# Support for Digital Transformation in the Energy Industry



High frequency implementation of "Business planning  $\rightarrow$  Partnering  $\rightarrow$  Demonstration  $\rightarrow$  Commercialization Cycle" in response to the rapid changes in industry.

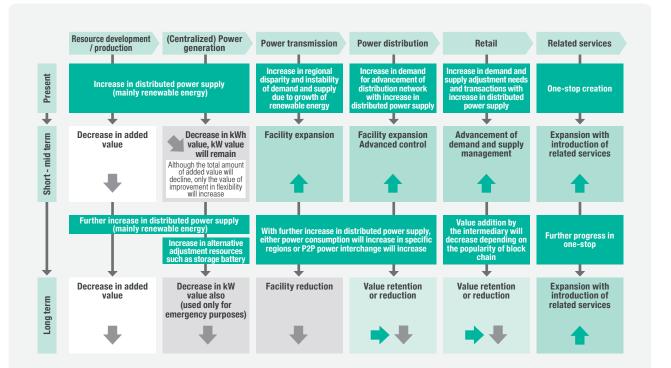
Destructive innovations are observed in the Energy industry

It is necessary to reduce CO<sub>2</sub> emissions to prevent climate change and global warming. In the power generation business domain, all countries are focusing on the use of renewable energy in place of fossil fuels. As a result, operators of various nationalities are entering into the renewable energy power generation market in Japan. Furthermore, government is reviewing the regulations around the electric power and gas industries. For example the retail business has been deregulated and new players are expanding their presence in the market.

On the other hand, with an increase in renewable energy especially in the western countries, the supply system of energy, by distributed power sources is becoming more common. Acquire new business opportunities while the market is undergoing changes

Two trends can be seen in the energy industry. First, "Decentralization of energy system", in which the customers own their own power generation facility and electricity is traded among customers. This includes transactions leading to the so-called P2P (Peer to Peer) power trading system. Second, "Onestop of energy services", in which the traditional energy suppliers along with new market entrants can acquire opportunities to provide value along with the development.

Thus, new business opportunities have emerged to monetize these trends.



### Business Environment Changes in the Energy Industry

NRI provides support for integration of business development processes by focussing on the mid-term changes in the market.

## Integrated support from planning to execution through consulting and IT solutions

NRI provides support for creating a business plan based on the market forecast and issues related to commercialization of themes where business opportunities will emerge in the future by using our deep industry knowledge.

Further, NRI has a network with domestic and overseas players that possess relevant technologies required for commercialization. Using this network, we implement business matching to supplement capabilities/functions that our clients do not have and provide support for collaboration related negotiations and investment.

We also provide support for implementing PoC\* projects to assess the feasibility of the system, in cases forming a team from NRI's consulting and IT/ system solution units. In particular, we have a great record of implementing PMO\* operations, such as creating a detailed plan for PoC and acquiring government funds. Moreover, if required, we provide proactive support for building a simple system and analyzing big data.

\*PoC: Proof of Concept \*PMO: Project Management Office

#### Case: Provided support from business plan creation to investment into overseas venture companies in distributed power supply domain

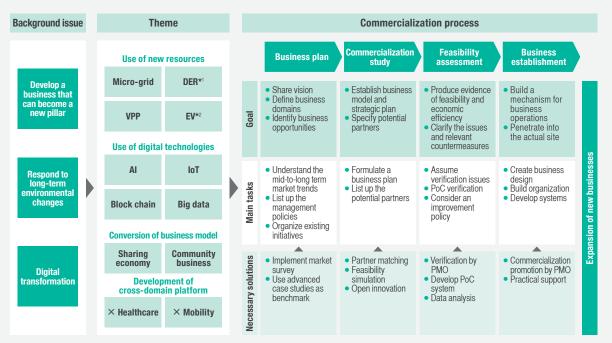
NRI provided seamless support to a leading energy company A, from creating a business plan to making investment into overseas venture companies of the distributed power supply domain that will expand in the future.

We researched the business opportunities for distributed power supply domain in the future through a global market survey and proposed to promote businesses by collaborating with an overseas partner. In order to find the partner with the best strategic fit, we screened the more than 200 energy-related venture companies from our proprietary database, followed by a detailed company evaluation (Due diligence) for the particular company of interest. Company A subsequently, decided to invest in the relevant company.

In addition, we took the responsibility of Project Management Office (PMO), from creating a future business plan to planning and implementing PoC of domestic VPP\* businesses for another leading energy company B.

\*Virtual Power Plant

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\*1 Distributed Energy Resource \*2 Electrical Vehicle