RECs in US)

- Create an energy market structure that allows for direct trade between corporate buyers of all sizes and renewable energy developers.
- Work with utilities or electricity suppliers to provide options for corporate renewable energy sourcing.
- Stimulate direct investments in production for selfgeneration of renewable energy.
- Remove regulatory barriers and implement stable frameworks to facilitate the uptake of corporate renewable energy sourcing.

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Questions about RE100 Technical Criteria

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