



SOJITZ IR DAY 2018
Energy & Social Infrastructure Division

February 25, 2019
Sojitz Corporation
Masakazu Hashimoto
Chief Operating Officer
Energy & Social Infrastructure Division



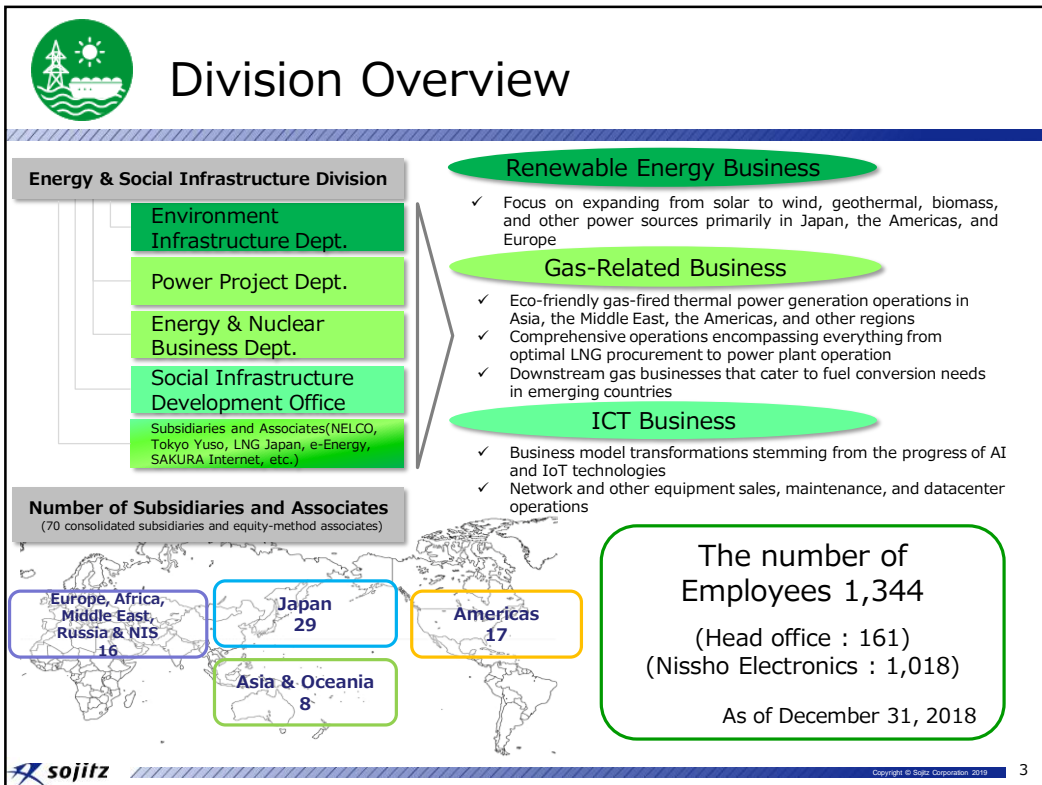
Contents

- ◆ Division Overview
- ◆ Division Policy and Growth Strategies
- ◆ Energy Value Chains of Sojitz
- ◆ Business Explanation
 - 1.LNG-Related Business
 - 2.Gas-Fired IPP Business
 - 3.Renewable Energy Business
 - 4.ICT Business (Nissho Electronics Corporation, SAKURA Internet Inc.)
- ◆ Measures Targeting Further Growth

Caution regarding Forward-looking Statements

This document contains forward-looking statements based on information available to the company at the time of disclosure and certain assumptions that management believes to be reasonable. Sojitz makes no assurances as to the actual results and/or other outcomes, which may differ substantially from those expressed or implied by such forward-looking statements due to various factors including changes in economic conditions in key markets, both in and outside of Japan, and exchange rate movements.

The company will provide timely disclosure of any material changes, events, or other relevant issues.



- The Energy & Social Infrastructure Division is comprised of three departments and one office as well as subsidiaries and associates including Nissho Electronics Corporation (NELCO), a core ICT company of the Sojitz Group, and LNG Japan Corporation, which is engaged in LNG-related operations. This division seeks out projects and operates businesses primarily in three fields: renewable energy, gas-related, and ICT.
- The Environment Infrastructure Department is looking to expand its overseas operations while simultaneously broadening and diversifying its power source portfolio by branching out from solar power to also handle onshore and offshore wind power, biomass power, and geothermal power. In these efforts, the department calls upon the development and operation expertise it has accumulated in Germany and Japan while basing decisions on factors including renewable energy resource distributions and regulatory framework maturity.
- The Power Project Department and the Energy & Nuclear Business Department, meanwhile, develop eco-friendly gas-fired thermal power generation projects in Asia, the Middle East, the Americas, and other regions. These departments are also advancing Gas-to-Power projects in these regions that comprehensively encompass everything from optimal LNG procurement to LNG receiving terminal operation, reliquefaction, and power plant operation. In addition, the departments are engaged in downstream gas businesses that cater to fuel conversion needs in emerging countries.
- Our ICT business is developed primarily by core ICT company NELCO; SAKURA Internet Corporation, which boasts strengths in the datacenter field; and the Social Infrastructure Development Office established in April, 2018. Centered on these Group constituents, the Energy & Social Infrastructure Division's ICT business is addressing business model transformations stemming from the progress of artificial intelligence (AI) and Internet of Things (IoT) technologies.
- The Energy & Social Infrastructure Division employs 1,344 individuals on a consolidated basis and 161 individuals on a non-consolidated basis. Meanwhile, NELCO has 1,018 employees. On whole, the division is comprised of 70 consolidated subsidiaries and equity-method associates, through which it develops operations around the world.



Division Policies and Growth Strategies

Basic Policies

Growth of existing businesses, creation of new businesses, and **rapid development of stable earnings foundations** that are resilient to operating environment fluctuations to be achieved through **effective analysis of energy business field portfolio transformations, megatrends, technological progress, and social issues**

Operating Environment Changes

Opportunities

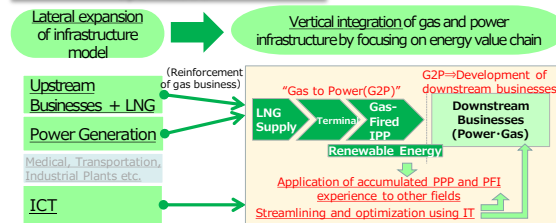
- Growing energy demand in emerging and developing countries
- Rising environmental awareness (ESG, SDGs, RE100)
- Anticipations for private operation of infrastructure
- Revolutionary operating environment changes driven by 5D progress

Risks

- Economic slowdown stemming from increased protectionism
- More stringent global environmental regulations (Infrastructure fund, etc.)
- Delayed regulatory development presuming private operation of infrastructure
- Shortened lifecycles for products and businesses



Forward-looking organizational optimization



Growth Strategies

- Development of Gas-to-Power as core gas-related business given the expectation for this business to underpin growing energy demand in Asian emerging countries and other countries
- Promotion of power source diversification and global expansion in renewable energy businesses to form foothold for development of solar power generation businesses in Japan and abroad and of onshore wind power generation businesses in Europe
- Identification of and responses to business model transformations stemming from the progress of AI and IoT technologies centered on Social Infrastructure Development Office

(Our Mission)

We will contribute to the development of industrial societies in different countries around the world, through developing advanced social infrastructure that promises reliability, safety, and comfort.



Copyright © Sojitz Corporation 2019

4

- As its basic policies, the Energy & Social Infrastructure Division looks to grow existing businesses, create new businesses, and thereby rapidly develop stable earnings foundations that are resilient to operating environment fluctuations. These objectives are to be achieved through effective analysis of energy business field portfolio transformations, megatrends, technological progress, and social issues.
- We have identified the following four major opportunities and four major risks for the Energy & Social Infrastructure Division.
 - **Opportunities**
 Growing energy demand in emerging and developing countries
 Rising environmental awareness as denoted by ESG and other trends
 Anticipations for private operation of infrastructure
 Revolutionary operating environment changes driven by 5D progress
 - **Risks**
 Economic slowdown stemming from increased protectionism
 Intensified competition resulting from market entry by infrastructure funds and companies from other industries
 Delayed regulatory development presuming private operation of infrastructure
 Shortened lifecycles for products and businesses
- With an eye to responding to operating environment changes, Sojitz merged its energy and power generation businesses, a step ahead of other trading companies. We are now poised to enhance our gas-related business through the vertical integration of our energy value chain. At the same time, an ICT business that is highly compatible with electricity and other energy businesses was introduced into the division as part of an organizational reform aimed at ensuring that we can keep pace with the rapid progress of digitization in energy and social infrastructure fields while generating earnings.
- Growth strategies have been established for each business of the Energy & Social Infrastructure Division as follows:
 - Development of Gas-to-Power as a core gas-related business given the expectation for this business to underpin growing energy demand in Asian emerging countries and other countries
 - Promotion of power source diversification and global expansion in renewable energy businesses using the development of solar power generation businesses in Japan and abroad and of onshore wind power generation businesses in Europe as a foothold
 - Identification of business model transformations stemming from the progress of AI and IoT technologies and new business fields to advance the creation of new businesses through efforts centered on the Social Infrastructure Development Office
- By advancing the growth strategies of the Energy & Social Infrastructure Division, we will fulfill our mission of contributing to the development of industrial societies in different countries around the world, through developing advanced social infrastructure that promises reliability, safety, and comfort.

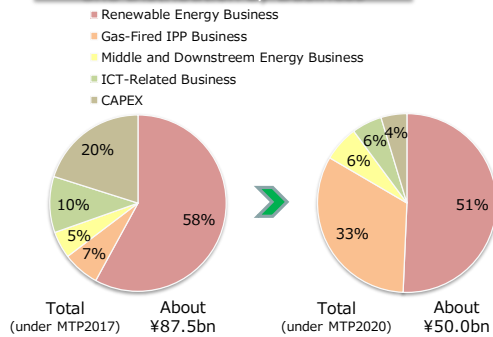


Division Policies and Growth Strategies

– Investments and Loans and MTP2020 Forecast –

Under MTP2020, (1) rapidly develop stable, sustainable earnings foundations, (2) downsize highly volatile upstream assets, and (3) accelerate initiatives in new growth fields to enhance division asset portfolio and boost profitability

Investments and Loans and Distribution by Business



MTP2017

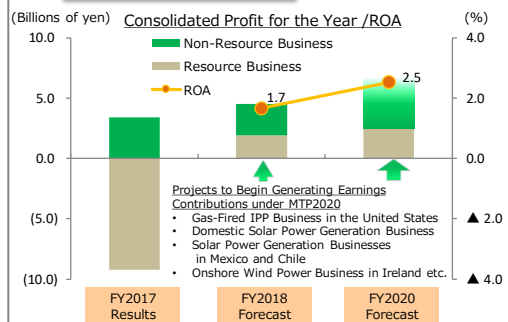
Asset Compression Results

Approx. ¥16.0bn

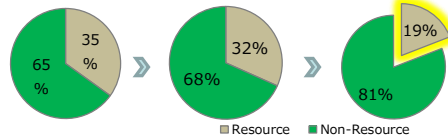
MTP2020

(Resource) Asset Compression
(Non-resource) Ongoing asset replacement + Accumulation of quality assets
⇒ Improvement of asset efficiency and quality

MTP2020 Forecast



Summary of Total Asset



Copyright © Sojitz Corporation 2019 5

- During the period of Medium-Term Management Plan 2020, the Energy & Social Infrastructure Division will focus on efforts to (1) rapidly develop stable, sustainable earnings foundations, (2) downsize highly volatile upstream assets, and (3) accelerate initiatives in new growth fields. In this manner, we will work to enhance the division's asset portfolio and boost its profitability.
- A total of ¥87.5 billion worth of new investments and loans was executed under Medium-Term Management Plan 2017, and we intend to conduct another ¥50.0 billion during the three-year period of Medium-Term Management Plan 2020. Of this ¥50.0 billion, roughly half will be directed toward renewables while the remaining half is slated to go to Gas-to-Power projects and downstream gas businesses.
- Sojitz's power generation asset portfolio boasts a gross generation capacity of 8.5 GW, of which the Company's stake is 1.8 GW, when including orders received and projects under development. Renewables and gas-fired thermal projects account for around 90% of our stake, making for a power source mix that is more eco-friendly than those of other trading companies.
- We will continue to develop renewable energy projects and gas-fired thermal power projects with the aim of addressing growing power demand while reducing environmental impacts.
- Infrastructure projects often require significant amounts of time to recover investments. Accordingly, we will manage our portfolio while paying consideration to short-term, medium-term, and long-term earnings through ongoing asset replacement and the selling of interests after investment. We thereby aim to create revenue clusters comprised of earnings from development, businesses, and sales while also quickly recovering invested capital and improving asset efficiency.
- In the year ended March 31, 2018, the Energy & Social Infrastructure Division posted a loss due to impairment on upstream assets. However, we expect to be able to develop frameworks for generating stable earnings in the final year of the medium-term management plan through progress in the replacement of resource assets with non-resource assets and the start of earnings contributions from previously commenced infrastructure projects.



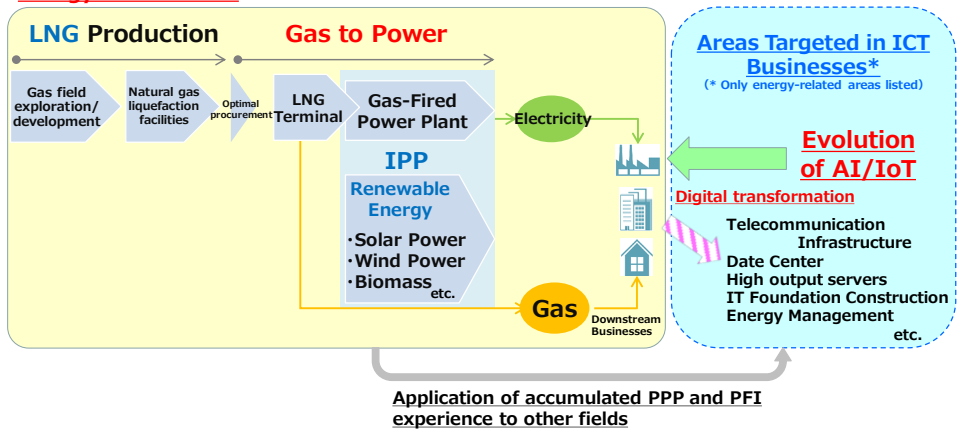
Energy Value Chains of Sojitz

Focus on Gas-to-Power projects integrating everything from optimal LNG procurement to power plant operation to provide sophisticated social infrastructure that simultaneously enables economic growth and reduced environmental impacts

Operating Environment

- ◆ Growing appetite for ESG investment
- ◆ Rising energy demand centered on Asian emerging countries
- ◆ Business model transformations stemming from the progress of AI and IoT technologies

Energy Value Chains



Copyright © Sojitz Corporation 2019

6

- The Energy & Social Infrastructure Division seeks to address growing energy and fuel conversion demand in Asian emerging countries and other countries. In this undertaking, we will focus on Gas-to-Power projects that integrate everything from optimal LNG procurement to power plant construction and operation to provide sophisticated social infrastructure that simultaneously enables economic growth and reduced environmental impacts.
- We are looking to apply the public-private partnership and private finance initiative experience we have accumulated, primarily in the power generation field, to the other fields, such as social infrastructure. In addition, we will address business model transformations stemming from the progress of AI and IoT technologies by utilizing the functions and experience of affiliates like ICT companies NELCO and SAKURA Internet.
- Meanwhile, a smaller investment was commenced in DIGITAL GRID Corporation, a company that applies blockchain technologies to power transactions, in January 2019. Going forward, we plan to examine possible methods of adding value to renewables with DIGITAL GRID's technologies.



Business Explanation

1. LNG-Related Business (LNG Terminal)

Capital participation in LNG terminal operations in Spain to perform domestic LNG procurement and shipment to Asia

Purposes of Initiatives

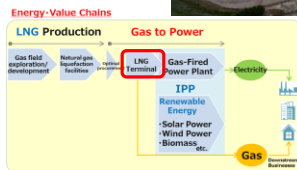
- Replace assets in energy business portfolio, which is overly focused on upstream interests, with downstream and midstream assets to develop stable earnings foundations that are resilient to operating environment changes
- Establish and acquire efficient operating methods to become a major market player in light of projected fuel conversion trends in emerging countries

Strengths

- Experience and insight regarding gas field development, liquefaction, transportation, and receiving accumulated through operations continuing from the 1970s (LNG business investments: Qatar, Indonesia (through LNG Japan))
- Strong, trust-based relationships with prominent customers



- Project Site : A Coruña Galicia, Spain
- Company Name : Regasificadora Del Noroeste SA
- Date of participation : 2017
- Shareholders : Sojitz-15.00%, Tojeiro Group-50.69%, Government of Galicia-24.31%, Sonatrach-10.00%
- Main Businesses : Ownership and operation of LNG terminals; gas transport
- Reserves : 300,000m³



NEXT

Develop LNG terminal operations in countries and regions (primarily Asian emerging countries) in which we can anticipate stable, long-term LNG demand growth and participation in downstream gas businesses



Copyright © Sojitz Corporation 2019

7

- Previously, our energy business portfolio has been overly focused on upstream interests, but we have recently been replacing these assets with downstream and midstream assets. A representative example of these assets would be our participation in an LNG receiving terminal business in Spain.
- Sojitz has been involved in the LNG business since the 1970s. The LNG experience and insight accumulated over the years as well as our strong, trust-based relationships with prominent customers are major strengths in this business.
- Sojitz is turning its attention to LNG receiving terminals, which we believe to be a type of infrastructure business with the potential to form stable earnings foundations. As a potential next step, we will consider the possibility of expanding into downstream gas businesses that support fuel conversion in emerging countries and that arise from LNG receiving terminal operations.



Business Explanation

2. Gas-Fired IPP Business (Gas to Power)

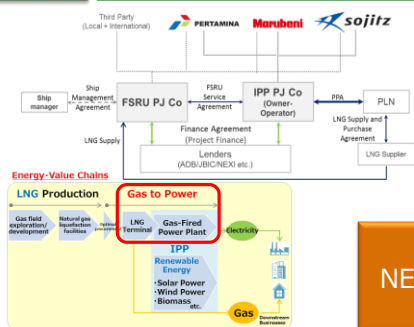
Advancement of Gas-to-Power projects in Indonesia that integrate development of power generation facilities and gas-related facilities

Purposes of Initiatives

- Contribute to environmental preservation and to economic growth in Indonesia by supplying power from a large-scale gas-fired thermal power plant that is reliable and boasts low environmental impact to cater to rising power demand accompanying rapid economic growth
- Utilize superior Japanese technological and funding capabilities while conforming to high-quality infrastructure partnership guidelines advocated by the Japanese government

Strengths

- IPP project development experience centered on gas-fired thermal power generation
- Experience and insight pertaining to LNG and other aspects of gas value chain
- Strong relationship with Pertamina spanning approx. 40 years (beginning with help for establishing Indonesia's first LNG production terminal in the 1970s and continuing on until today)



- Project Site : Ciamaya, West Java province (100km east of Jakarta)
- Project Cost : About US\$1.8 billion (Gas-fired power generation plant US\$1.4 billion, FSRU US\$0.4 billion)
- Shareholders(IPP) : Sojitz-20%, Marubeni-40%, Pertamina-40%
- Shareholders(FSRU) : Sojitz-10%, Marubeni-20%, Pertamina-26%, Mitsui O.S.K Lines-19%, Others-25%
- Generation Capacity : 1,760MW (880MW x 2 block), 170,000m³ (FSRU)
- Off-taker : PT PLN (Persero) (25 years)

NEXT

- Commence construction with target completion date of 2021
- Leverage experience gained through project to develop new Gas-to-Power projects in emerging countries in need of fuel conversion



Copyright © Sojitz Corporation 2019

- In Indonesia, we are advancing the Jawa 1 Gas-to-Power project, which entails the integrated development of floating storage and regasification units and generation facilities, together with Marubeni Corporation, PT Pertamina, and Mitsui O.S.K. Lines. Financing was closed at the end of 2018, and we have since begun construction with the current goal of achieving completion in 2021.
- Gas-to-Power projects of this scale require massive funds. We will therefore need the support and efforts of the all-Japan project team comprised of trading companies and other Japanese investors, Japan's export credit agency, and Japanese banks.
- In addition, we are currently implementing initiatives to apply the development experience acquired through this project to Gas-to-Power projects and downstream gas projects. We will look for these projects in emerging countries in need of LNG imports or fuel conversion, such as Sri Lanka, Bangladesh, Myanmar, and Vietnam.



Business Explanation

3. Renewable Energy Business (Onshore Wind Power)

Capital participation in Evalair to operate wind power generation facilities in Ireland

Purposes of Initiatives

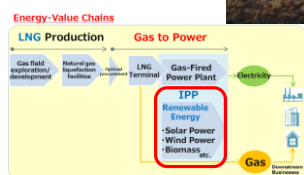
- Acquire wind power generation facility operation expertise in Ireland, which boasts world-leading levels of wind
- Secure stable earnings that are not influenced by market price fluctuations by utilizing Ireland's feed-in-tariff scheme

Strengths

- Track record of developing and managing numerous renewable energy projects as principal developer (particularly solar power generation projects in Japan)
- Renewable energy project development expertise spanning from project exploration to commercialization



- Project Site : 5 places in Ireland
- Date of participation : 2017
- Shareholders : Sojitz-29.28%, The Kansai Electric Power-24%, Mitsubishi UFJ Leasing & Finance Limited-6.72%, Invis Energy-40%
- Generation Capacity : 223MW (Total output for 97 wind turbines)
- Off-taker : Ireland's wholesale electricity market



NEXT

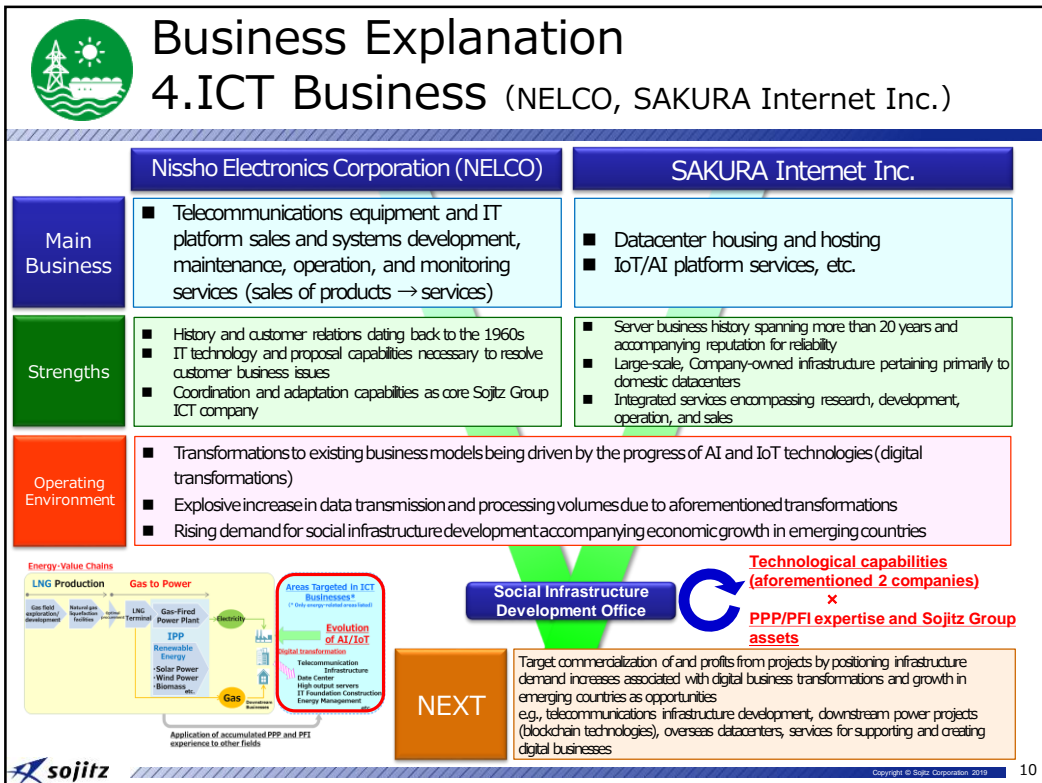
- Advance into regions where wind power markets are expected to grow
- Accelerate power source diversification initiatives pertaining to biomass, geothermal, and offshore wind power
- Develop downstream businesses in deregulated power market (energy management)



Copyright © Sojitz Corporation 2019

9

- Leveraging the foothold formed by our solar power generation operations in Europe and Japan, we have been developing and participating in solar power projects in Mexico and Chile.
- Sojitz was quick to begin taking part in wind power generation projects. However, we sold all of our wind power interests in the 2000s to focus our operations primarily on solar power. Our first step toward getting back into wind power was taken in 2017 with our participation in an onshore wind power generation project in Ireland, which we are developing together with partners The Kansai Electric Power Company, Incorporated, and Mitsubishi UFJ Lease & Finance Company Limited. Looking ahead, we will endeavor to apply the wind power generation facility operation expertise acquired through this project to others while examining and developing projects for diversifying our power source mix to include offshore wind power, biomass power, and geothermal power.
- The trends toward so-called repowering, the act of replacing existing facilities with high-efficiency renewable energy facilities, and toward power storage operations, for achieving grid stability, are taking off largely in Europe and North America, which were early to adopt feed-in tariff schemes. Sojitz will look to enter into these markets as it develops new businesses.

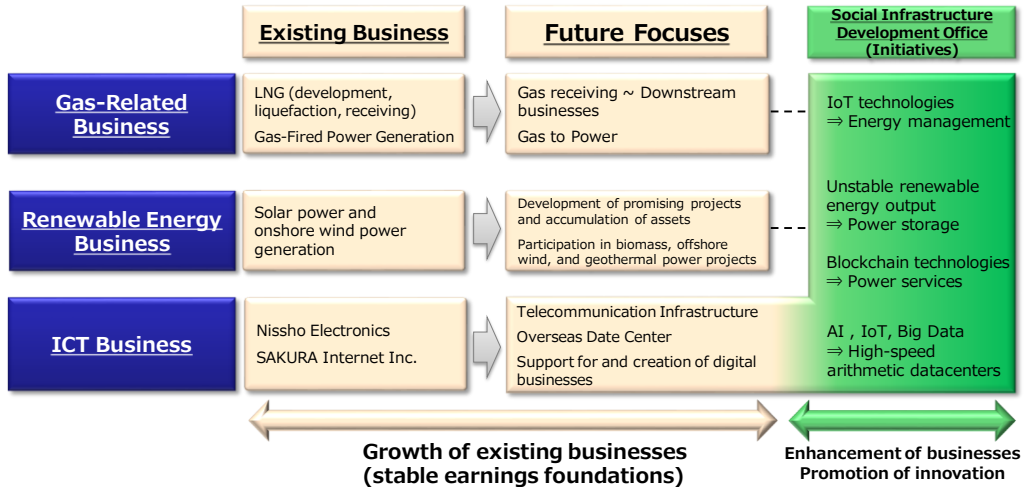


- NELCO, a core ICT company of the Sojitz Group, and SAKURA Internet, which boasts strengths in the datacenter field, form the backbone of Sojitz’s ICT business.
- The operating environment for this business is characterized by rapid growth in demand for efficient big data processing as digital transformations are promoted in various industries.
- Efficient data processing requires affordable and reliable power supplies, resilience to disasters, and sophisticated computation technologies. Recognizing this fact, we will capitalize on the experience of NELCO and SAKURA Internet to broaden our datacenter operations.
- Up until the year ended March 31, 2018, I was the chief operating officer of the former Infrastructure & Environment Business Division, placing me in a position of responsibility for power projects as well as for transportation, medical, and industrial infrastructure projects. The public-private partnership and private finance initiative insight I gained through involvement in these projects is becoming increasingly applicable to other social infrastructure fields. The Social Infrastructure Development Office established within the Energy & Social Infrastructure Division in the year ending March 31, 2019, will coordinate with NELCO, SAKURA Internet, and other divisions in these fields. One goal of this coordination will be to effectively utilize the business assets of other divisions to identify new growth fields and to build new earnings foundations.
- Specifically, we are examining the following potential business initiatives.
 - Value adding pertaining to telecommunications network infrastructure, telephone poles, street lights, and other social infrastructure in emerging countries in light of the evolution from 3G to 4G and 5G
 - Power service businesses capitalizing on blockchain and power storage technologies
 - Overseas datacenter businesses
 - Support for digital transformations at NELCO and at customers and partners



Measures Targeting Further Growth for Future

Rapidly develop stable, sustainable earnings foundations that are resilient to operating environment fluctuations by advancing division growth strategies
 Create a sustainable and prosperous future through the provision of energy-saving solutions and gas-fired thermal and other eco-friendly power and support for trends in and the development of AI, IoT, and other new technologies



Copyright © Sojitz Corporation 2019

11

- The Energy & Social Infrastructure Division aims to rapidly develop stable, sustainable earnings foundations that are resilient to operating environment fluctuations by advancing its growth strategies. Furthermore, we will aspire to help create a sustainable and prosperous future through the provision of energy-saving solutions and gas-fired thermal and other eco-friendly power and through support for trends in and the development of AI, IoT, and other new technologies.
- The division is committed to the growth of existing business and to coordinating the initiatives of the Social Infrastructure Development Office with those of the Business Innovation Office and of other divisions to address business model transformations arising from the progress of AI and IoT technologies. These initiatives will be advanced alongside concerted, division-wide efforts for developing new earnings foundations.



sojitz

New way, New value