

Oil & New

Everything About Oil – And Beyond

Review of the previous Consolidated Medium-Term Management Plan FY2013-FY2017

- Steadily achieved “the recovery of the oil refining business” and “the growth by the large investment” while utilizing the alliance strategy

Four Basic Policies and their Steady Execution

Recover profitability in the oil refining sector

- Closure of Sakaide Refinery (¥10 billion in rationalization impact)
- Establishment of Keiyo Seisei JV
- Chiba Refinery’s 2-year long-run operation (¥7 billion in profit improvement)
- Start of business alliance in Yokkaichi (¥1 billion/year in synergies at Cosmo)

Collect return from investments made in the previous Consolidated Medium-Term Management Plan

- The Hail Oil Field’s start of operation
- HCP’s¹ newly-established para-xylene production facilities started operation
- Expansion of wind power generation capacity

Strengthen alliances

- Strategic comprehensive alliance with CEPESA, fully-owned by MIC² (formerly IPIC)
- Integration of four companies in LPG business (Foundation of Gyxis)
- Capital and business alliance with Kygnus Sekiyu
- Maruzen Petrochemical became a consolidated subsidiary

Enhance CSR management

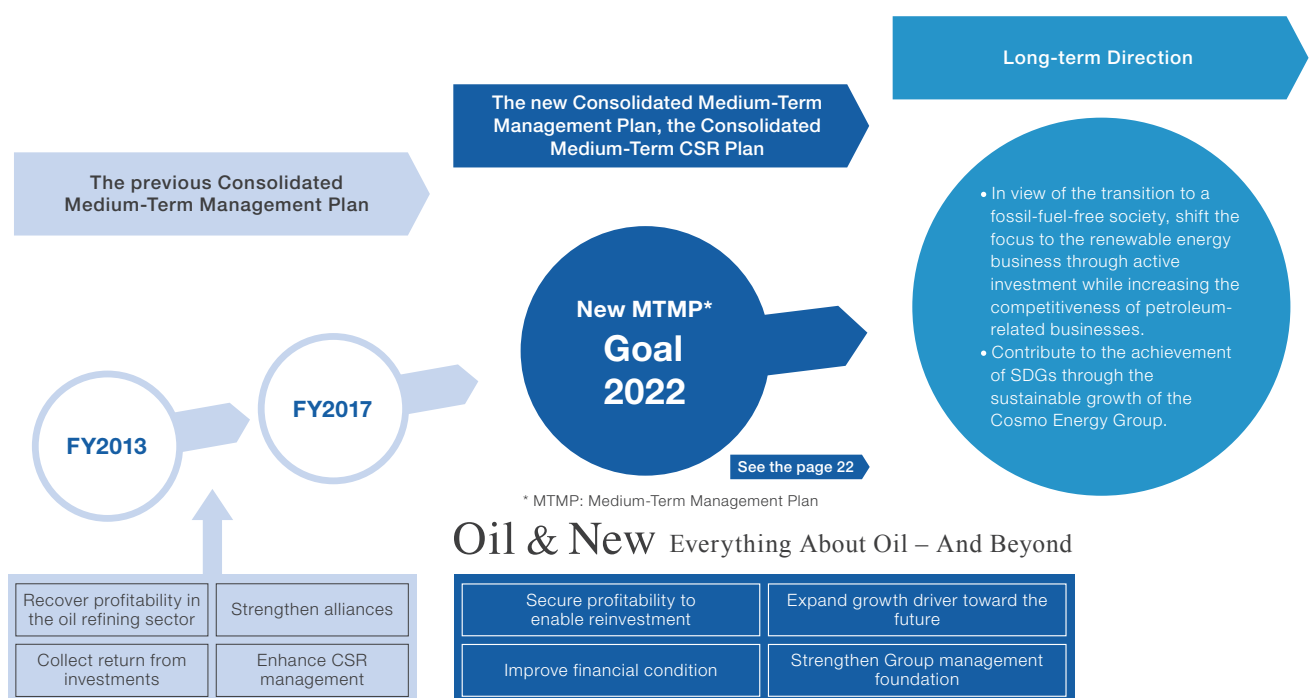
- Thorough safety management
- Working style reform to raise work efficiency
- Promotion of environmental measures
- Enhancement of governance system

1. Hyundai Cosmo Petrochemical. A joint venture with Hyundai Oilbank (HDO) in South Korea.

2. Mubadala Investment Company (MIC), a holding company, was established by an integration of International Petroleum Investment Company (IPIC), an energy investment company that is fully owned by the Abu Dhabi government and Mubadala Development Company (MDC).

Importance of Taking a Long-Term Perspective

- 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.



* MTMP: Medium-Term Management Plan

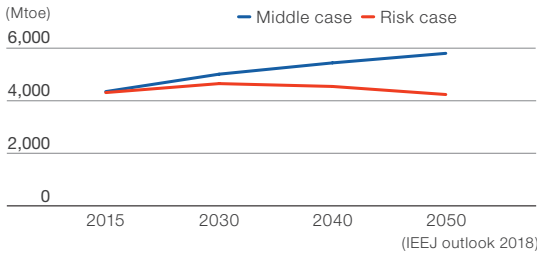
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Long-Term Environmental Awareness

- 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 by around 2030.
- The use of Electric Vehicles (EV) will accelerate, while the sharing economy will expand.

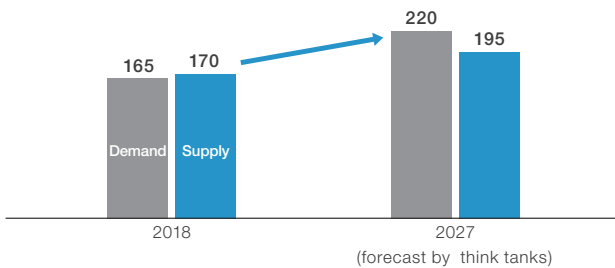
GLOBAL

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



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

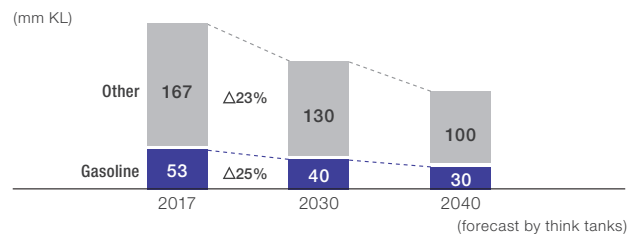
Ethylene supply and demand (mmtan)



JAPAN

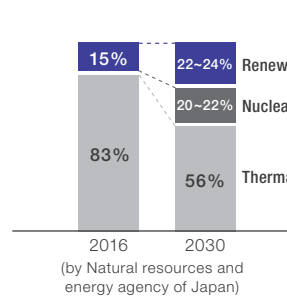
Decline in oil demand (A certain amount of gasoline demand remains)

Oil demand (mm KL)

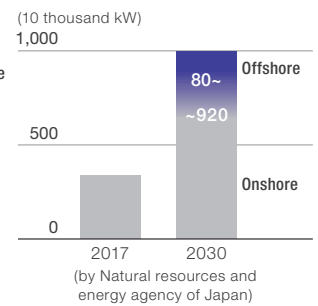


Expansion of renewable energy (Acceleration of wind power generation development)

Composition of primary energy supply of Japan



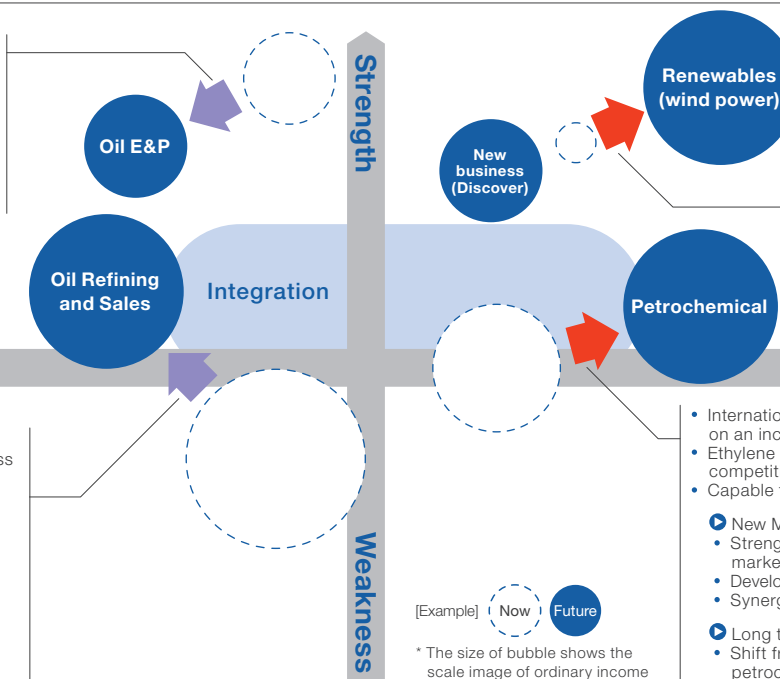
Wind power's capacity



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.

- Possibility of peak out after 2030
- Cost competitiveness is a key
- ▶ New MTMP: Maintain production level & reduce OPEX
- ▶ Long term: Seek added value projects utilizing the Company's strengths



- Domestic onshore mostly occupied but offshore to expand
- ▶ New MTMP: Maximize onshore Expand to offshore
- ▶ Long term:
 - Become one of core businesses
 - Aim to be a domestic leading company in offshore wind power generation

- Domestic demand will continue to decline but relative competitiveness will increase up to 2030
- ▶ New MTMP:
 - Focus on profitable products
 - Synergy with petrochemical business
- ▶ Long term:
 - Shift from petroleum fuel to petrochemical feedstock

- International markets are growing based on an increase in the global population.
- Ethylene production to keep competitiveness
- Capable to swing from petroleum fuel.
- ▶ New MTMP:
 - Strengthen competitiveness in global market
 - Development of differentiating products
 - Synergy with oil refining business
- ▶ Long term:
 - Shift from petroleum fuel to petrochemical feedstock

[Example] Now Future
* The size of bubble shows the scale image of ordinary income

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Basic policy of the new consolidated medium-term management plan ~Oil & New~

Oil

- Increase the profitability of the petroleum business by, for example, complying with the IMO regulations on use of high-sulfur fuel oil 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.

Four priority measures

1. Secure profitability to enable reinvestment

- Firm a system of safe, stable operation in oil refining business
- Take action ahead of the IMO regulations
 - ▶ Make refineries not to produce high-sulfur fuel oil and increase profitable products.*
- Strengthen the “Vehicle life” business
- Achieve synergy with petrochemical business
- Steadily recover the investment in the Hail Oil Field

* Aim to raise the competitiveness of refineries that supply only relatively high added value petroleum products.

2. Expand growth driver toward the future

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

3. Improve financial condition

- Increase shareholders' equity based on profits
- Strengthen cash management
- Careful selection of investments with an eye on long-term environment
 - ▶ Early achievement of management goals

4. 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



Management Goals (FY2022)

- Increase earning power and improve the financial position to achieve a goal of net worth and a net debt to equity ratio 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 the impact of inventory valuation)	Over 120.0
2	Profit attributable to owners of parent	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 D/E Ratio*	1.0~1.5 times
6	ROE	Over 10%

Precondition

Dubai crude oil price (USD/B):70

Exchange rate (yen/USD):110

* Calculated on the basis that 50% of 60 billion yen Hybrid Loan made on 1st April 2015 is included into Equity.

Business Strategy and Value of Improvement

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

	FY2018	FY2019	FY2020	FY2021	FY2022	Improvement
Improvement in FY2022 vs FY2017 (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 high-sulfur 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 Cash Flow:8.0*
	Start C9 petroleum resin business					
Renewable energy	Expand onshore wind firms (Power generation capacity 230,000kW → 400,000kW)					2.0
	Develop offshore wind farms		Start offshore wind power site project			
New areas	Deepen alliances with MIC, Hyundai Oilbank, and CEPESA					+α
	Sow the seed to new business					

* Cash Flow: Ordinary income + Increase in depreciation

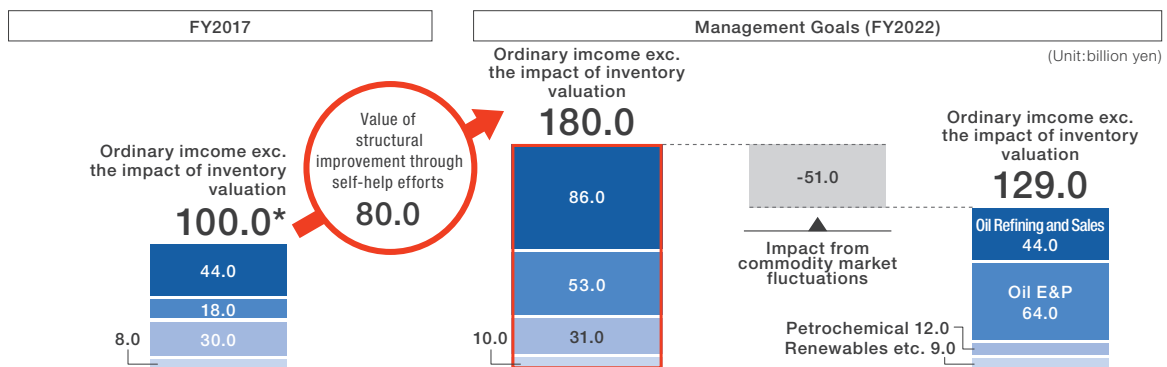
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Profit Plan

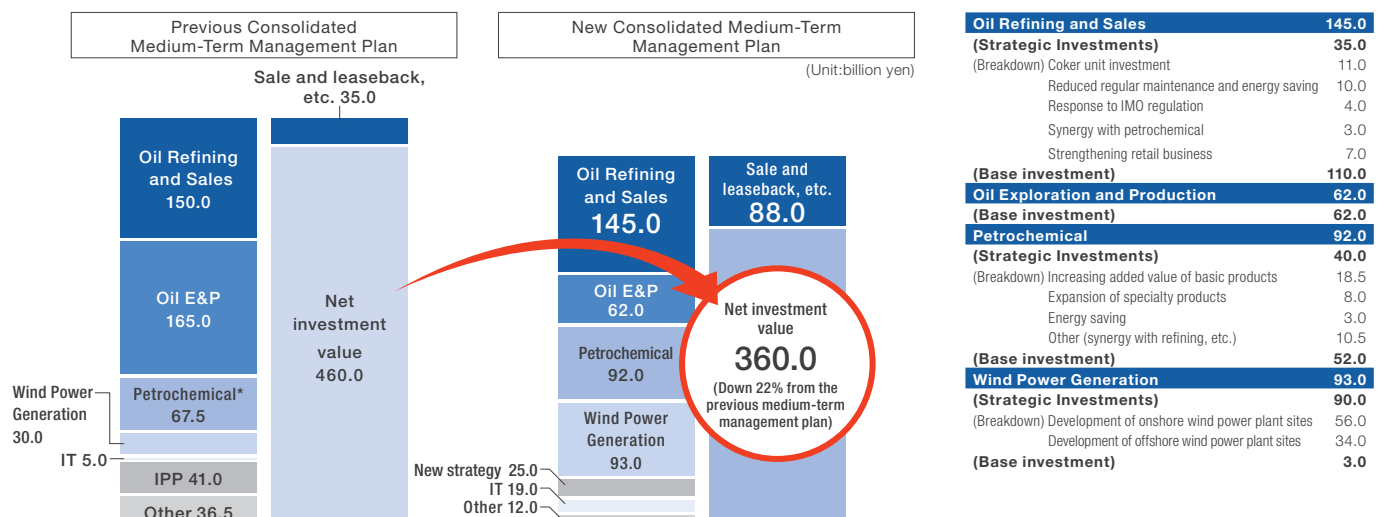
- Ordinary income is expected to be 129.0 billion yen in FY2022 despite an increase of 80.0 billion yen from FY2017, taking into account the assumptions such as crude oil prices.



* Above is the forecast at the time when the new consolidated medium-term management plan was developed. Actual ordinary income (excluding the impact of inventory valuation) was 95.9 billion yen.

Investment Plan

- Strategic investment: Actively use approx. 40% of the total investment for an increase in competitiveness and growth investment.
 - ▶ Oil refining and sales: 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 by using sale and leaseback, etc.



Oil Refining and Sales	145.0
(Strategic Investments)	35.0
(Breakdown)	
Coker unit investment	11.0
Reduced regular maintenance and energy saving	10.0
Response to IMO regulation	4.0
Synergy with petrochemical	3.0
Strengthening retail business	7.0
(Base investment)	110.0
Oil Exploration and Production	62.0
(Base investment)	62.0
Petrochemical	92.0
(Strategic Investments)	40.0
(Breakdown)	
Increasing added value of basic products	18.5
Expansion of speciality 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

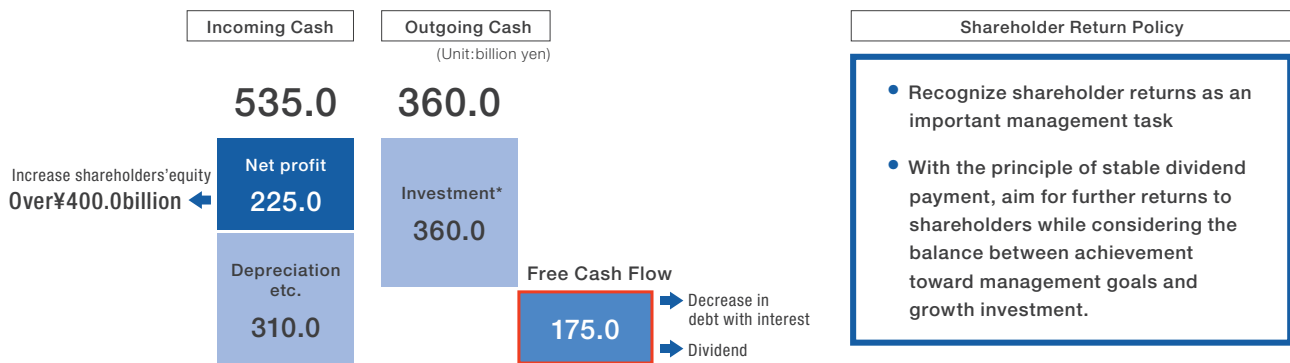
* Calculated by assuming that Maruzen Petrochemical had become a consolidated subsidiary at the beginning of the Previous Consolidated Medium-Term Plan.



(Image)

Cash Balance and Use of Funds(FY2018-FY2022)

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



* Strategic investment is net amount reflecting sale and leaseback etc.

Overview of new Consolidated Medium-Term CSR Management Plan -Contribution to Achievement of SDGs-

- Develop the 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.

<div data-bbox="113 1489 454 1568"> <h3>E Promoting environmental measures</h3> </div> <div data-bbox="454 1489 758 1568"> </div> <div data-bbox="113 1579 758 1736"> <ul style="list-style-type: none"> • Reduction of greenhouse gas emissions FY2030 targets CO₂ emissions Down26% [from FY2013] (Down 2 million tons) FY2022 targets CO₂ emissions Down16% [from FY2013] (Down 1.2 million tons) • Reduction of pollutants • Initiatives to recycle resources </div>	<div data-bbox="798 1489 1284 1568"> <h3>S Enhancing human rights & social contribution measures</h3> </div> <div data-bbox="1284 1489 1444 1568"> </div> <div data-bbox="798 1579 1284 1758"> <ul style="list-style-type: none"> • Occupational safety & health management • Diversity • Human resources development • Customer satisfaction → Improve service level → Enhancing Eco Card Fund initiatives </div>
<div data-bbox="113 1780 606 1859"> <h3>G Ensuring safety measures</h3> </div> <div data-bbox="606 1780 758 1859"> </div> <div data-bbox="113 1870 758 1966"> <ul style="list-style-type: none"> • Safe operations and stable supply → Preventing work-related accidents, and major accidents • Quality assurance </div>	<div data-bbox="798 1780 1284 1859"> <h3>G Strengthening corporate governance structure</h3> </div> <div data-bbox="1284 1780 1444 1859"> </div> <div data-bbox="798 1870 1284 1966"> <ul style="list-style-type: none"> • Risk management and compliance • CSR-based procurement • Information disclosure → Improve ESG ratings </div>

See the pages 43-54