

The 6th Consolidated Medium-Term Management Plan

~ Oil & New 2022 ~

March 20, 2018

Cosmo Energy Holdings Co., Ltd.

President, Representative Director, Chief
Executive Officer

Hiroshi Kiriya

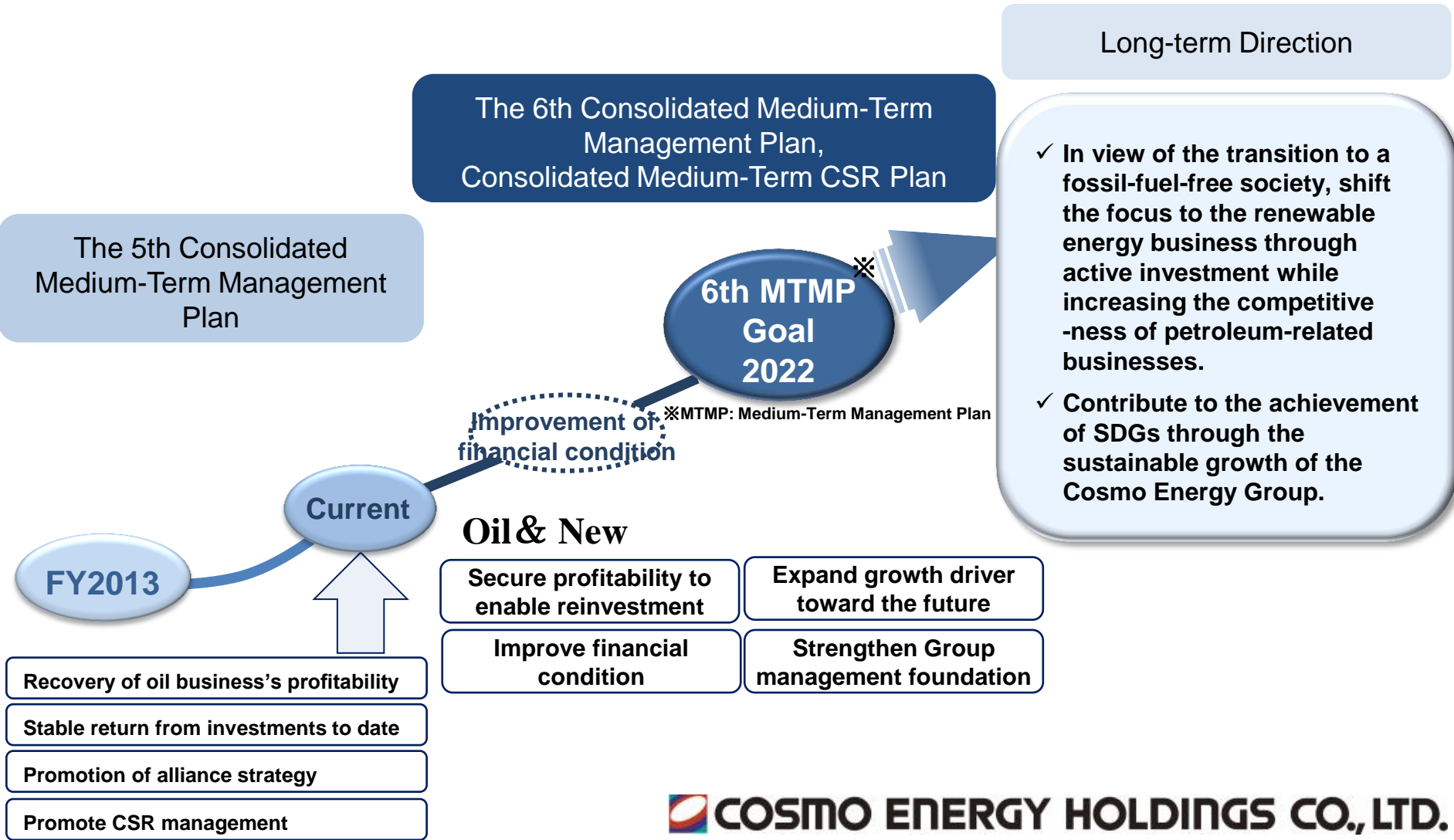
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Long-Term Direction of Business

Positioning of the 6th Consolidated Medium-Term Management Plan for a Long-Term Increase in Corporate Value

- ✓ Improve the business portfolio for the subsequent growth in view of a long-term direction.
- ✓ Strengthen a financial condition by increasing the profitability of the Oil E&P and Petroleum business.



Long-Term Environmental Awareness

- ✓ The transition to a fossil-fuel-free society is accelerating in response to the Paris Agreement.
- ✓ Renewable energy will increase although the value of petroleum will remain unchanged by around 2030.

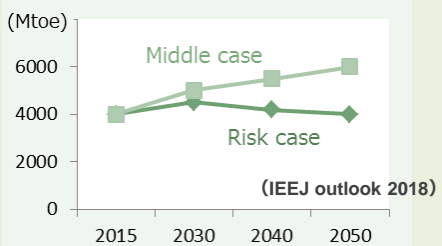
Paris Agreement
(Set the target of greenhouse gas reduction)

4th Industrial revolution
(Innovation of IT technology)

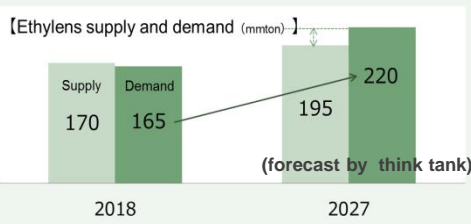
Acceleration of fossil fuel free

GLOBAL Increase in population

Stable growth of oil demand (level off after 2030 onwards)

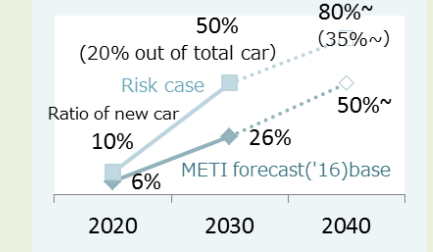


Stable growth of petrochemical demand (deficiency despite new plants and revamp)

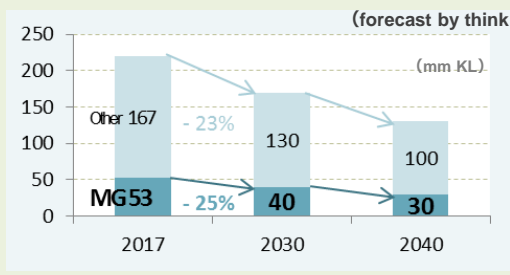


JAPAN Decrease in population

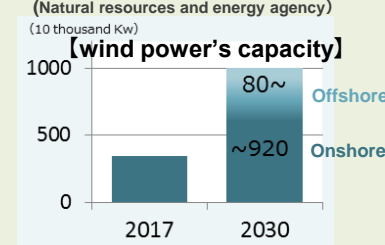
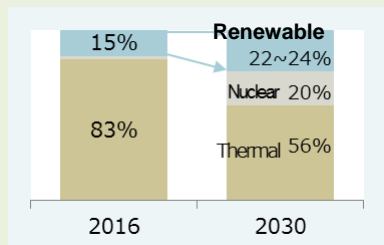
Wide-spread use of EV* *including PHV
(Cosmo's forecast based on forecast by think tank)



Decline in oil demand (A certain amount of gasoline demand remains)
(forecast by think tank)



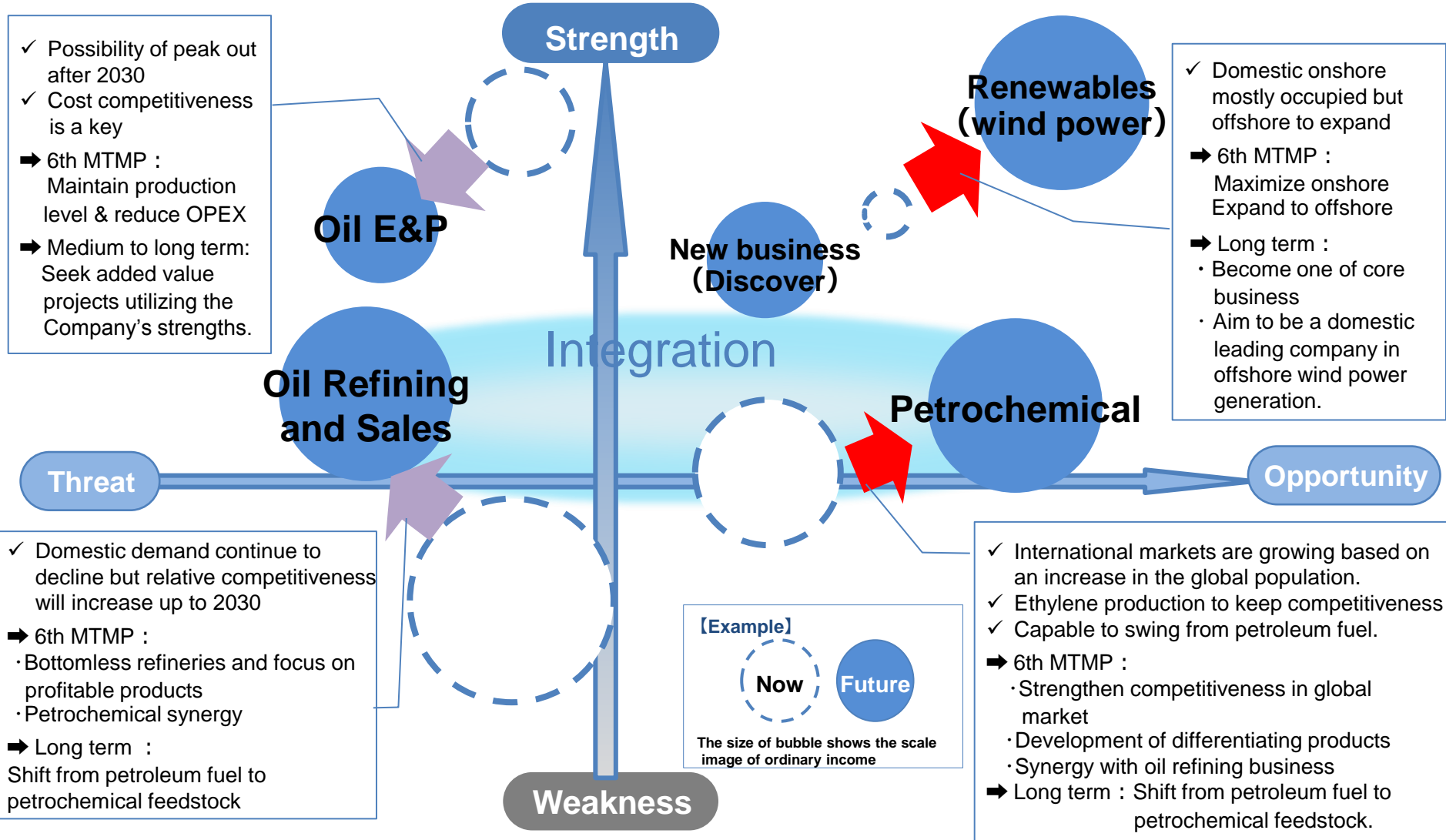
Expansion of sharing economy Expansion of renewable energy (Acceleration of wind power generation development)
(Natural resources and energy agency)



(Association of sharing economy)

Conversion image to long-term business portfolio

- ✓ In view of the transition to a fossil-fuel-free society, shift the focus to the renewable energy business through active investment while increasing the competitiveness of petroleum-related businesses.
- ✓ Contribute to the achievement of SDGs through the sustainable growth of the Cosmo Energy Group.



The 6th Consolidated Medium-Term Management Plan

“Oil”: Increase the profitability of the petroleum business by, for example, complying with the IMO regulations and taking the lead in the supply of clean marine fuels.

➔ **Strengthen financial condition based on earning power.**

“New”: Invest in wind power generation and other businesses that will lead the next growth stage.

➔ **Contribute to the achievement of SDGs through business activities.**

Secure profitability to enable reinvestment

- ✓ Firm a system of safe, stable operation in oil refining business
- ✓ Take action ahead of the IMO regulations
 - ➔ Transform to bottomless refineries and increase profitable products.*
 - * Aim to raise the competitiveness of refineries that supply only relatively high added value petroleum products.
- ✓ Strengthen the “Vehicle life” business
- ✓ Achieve synergy with petrochemical business
- ✓ Steadily recover the investment in the Hail Oil Field

Expand growth driver toward the future

- ✓ Strengthen petrochemical business and increase its product-line
- ✓ Early development of offshore wind power
- ✓ Explore new businesses for future growth in domestic and overseas market(Asia / Abu Dhabi)

Improve financial condition

- ✓ Increase shareholders’ equity
- ✓ Strengthen cash management
- ✓ Careful selection of investments with an eye on long-term environment
 - ➔ Early achievement of management goals

Strengthen Group management foundation

- ✓ Implement CSR management.
 - Pursue the sustainability of society and the Group.
 - Improve ESG key factors.
 - ➔ Develop and implement the medium-term CSR management plan (FY2018 – FY2022).
- ✓ Increase productivity through work-style and operational innovation
 - Promote diversity.
 - RPA(Robotic process automation), Thoroughly increased operation efficiency using AI.

Increase earning power and improve the financial position to achieve a goal of equity capital and DER of 1.0-1.5 times that can withstand changes in the market environment at an early stage.

【Management Goals (FY2022)】

(Unit: billion yen)

1	Ordinary income (excluding impact of inventory valuation)	Over 120.0
2	Income taxes	Over 50.0
3	Free cash flow (FY 2018 - FY 2022 Five years total)	Over 150.0
4	Net worth (Net worth ratio)	Over 400.0 (Over 20%)
5	Net Debt Equity Ratio *	1.0~1.5 times
6	ROE	Over 10%

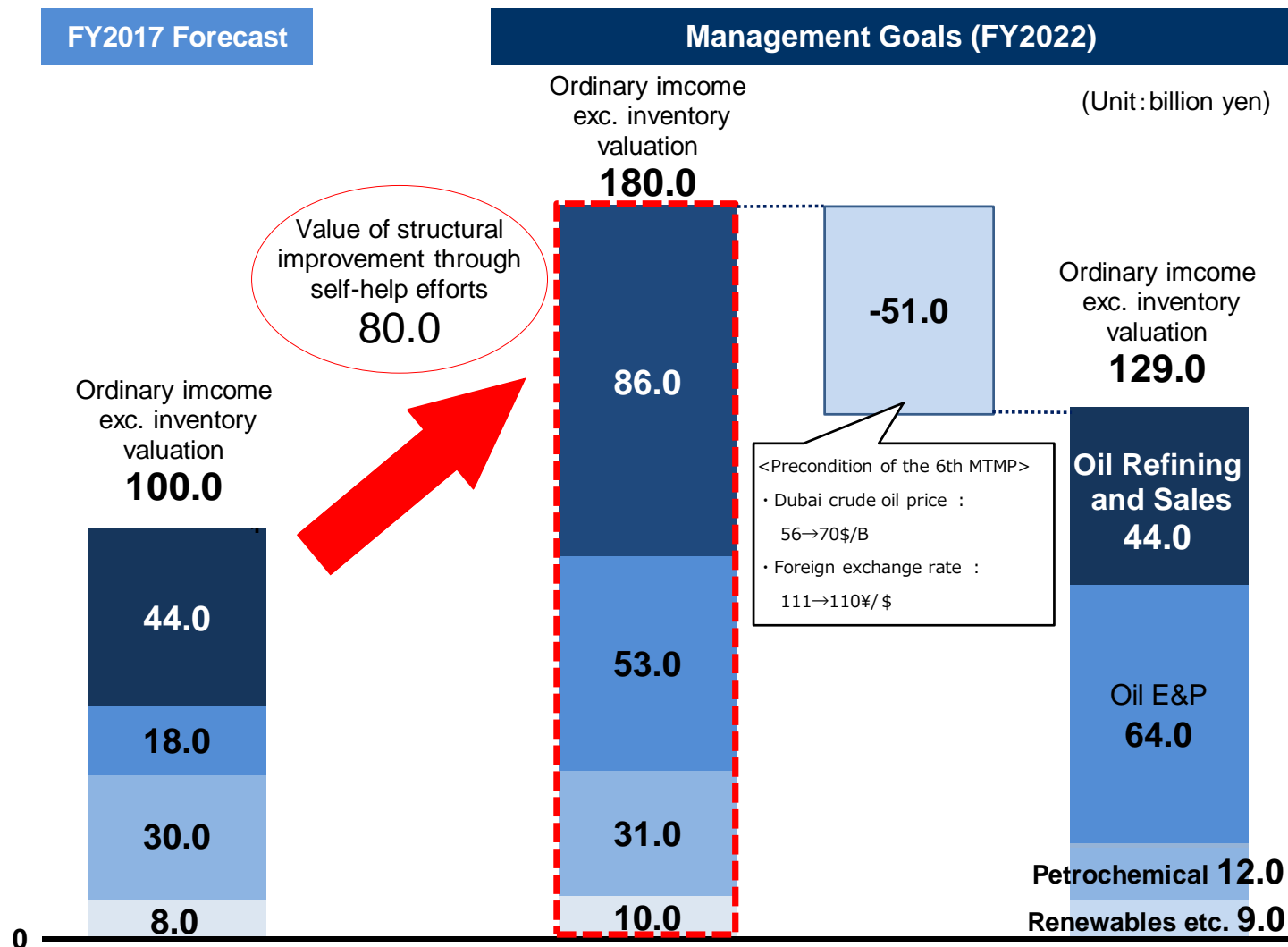
【Precondition】

Dubai crude oil price (USD/B) : 70

Exchange rate (yen/USD) : 110

* 50% of original amount of Hybrid Load regarded as Equity is counted as Equity by the assessment of Japan Credit Agency, Ltd. (50% of 60 billion yen Hybrid Loan started on 1st April 2015 is included into Equity)

✓ Ordinary income is expected to be 129.0 billion yen in FY2022 despite an increase of 80.0 billion yen from FY2017, taking into account the assumptions such as crude oil prices.



An increase of 80.0 billion yen to be achieved, largely through changes such as increasing profitable products composition in oil refining and sales and production of the Hail Oil Field.

(Unit:billion yen)

	FY2018	FY2019	FY2020	FY2021	FY2022	Improvement
Improvement in FY2022 vs 2017 (excl. impact of market condition)						80.0+α
Oil Refining and Sales	Utilizing Chiba Refinery Pipeline					42.0
	Safe and stable operation,Improve utilization rate (Regular maintenance reduction・Chiba Refinery 4 year's operation) ,Synergy creation with petrochemical					
	Achieve no heavy fuel oil production (response to IMO)					
	Start Supply to Kygnus Sekiyu K.K.					
Expansion of vehicle life business						
Oil E&P	Stable production in existing and the Hail Oil Fields ・ OPEX reduction					35.0
Petrochemical	Enhance competitiveness of basic petrochemical product , Pursue synergy with refinery					1.0
	Start C9 petroleum resin business					Cash Flow:8.0[*]
Renewable energy	Expand onshore wind farms (Power generation capacity 230,000kW→400,000kW) (see page 25)					2.0
Develop offshore wind farms					Start offshore wind power site project	
New area	Deepen alliances with MIC, Hyundai Oilbank, and CEPSA					+α
	Sow the seed to new business					

※ Cash Flow: Ordinary income + Increase in depreciation

Carry out growth investment and shareholder returns while considering balance with the financial position.

(Unit: billion yen)

Incoming Cash	Outgoing Cash
535.0	360.0
Net profit 225.0 →Increase shareholders 'equity	Investment [※] 360.0
Depreciation etc. 310.0	Free Cash Flow 175.0 →Decrease in debt with interest →Dividend

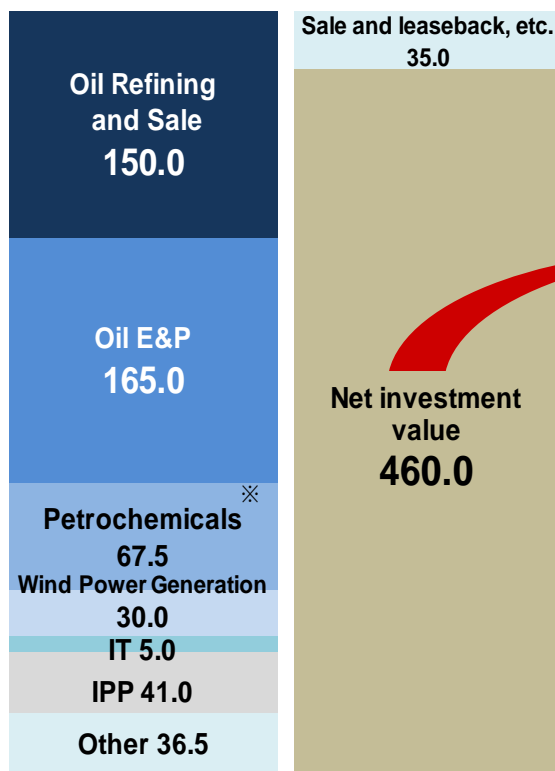
Shareholder Return Policy

- ✓ Recognize shareholder returns as an important business task
- ✓ With the principle of stable dividend payment, aim for further returns to shareholders while considering the balance between achievement toward management goals and growth investment.

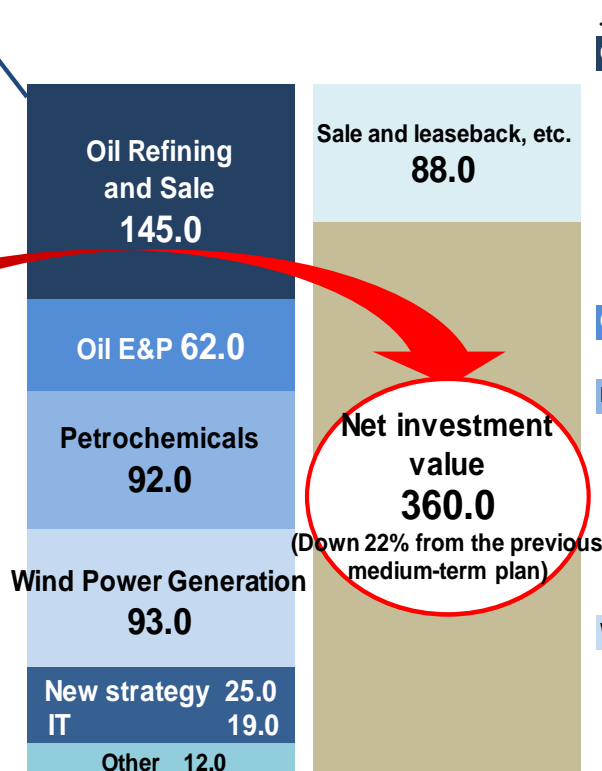
*Strategic investment is net amount reflecting operating lease etc.

- ✓ **Strategic investment: Actively use approx. 40% of the total investment for an increase in competitiveness and growth investment.**
 - ➔ **Oil refining and sale** : Increase delayed coker unit capacity.
 - ➔ **Petrochemicals** : Increase added value of basic products.
 - ➔ **Wind power generation** : Develop offshore wind power sites.
 - ➔ **New businesses** : Discover businesses that will lead the next growth stage.
- ✓ **Reduce cash-out using sale and leaseback, etc.**

The 5th Consolidated Medium-Term Management Plan



The 6th Consolidated Medium-Term Management Plan



(Unit : billion yen)

< Breakdown >

Oil Refining and Sale	145.0
(Strategic Investments)	35.0
(Breakdown) Coker unit investment	11.0
Reduced regular maintenance and energy saving	10.0
Conversion to profitable product	4.0
Synergy with petrochemicals	3.0
Strengthening retail business	7.0
(Base investment)	110.0
Oil Exploration and Production	62.0
(Base investment)	62.0
Petrochemicals	92.0
(Strategic Investments)	40.0
(Breakdown) Increasing added value of basic products	18.5
Expansion of functional products	8.0
Energy saving	3.0
Other (synergy with refining, etc.)	10.5
(Base investment)	52.0
Wind Power Generation	93.0
(Strategic Investments)	90.0
(Breakdown) Development of onshore wind power plant sites	56.0
Development of offshore wind power plant sites	34.0
(Base investment)	3.0

* Calculated by assuming that Maruzen Petrochemical had become a consolidated subsidiary at the beginning of the 5th medium-term plan.

Overview of Consolidated Medium-Term CSR Management Plan



~ Contribution to Achievement of SDGs ~

- ✓ Develop a medium-term CSR management plan for activities that contribute to the sustainable development of both society and the Cosmo Energy Group.
- ✓ Promote activities based on the perspective of ESG throughout the supply chains, including group companies and business partners.

E	Promoting environmental measures 	S	Enhancing human rights & social contribution measures 
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- ✓ **Reduction of greenhouse gas emissions**
【2030 targets】
CO2 emissions Down26% [from FY2013]
(Down 2 million tons)
【2022 targets】
CO2 emissions Down16% [from FY2013]
(Down 1.2 million tons)
- ✓ **Reduction of pollutants**
- ✓ **Resource circulation**

- ✓ **Occupational safety & health**
- ✓ **Diversity**
- ✓ **Human resources development**
- ✓ **Customer satisfaction**
 - ➔ Improve service level
 - ➔ Enhancing Eco Card Fund initiatives

G	Ensuring safety measures 	Strengthening corporate governance structure 
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- ✓ **Safe operations and stable supply**
 - ➔ Preventing work-related accidents, Preventing major accidents
- ✓ **Improvement of quality assurance system**

- ✓ **Thorough implementation of risk management and compliance system**
- ✓ **Development of CSR procurement policy**
- ✓ **Responses to ESG evaluation (improvement of information disclosure)**
 - ➔ Improve ESG ratings

Supplementary Information

Review of the 5th Medium-Term Management Plan	P.15-17
Business Strategy	P.18-25
-Oil Exploration and Production Business	
-Oil Refining Business	
-Petroleum Sale and Vehicle life Business	
-Petrochemical Business	
-Renewable Energy Business	

Review of the 5th Medium-Term Management Plan

Review of the 5th Medium-Term Management Plan

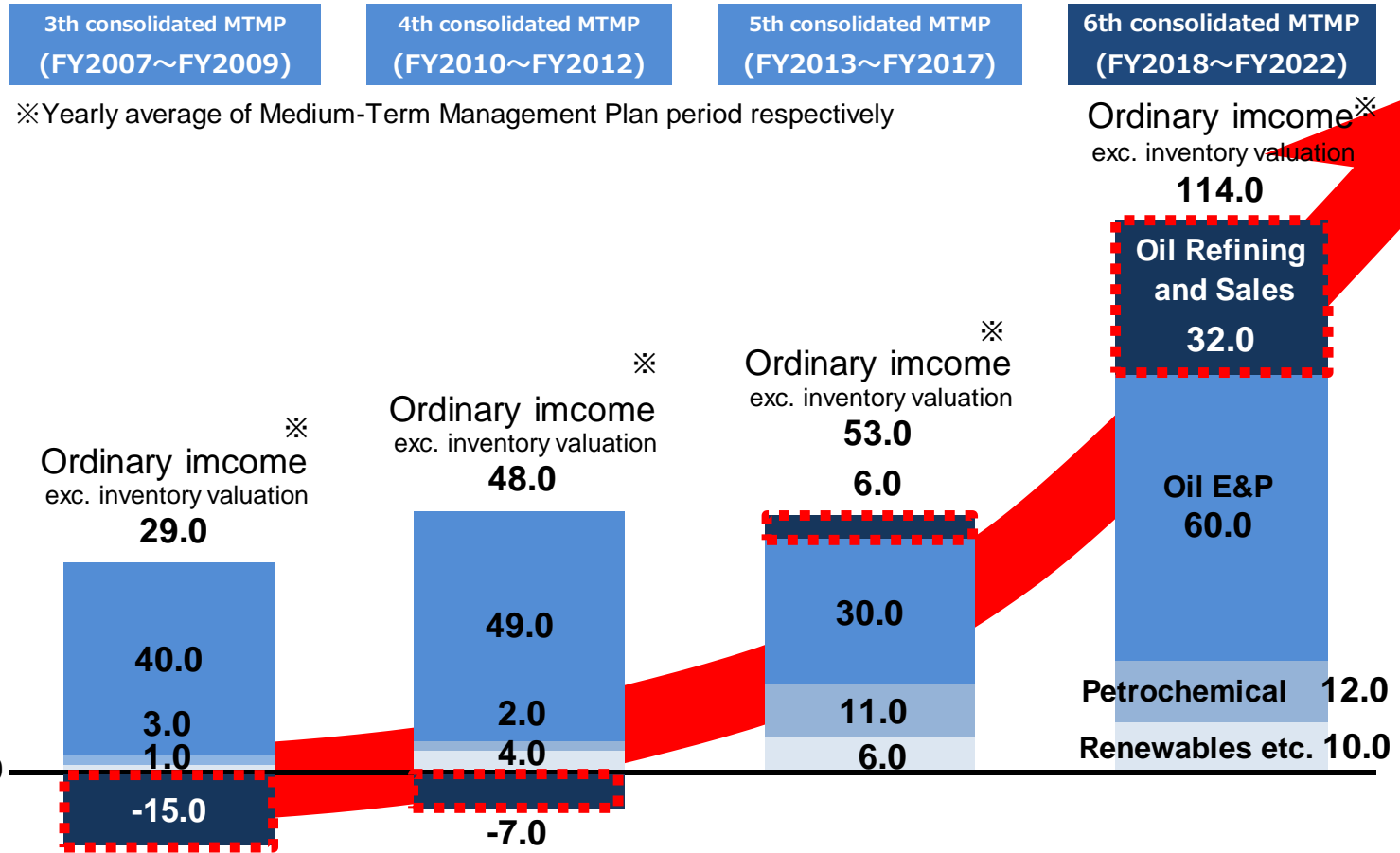
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Steadily achieved growth through the recovery of the oil refining business and large investments while utilizing the alliance strategy.

		FY2013	FY2014	FY2015	FY2016	FY2017
Company Structure					Holding structure with audit & supervisory committee	
Investment Strategy		Executed large-scale growth investment (the Hail Oil Field, paraxylene plant, new wind power plant, etc.)				
Oil E&P	The Hail Oil Field	Acquisition	Data analysis	Construction of artificial island	Installation of production equipment and exploration	First oil Nov 2017
Oil refining and Sales	Chiba Refinery				2 year long run → Opex cut (Approx. ¥7bn)	
	Sakai Refinery	Operating new coker (FY2010~)				
	Yokkaichi Refinery			Alliance agreed w/ Showa Shell	Halt No.5CDU	Alliance start
	Others	Sakaide closure				Capital & business alliance with Kygnus Sekiyu K.K.
	IPP electricity business				Renovation (Selling capacity: 200,000Kw)	Operation resumption
	LPG business		Integration contract agreed on w/ wholesale & retail		Foundation of Gyxis	
	Car lease business for individuals	⇒ ⇒ ⇒ ⇒ ⇒ Reach 20,000 cars in total			Reach 30,000	Reach 40,000
Petro-chemical	Paraxylene business	Start operation of new PX plant		Energy-saving investment & streamlining	Establishment of profitable base resistant to market fluctuation	
	Maruzen Petrochemical				Consolidation	Consider synergy between refining ⇄ petrochemical
Renewable energy	Wind power generation business	Feed-in tariff (for 20 years) (Total generation capacity: Approx. 150,000Kw)		Start operation of Hirokawa, Aizu (Approx. 180,000Kw)	Start operation of Watarai (Approx. 210,000Kw)	Start operation of Sakata, Ishikari (Approx. 230,000Kw)

Changes in Ordinary Income Excluding the Impact of Inventory During Each Medium-Term Plan Period

✓ **Expect a further increase in profitability, particularly in the oil refining and sales business.**



Dubai crude oil price(\$/B)	77	100	56	65
Foreign exchange rate(¥/\$)	103	83	111	110
CDU operation ratio (calender Day base)	76%	62%	84%	Over 90%

Business Strategy

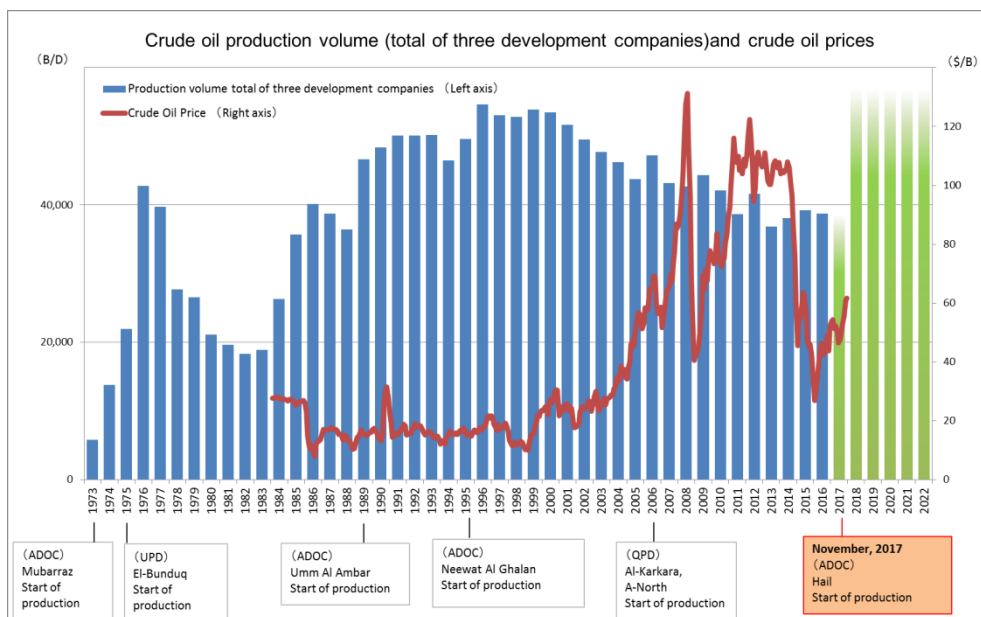
Long-term business strategy based on strengths

- ✓ Strong relationships of trust built through stable production for around 50 years at the Abu Dhabi offshore oil field.
- ✓ In-house operation (operatorship)

➔ Seek added value projects utilizing the Company's strengths.

Policies and measures in the 6th medium-term plan

- ✓ Continue full production at the Hail Oil Field.
- ✓ Reduce operation cost (at least 30% per unit).
- ✓ Examine new investments for the next phase.



Value of improvement in FY2022 (from FY2017)
35.0 billion yen

※1) ADOC : Abu Dhabi Oil Company, UPD : United Petroleum Development, QPD : Qatar Petroleum Development
 ※2) Production of three development companies per year (monthly average of 1-12 each year)
 ※3) Crude oil prices (Platt's Dubai crude) average monthly
 ※4) The production volume of three development companies in fiscal 2017 is planned value

Long-term environmental awareness and business strategy

Environmental awareness

- ✓ A certain level of demand for petroleum products remains, despite a decline due to the increased use of EVs by consumers.
- ✓ Initiatives using IoT are increasingly active.

Business strategy

- ✓ Shift from fuel oil to petrochemical materials.
- ✓ Promote IT conversion of refineries

Policies in the 6th medium-term plan

- ✓ Increase profitable products by increasing delayed coker unit capacity promoted by the IMO regulations and maintain high capacity utilization to establish refinery competitiveness exceeding the global standard.
- ✓ Grow the recipients of products and use alliances with other companies to increase competitiveness.
- ✓ Create synergy with the petrochemical business.

Measures in the 6th medium-term plan

(billion yen)

Activity Measures		Value of Improvement
1. Increase degradation capacity, etc.	Increase delayed coker unit capacity at Sakai Refinery, etc. Use of Chiba Refinery pipeline ➔Focus on profitable products	24.0
2. Increase capacity utilization	Reduce unplanned suspensions Reduce regular maintenance periods at refineries	6.0
3. Achieve synergy with the petrochemical business.	Use of unused distillates ➔Increase business opportunities	3.0
4. Cost reduction	Energy-efficient operation of facilities Strategic purchasing, rationalized distribution	6.0

Value of improvement in FY2022
(from FY2017)

39.0 billion yen

Redevelopment of Measures to Increase the Competitiveness of Chiba Refinery

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- ✓ Continue the operation of two CDUs at Chiba Refinery, taking into account the environmental changes such as the IMO regulations, and implement integration with Maruzen Petrochemical to improve profitability.

■ Increase the competitiveness of Chiba Refinery

- Continue the operation of two CDUs at Chiba (177,000 BD) after the completion of the pipeline to maximize the use of the pipeline (from mid-2018).
- Use direct desulfurization equipment to meet increasing demand for marine fuels (low-sulfur C fuel oil) in response to the IMO regulations and enjoy maximized benefits.
- Integrate business with Maruzen Petrochemical.

■ Response to the Sophisticated Methods of Energy Supply Structures

- First announcement: disposal of No.5 CDU at Yokkaichi Refinery (Before change): disposal of No.1 CDU at Chiba Refinery
- Second announcement: reduction of CDU capacity (Before change): disposal of No.5 CDU at Yokkaichi Refinery

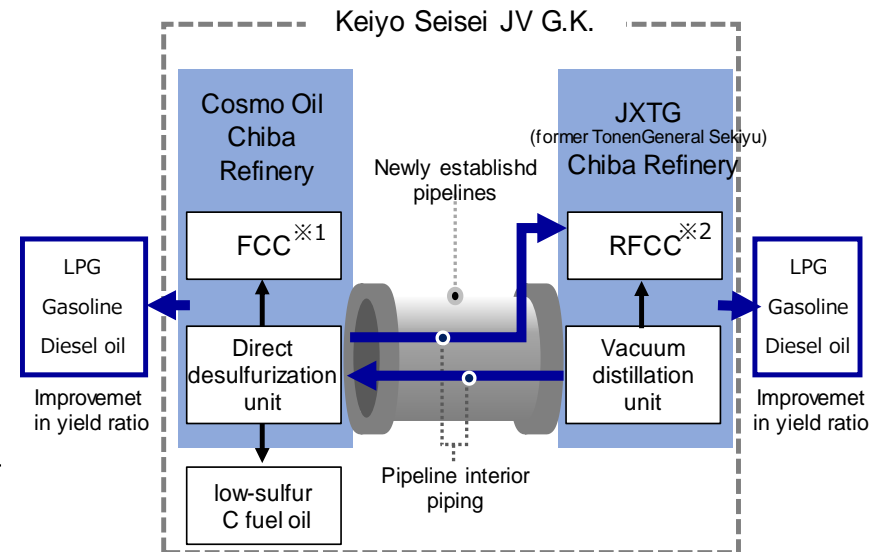
■ Overview of Keiyo Seisei JV G.K. (joint venture)

- Established: January 2015
- Capital contribution ratio: 50% each from the two companies
- Type of business: maximum use of pipelines

■ Overview of pipelines

- Completion of pipelines: February 2018
- Installation of nine pipelines (mutual adaptability between products and semi-finished products)

■ An example of Synergy



※1 Fluid Catalytic Cracking (FCC) is an equipment to convert heavy oil to LPG, gasoline, diesel oil etc.

※2 Residue Fluid Catalytic Cracking (RFCC) is an equipment to convert extra heavy oil to LPG, gasoline, diesel oil etc.

Business Strategy: Petroleum Products Sale and “Vehicle life” Business

Long-term business strategy

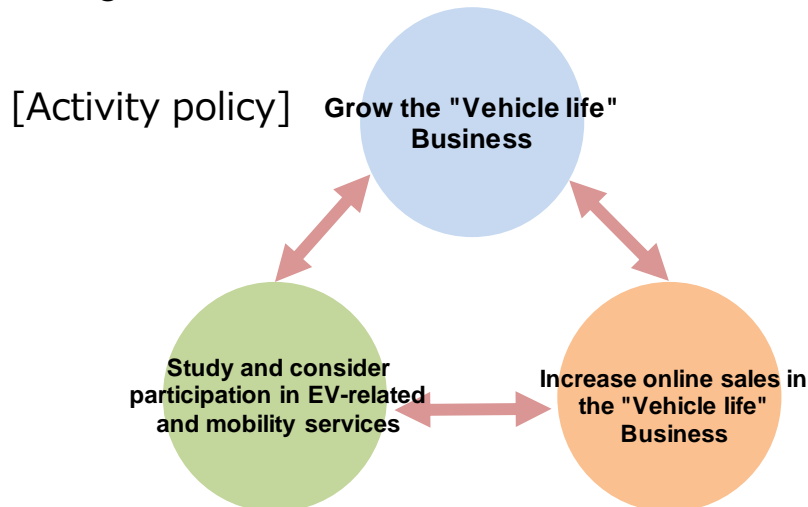
- ✓ Acquire business areas based on a business model reform corresponding to a shift to EVs and changes in consumers’ use of automobiles.
- ✓ Acquire total competitiveness together with oil refining business

Policies in the 6th medium-term plan

- ✓ Determine new business models that take the long-term business environment into consideration while seeking the growth of the “Vehicle life” Business

Measures in the 6th medium-term plan

- ✓ Increase sales of lease and car care products.
 - ➡ Collaborate with other companies in other industries to achieve total support (from obtaining a driver’s license to the sale of a car) for car owners.
 - ➡ Develop new products and provide services to meet customer demand.
 - ➡ Increase online sales.



Value of improvement in FY2022
(from FY2017)

3.0 billion yen

Long-term environmental awareness and business strategy

Environmental awareness

- ✓ International markets are growing based on an increase in the global population.
- ✓ Supply is increasing due to the construction of new highly competitive ethane crackers in North America and Naphtha crackers in China.
- ✓ A production shift from oil refining is possible.

Business strategy

- ✓ Maximize the use of the competitive advantage in ethylene and Paraxylene production.
- ✓ Shift from petroleum fuel oil to petrochemical materials.

Policies in the 6th medium-term plan

- ✓ Enjoy and improve the synergy of oil refining and petrochemicals (exploitation of unused distillates, etc.).
- ✓ Increase the competitiveness of basic products and grow a new business of functional products that are not vulnerable to environmental changes.

Measures in the 6th medium-term plan

Improve profitability in the functional product area.

- ➔ Start hydrogenated petroleum resin business with Arakawa Chemical Industries.

Investment in increasing competitiveness for the future

- ➔ Increase the added value of basic chemical products.
- ➔ Increase and add new capabilities of functional products.

**Value of improvement in FY2022
(from FY2017)**

1.0 billion yen

**Cash Flow*8.0
billion yen**

※Cash Flow: Ordinary income + Increase in depreciation

Business Strategy: Renewable Energy (6th Medium-Term Plan) 25

Policies in the 6th medium-term plan

Onshore

- ✓ Steadily implement development projects that can secure the FIT unit price of 22 yen/kWh and aim to reach 500,000 kW at an early stage.
- ✓ Seek projects that contribute to new development.

Offshore

- ✓ As the land for power plant development is increasingly filled, use O&M* skills, the company's conventional strengths, and enter the offshore wind power at an early stage.
(* operation and maintenance)
- ➔ Invest in this business to make it the foundation for the next growth stage.

Measures in the 6th medium-term plan

- ✓ Reach a 500,000 kW at an early stage.
 - ➔ Development of Himekami (18,000 kW) in Iwate Prefecture, Watarai 2th phase (22,000 kW) in Mie prefecture, etc.
 - ➔ Expect to achieve power generation capacity of 400,000 kW at the end of FY2022
- ✓ Development of a business plan, environmental assessment, construction, etc. to launch the operation of an offshore wind power plants.

Value of improvement in FY2022
(from FY2017)

2.0 billion yen

Disclaimer

FORWARD-LOOKING STATEMENTS

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