

Shizen Energy Inc. in ASEAN



Shizen Energy Group

Aiming for a world powered by 100% renewable energy

PURPOSE / The significance of our existence

We take action for the blue planet.

Shizen Energy will always be challenging to “take action for the blue planet”

Three months after the Great East Japan Earthquake of March 11, 2011, three founding members who grew up near the blue sea and green mountains launched Shizen Energy. Since then, we have moved forward with the strong belief that “we create our own future.”

Energy affects our lives, culture, industry and the future of the global environment. That is why we are committed to take action for the blue planet with energy at the foundation of our business.

To ensure that people can continue to live happily on Earth in the future, we will work on the conversion to renewable energy with like-minded people to create an autonomous, sustainable community and society with “100% renewable energy.”



Shizen Energy Group Business Overview

03

Expand renewable energy

SHIZEN ENERGY **SHIZEN CONNECT**

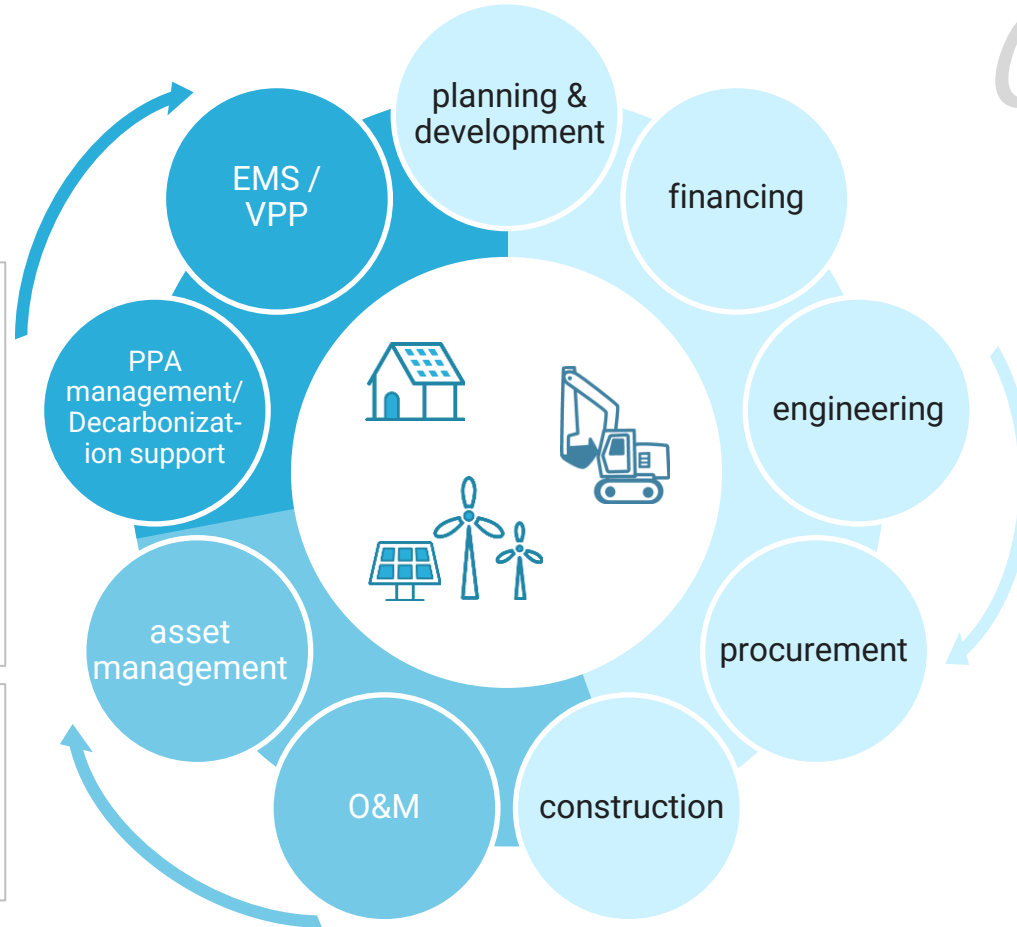
- IPP for renewable energy power plants
- Project Development
- Financing
- AM (Asset Management)
- Energy aggregation service

JSEO

O&M of renewable energy power plants

02

Power plant operation



01

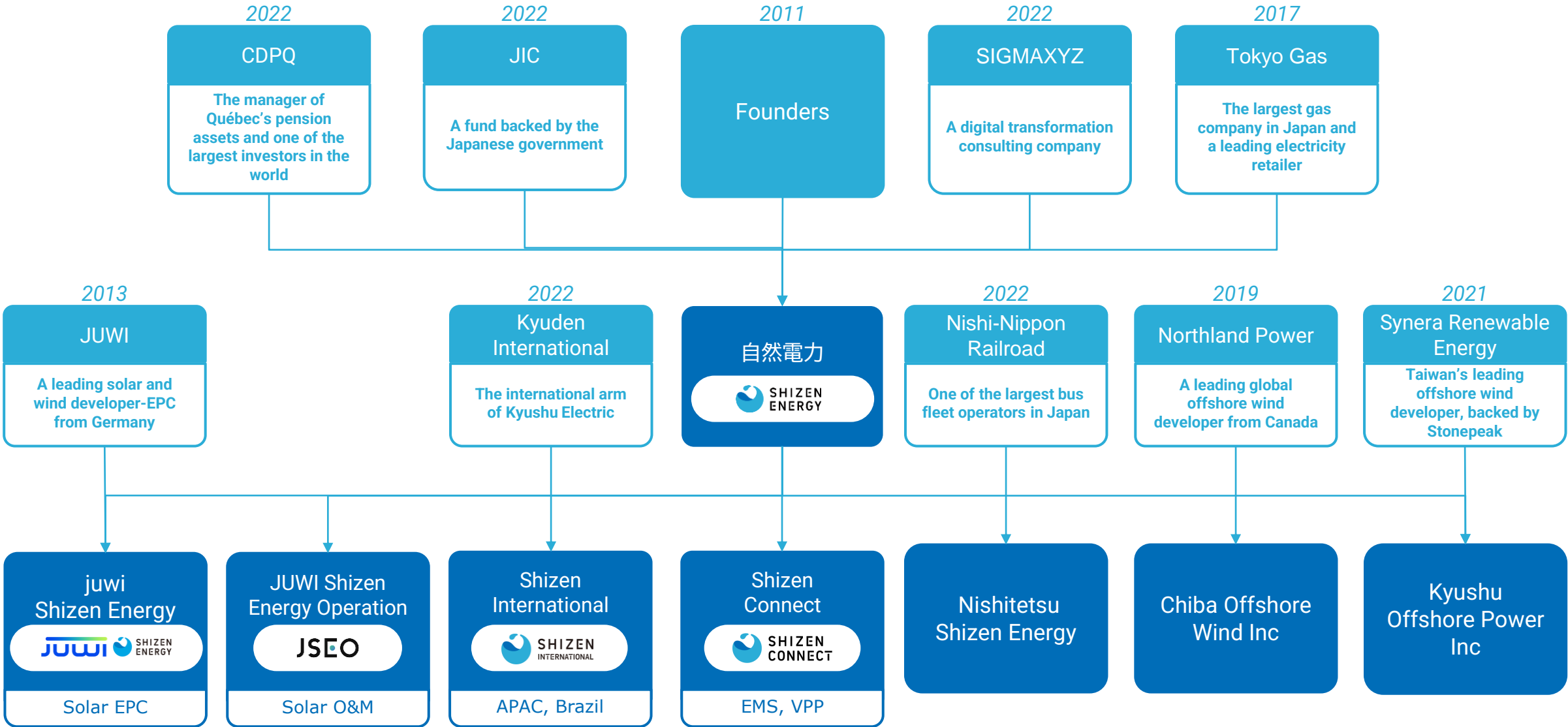
Power plant Construction

JUWI **SHIZEN ENERGY**

EPC of renewable energy power plants (engineering/procurement/construction)

Shizen Energy Group offers regional development expertise based on our experience in developing diverse power sources, including solar, wind, hydro, and biomass power, as well as technical expertise in O&M. With our self-developed digital technologies, we offer an integrated service from planning to implementation of comprehensive solutions tailored to the needs of our customers. We also offer corporate PPA and supply/demand management services to corporate clients.

Shizen Energy Group Corporate Structure







Global Achievements and Pipelines

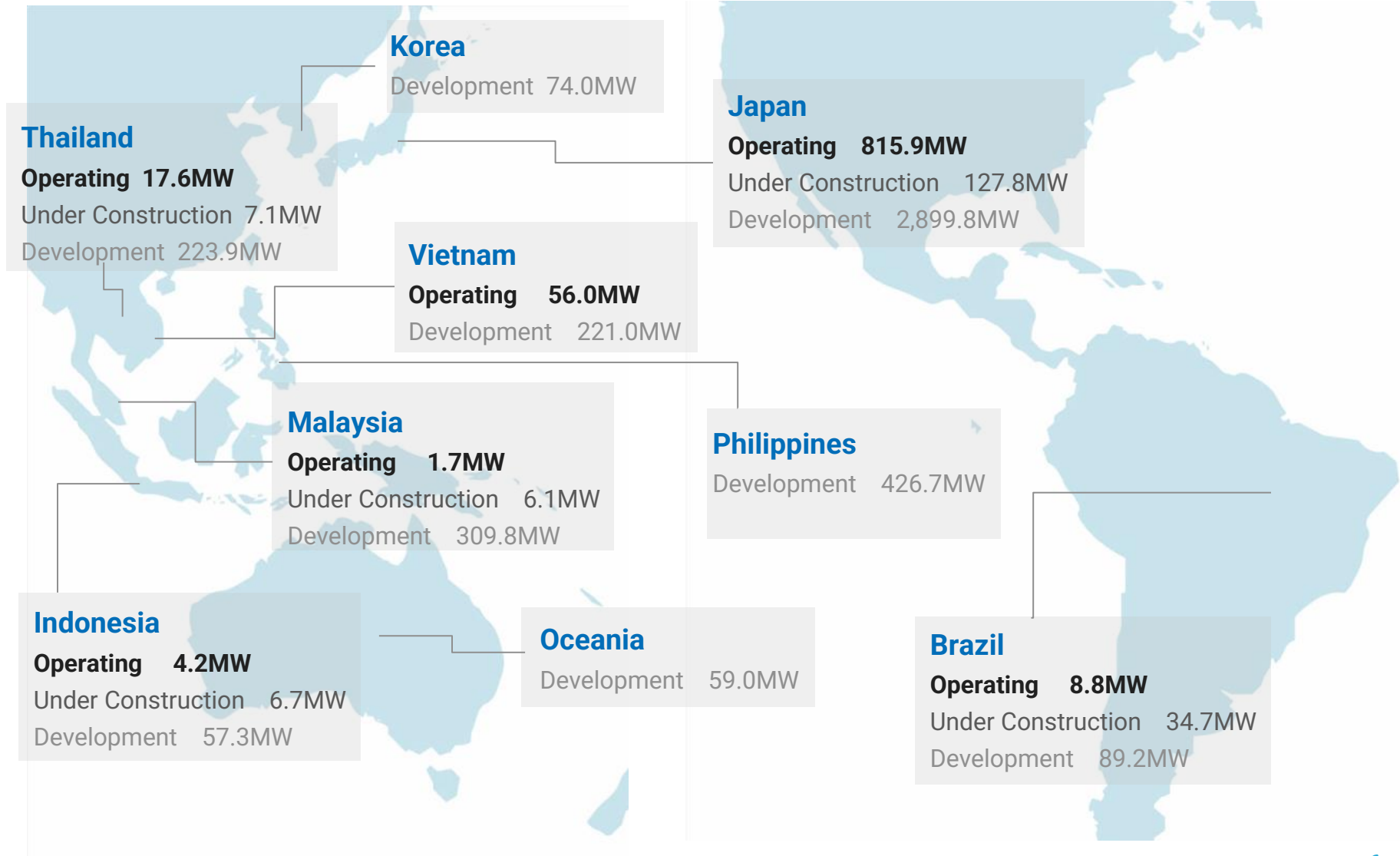
Group total Development

(As of June, 2023)

1,263.3 MW

Operating	904.3 MW
Under Construction	182.3 MW
Advanced Development	176.7 MW
Early Development	4,183.9 MW

 Solar	1,175.2 MW
 Wind	82.0 MW
 Small Hydro	0.2 MW
 Biomass	2.0 MW



International Business Development and Recent Achievements



Philippines, Korea, Taiwan, Oceania

In total, there are more than 600 MW in the pipeline.

In the Philippines, Shizen International and the Ganubis Renewable Energy consortium have agreed in 2023/3 to jointly develop the country's largest onshore wind farm of 96 MW.

In Korea, Inmark, DOHWA, and Shizen International agreed in 2023/5 to form a joint venture to develop renewable energy projects.



Vietnam - Wind power generation business started operation in 2020/03 and solar power generation business in 2020/12, together with Halcom Vietnam JSC.



Thailand -Corporate PPA with a major auto parts manufacturer in 2020/10 together with Constant Energy; an expansion agreement was also signed in 2021/11. PPA also signed with other Japanese companies. Started cooperation with Sena Solar in 2023/3. As of 2023/7, about 150 projects are underway including construction finished ones.



Brazil - Agreed in 2022/04 to build 17 power plants in Brazil within 2022, together with Faszol Energias Renováveis (FazSol) .We also provide electricity to the Banco do Brasil.



Indonesia -Many projects are in progress with Alam Nix Renewables. The project has been selected for the Joint Crediting Mechanism (JCM) financial support project. Although PPA contracts were mainly with local firms, in recent years the number of contracts with Japanese companies has been increasing.



Malaysia - Member of Malaysian Photovoltaic Industry Association (MPIA). PPA contract signed with Top Glove in 2021/12. PPA contracts with Japanese companies are also increasing.



Business Case in ASEAN

An aerial photograph of a large industrial facility, likely a factory or warehouse, with a vast roof covered in solar panels. The building is light-colored with several long, rectangular sections. To the left, there are some smaller structures and utility equipment. The surrounding area includes green fields and a dirt road.

Aisin Group Automobile Parts Project

- Location: Prachin Buri, Thailand
- Generation capacity (DC): Approx. 1MW
- Start of operation: February 2020

Business Case in ASEAN



APL Electronic Equipment Project

- Location: XXX, Indonesia
- Generation capacity (DC): Approx. 0.8MW
- Start of operation: xxxx

Business Case in ASEAN



Hau Giang Solar Project

- Location: Hau Giang Province, Vietnam
- Generation capacity (DC): Approx. 35MW
- Start of operation: December 2020

Business Case in ASEAN


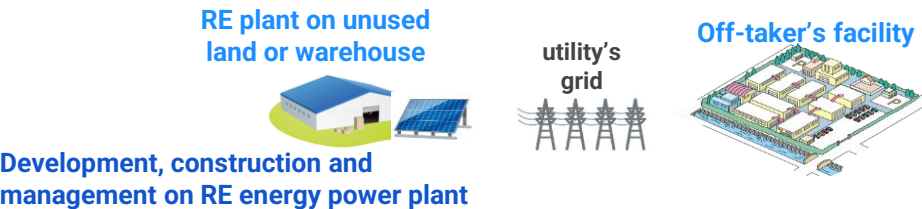



Phuong Mai 3 Wind Project

- Location: Hau Giang Province, Vietnam
- Generation capacity (DC): Approx. 21MW
- Start of operation: February 2020

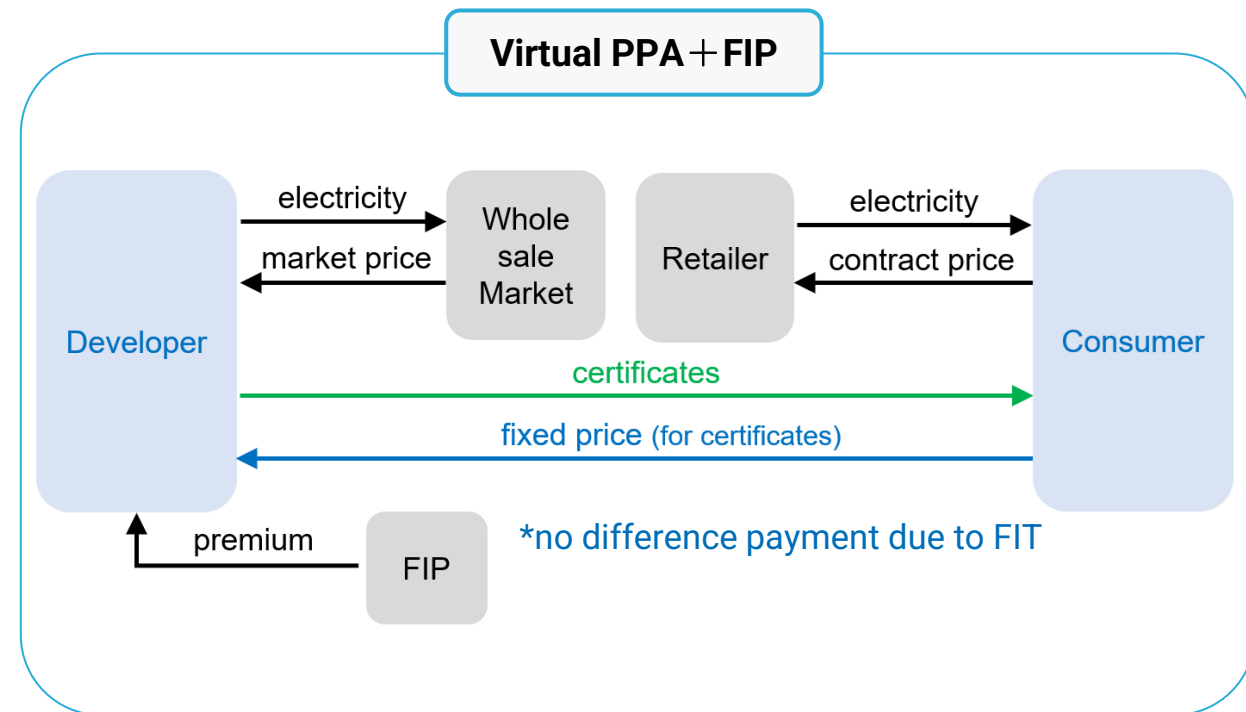
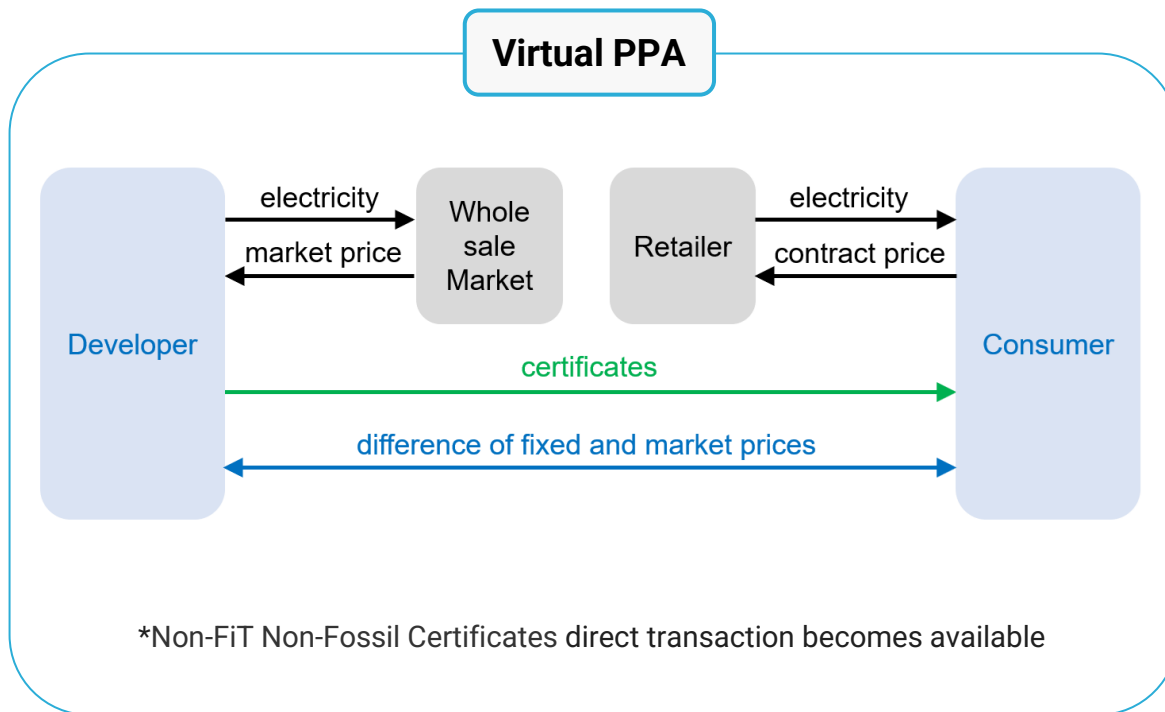
PPA/Renewable Energy Certificates

We help corporate and municipal customers secure "carbon-neutral" power, by providing renewable energy power source installation, storage battery installation, and optimal supply-demand management using digital technology.

		options for "decarbonization solutions"	initial cost	maintenance cost	electricity/enviromental attribute cost	Image chart
1	on-site PPA*	Self-investment by the offtaker	payment by owner	payment by owner	free	<p>Solar panels are installed on-site (e.g. roof-top), and are connect with private lines for direct use (self-consumption)</p> 
		CPPA (investment by Shizen)	Shizen Energy	Shizen Energy	payment to Shizen Energy	
2	off-site PPA*	Self-investment by an offtaker	payment by owner	payment by owner	free	<p>Renewable energy plant is installed away from the off-taker's facility, and electricity generated from the plant is transmitted through the utility's grid</p> 
		CPPA (investment by Shizen)	Shizen Energy	Shizen Energy	payment to Shizen Energy	
3		Renewable Energy Certificates Purchase	-	-	payment by owner	<p>Japan Electric Power eXchange</p>  <p>Tokyo Stock Exchange Carbon Credit Market</p>

Adapting to Increasingly Diverse forms of Transactions

The increasing demand for renewable energy procurement by corporate PPAs has led to continued expansion of schemes. Shizen Energy offers flexible service design for complex electricity markets.



Source: Renewable Energy Institute *Corporate PPA Latest Trends in Japan 2022*

Recent Project in Japan

Inuyama Project

- ▶ Shizen Energy has signed a 20-year virtual PPA with Microsoft for a solar project in Inuyama City, Aichi Prefecture.
- ▶ This is Microsoft's first PPA in Japan and the largest single asset solar power plant contracted under a corporate PPA in Japan to reach financial close
- ▶ The project has been financed by Societe Generale.



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