Infrastructure Business Unit IR Meeting

December 17, 2018
1. Overview of Infrastructure Business Unit

1-1. Organization

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning &amp; Coordination Dept., Infrastructure Business Unit</td>
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</tr>
<tr>
<td>Social Infrastructure Business Division</td>
<td>157</td>
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<tr>
<td>Power Retail, Energy Management &amp; Machinery Business Dept.</td>
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<tr>
<td>Infrastructure Business Development Dept.</td>
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<td>Transportation Systems &amp; Infrastructure Business Dept.</td>
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<td>PFI Business Dept.</td>
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<td>North Hanoi Project Dept.</td>
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<tr>
<td>Global Power Infrastructure Business Division</td>
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<tr>
<td>IPP &amp; IWPP Dept. No.1</td>
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<tr>
<td>IPP &amp; IWPP Dept. No.2</td>
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<tr>
<td>IPP &amp; IWPP Dept. No.3</td>
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<tr>
<td>Power Plant EPC Dept. No.1</td>
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<td>Power Plant EPC Dept. No.2</td>
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<tr>
<td>Power Plant EPC Dept. No.3</td>
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<tr>
<td>Renewable Power Generation Dept.</td>
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<td>Global Renewable IPP Dept.</td>
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<td>Logistics Infrastructure Business Division</td>
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<tr>
<td>Logistics Business Dept.</td>
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<td>Logistics Administration Dept.</td>
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<td>Insurance Business Dept.</td>
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<tr>
<td>Overseas Industrial Park Dept.</td>
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Number of employees: 611 (As of Nov., 2018)
Number of consolidated subsidiaries employees: 3,856 (As of Mar., 2018) (included 2,203 temporary employees)
1. Overview of Infrastructure Business Unit

1-2. Business Lines

The Infrastructure Business Unit engages in a broad range of infrastructure-related business in the three fields of social infrastructure, global power infrastructure and logistics infrastructure.

<table>
<thead>
<tr>
<th>Social Infrastructure Business</th>
<th>Global Power Infrastructure Business</th>
<th>Logistics Infrastructure Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Electricity retail business in Japan</td>
<td>• Power generation business inside and outside Japan including renewable energy</td>
<td>• Logistics service such as transportation</td>
</tr>
<tr>
<td>• Water infrastructure business</td>
<td>• Power plant EPC business</td>
<td>• Arranging of various insurance contracts</td>
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<tr>
<td>• Traffic and transportation infrastructure-related business, etc.</td>
<td></td>
<td>• Development and management of overseas industrial parks</td>
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</tbody>
</table>

Water and sewerage treatment facilities (Brazil)  
Offshore wind power farm (Belgium)  
Logistics center (Japan)
1. Overview of Infrastructure Business Unit

1-3. Addressing Social Issues (Materiality) Through Businesses

Contributes to addressing social issues through the development of infrastructure in accordance with regional and customer needs

► **Basic policy for business activities**

✓ Focus on environment-friendly infrastructure development in developed countries
✓ Contribute to social development and building foundations of people’s lives by addressing power and water shortages and developing logistics networks in developing countries

► **Valuation criteria for business portfolios**

✓ Portfolios are valued from the perspectives of environmental value, social value and economic value (Triple Values)

Aim to create balanced portfolios in terms of Triple Values
1. Overview of Infrastructure Business Unit
1-4. Business Unit Growth Strategies

Promotes the expansion of existing core businesses and initiates new infrastructure fields and business models

► Expansion of existing core businesses
  ✓ IPP: With a focus on gas and renewable energy, expand net capacity to the 10,000MW level*1 as early as possible
  ✓ Water infrastructure business: Grow projects in the UK and Brazil and expand assets in China, Middle East, etc.
  ✓ Electricity retail business in Japan: Expand sales by leveraging the Group’s integrated strength and pursue optimal power source composition
  ✓ Industrial parks: Expand businesses in Southeast Asia and promote development projects in emerging markets

Accelerate development of projects primarily led by Center of Excellence (CoE: development base) in each region

*1 7,730MW currently
1. Overview of Infrastructure Business Unit
1-4. Business Unit Growth Strategies

Promotes the expansion of existing core businesses and initiatives for new infrastructure fields and business models

► Entry into new infrastructure fields
  ✓ Enter into new infrastructure fields in which Sumitomo Corporation has not previously engaged, including airport concessions, railroad operations, seaport business, urban development and so on

  ⇒ Pursue integrated development including peripheral fields rather than as a stand-alone project

► Take on challenge for new infrastructure business models through Digital Transformation
  ✓ Promote the creation and sophistication of business models that utilize digital technologies such as the development of the third power business model following IPP and EPC, and the promotion of smart logistics

  ⇒ Lay the foundation for attaining new revenue sources looking beyond future growth
1. Overview of Infrastructure Business Unit

1-5. Quantitative Plan (PL)

Profitability excluding the effects of One-off profits has steadily increased. Annual profits reach the 50.0-billion-yen level in the current medium-term management plan thanks to the contribution of large-scale power plant EPC projects, etc.

- Progress of large-scale power plant EPC projects
- Expansion of IPP assets
- Growth of electricity retail business in Japan, etc.
1. Overview of Infrastructure Business Unit
1-5. Quantitative Plan (CF)

Will expand assets in existing fields and invest in new fields and technologies aimed at future growth.

Three-year investment and financing plan under the medium-term management plan

New infrastructure businesses
- Airport concessions
- Railroad operation business
- Seaport business
- Urban development, etc.

Water infrastructure business
- Expansion of projects in Brazil
- New businesses in China, Middle East, etc.

Electricity retail business in Japan
- In-house power source development using biomass, etc.

IPP (renewable energy)
- Offshore wind power farm in Europe
- Solar power generation in Japan, etc.

IPP (thermal)
- Gas power generation in Middle East and Africa
- Coal-fired power generation in Asia, etc.

Approx. 290.0 billion yen + Strategic Investment Fund (as of April 2018)

Currently working on the establishment of fund-based cash recycling scheme.
Aim to realize efficient business cycles for cash recovery and reinvestment.
Growth Strategies in Respective Fields

- Social Infrastructure Business Field
- Global Power Infrastructure Business Field
- Logistics Infrastructure Business Field
Growth Strategies in Respective Fields

Social Infrastructure Business Field

Global Power Infrastructure Business Field

Logistics Infrastructure Business Field
2. Growth Strategies for the Social Infrastructure Business Field


Increase the value of existing core businesses by leveraging the Sumitomo Corporation Group’s comprehensive capabilities

- **Electricity retail business Summit Energy**
  - Expansion of sales in the low-voltage field in collaboration with **J:COM** ← Balanced sales portfolio
  - Commencement of operations of in-house biomass power sources (**Summit Handa Power and Summit Sakata Power**) ← Reinforcement of competitiveness
  - Expansion of **new “service menus”** in line with customer needs (electricity retail x energy management, etc.)

![Diagram showing electricity sales and provision of biomass fuels](image)

- Provision of biomass fuels by the lifestyle product team
  - Woodchips
  - Wood pellets

**Electricity sales**

- 2015: 50 million kWh
- 2016: 70 million kWh
- 2017: 90 million kWh
- 2018: 110 million kWh
- 2020: 130 million kWh

**J:COM**

- Since June 2017
- Since August 2018
2. Growth Strategies for the Social Infrastructure Business Field

2-2. Medium- to Long-term Strategies

A new system based on a business model focused on the development of next-generation “smart infrastructure” and “urban management”

Social Infrastructure Business Division

- Establishment of the new “strategy and planning team”
  Incubation and organizational collaboration

- “Energy management” x “retail”
  “Smart” x “DX”
  Creation of new services and value

- “Smart City”
  Implementation of integrated infrastructure services
  Development of environmental value and sustainable urban design
2. Growth Strategies for the Social Infrastructure Business Field

2-3. Case Study: Value Creation through “Organizational Collaboration”

Scheme to broadly promote the concept of “Eco Islands” in Koshiki Islands through organizational collaboration and implement it in society.

Koshiki Eco Islands

- Future Plant in Nagasaki
  - Storage system using used batteries / recycling-oriented society

- Smart Town

- Integrated resort city

- Future Plant in Nagasaki
  - Zero-emission business opportunities

- Smart Town
  - Maximization of introduction of renewable energy / local production for local consumption

- Isolated islands/micro grid model
  - Low-carbon society / reduction of energy cost

- “Energy management” x “Summit Energy”
- “Energy management” x “Airport PFI”
- “Energy management” x “North Hanoi”

- Airports/North Hanoi Smart City
  - “Energy management” x “Electricity headquarters”
2. Growth Strategies for the Social Infrastructure Business Field

2-4. Case Study: Development of Next-generation Smart Infrastructure

Take steps toward building towns that fulfills people’s dreams by leveraging the Sumitomo Corporation Group’s comprehensive capabilities.

<table>
<thead>
<tr>
<th>Items to be considered as smart city elements</th>
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<tbody>
<tr>
<td><strong>Social infrastructure</strong></td>
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<tr>
<td>Real estate</td>
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<tr>
<td>High-rise apartments</td>
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<tr>
<td>Office buildings</td>
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<tr>
<td>Hospitals and schools</td>
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<tr>
<td>Commercial facilities</td>
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<tr>
<td>Transportation systems</td>
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<tr>
<td>Water supply and sewerage systems</td>
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<tr>
<td>Education</td>
</tr>
<tr>
<td>Medical services</td>
</tr>
<tr>
<td>Public services</td>
</tr>
<tr>
<td>Civil engineering</td>
</tr>
<tr>
<td>Power lines</td>
</tr>
<tr>
<td>Smart meters</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
</tr>
<tr>
<td>Provision of electricity</td>
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<tr>
<td>Energy management</td>
</tr>
<tr>
<td>Thermal storage</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
</tr>
<tr>
<td>Electric vehicles (EVs)</td>
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<tr>
<td>Renewable energy</td>
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<tr>
<td>Storage batteries</td>
</tr>
<tr>
<td><strong>Informatization</strong></td>
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<tr>
<td>Security services</td>
</tr>
<tr>
<td>Settlement services</td>
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<tr>
<td>Data centers</td>
</tr>
</tbody>
</table>

**Vietnam North Hanoi Smart City**

- **Development area:** 272ha
  
  Investment permit obtained in June 2018

- **Establishment of the North Hanoi Project Dept.**
  
  Integrated into this Business Division by spinning off from a relevant business unit
Growth Strategies in Respective Fields

- Social Infrastructure Business Field
- Global Power Infrastructure Business Field
- Logistics Infrastructure Business Field
3. Growth Strategies for the Global Power Infrastructure Business Field

3-1. Action Plan of the Medium-term Management Plan 2020

“Contribute to national interests of respective countries and simultaneously boost Sumitomo Corporation’s revenues by developing and providing global power infrastructure required by host countries by applying optimal technologies, cost and methods.”

- Thoroughly implement contracted projects
- Achieve 10,000MW (holding basis) as early as possible
- Rebalancing of asset portfolio
  Rebalance the ratio to coal 30: gas 40: renewable energy 30 by 2035
- Develop new businesses
3. Growth Strategies for the Global Power Infrastructure Business Field

3-2. Medium- to Long-term Growth Strategies

Enhance capabilities to conceptualize and promote businesses and develop optimal business portfolios.

**EPC**
- Market strategies
  - Traditional markets: Indonesia, Thailand
  - Emerging markets: Bangladesh, Myanmar, Sub-Saharan Africa

**IPP**
- Business bases and professional groups located in the US, Europe, Asia and Middle East
- Partnerships with utility companies and developers in Japan, the US and Europe
- Strategic cash management through fund formation (currently under preparation)
3. Growth Strategies for the Global Power Infrastructure Business Field

3-3. Case Study

TNF (Team New Frontier): Established on October 1, 2018

3D+1 (De-carbonization／De-centralization／Digitalization + Disruption)

By capturing rapid changes in the business environment, a new business organization has been established in order to pursue the third business model beyond the organizational framework.
3. Growth Strategies for the Global Power Infrastructure Business Field

3-3. Case Study

Asset portfolio for renewable energy
(Power generation capacity --- Gross: 4,413MW / Net: 1,581MW)
Growth Strategies in Respective Fields

- Social Infrastructure Business Field
- Global Power Infrastructure Business Field
- Logistics Infrastructure Business Field
4. Growth Strategies for the Logistics Infrastructure Business Field

4-1. Action Plan of the Medium-term Management Plan 2020

Promote initiatives related to new business fields and business models while working on the expansion of business infrastructure of existing core businesses

► Expansion of logistics management and support systems on a global basis
  ✓ Expansion of sales support system and reinforcement of support for large-scale projects in collaboration with operating companies and overseas regional organizations
  ✓ Strengthening of logistics governance

► Provision of risk management function based on insurance
  ✓ Analysis and grasping of risks associated with businesses of the Sumitomo Corporation Group and optimization of insurance coverage
  ✓ Development of a loss control program

► Expansion of revenue foundation for existing businesses, sophistication of functions and enhancement of profitability through improvement of efficiency
  ✓ (Logistics) Scale expansion, introduction of new technologies, enhancement of efficiency and promotion of usage of partners
  ✓ (Logistics) Responding to the needs of customers and markets in each region by leveraging strengths and networks of logistics operating companies
  ✓ (Logistics) Expansion of initiatives related to port terminals and retail logistics business
  ✓ (Industrial parks) Expansion and sales of existing industrial parks
  ✓ (Industrial parks) Development of new industrial parks and enhancement of services to tenants of existing industrial parks
4. Growth Strategies for the Logistics Infrastructure Business Field

4-2. Medium- to Long-term Growth Strategies

Generate revenues and fulfill functions by implementing new businesses and services and realizing new core strengths as early as possible

- **Further promotion of organizational collaboration**
  - Development of new businesses that can leverage the combination of “logistics x insurance x industrial parks” as cross-organizational initiative within the business division with a focus on key regions subject to company-wide development and those with growth potential

- **Logistics business and insurance business**
  - Engagement in the retail logistics business and port terminal operations
    - Realization of a broad-area smart logistics concept
  - Development of insurance products to address new risks such as cyber risks, reinforcement of proposal capabilities, support and participation in business investment projects in overseas regional organizations

- **Overseas industrial park business**
  - Increase value of existing industrial parks, development of new industrial parks
  - Development of new businesses and enhancement of services that meet the needs of employees of industrial parks and communities
  - Consideration of development of areas surrounding industrial parks
踏み出そう 一步先へ、創ってゆこう 地球の未来