



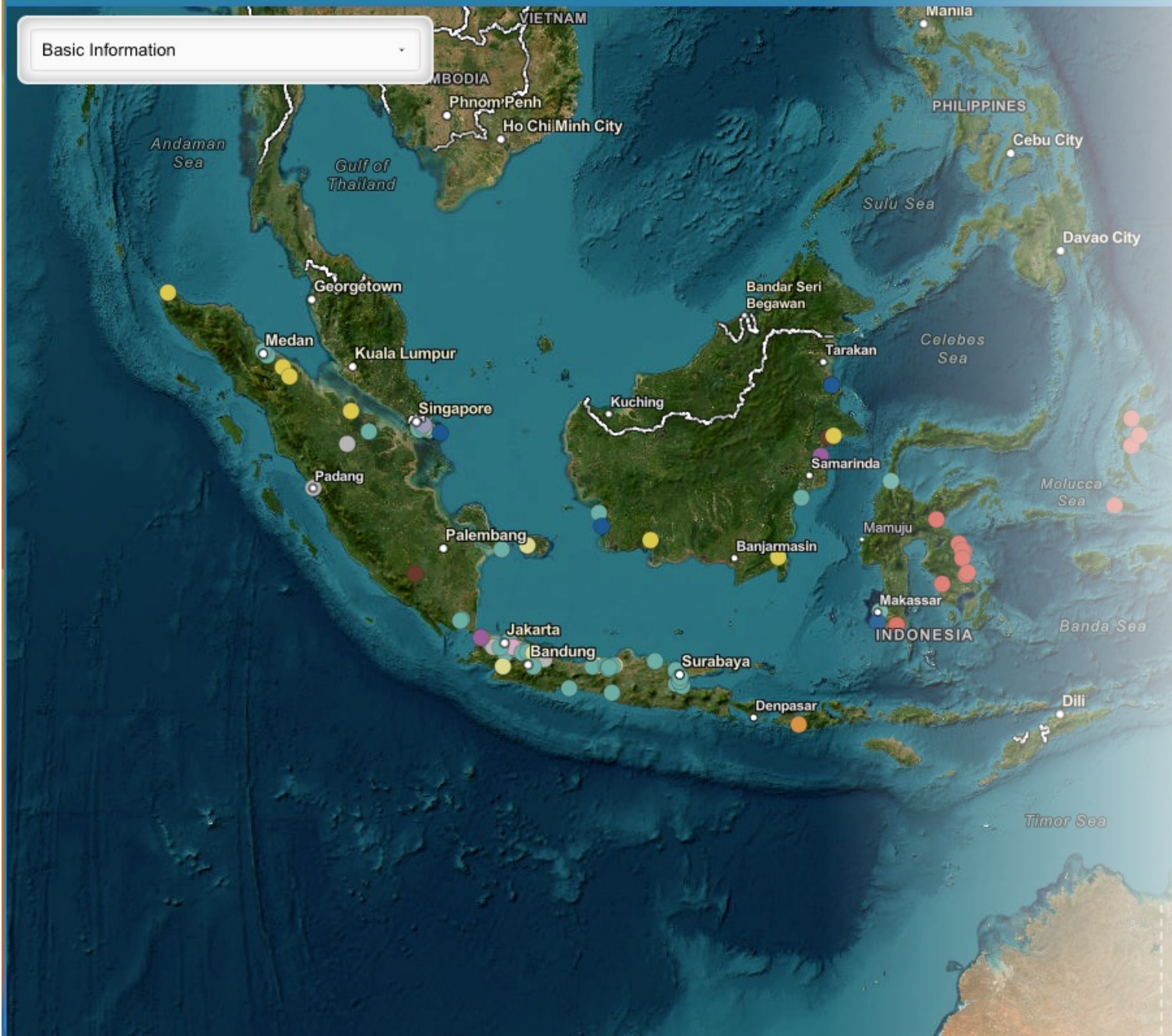
SCHOOL OF
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Center for Global Sustainability
Analytics for Ambition | Collective Action

Sustainable Industrial Development in Indonesia: Challenges and Opportunities in Industrial Parks

4 June 2024

Basic Information

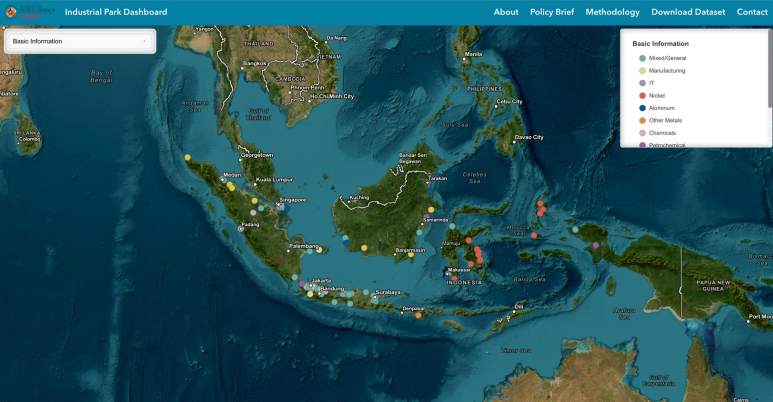


Industrial Park Database Launch

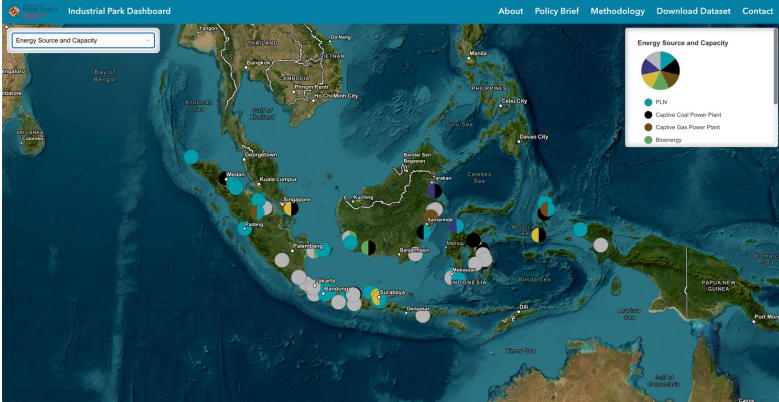
- cgsindustrialparks.org
- One and half year efforts of data collection and validation
- 140 industrial parks in the database up to now
- Downloadable CSV files for the research community
- Six layers of display

Six layers to cover all the important elements

Basic Information



Energy Source and Capacity



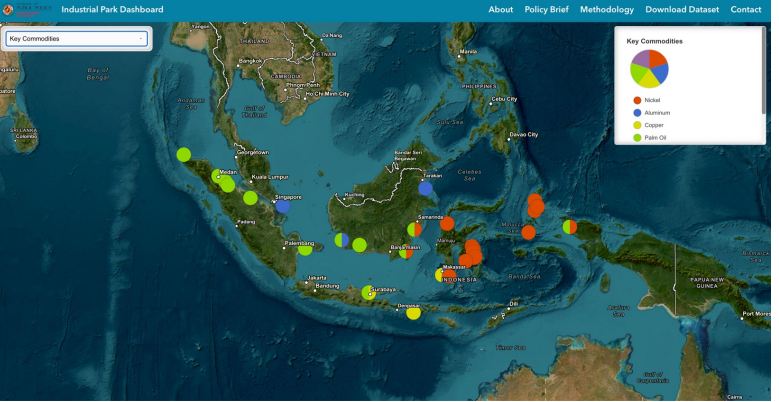
Status



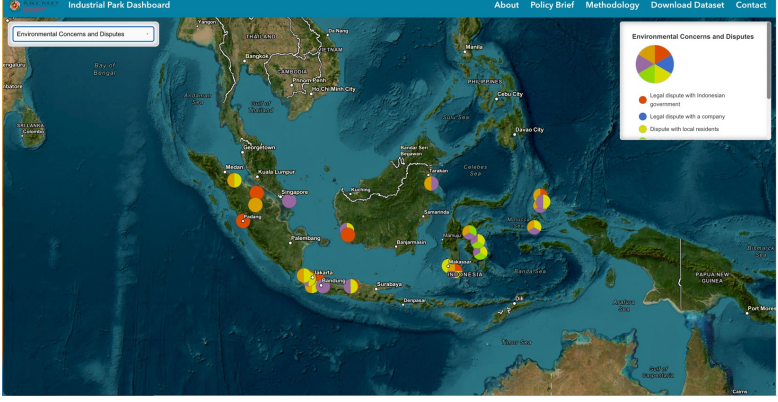
Foreign Company Involvement



Key Commodities



Environmental Concerns and Disputes



Energy Source and Capacity

Electricity Capacity Notes

2840 MW power from captive coal power plants (as verified by GEM), in addition to 200 MWp from solar power; current total 3040.

(Global Energy Monitor, 2024, gem.wiki): Total of 2840 MW operating between Sulawesi Mining Power Station and Sulawesi Labota Power Station

Sulawesi Mining Power station: "Sulawesi Mining power station is an operating power station of at least 2080-megawatts (MW) in Morowali, Morowali Regency, Central Sulawesi, Indonesia."

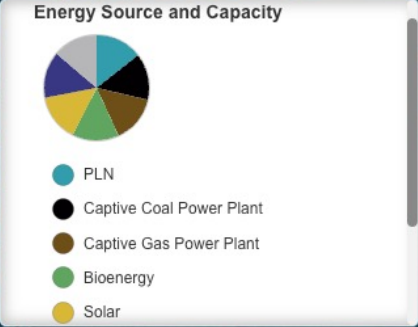
Sulawesi Labota Power Station: "Sulawesi Labota power station is an operating power station of at least 380-megawatts (MW) in Bahodopi, Morowali, Morowali Regency, Central Sulawesi, Indonesia with multiple units, some of which are not currently

Filtered_Energy_Industrial_Parks1: Indonesia Morowali Industrial Park (IMIP)

Zoom to

Industrial Park Name	Indonesia Morowali Industrial Park (IMIP)
PLN	0
Captive Coal Power Plant	1
Captive Gas Power Plant	0
Bioenergy	0

1 of 2



- ### Sources
- https://en.wikipedia.org/wiki/Morowali_Inc_15
 - https://www.gem.wiki/Sulawesi_Mining_p
 - https://www.gem.wiki/Sulawesi_Labota_p
 - <https://www.nickeImagazine.com/2022/04/industrial-area.html?m=1>
 - <https://www.rosalux.de/fileadmin/Images/>
 - <https://www.rosalux.de/en/publikation/id/4>

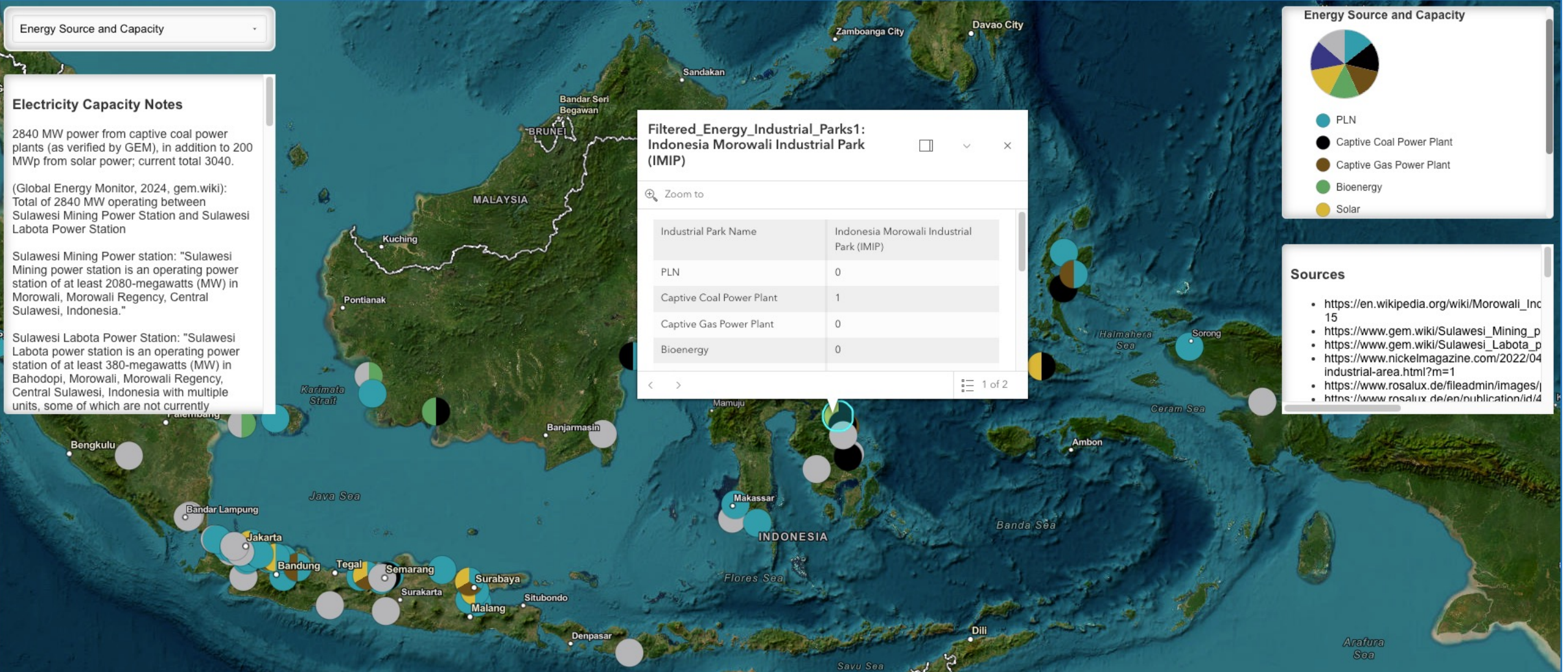
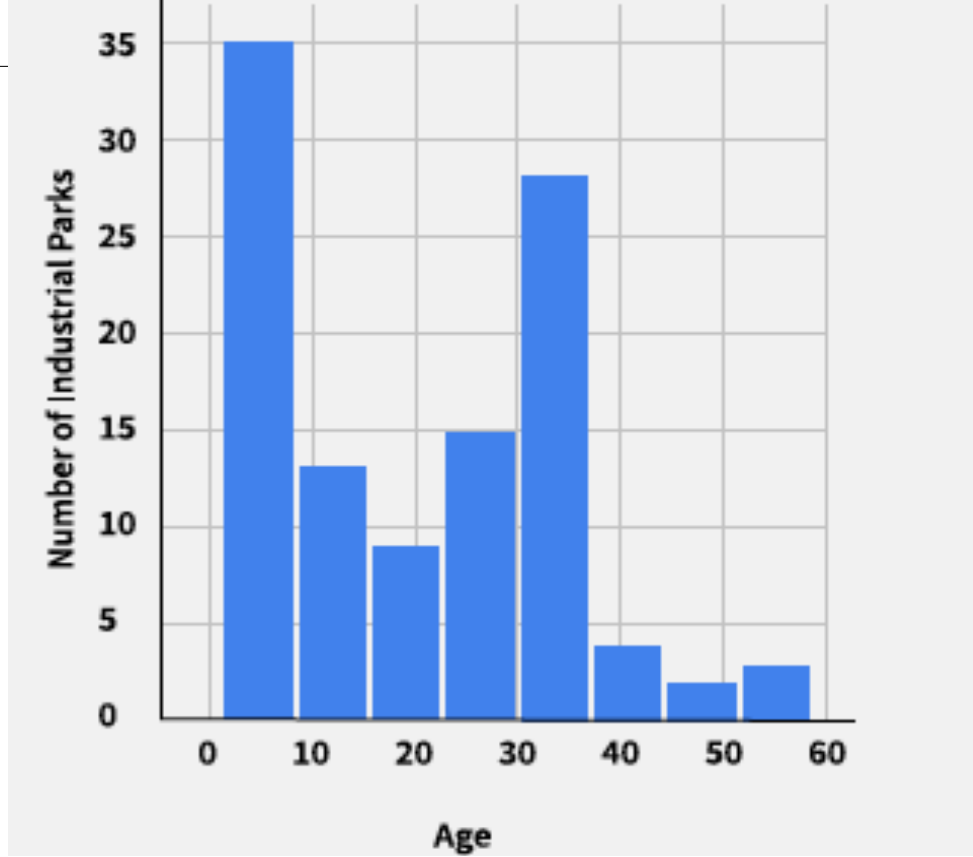
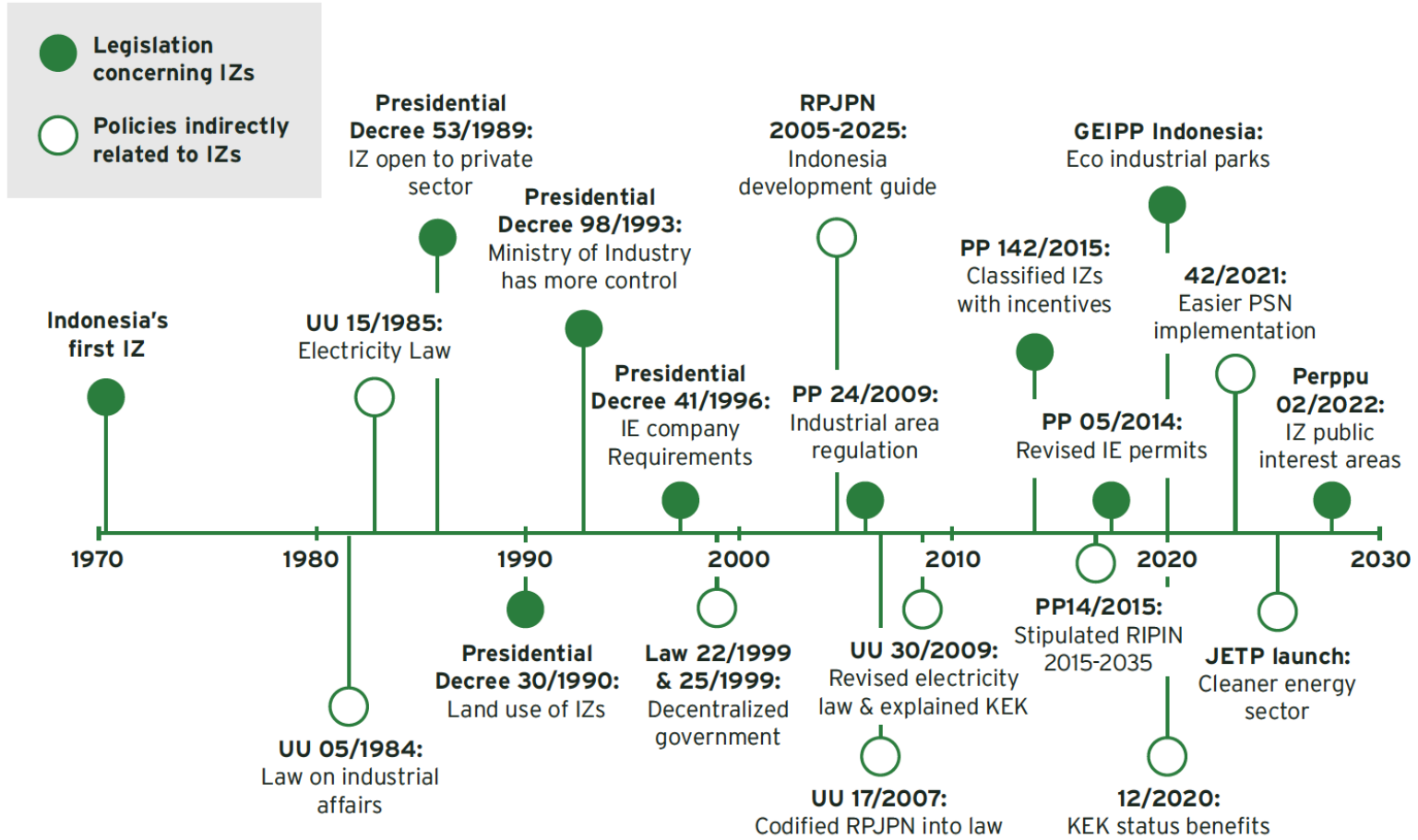
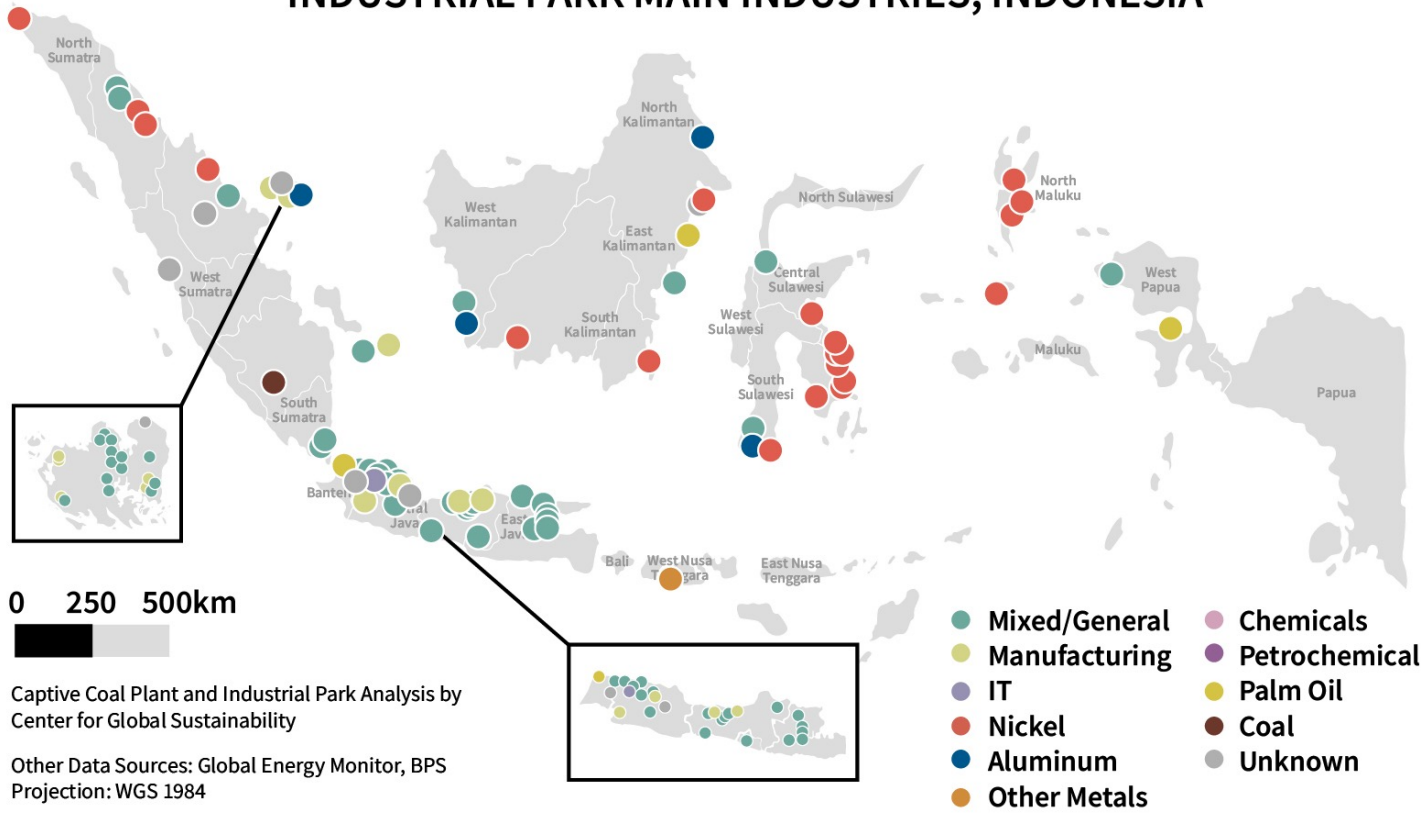


Figure 1. Timeline of the evolution of the Industrial park related policies.



Overview of Industrial parks

INDUSTRIAL PARK MAIN INDUSTRIES, INDONESIA

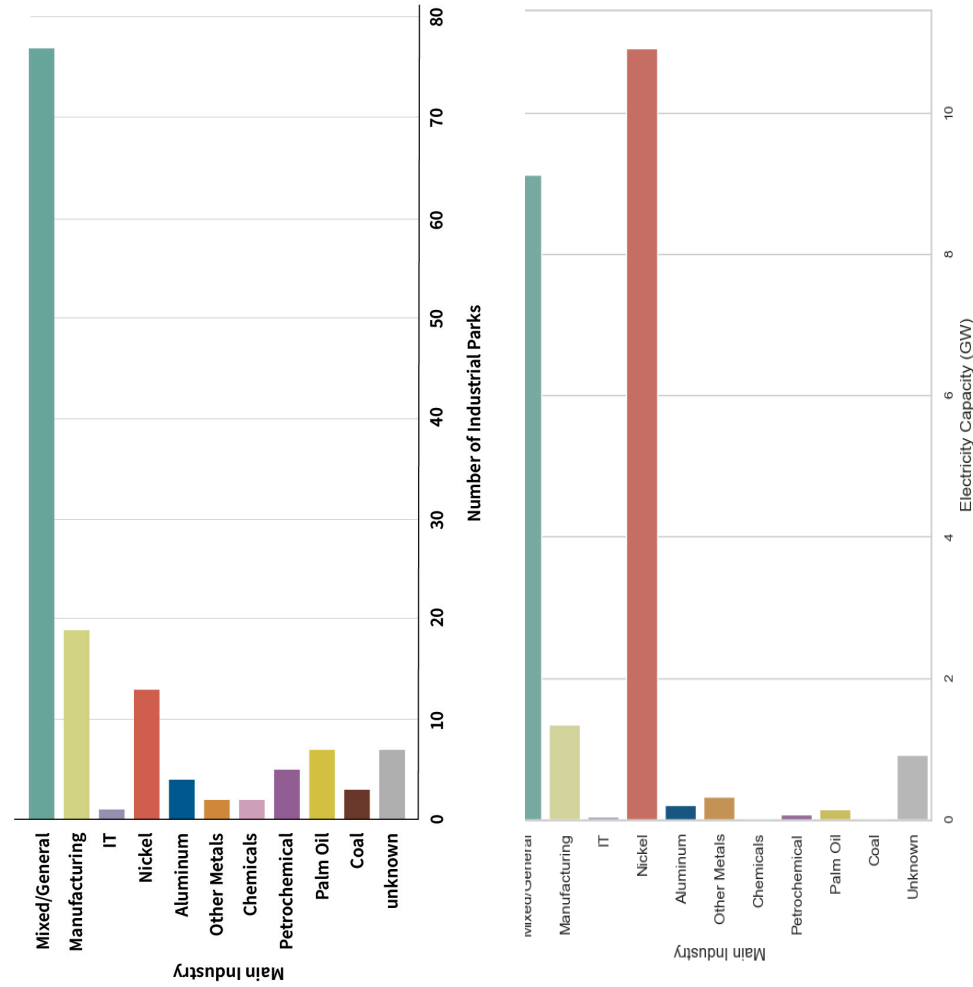


0 250 500km

Captive Coal Plant and Industrial Park Analysis by Center for Global Sustainability

Other Data Sources: Global Energy Monitor, BPS
Projection: WGS 1984

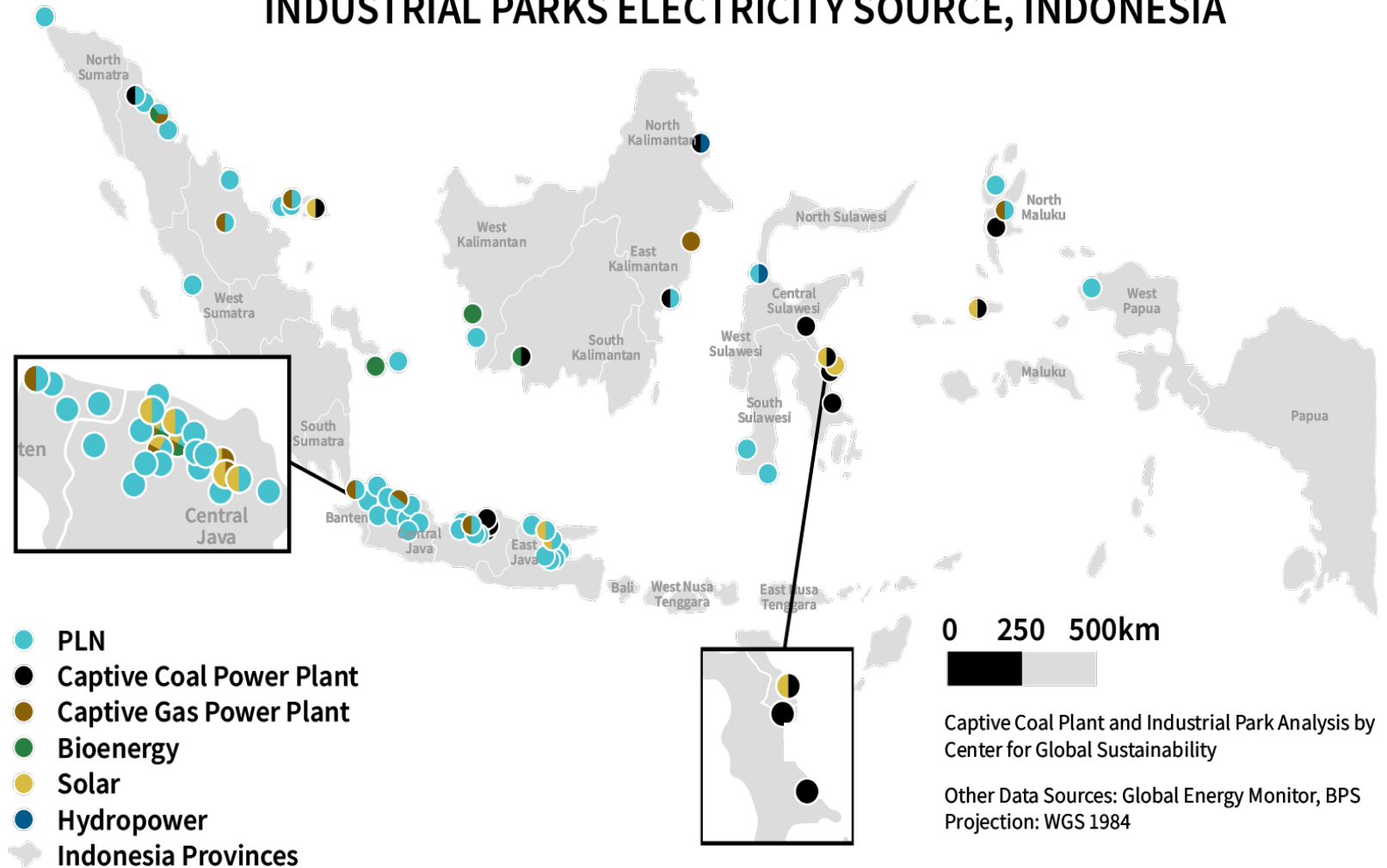
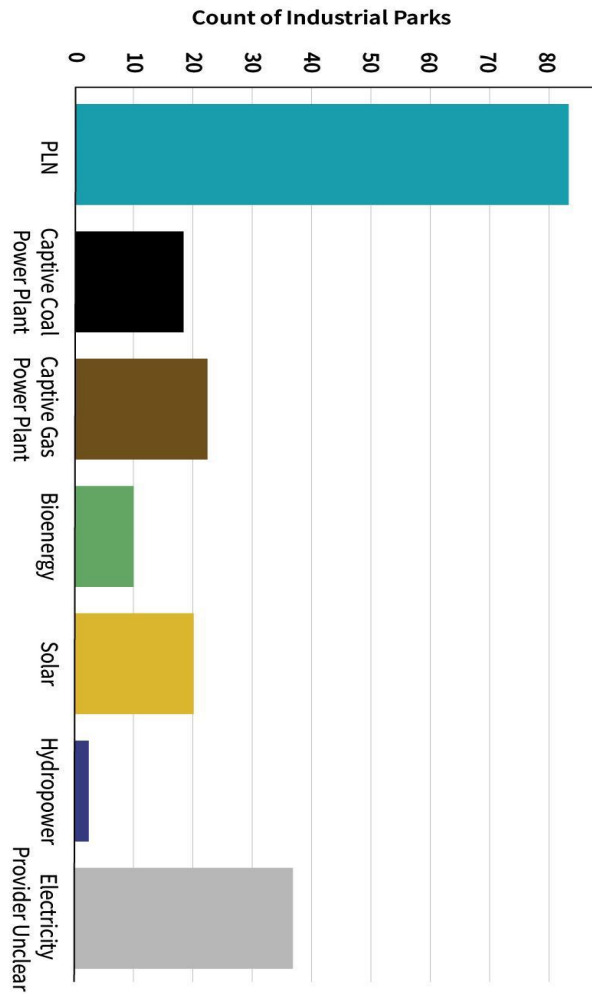
MAIN INDUSTRIES OF INDUSTRIAL PARKS IN INDONESIA



The 13 industrial parks focused on nickel processing have 10.91 GW of electricity capacity, almost half of the total 23.07 GW of electricity capacity accounted for in the dataset

Based on the 79 industrial parks with reported electricity capacity, industrial parks source 6.20 GW exclusively from PLN, and 6.85 GW exclusively from captive coal

INDUSTRIAL PARKS ELECTRICITY SOURCE, INDONESIA



Captive Coal Plant and Industrial Park Analysis by Center for Global Sustainability
 Other Data Sources: Global Energy Monitor, BPS
 Projection: WGS 1984

Foreign investment

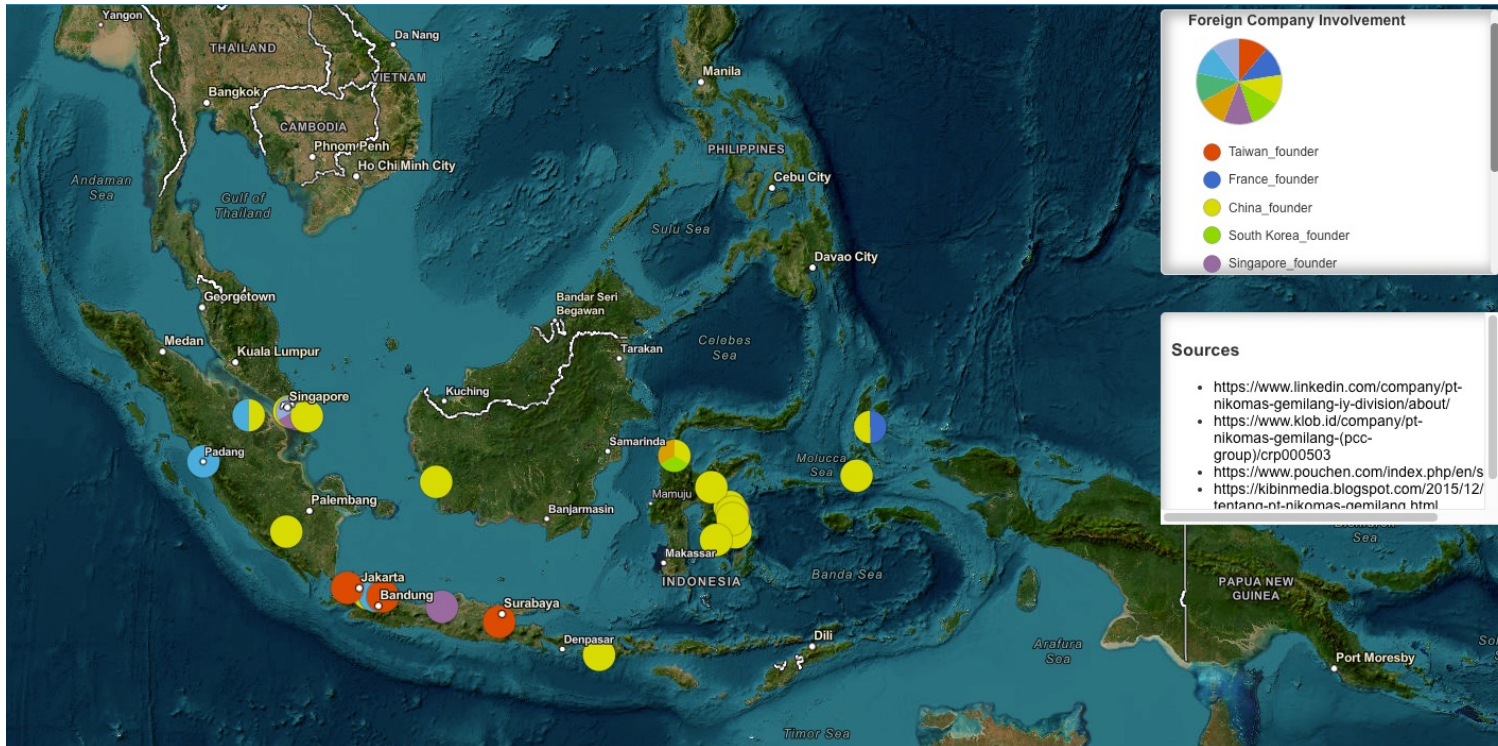


Table 3: Foreign Company Involvement as a Founder/Manager and Tenant at Industrial Parks

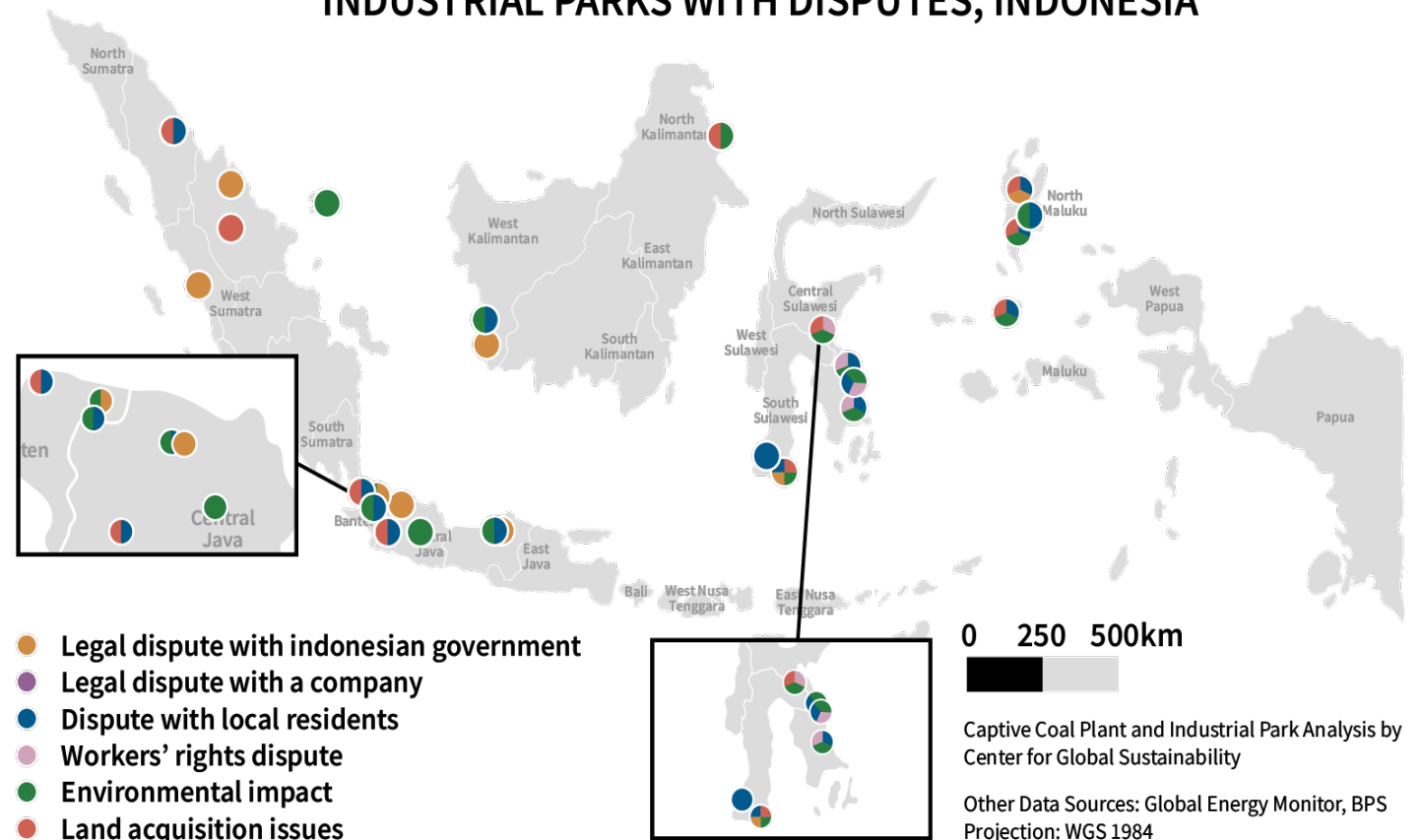
Founder Company Countries of Origin	Count of Industrial Parks	Tenant Company Countries of Origin	Count
China	17	China	11
Japan	8	Japan	9
Singapore	6	South Korea	9
Taiwan	3	Taiwan	7
Malaysia	3	United States	6
France	2	Singapore	4
South Korea	2	Netherlands	3
Canada	1	Germany	3
Germany	1	India	3

Note: "Founder Company" Countries of Origin includes all nine countries noted as founders in the dataset; "Tenant Company" Countries of Origin lists top nine tenant countries in the dataset.

- As Indonesia has prioritized downstreaming since 2014, Chinese investment has contributed to the development of a new wave of industrial parks focused on the processing of nickel, aluminum, and other key commodities
- Among the founders or managers, the most common country of origin is China, represented in 17 industrial parks, followed by Japan in eight industrial parks and Singapore at six industrial parks.
- Similarly, the most common tenant company countries of origin are China with 11 industrial parks, Japan and South Korea with nine industrial parks

The dataset also tracks the cost of quick, large-scale industrial development, documenting 18 industrial parks with negative environmental impacts, 15 instances of disputes between industrial park companies and local residents, and 10 land acquisition disputes

INDUSTRIAL PARKS WITH DISPUTES, INDONESIA



Conclusion

- The Industrial Parks dataset provides a comprehensive overview of available information on areas deemed industrial parks, industrial zones, special economic zones, or other related development sites.
- The trends within the dataset should be understood within the greater context of Indonesia's industrial policies, economic growth goals, and recent decarbonization promises.
- While some aspects of industrial park development challenge environmental and energy goals, recent trends in renewable energy use provide an opportunity to lead in industrial decarbonization.
- We hope this dataset provides a window into the many challenges and opportunities Indonesia faces in its energy transition at both a local and national scale.



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Thank you!

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