

Energy Internet Technology and Applications

Overview

EI is an integration of DRERs, DESDs, real-time energy monitoring, information sharing, real-time pricing, and energy transactions. This textbook is the first of its kind to comprehensively describe the energy Internet, a vast network that efficiently supplies electricity to anyone anywhere and is an internet based wide area network for information and energy fusion. The chapters are organized into five parts: Architecture and. Building the Energy Internet involves transforming traditional, one-way power grids into decentralized, intelligent, and two-way, digital networks. It improves a reliability of the system, and provides an increased utilization of energy resources by integrating the smart grid with the. These drivers have encouraged energy companies to deploy applications that utilise artificial intelligence to optimise systems, improve production, reduce costs, raise efficiency, improve uptime, cut emissions and enhance safety. Many of the desired goals of AI's application in the energy sector –.



Article Content

Sep 23, 2025

Energy Internet: Systems and Applications

The book presents the basic principles of energy internet and emphasizes the current research trends in the field of energy Internet at an advanced level. It includes instructor materials,...

Feb 25, 2026

AI for energy optimisation and innovation – Energy and AI

AI applications for optimising energy systems Oil and gas companies have been among the earliest adopters of new technologies to boost exploration and production. In 2000, 11 supercomputers ...

Aug 24, 2025

What Is Energy Internet? Concepts, Technologies, and Future ...

To realize renewable-energy-based electrification goals, a new concept the Energy Internet (EI) has been proposed, inspired by the most recent advances in information and telecommunication...

Feb 12, 2026

Energy Internet: State of the Art and Challenges

This survey provides a comprehensive overview of the Energy Internet Concept, strategies for achieving energy-efficient communications and data centers, and the dynamic interplay between the Energy ...

Nov 17, 2025

The Emerging Energy Internet: Architecture, Benefits, Challenges, and ...

The benefits of the energy Internet, along with the challenges of its implementation on a large-scale distributed architecture with the inclusion of renewable energy resources, is discussed.

Dec 10, 2025

Energy Internet: Systems and Applications | Springer Nature Link

This textbook provides an ideal resource for students in advanced graduate-level courses and special topics in energy, information and control systems. It comprehensively describes the energy Internet, ...

May 19, 2026

Recent advancement of energy internet for emerging energy ...

Energy internet features are highlighted to enhance efficiency, security and reliability. Energy internet architectures and models are demonstrated for regulatory bodies. Challenges and ...

Aug 26, 2025

Energy Internet: Redefinition and categories | Energy Internet

In this paper, we propose the redefinition of EI, based on a comprehensive literature review, some latest trends and driving forces in the global energy industry, as well as its development in the past decade.

Jun 01, 2026

Building the Energy Internet — EITC

The Internet of Energy is now possible thanks to advances in microgrid technology and machine-type communications that allow applications with ultra-reliable, low-latency, and massive ...

Sep 19, 2025

Energy Internet

We are pleased to announce that Energy Internet is indexed in IET Inspec.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg, 2196, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

