

# Thailand Smart Energy Internet



## Overview

Pilot Microgrid System Project in Rat Burana District (MEA) EPPO has conducted a study on promoting the use of net-zero energy microgrid systems in government facilities across the country.

## Key Takeaways

Thailand is implementing a nationwide AI-powered smart grid and digital energy network to modernize electricity management, integrate renewables, and enable smart consumer energy control. Overview of Thailand's Smart Energy Initiatives Thailand has embarked on a \$1.8 billion, 15-year AI-driven smart grid transformation, led by Gorilla Technology Group, aiming to modernize the entire electricity ecosystem, including generation, transmission, distribution, cybersecurity, and consumer engagement.

This initiative is designed to improve efficiency, reduce energy losses, and enhance grid reliability, positioning Thailand as a leader in Southeast Asia's digital energy transition.

## Smart Grid and Digital Metering

The Metropolitan Electricity Authority (MEA) has developed a Smart Grid system that allows both energy producers and consumers to manage electricity usage efficiently. This includes energy storage systems to stabilize renewable energy output and maintain power quality. Companies like FORTH Corporation have deployed digital meters and smart meters in Bangkok, enabling real-time monitoring and automated data collection for over 33,000 meters, supporting sustainable energy management.



## Renewable Energy and E

V Integration Thailand's smart energy network integrates renewable energy forecasting and management. The Electricity Generating Authority of Thailand (EGAT) has launched a Renewable Energy Forecast Center and is developing day-ahead forecasting models for wind and solar power plants. Additionally, pilot projects for Vehicle-to-Home (V2H), Vehicle-to-Grid (V2G), and Vehicle-to-Building (V2B) systems are underway, allowing electric vehicles to interact with the grid and optimize energy distribution.

## Microgrid and Net-

## Zero Energy Projects

Pilot microgrid systems are being tested in government facilities and districts like Rat Burana, promoting net-zero energy solutions. These microgrids aim to enhance local energy resilience, integrate distributed renewable generation, and provide guidelines for broader adoption.

## Key Benefits

Enhanced energy efficiency through AI-driven monitoring and predictive analytics. Reduced operational losses and improved reliability of electricity supply. Consumer empowerment via smart meters and EV smart charging systems.

Support for renewable energy integration and grid stability. Long-term sustainability with innovative financing models ensuring scalable implementation. Thailand's Smart Energy Internet represents a comprehensive digital transformation of the national electricity system, combining AI, smart grids, renewable energy management, and consumer-focused technologies to create a resilient, efficient, and sustainable energy ecosystem.

## Article Content

Thailand Internet of Things (IoT) in Energy Market (2025-2031)

The Thailand Internet of Things (IoT) in Energy Market has undergone substantial changes due to the COVID-19 pandemic, transforming how the energy sector leverages IoT devices and platforms for

Thailand's Smart Grid

Pilot Microgrid System Project in Rat Burana District (MEA) EPPO has conducted a study on promoting the use of net-zero energy microgrid systems in government facilities across the country.

Thailand Internet of Things (IoT) Market (2025-2031) Outlook

IoT is driving efficiency, automation, and innovation in multiple domains. The Internet of Things (IoT) market in Thailand is witnessing robust growth, propelled by the widespread adoption of connected

### Thailand's \$1.8 Billion AI-Powered Smart Grid Revolution

In early March 2025, the Government of Thailand formally signed a landmark \$1.8 billion agreement with Gorilla Technology Group (NASDAQ: GRRR) to embark on a nationwide, 15-year AI-powered smart

### Thailand shifts towards clean energy, modern power infrastructure

The government is expanding clean energy through renewable power, smart grids and modern infrastructure to strengthen Thailand's economy.

### Smart Distribution

The advancement of technology in the energy sector has caused significant changes to the power grid, such as more distributed generation, increasing role of renewable energy by switching from fossil fuel

### HYXI Strengthens Thailand Presence with New Residential Energy ...

Bangkok (ANTARA/PRNewswire)- HYXI (formerly "HYXiPOWER"), a global smart energy innovator, is showcasing its latest residential, commercial and utility energy solutions at ASIA

### Thailand Smart Grid Market Size and Forecasts 2031

Rising adoption of renewable energy and distributed energy resources in Thailand is driving the need for advanced grid management technologies. Cloud-based platforms and IoT

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### PEA Lights up Thailand's Future with Smart Grid ...

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## How to Choose the Best Internet Provider in Thailand in

Learn how to set up home Internet in Thailand, including the best providers, package prices, contract terms, and documents expats need.

## Thailand's High-Speed Internet Revolution: 5G, Fiber, and the Battle

Thailand connected to the international Internet in the late 1980s and moved to full TCP/IP by 1992. In 2004, unmetered flat-rate broadband plans were introduced, spurring rapid

## Best Home WiFi Service Providers in Thailand (2025 Edition)

Explore the Best Home WiFi Service Providers in Thailand with our 2025 broadband guide. Compare AIS, True, and local ISPs for speed, price, and regional coverage.

## Thailand in Need of "Energy 4.0" | Asian Development Blog

A strong foundation for Thailand's "Energy 4.0" is already in place: approximately 10 GW of renewable energy capacity, a mature framework on energy efficiency, a supportive environment

## Thailand's IoT Revolution: Smart Cities to Industry 4.0

Discover how Thailand is leading Southeast Asia's IoT transformation—from smart cities and 5G to AI-driven manufacturing and environmental monitoring.

## Internet in Thailand 2026 | Earth SIMs

Internet in Thailand — eSIM options, local SIM cards, WiFi speeds, coworking spots, VPN needs, and Starlink availability for digital nomads.

## SMART-CITY LIVING MARKS ANOTHER MILESTONE

As Thailand marches towards its goal of sustainable development under the Thailand 4.0 model, the smart-city concept is front and centre in the

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

