



Can Smart Grid technology improve Indonesia's power system?

Smart grid technologies can facilitate solutions for demand growth, energy access and renewable integration. This paper presents the establishment of a smart grid roadmap for Indonesia's power system including a discussion on the applied method.

Should smart grids be adapted to the Indonesian context?

With a professional implementation of smart grids latest technological developments and best practice processes can be leveraged. Nevertheless, they need to be tailored to the Indonesian context, taking into account specific requirements to meet the country's energy vision.

Is PLN developing a smart grid project in Indonesia?

PLN has developed some smart grid pilot projects around Indonesia. Some smart grid project is still on going at some areas. Content may be subject to copyright. PT. PLN (Persero) Who We are ... Why Smart Grid? 1. Operational Efficiency 2. Service Reliability 3. Clean Energy (CO<sub>2</sub> emission) 4. Sustainability 1. Energy Efficiency Solution 2.

What is the Smart Grid Compass<sup>®</sup> framework?

The Smart Grid Compass<sup>®</sup> Framework establishes a structured 360<sup>°</sup> view on the development of a utility of today into a utility of the future. The 360<sup>°</sup> distinguish four quadrants that represent the core business areas of an electric utility. Figure 1 below shows the five business areas of the Siemens Smart Grid Compass<sup>®</sup>; [3,4].

How many smart grid projects are there in PLN?

Nowadays there are 10 Smart Grid related projects in PLN. Some projects take the focus on the integration of renewable energy, and other projects related to the development of Smart Grid energy management and power quality. 1. Demonstrate that intermittent RE could be 2. Move away from the dependency of fossil fuel funded by third parties. 1.

# SMART GRID IMPLEMENTATION INDONESIA



In the experiment, students analyze a microgrid network in grid-powered, grid-interactive, and island modes with a renewable source that is not electrically (or physically) co-located with the



"Pada tahap awal, implementasi Smart Grid berfokus kepada keandalan, efisiensi, customer experience dan produktivitas grid. Sedangkan tahap berikutnya PLN berfokus kepada ketahanan (resiliency), customer engagement, sustainability dan self-healing," ujarnya.



Pengembangan smart grid dilakukan untuk menjawab isu-isu terkait Transisi Energi (Decarbonization, Digitalization dan Decentralization ) sekaligus menjawab tantangan penyediaan tenaga listrik di Indonesia ( efficiency/losses, reliability, resiliency dan

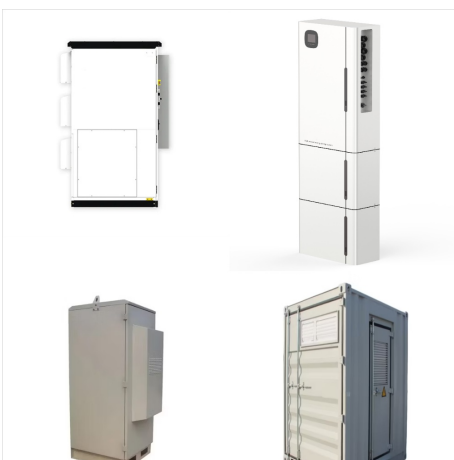
# SMART GRID IMPLEMENTATION INDONESIA



The development and implementation of a smart grid for power supply is one of the pressing issues in modern energy economy, given high national priority and massive investments, although the entire subject is still in its infancy stage.



The IEA's work as co-host of the Indonesia Smart Grids workshop is part of the IEA's Clean Energy Transitions in Emerging Economies programme, which has received funding from the European Union's Horizon 2020 research and innovation programme



As part of the power system transformation in Indonesia, the 2020-2024 National Medium-Term Development Plan (RUPTL) will include the deployment of smart grids. This webinar dedicated to Indonesian stakeholders kicked off the deployment.

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At the short term, the road map implementation of the smart grid in Indonesia focuses on reliability, efficiency, customer experience and grid productivity with an estimated CAPEX of IDR 10-25 T (US\$ 645 M a??1,6 B). While the long term focuses on resiliency, customer engagement, sustainability and self-