



RENEWABLE ENERGY



INDUSTRIAL PARK

 **Suruhanjaya Tenaga**
Energy Commission



**PENANG DEVELOPMENT
CORPORATION**

PENANG DEVELOPMENT CORPORATION PROPOSAL FOR GREEN INDUSTRIAL PARK

The background of the slide is an aerial photograph of an industrial park. It shows numerous large industrial buildings with various roof colors (blue, white, grey) and parking lots. In the distance, there are green hills under a clear blue sky. A large white semi-circular graphic element is overlaid on the right side of the image, containing the text.

PENANG DEVELOPMENT CORPORATION

GREEN INDUSTRIAL PARK

THE KEY FEATURES



**Sustainable
Design**



**Collaboration
& Innovation**



**Renewable
Energy Use**



**Green
Mobility**



**Smart
Technology
Integration**



Green Space



**Waste
Management
System**



**Water
Management
System**



RENEWABLE ENERGY USE



Solar Photovoltaic (PV) Systems

- **Large-scale Solar Farms**
Centralized solar plants providing renewable electricity to all tenants.
- **Rooftop Solar Installations (Rooftop Solar PV):**
Maximizes space utilization and energy generation efficiency



Battery Energy Storage Systems (BESS)

- Stores surplus energy generated during peak solar periods for later use.
- Ensures continuous, reliable energy supply, balancing load and demand fluctuations.
- Improves grid stability and reduces peak demand charges.

Microgrid Infrastructure

- Independent localized power grid, capable of disconnecting from the national grid.
- Enhances resilience against grid outages or disruptions.
- Integrates renewable generation, storage, and load management within the industrial park.

EV Charging Infrastructure

- Network of strategically placed EV charging stations to facilitate sustainable transportation.
- Supports electric mobility transition, reducing overall emissions and promoting cleaner logistics operations.

SUPPORTING FEATURES

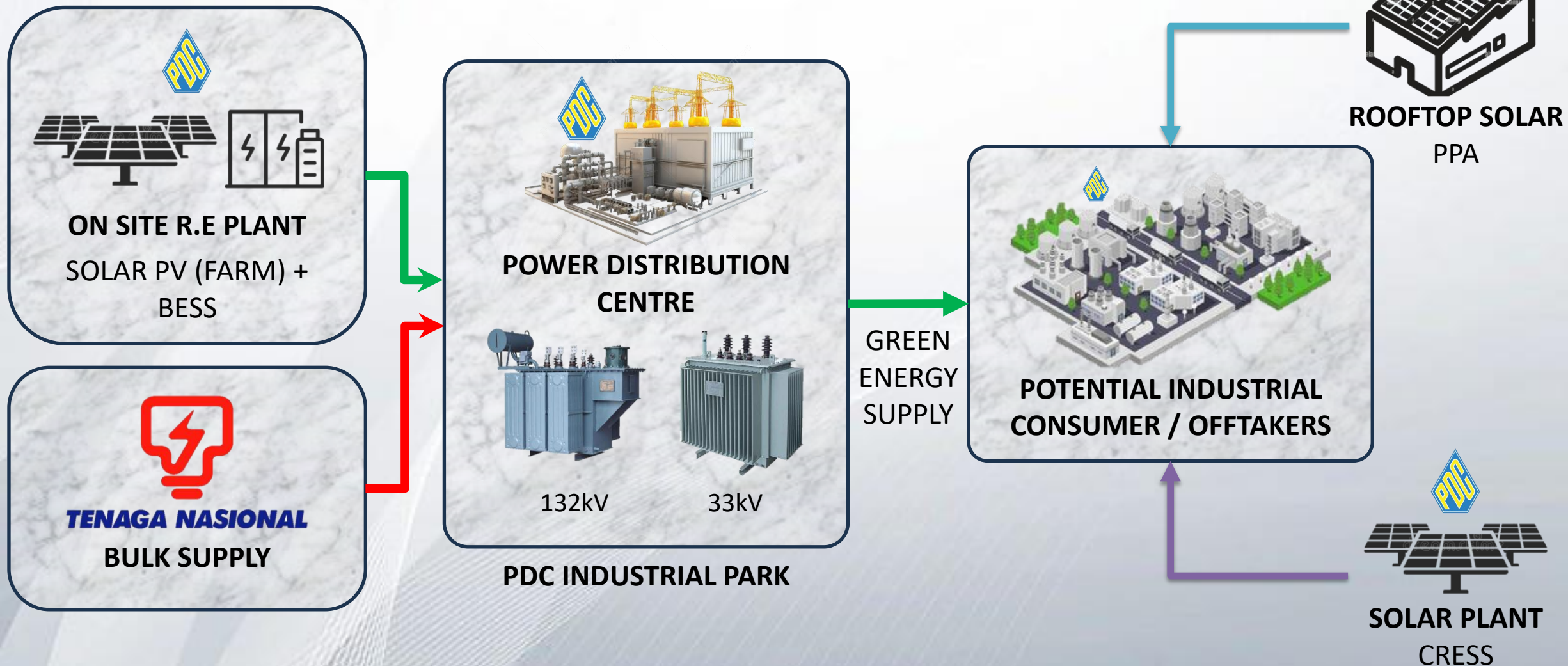
Energy Efficiency and Smart Management

Green Certification & Compliance

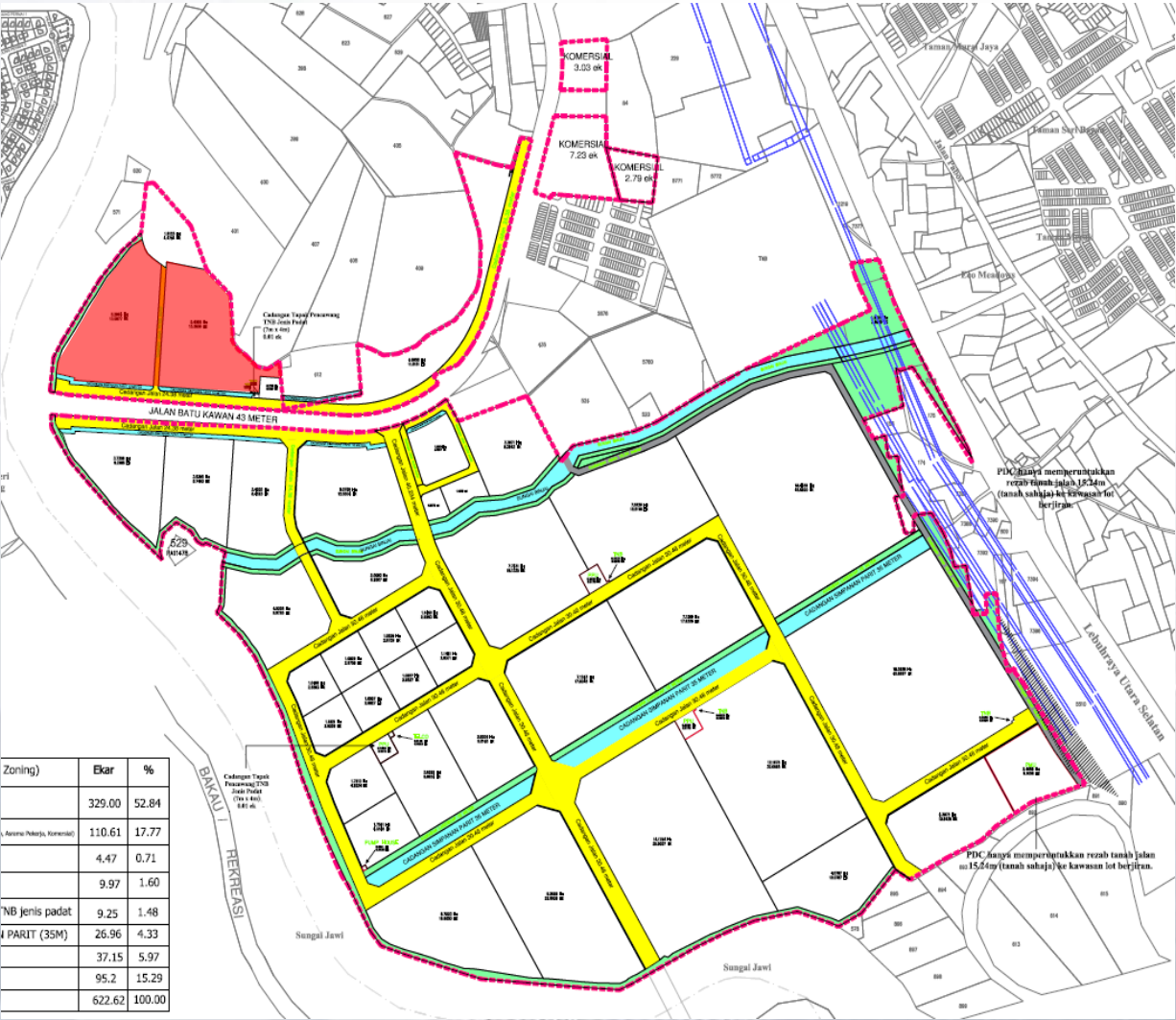
Renewable Energy Certificates (RECs)

PROPOSAL FOR: **GREEN** INDUSTRIAL PARK

RENEWABLE ENERGY STRUCTURE



BATU KAWAN INDUSTRIAL PARK 3



Total Land Size	:	26.4 Acres
Proposed DC Capacity	:	8.87 MWp
Proposed AC Capacity	:	6.00 MWac
Proposed BESS Capacity	:	3.00MWh
Exp. Annual Generation	:	13,249 kWh

PENANG SCIENCE PARK SOUTH



Total Land Size	:	25.9 Acres
Proposed DC Capacity	:	9.20 MWp
Proposed AC Capacity	:	6.00 MWac
Proposed BESS Capacity	:	3.00MWh
Exp. Annual Generation	:	10,029 kWh

The background features a green silhouette of a world map. Above the map, there is a row of green icons representing a city skyline with various buildings, a house, solar panels, and wind turbines. The text "THANK YOU" is centered over the map in a black serif font. The entire image has a light blue background with faint, curved lines and a subtle gradient.

THANK YOU