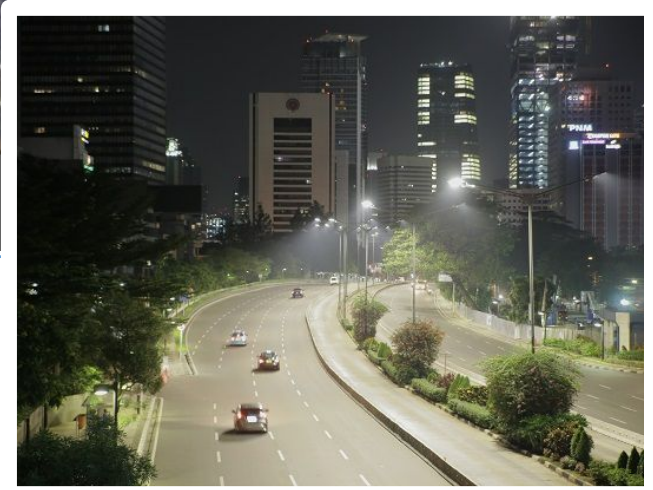


# Climate Change Finance: How Can Private Sector Investment be Mobilized?



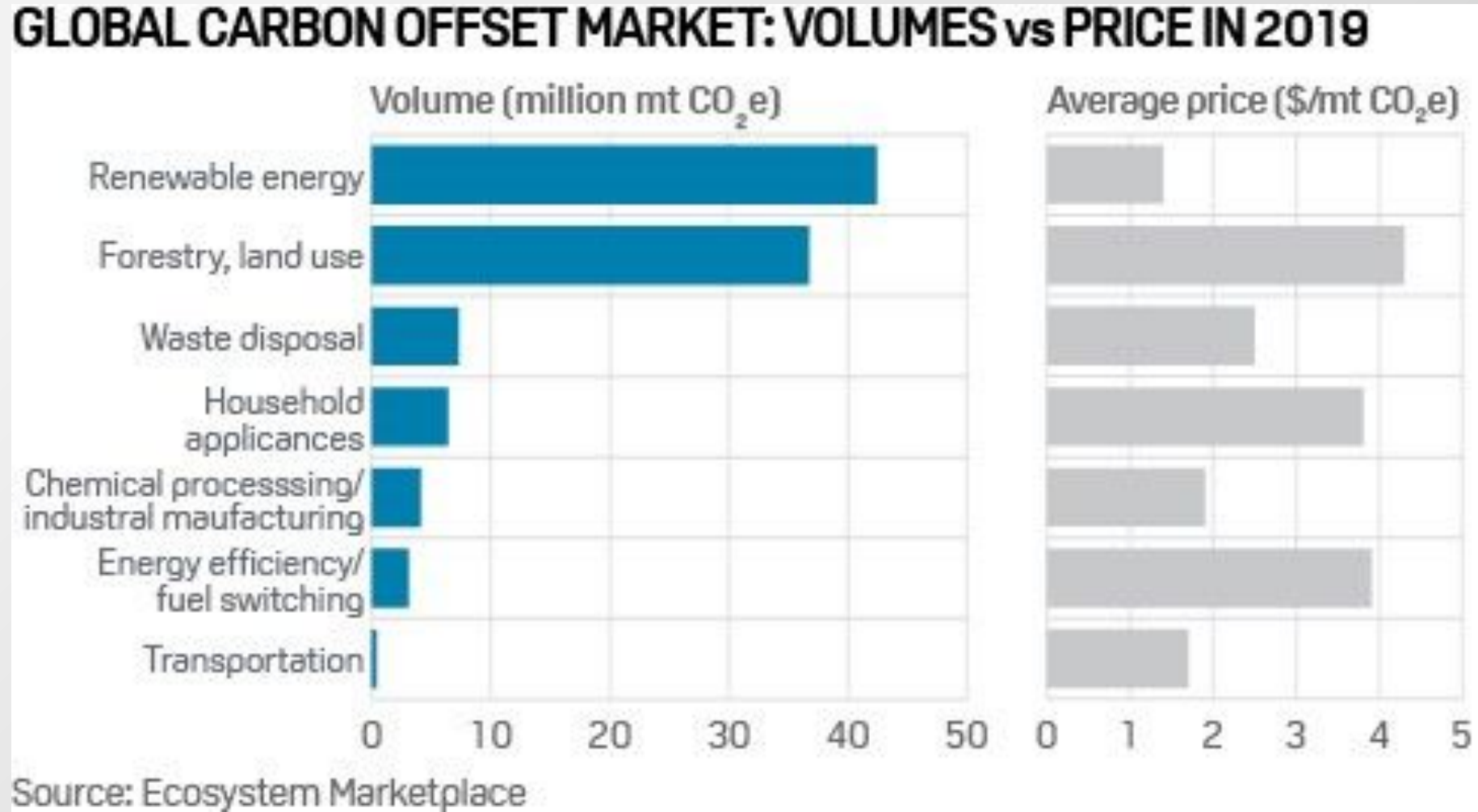
Unlocking Carbon Benefits for Clean Energy Investment in Indonesia

complex world | CLEAR SOLUTIONS™

# Contents

- Global carbon investments
- Carbon trading and pricing for energy in Indonesia
- Building a pipeline of viable projects
- Converting plans into procurements
- Conducive policy and investment climate

# Global Carbon Investments



# Opportunities for Renewable Energy

*Private equity funds that invest solely in renewable energy assets raised approximately \$52 billion in 2020.*

*Investors in private equity, like pension funds, are moving away from investing in oil and gas in pursuit of their carbon neutral goals.*

Bloomberg New Energy Finance

*“Carbon-pricing instruments will not only unleash massive investment in renewable power systems globally, but boost sectors from construction to transport, which are in urgent need of transition.”*

Günther Thallinger, Member of the Board of Management Allianz SE and Chair of the Net-Zero Asset Owner Alliance.

# Corporate Buyers of Renewable Energy

## CORPORATE RENEWABLE ENERGY BUYERS' PRINCIPLES: INCREASING ACCESS TO RENEWABLE ENERGY

**78** COMPANIES

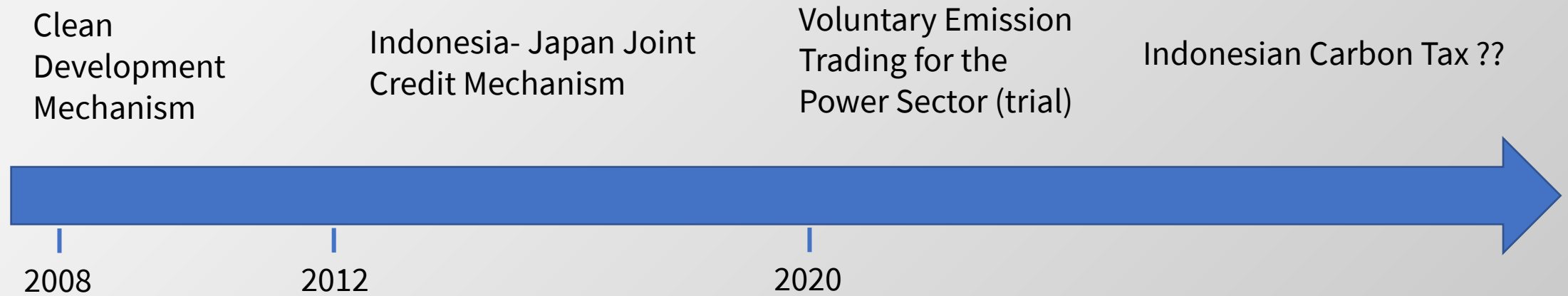
**69** MILLION MWH  
OF DEMAND FOR  
RENEWABLE ENERGY

**\$ 7.8** TRILLION IN  
MARKET CAP



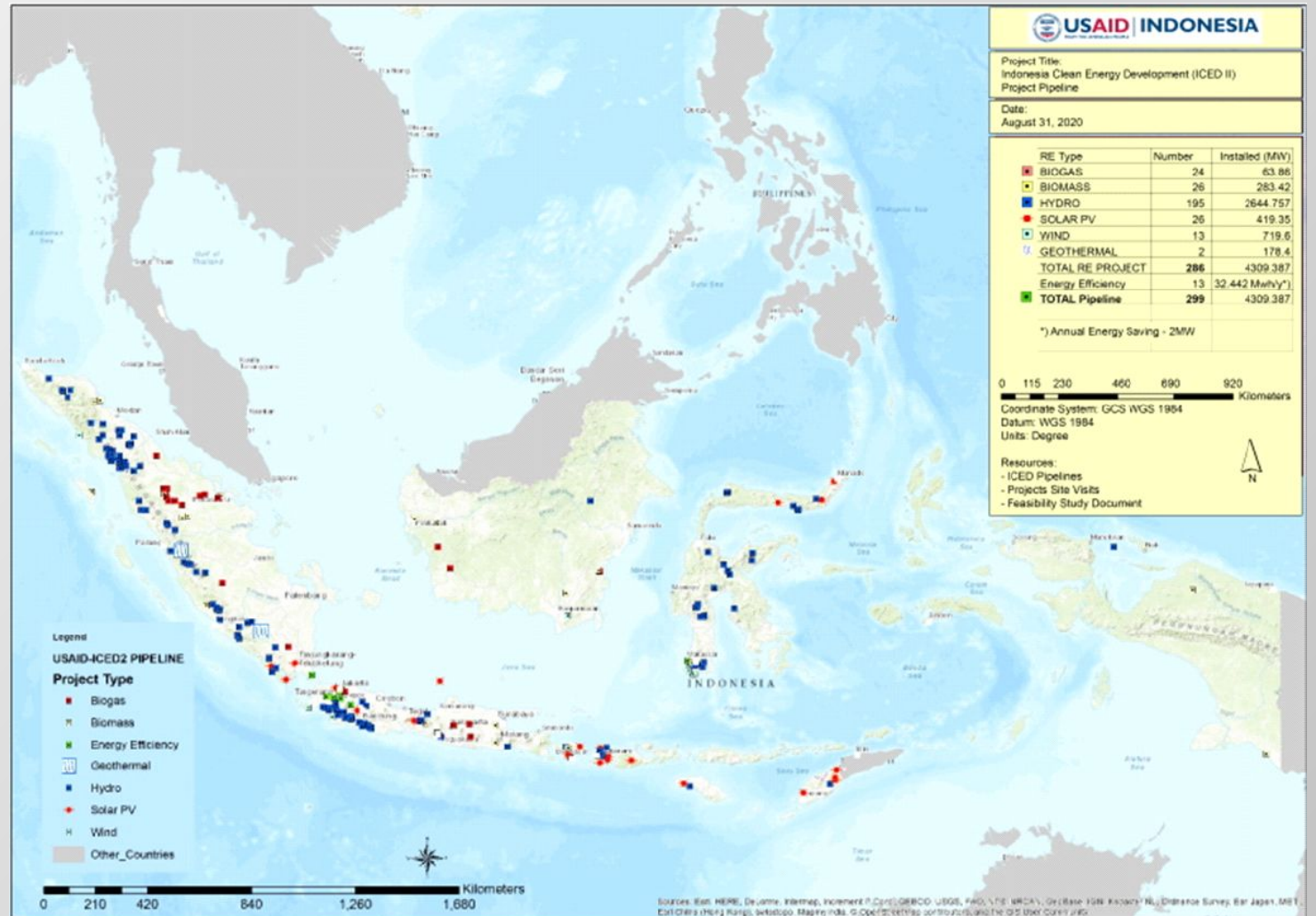
[www.buyersprinciples.org](http://www.buyersprinciples.org)

# Carbon Trading and Pricing for Energy in Indonesia



# Building a Pipeline of Viable Projects and Project Types

- Between 2015-2020, USAID ICED II reviewed 299 clean energy project with a combined design capacity of nearly 4,309 MW.
- Over \$1.6 billion mobilized, 61.3% from private international and domestic sources.
- Projects include run-of-river hydropower, geothermal, bioenergy, wind, and solar PV, as well as streetlighting and other EE projects.
- Many projects stalled due to policy changes, procurement delays, PPA terms, and financing challenges.



# Converting Plans to Procurement

- PLN Draft RUPTL call for additions of 19,900 MW of RE by 2030, 49% of total capacity additions, with 6,000 MW planned from solar PV
- PLN procurements have stalled in the face of lower demand growth and excess capacity on Java and Sumatra
- PLN Energy Transition Roadmap to achieve GOI Net Zero Emissions target will require:
  - Reductions of coal power plants
  - Significant increase of RE
  - Grid and operations improvement



# Conducive Policy and Investment Climate Needed

- An Emissions Trading Scheme will create a value of avoided emissions from renewable energy generation
- A proposed Carbon Tax will increase the cost of PLN and captive fossil fuel power plants, improving RE cost competitiveness
- Verified Renewable Energy Credits, private PPAs and power wheeling rights for commercial and industrial customers
- Cost reflective retail tariffs need by PLN to recover RE purchases and associated grid investments