

THE MID-TERM BUSINESS STRATEGY (2017-2021)

This document contains forward-looking statements concerning the results of operations and businesses of Showa Shell Sekiyu K.K.. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements.

A new integrated company

A leading company with outstanding competitiveness
Building a new model of an energy company starting from Japan

昭和シェル石油

出光

**The Mid-term Business Strategy
(2017-2021)**



**Current Mid-term
Business Action Plan**



Oil Business: To increase our profitability

- Retain domestic sales volume
- Increase oil product margins through added value
- Reduce costs through supply chain improvements
- Form partnership with other companies
- Expand petrochemical business

- Executed the planned actions
- Improved our profitability and efficiency



Solar Business: To be a global leader

- Realize business success in Japan
- Create a high-value added business model
- Develop technologies for future growth

- Changed our strategy due to the rapid change in the business environment
- Aim to realize positive turnaround through focusing on sales in the domestic market



Power Business: To expand capacity and types of electricity generation

- Expand business scale to 1GW class
- Increase sources of electric power generation

- Expanded both the electricity generation capacity and the sales of our electricity
- Gained stable profit

1. Political, socio-economic structural change

- Aging and shrinking population in Japan
- Growth and urbanization in emerging Asian economies
- Change of oil downstream business environment in Asia and Middle East



2. Discontinuous changes by technological innovation

- ICT and AI revolution
- Evolution of alternative vehicles such as EV
- Dramatic drop of battery prices

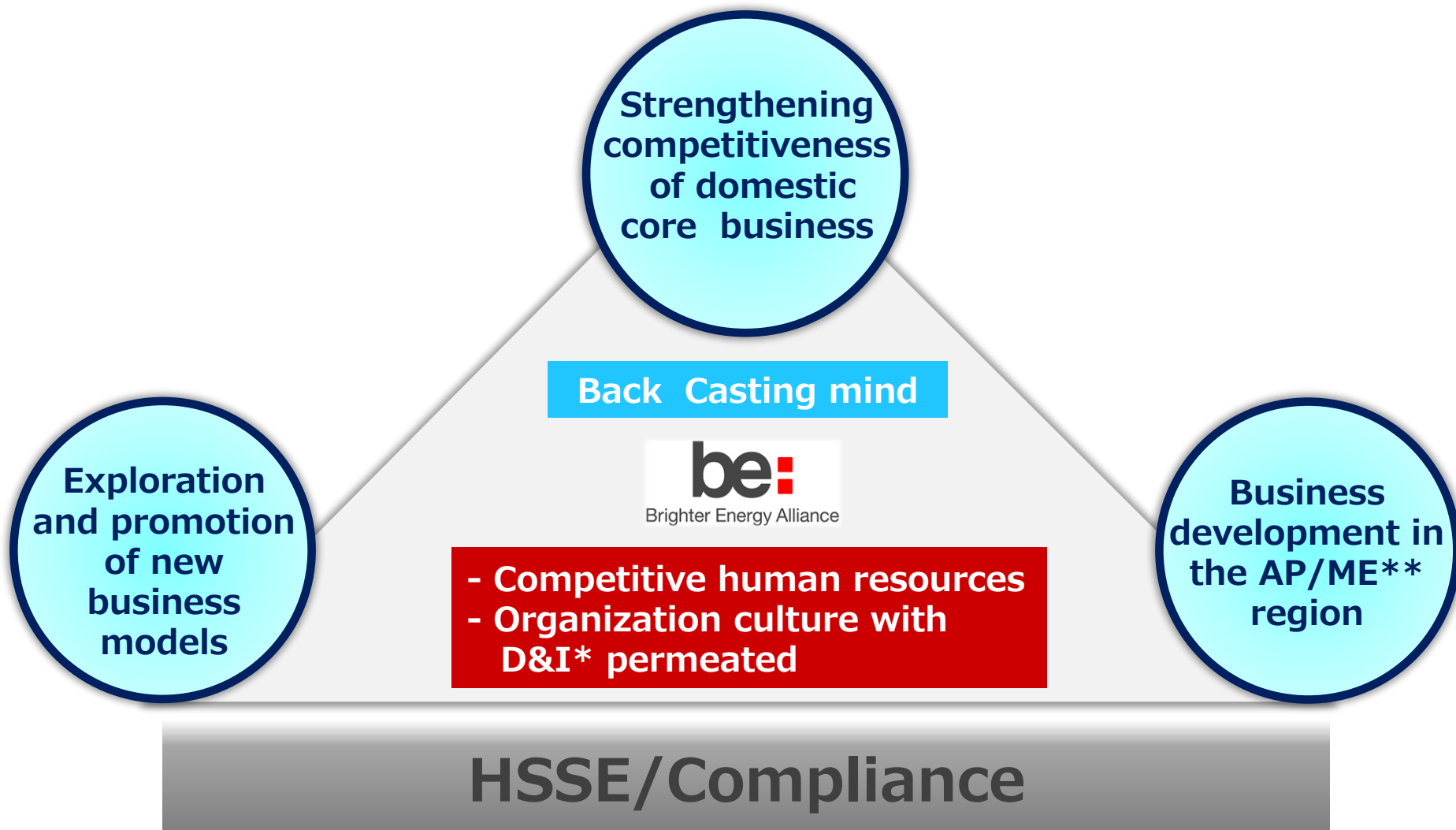
3. Increasing social demands for measures against environmental problems

- Rising expectation toward corporate actions along with international agreement on climate change
- Dramatically declining renewable costs and decentralization of power generation
- Introduction of stricter environmental regulation in Asian and Middle Eastern countries



Realizing our management philosophy

“With our energy, we energize the future”



*Diversity and Inclusiveness

**AP: Asia Pacific, ME: Middle East

Showa Shell Sekiyu K.K.

in 2021

**Consolidated ordinary
income*(CCS**)**

100Bil¥

-Oil Business(CCS)

80Bil¥

-Energy Solution Business

20Bil¥

*Consolidated ordinary income includes the synergy of the alliance with Idemitsu Kosan.

**CCS: Current Cost of Supply

Base Assumptions

Dubai Crude Oil Price

-2018-20 : \$ 55/bbl

-2021 : \$ 60/bbl

Exchange Rate

-2018 : ¥110/ \$

-2019-21 : ¥115/ \$

Strengthening competitiveness of domestic core business

- Strengthen supply competitiveness by the Alliance and chemical shift.
- Create the new competitive “next generation” SS models.
- Expand line-up of value-added products and expand domestic market share in lubricants and bitumen business.

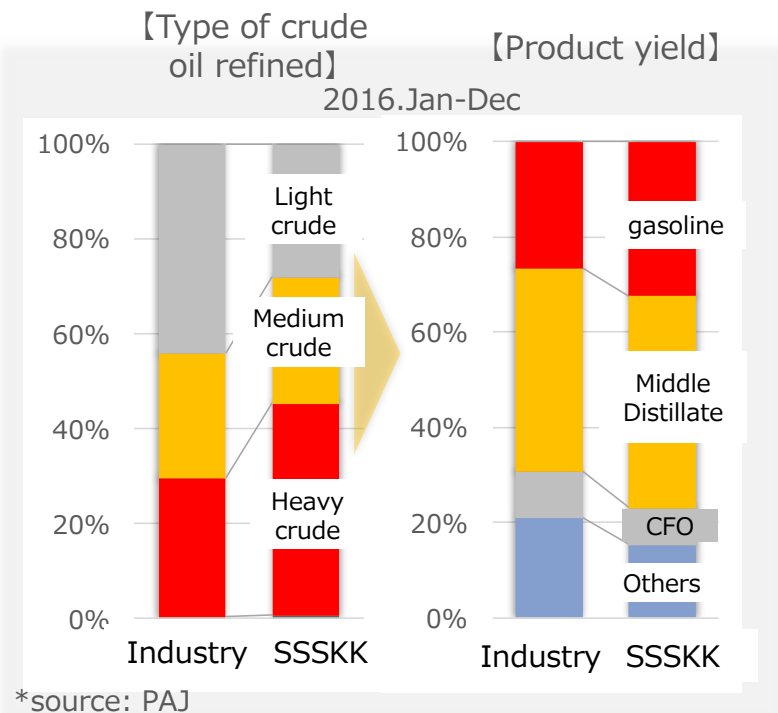
Exploration and promotion of new business models

- Promote research and development for future businesses to realize sustainable society.

Business development in the AP/ME region

- Embark on businesses in foreign countries by utilizing our strength and cooperating with our strategic partners.

- Our group refineries have already been competitive with the high 2nd unit ratio and the operation capability to maximize utilization of those units.
- In order to survive in the Asian market, we enhance our refineries competitiveness through investment to various items, such as expansion of exporting facilities, construction of chemical producing units, among others.



【Major activities to enhance the refineries competitiveness】

Expansion of export facility

Mainly at Yokkaichi refinery

Chemical Shift

Investment for MX/PX production increase

Energy efficiency

Mainly at Toa and Yokkaichi

Improvement of efficiency with ICT use

On-line check programs for facilities, etc.

Assessment for energy efficiency of group refineries

SSSKK	Industry
7.9	8.4

←Energy consumption rate of yr2016(unit: klcoe/kkl), which shows our group refineries are more efficient than the industry average.

- We strengthen competitiveness of our supply chain, such as refining, supply and distribution through proceeding the be: Alliance with Idemitsu Kosan.



Brighter Energy Alliance

**Optimization of
crude purchase
and transportation**



**Efficiency
improvement in
logistics network**



**Mutual use of
depots**



**Optimization of
production
planning**



- We generate synergies through joint operations with other industries and create new services provided at SS.
- We build Big Data of SS customers aiming to create the “next generation” SS model.

【Creation of new services】

Complex SS model cooperating with other industries



- Improving customers' convenience
- Expansion in the number of customers

【Roadmap of the “next generation” SS model】

yr2018

yr2020

yr2022

One to One Marketing

Direct Marketing

Data Consulting

Data Collaboration with other industries

Service for next generation mobility

More customer focus with digital marketing

Building Big Data and more sophisticated use

- Improvement of customer contact in quality and frequency

- Capturing the changing needs of society and customers, we expand our share in the Japanese market by improving line-up of value-added products and quality of service which enhance environmental friendliness more.



● Lubricants Business

Improve line-up of value-added products and explore new services

Products	✓ To contribute to stable utilization, long-life use, energy saving
Service	✓ To utilize IoT ✓ To enhance eco-friendliness
Sales	✓ To enhance relationship with manufacturers ✓ To improve competency of salespeople for more value-added products sales



● Bitumen Business

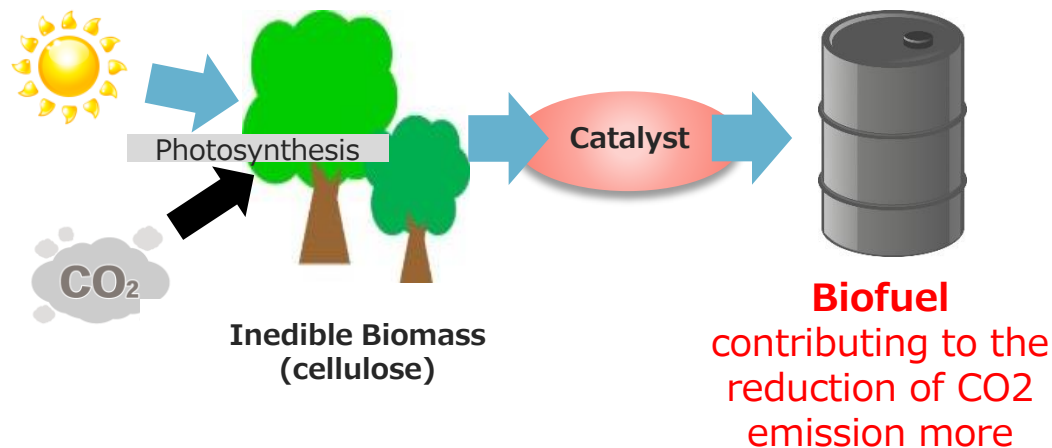
Be a market leader of value-added bitumen in Japan

Products	✓ To promote development of modified products and recycling of our products
Sales	✓ To research and create standards in collaboration with industry, government, and academia ✓ To lead standardization of long life and eco-friendly bitumen products in the industry

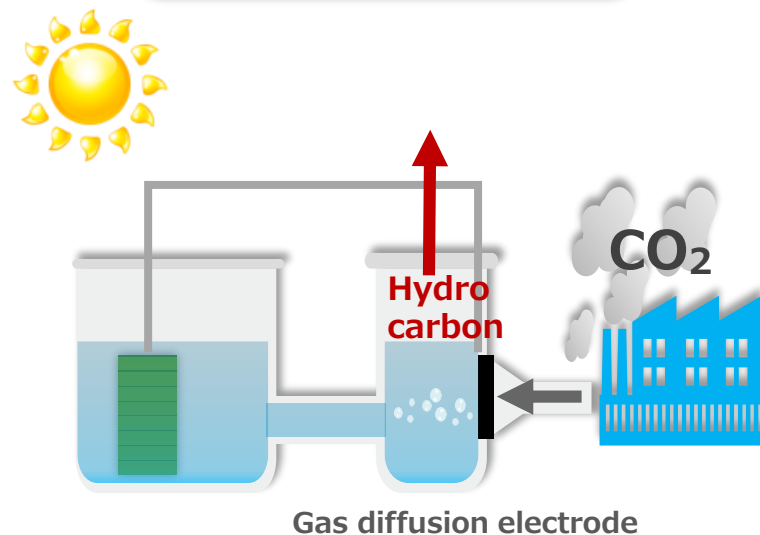
- We promote research and development for future business with consideration of solution for various social or environmental problems and changing business environment.

Biofuel

- ✓ Succeeded in producing “hexane” which can be used as gasoline base material
- ✓ Planning to produce bio jet fuel with this biofuel



Artificial Photosynthesis



- We embark on businesses in foreign countries, especially in AP and ME regions, not only by utilizing our competitiveness in each supply chain but also by collaboration with strategic partners like Idemitsu Kosan and Saudi Aramco.

- ✓ Participation in refinery operation
- ✓ Investment into refineries and petrochemical plants

Refining



- ✓ Joint operation in trading
- ✓ Operation of fuel oil terminals

Supply/Distribution



- ✓ Investment into SS business
- ✓ Sales of high value-added bitumen

Sales



Strengthening competitiveness of domestic core business

- Power: Diversify power resources and invest in new power plants
- Power: Expand the power retail marketing area in Japan
- Solar: Achieve positive profit by cost reduction and focusing on sales in the residential market.

Exploration and promotion of new business models

- Solar: Launch a new ultra-light-weight panel
- ES: Explore new business models to generate profit in the decentralized energy society

Business development in the AP/ME region

- ES: Enter into power business in foreign countries

- We pursue expansion of power generation which is cost competitive and meets social demand, by utilizing our experiences and knowledge of various types of power generation.

【Various types of power generation in our group】

Biomass



LNG



Refinery Off-gas

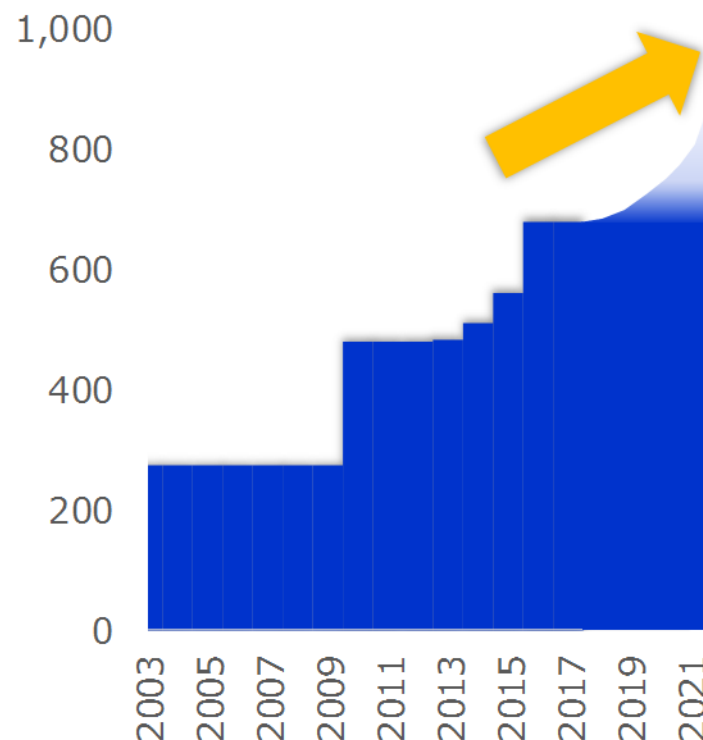


Solar



【Transition in the scale of our group's power generation】

(MW)

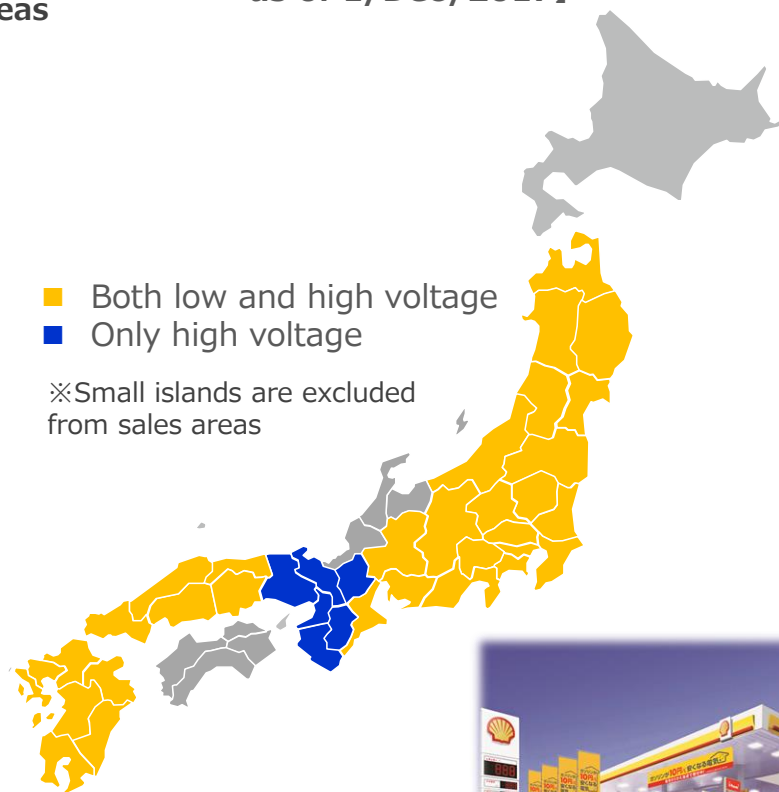


- We've already expanded the power retail marketing areas in Japan. We continue to increase our customers by utilizing the network including DLRs network we've established in the oil business.

【Growth of retail sales】



【Retail marketing areas as of 1/Dec/2017】



←Programs we are providing.
(L): Electricity supply with gasoline price discount program
(R): Electricity supply program with an advantage at night as well as in the daytime



Showa Shell Sekiyu K.K.

- We decided to split Solar Frontier into two companies. This enables Solar Frontier to focus on production and domestic sales of CIS modules and promote differentiation strategy.
- Solar Frontier continues to reduce production cost and expenses, revise organization, and increase sales in residential market in order to achieve positive financial result.

Business selection and focus

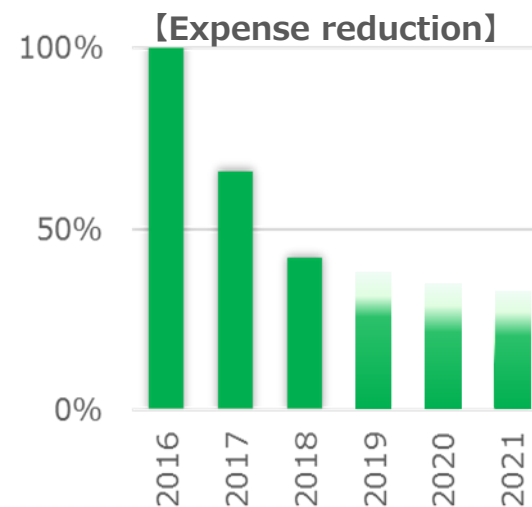
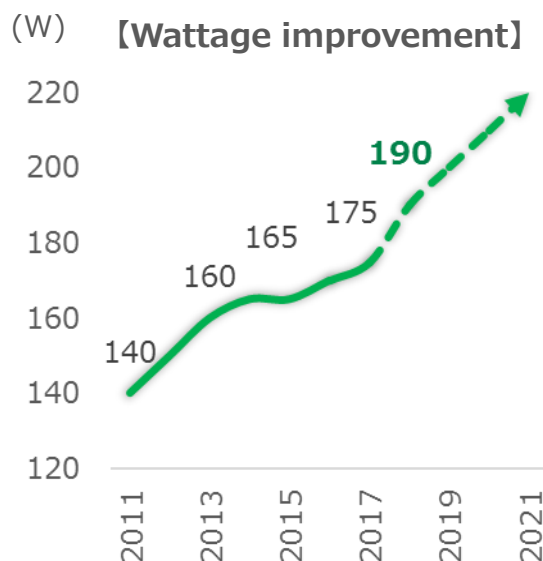
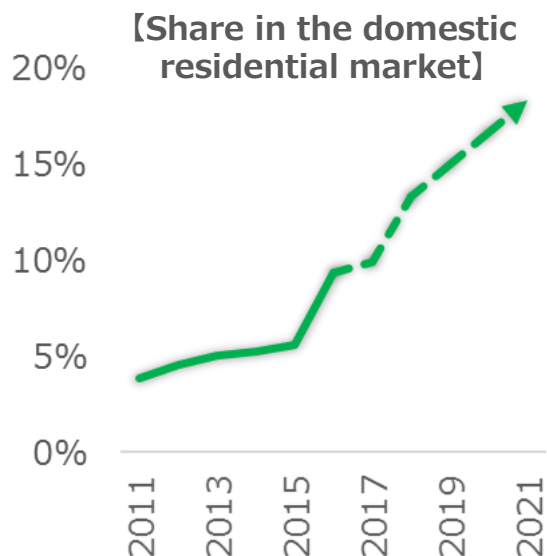
- Focus on module production and promote differentiation strategy
- Focus on sales in the domestic residential market

COGS reduction

- Strengthen the multi-functionality of Kunitomi Plant
- Improve panel output : reduction of unit cost per wattage
- Reduce the cost of raw materials

Expense reduction

- Consolidate production into Kunitomi Plant
- Reduce SGA

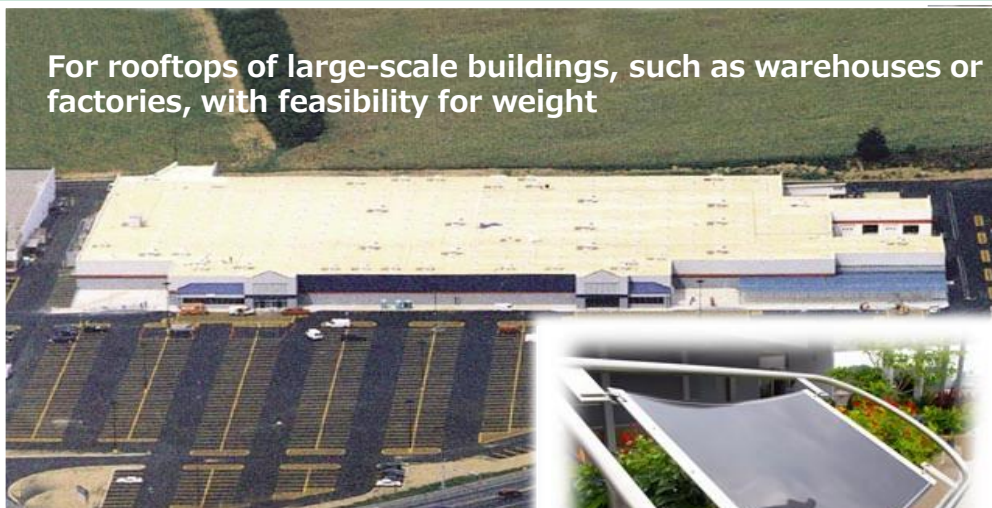


Solar – New Ultra-Light-Weight Panel

19

- We generate steady profit with our new product, ultra-light-weight panel. This product will be the Game Changer, exploring new demand which conventional panels hasn't been able to meet, such as rooftops of warehouses with feasibility for weight. We plan to launch it in 2019.

For rooftops of large-scale buildings, such as warehouses or factories, with feasibility for weight



As an off-grid power source in the places devastated by natural disasters



Harmonize with architectures with sophisticated design



Prototype of new ultra-light-weight panel

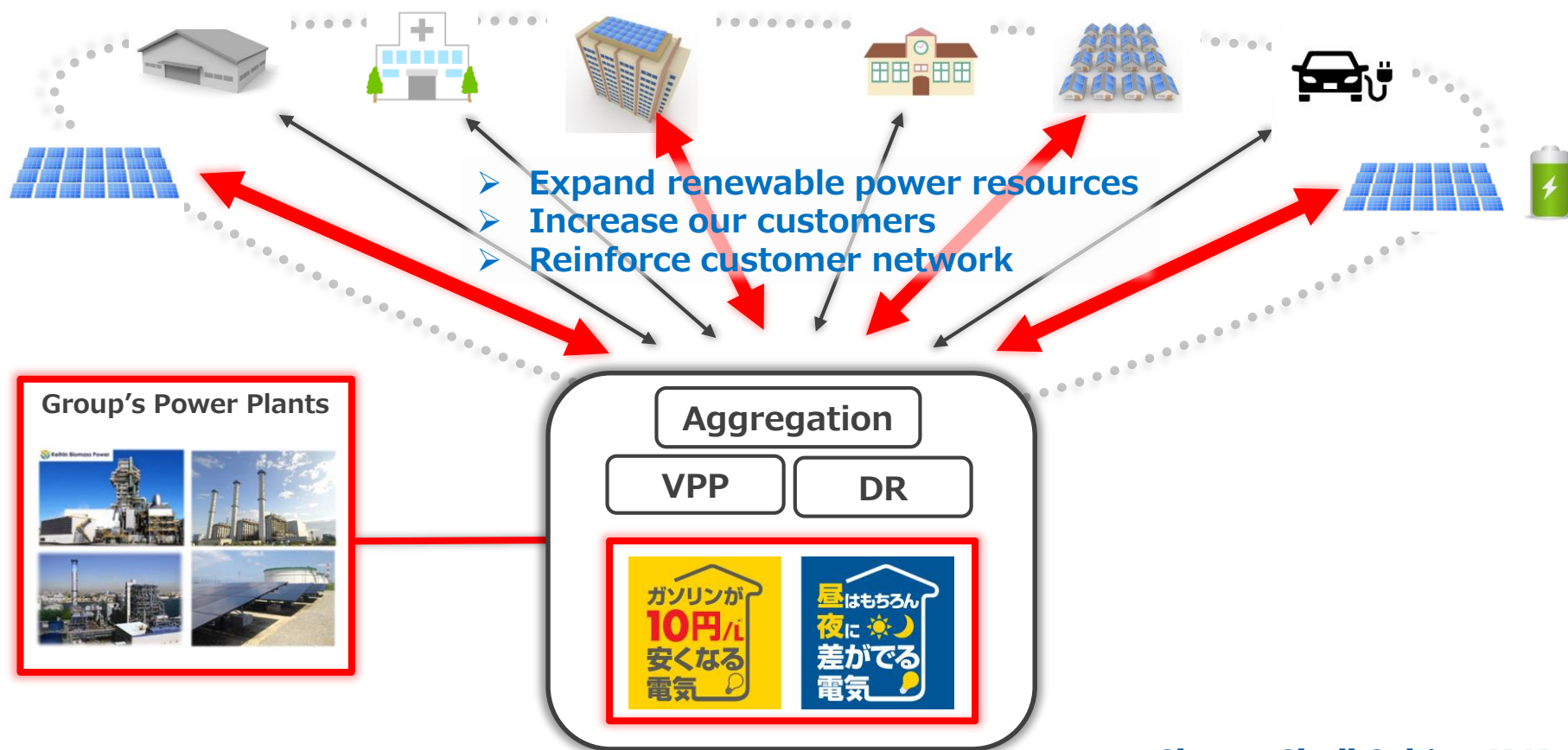
For rooftops of houses not strong enough to apply conventional solar panels



For mobility

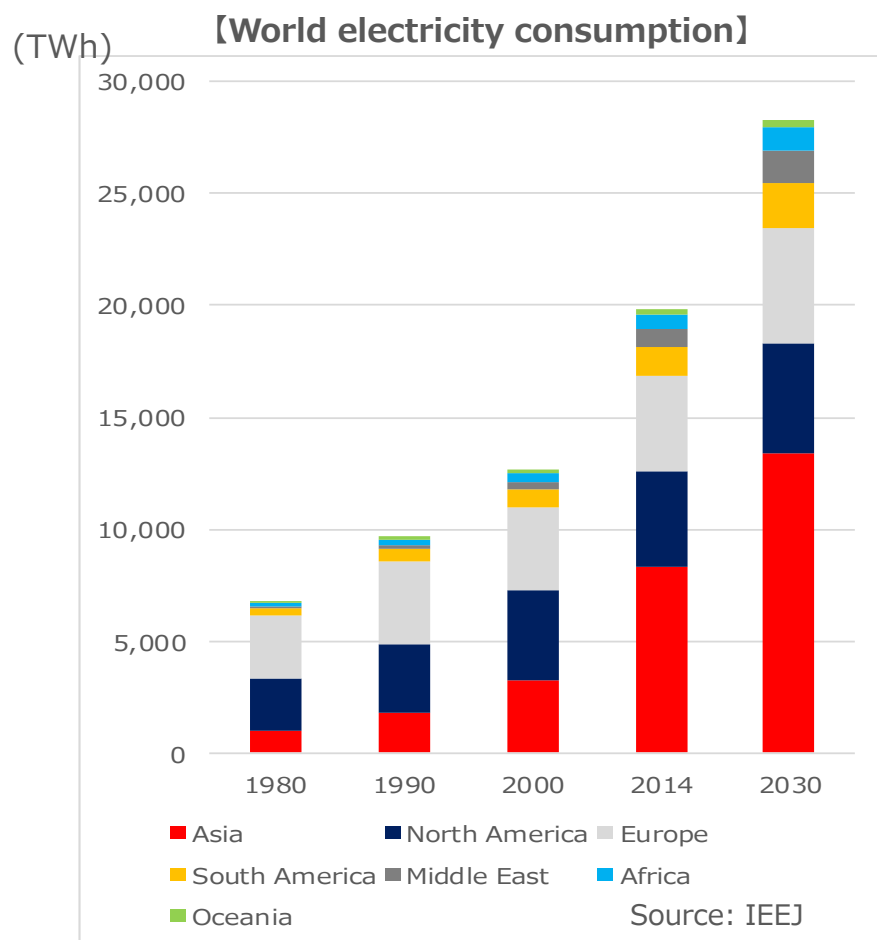


- Assuming the possibility of change in domestic business environment, such as more IoT use, decentralized energy increase, and battery improvement, we aim to generate profit through exploring new business models with our experiences and knowledge of solar and power business and by developing systems, such as VPP* or DR**.



*VPP: Virtual Power Plant, **DR: Demand Response

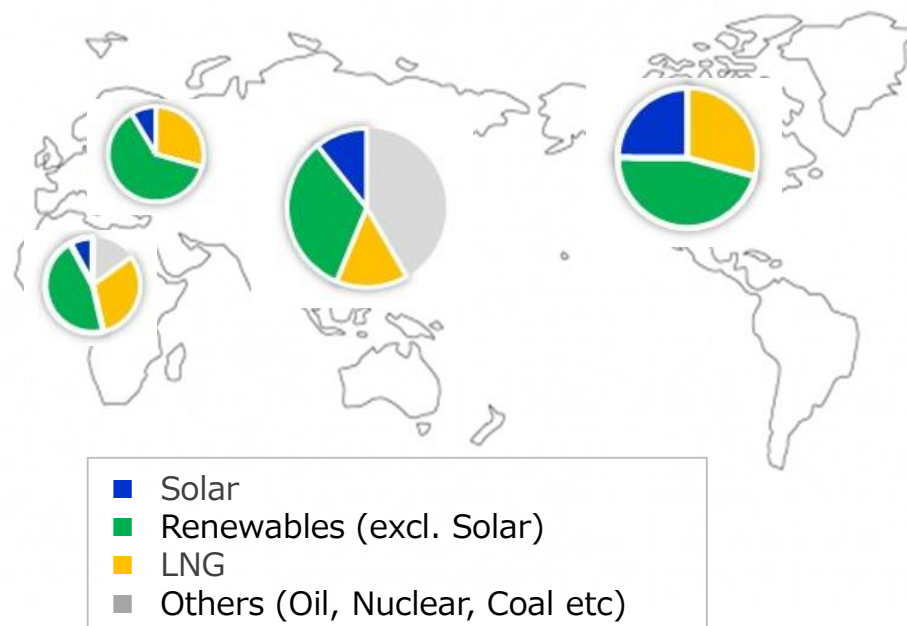
With our experiences and knowledge of power business in Japan and solar business overseas, we enter into power business market in overseas, especially in the AP/ME region, where the demand growth is expected.



[Growth of Electricity generation in types of power sources]

※growth from 2014 to 2030

Source: IEA



(0.1Bill ¥)

Cash-in/out

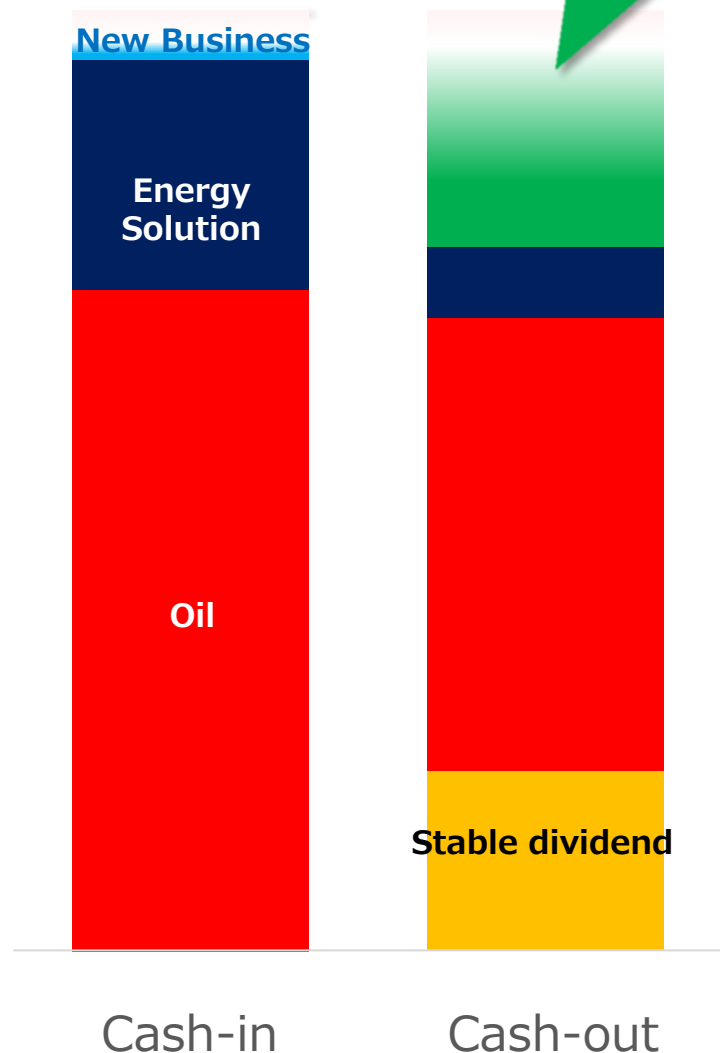
4,000

3,000

2,000

1,000

0



- We promote investment strategy focusing on strengthening our current core business in order to realize the mid-term business strategy target.
- We plan to generate steady cash flow even with planned investment in the mid-term business strategy.
- We've already been financially healthy. With keeping our "stable and attractive" dividend policy, not only strategic investment for the future growth but also additional dividend are in consideration.

- We strengthen our organization capability and HR competitiveness through permeation of Diversity and Inclusiveness (D&I) in order to provoke innovation and realize the mid-term business strategy.

Realize SSSKK management philosophy

Provoke innovation and establish competitive edge

**Diversity
&
Inclusiveness**

✓ **Diversified
recruitment**

✓ **Utilization of HR
between group
companies**

✓ **Restructuring and
reinforcement of
employees
education system**

✓ **More utilization of
senior employees'
knowledge and
talent**

✓ **Increase women
managers' ratio**

✓ **Improvement of
working system to
promote work-style
reforms**



For Low Carbon Society

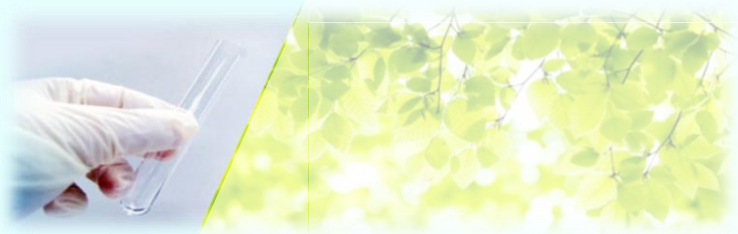
More renewables for power generation



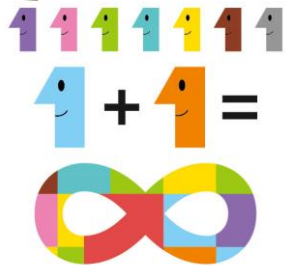
Exploration for new way of use and creation of new value of solar panels



Biofuel, artificial photosynthesis, etc.



For D&I and Women's Participation



For Highly Effective Governance



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