



The Jakarta Japan Club

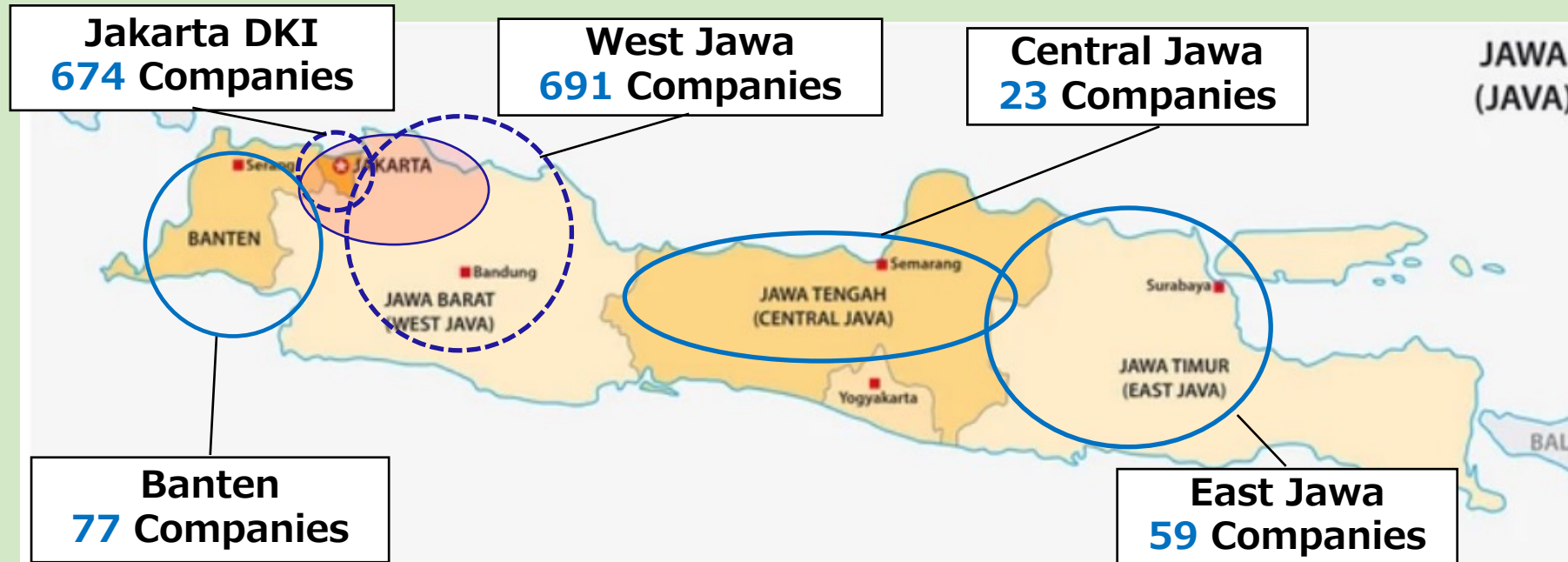


Contribution Towards Net Zero Indonesia

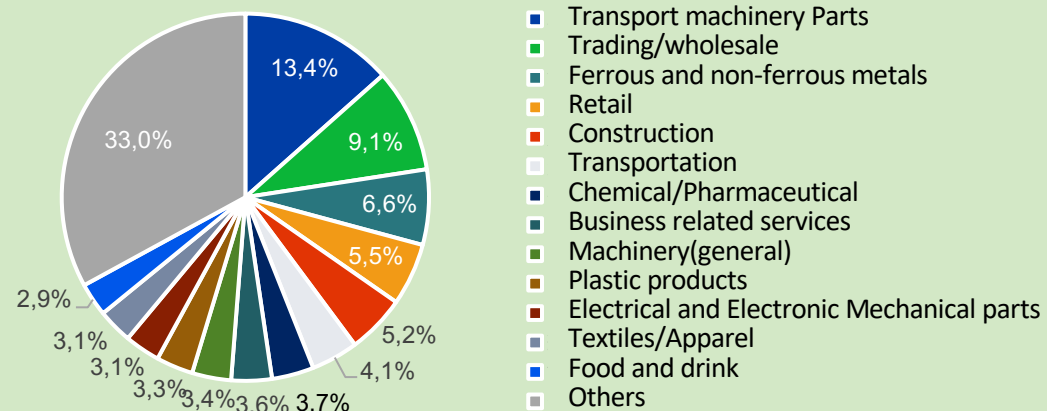
by Japanese Companies

Japanese companies in Indonesia

JETRO Survey in Japanese Companies (August, 2022) : **1,569 companies**
 ref. JJC (Jakarta Japan Club) member: 701 companies (as of 2022)



Numbers of Companies by Sectors

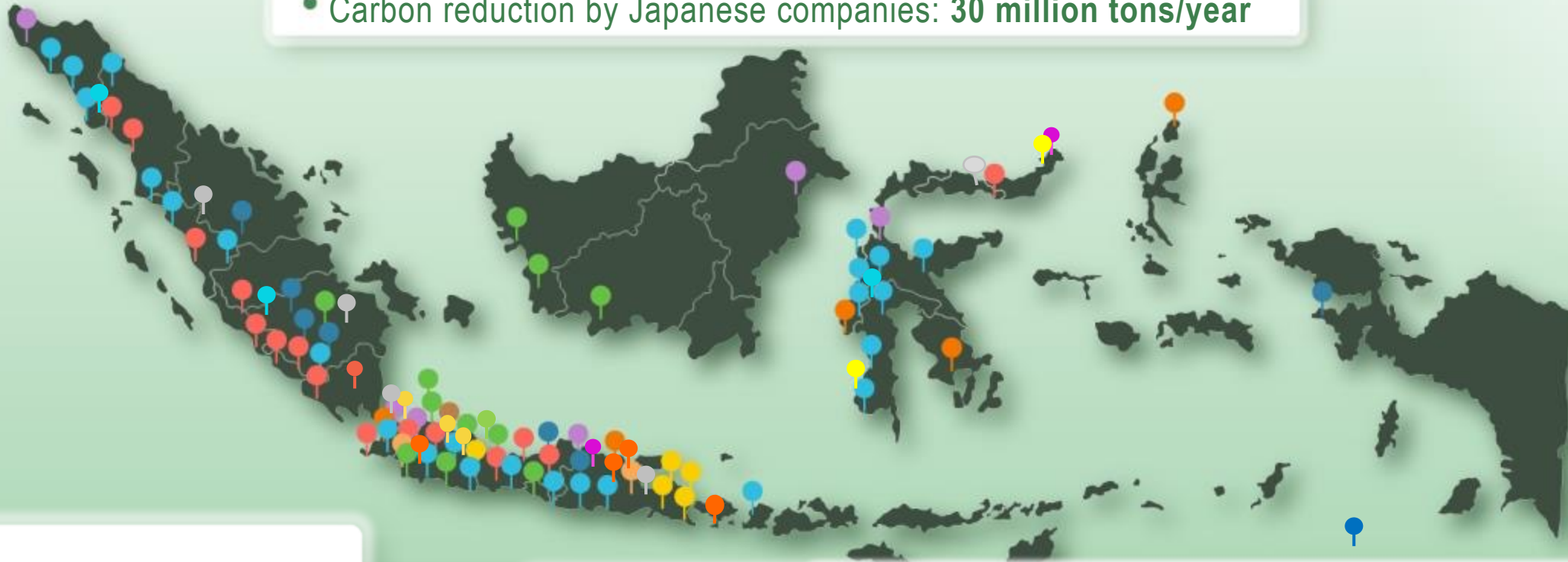


Directory of Decarbonization Efforts by Japanese Companies



Map of Decarbonization Efforts by Japanese Companies (May 2023)

- 552 projects by 208 Japanese companies
- Carbon reduction by Japanese companies: 30 million tons/year

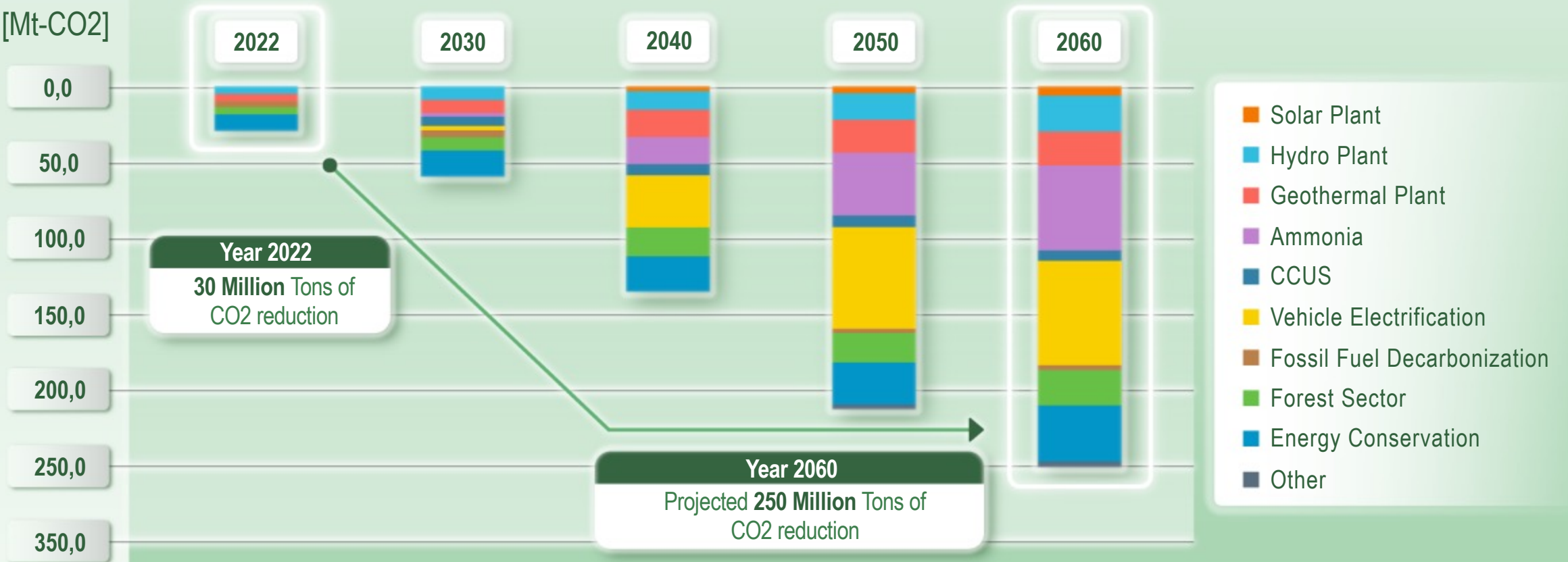


Map of Jakarta and its surroundings

- | | | | |
|-------------------------------------|--|---|---------------|
| Solar Power Plant (Under Operation) | Geothermal Plant | Vehicle Electrification & Battery Storage | Forest Sector |
| Solar Power Plant (Considering) | Ammonia/hydrogen | Fossil Fuel Decarbonization | Forest Sector |
| Hydropower Plant | Carbon Capture, Utilization & Storage (CCUS) | | |

Carbon Emission Reduction by Japanese Companies in Indonesia (Projected amount by various sectors)

CO2 emission reduction
[Mt-CO2]



As seen on "Quantitative Research on Contributions Toward Decarbonization by Japanese Companies in Indonesia"
By Abeam Consulting

CO2 reduction effort by Japanese companies (30 million tons of CO2)

17% of Jakarta's total CO2 emission



200 million tons
Total CO2 emission of **DKI Jakarta**
(2022)

5% of Indonesia's total CO2 emission



CO2 emission of
DKI Jakarta

600 million tons
Total CO2 emission of **Indonesia**
(2022)

50% of Tokyo's total CO2 emission



70 million tons
Total CO2 emission of **Tokyo**
(2022)

**“Business Catalog” for
Decarbonization Realization
in Indonesia**

“Business Catalog” by Japanese Companies for Decarbonization Realization in Indonesia

Edition 4 (April 2023)

BaaS

-Battery as a Service-

PT. Santomo Resources Indonesia

Product and service outline

- While working on electric motorbike batteries using BaaS (Battery as a Service) business, we are also contributing to the realization of Indonesia's decarbonization and ecosystem construction. At the present time we are conducting electrical motorbike sale and battery replacement station service for the motorbike, and also offering services related to all of these.
- Electric motorbike being sold at present has 60 km maximum travel distance with 1.500 W power. Roughly it has the same running performance as an 80cc engine displacement gasoline motorbike. The most special feature is the battery can be switched, so it doesn't necessary to charge it at home or charge it at the charging station. The battery usually needs a charging time of around 4 to 6 hours, but this service offers a battery switch within seconds, which is realizing waiting time solution for the user's charging challenges. Users will use an exclusive application, so they can see the motorbike's condition and the nearest battery switch station.
- At the present, electric power for the battery switch station has been supplied by PLN, but by using a renewable energy source's supply which has been considered to have more contribution to carbon neutral. And for now, the battery is only used for electric motorbikes, but function expansion to use it for other household appliances has been considered and hereafter there is a plan to carry out a verification experiment.

Actual result and example

- On February 17th, 2022 there was an MOU signing with PT Swap Energi Indonesia. As the same company's partner which has managed a monopoly on BaaS business in the eastern Indonesia area. At the present it is running 7 battery switch stations in Makassar city, Sulawesi island. Based on the cooperation with PLN, 6 stations were established in the PLN offices within Makassar city.
- On March 18th of the same year there was an MOU signing with PT Goto Gojek Tokopedia, which then setting for a goal to make all two-wheeled vehicles owned by Gojek drivers within the same mentioned area to be electrical in 2030. At the present, there are 20 units of electric motorbikes being used by Gojek driver.
- Travel distance, unprepared charging infrastructure, and unit price problems can be seen as the obstacles to the electric motorbike popularization, but in this project, the aforementioned problem had been settled and ready for the challenge to improve the user-friendliness. The travel distance and charging infrastructure problem had been settled by using the battery switch type electric motorbike and the battery switch station's establishment and expansion, and the unit price problem had been settled by selling the electric motorbike at the same price as low engine displacement model's gasoline motorbike. According to some drivers' opinions, they believe that it is lower compared to gasoline motorbike fuel price and maintenance cost.
- At the present, we are analyzing the running performance and battery switch data, carrying out a user interview, and improving service and battery switch station's places.

Contact point

—Phone number: [Redacted]
 —E-mail address: [Redacted]


English


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Langkah-langkah dekarbonisasi yang dapat segera dimulai

Penyewaan Tenaga Surya

PT. ATW Alam Hijau





Produk & Layanan

Penyewaan tenaga surya terutama untuk pengguna industri seperti pabrik yang tidak perlu menanggung sendiri biaya pemasangan sistem. Pengguna akan memperoleh tenaga hijau dalam jangka panjang tanpa investasi awal. Ini adalah "model sewa", dan kami akan melakukan operasi dan pemeliharaan selama masa kontrak ini, selain berkontribusi untuk dekarbonisasi, juga berkontribusi diperkirakan akan meningkat di masa depan.

- Dalam desain dan konstruksi, kami melakukan kontrol kualitas untuk kontraktor lokal, dan juga menanggapi standar teknis yang jelas dari kantor pelanggan, sehingga Anda dapat menyerahkan pekerjaan kepada kami dengan tenang.
- Selain itu, solusi komprehensif meliputi penerapan Joint Crediting Mechanism (JCM) Kementerian Lingkungan Hidup (Jepang), peningkatan ketahanan dengan memperkenalkan baterai penyimpanan dan penggunaan energi terbarukan 100% dengan memberikan sertifikat I-REC

Pencapaian & Hasil

PT ATW Alam Hijau memiliki rekam jejak pemasangan fasilitas PLTS di Jawa Barat, Jawa Timur, Bali, dan Batam

<Hasil Penyelesaian>

1.22 MWp	Jawa Barat	Pabrik Farmasi
0.46 MWp	Jawa Barat	Pabrik Farmasi
1.20 MWp	Jawa Timur	Pabrik Pengolahan Kayu
0.54 MWp	Jawa Timur	Pabrik Pengolahan Kayu
0.47 MWp	Bali	Dealer Mobil (beberapa lokasi)
0.36 MWp	Bali	Dealer Mobil (beberapa lokasi)
0.31 MWp	Jawa Timur	Pabrik Pipa Baja
0.66 MWp	Jawa Timur	Pabrik Pipa Baja
0.22 MWp	Jawa Barat	PLTU
0.61 MWp	Jawa Barat	Pusat Distribusi Farmasi

<Dijadwalkan untuk diperkenalkan (per Juli 2022) >

Pembuat kertas, pembuat kebutuhan sehari-hari, pembuat kemasan (semua di Jawa Barat)

Total 37 items

Indonesian

13



Indonesian



English



Japanese

Available from JETRO Website

“Business Catalog” Edition 4 (April 2023)

1. Renewable

9 items



5. Energy Conservation

8 items



2. Biomass

4 items



6. Digital technology

4 items



3. Decarbonization of Fossil Fuels, CCUS

4 items



7. Effective use of resources

2 item



4. EVs/Battery

2 items



8. Finance/Insurance

4 items



Further Works/ Policy Recommendations

Actions Taken by JJC/JETRO

- Socialization of Japanese Products/Services
- Business Matching on energy sector
 - Biomass such as PKS, woodchip
 - Energy Management Consultants for SMEs in Indonesia
- Cooperation with GoI, ASEAN Institutions, Indonesian Industry

Thank you