



ENERGY ONE-STOP SERVICES

We offer one-stop services to meet all of your energy needs

Act with integrity and contribute to
society through technology and engineering



ENERGY DEVELOPMENT & OPERATION
ENERGY MANAGEMENT
MANUFACTURING
ENGINEERING
CONSTRUCTION

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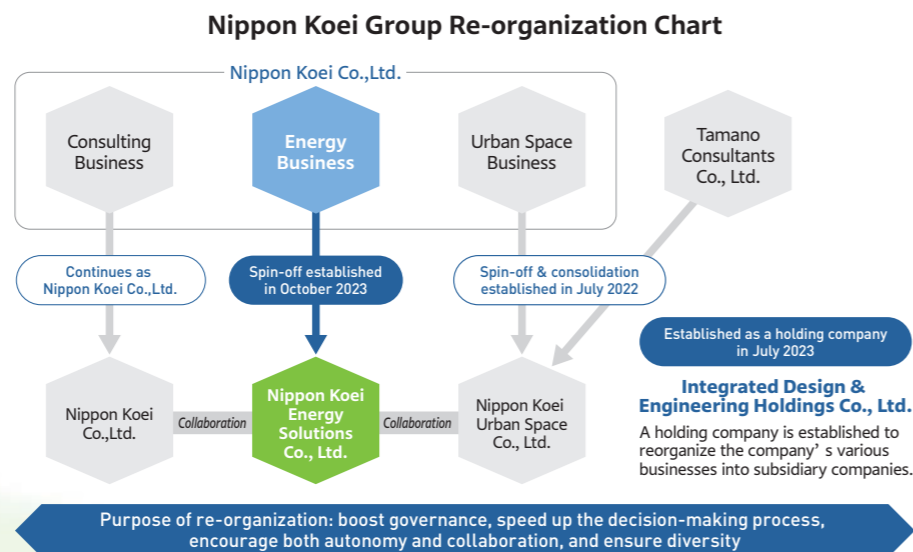
The Nippon Koei Group has transitioned to a holding company structure. As part of the new structure, the company's energy business has been transferred to Nippon Koei Energy Solutions, a spin-off.

NIPPON KOEI Energy Solutions CO.,LTD.

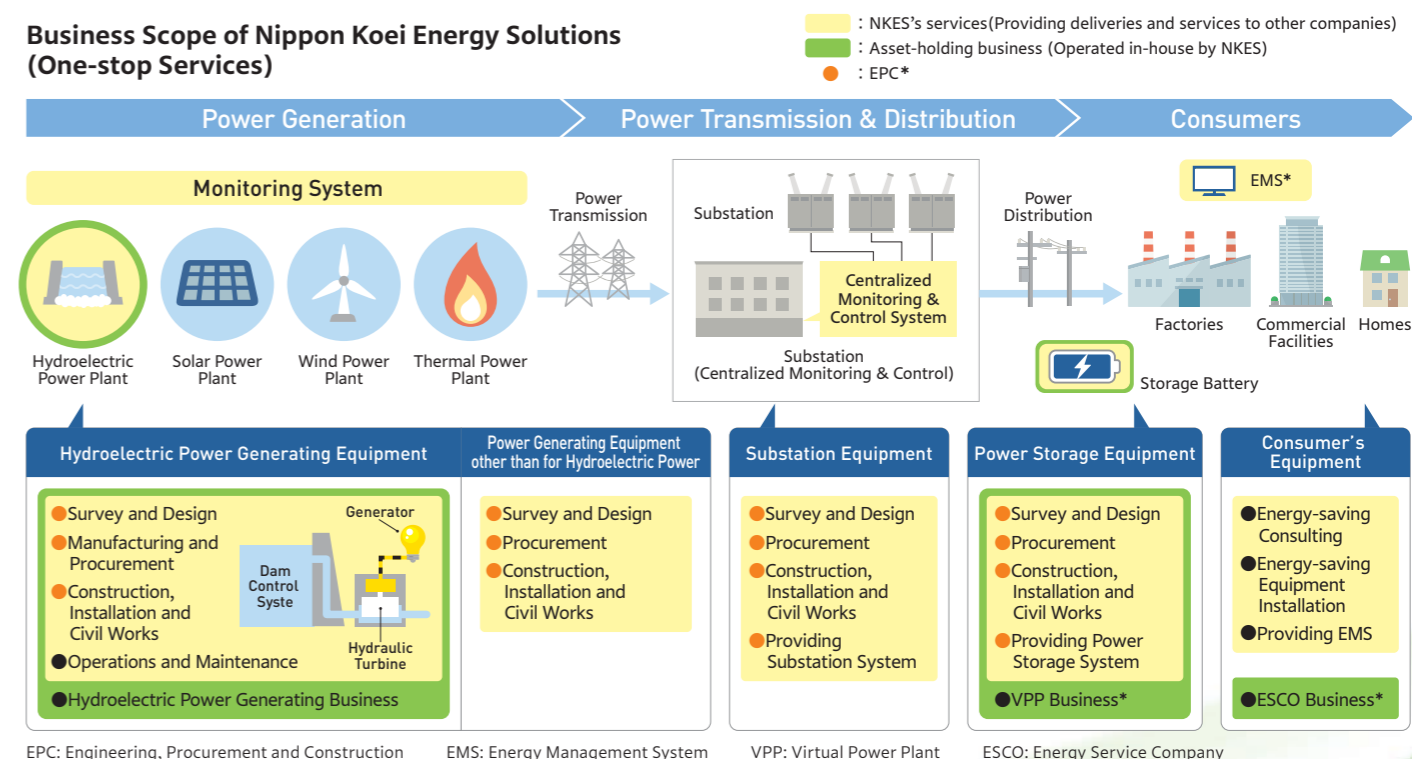
The energy management, manufacturing, construction & installation, and electro-mechanical consulting fields have been retained, and we continue to provide one-stop services pertaining to energy.

During the current period of global change in the electrical and energy fields, our energy business has been separated from Nippon Koei Co., Ltd. to establish and launch the new Nippon Koei Energy Solutions Co., Ltd. Drawing on the foundations of Nippon Koei's "DNA", the new company - consisting of the energy and electrical engineering business plus electro-mechanical consulting - is working to develop new value to answer to a diverse array of needs through energy.

At the new company, the energy business and electrical power engineering business remain structured in the same manner, and the new company retains from Nippon Koei Co., Ltd. a part of its track records of consulting services pertaining to electro-mechanical as well as to information & communications.



Business Scope of Nippon Koei Energy Solutions (One-stop Services)



Energy Development and Operations

Energy resource development, operations, market transactions, and assistance on energy-saving, based on the concepts of carbon neutral and electricity liberalization

A wide range of support provided, as follows: development and operations of hydroelectric power, market transactions on dispersed power sources including power storage stations and energy-saving analysis for consumers

Storage battery ancillary services business one-stop service (development, construction, investment, operations)



Grid scale battery energy storage system for energy trading and ancillary service

- Project development, financing, EPC, and operation of battery energy storage asset for electricity grid flexibility
- Project feasibility study including technical assessment and revenue generation
- Ancillary services as a route to marketer provider
- Provider of energy trading and ancillary services software platform for energy traders

Domestic hydroelectric power development/O&M

- Survey to find appropriate site, hydrological analysis, development of overall layout
- Civil engineering/electro-mechanical engineering, consensus-building, and construction supervision
- Operation & maintenance of electric power generation, operation of power generating company

Aggregation business

- Market transactions including supply and demand adjustment markets and capacity markets
- Agency business using power storage stations and generators

Energy-saving services

- Support for compliance with environmental laws and regulations, specifically energy-saving laws
- Support for devising greenhouse gas reduction strategies
- Cloud-based energy management support services

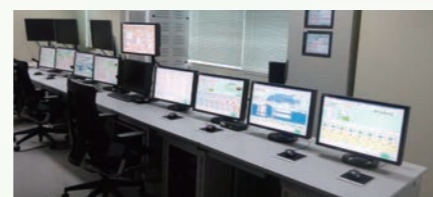
Manufacturing

Production base in support of electric power infrastructure

Manufacturing that answers to a diverse array of needs from development, engineering, manufacture, and construction - plus maintenance and refurbishment - equipment/system of hydroelectric power plants, electric power substations, as well as dams and civil engineering facilities

Creating energy sources for future generations with cutting-edge technologies

Making intelligent and effective use of energy in the form of smart cities, smart housing, and more forging advanced energy sources with the energy management systems (EMS)



Civil engineering system and disaster prevention

- Dam monitoring & control system/dam discharge warning equipment
- Rock fall monitoring system/landslide detection equipment

Electric power substation systems

- Miniature monitoring control panel/N-1 electrical control device
- Electric power substation system

Substation equipment

- Conservator/live-line oil purifier/line trap

Energy management

- EMS (micro-grid, aggregation, renewable energy monitoring)
- Energy storage system (multi-vendor system)

Hydroelectric power plants

- Hydraulic turbines (francis wheel, pelton wheel, cross-flow wheel, propeller wheel, spiral wheel)
- Synchronous generators/induction generators
- Integrated protection control devices
- Excitation devices
- Governors (hybrid, electric driven, hydraulic driven)
- Water response devices
- Hydraulic turbine generator comprehensive testing devices

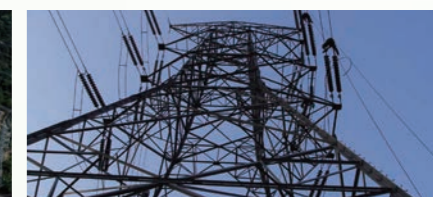
Installation of Electrical Equipment, Civil Construction Work, Electro-mechanical Consulting Services

Electrical power equipment installation/construction in support of social infrastructure

Engineering and construction management pertaining to new construction, expansion, and renewal - mainly for electric power companies, which are responsible for providing a stable supply of electricity

From domestic and overseas electro-mechanical consulting services to renewable energy EPC development

Electro-mechanical consulting business in Japan and other countries, and development of EPC business for the renewable energy and electric power storage fields, drawing on our comprehensive knowledge and perspective gained through the consulting



Electrical equipment installation

- Expanding upon and build new electric power substations and hydroelectric power plants
- Selection, procurement, and installation of renewable energy substation equipment

Power civil engineering construction

- Hydroelectric power plant renovation (piping, foundation, architecture)
- Substation civil engineering work
- Civil engineering surveying and analysis as pertains to the above

Domestic electro-mechanical field consulting (planning and detailed design)

- Electrical equipment
- Information and communications equipment
- Mechanical equipment

Overseas electro-mechanical consulting (planning, design and construction supervision)

- Electric power generating equipment
- Electric power transmission & distribution equipment
- Information and communications network

Engineering

- Renewable energy generation EPC
- Grid-scale storage battery EPC