

## ALA

### 5-aminolaevulinic acids (ALA)

ALA is a natural and important amino acid and it has an important role related to chlorophyll and blood in the body. It is used as an enhancer of fertilizer to promote plant growth. It is also used in photodynamic cancer therapy, and is expected to be applied in the medical field in areas, such as prevention of anemia in pigs and improvement of disease resistance in fish. ALA is highly expected to become a good match for main amino acids and to rise in the marketplace to reach several billions of yen by development of the business.

Company name: Cosmo Seiwa Agriculture Co., Ltd.

(URL: [http://www.cosmoseiwaagriculture.co.jp/jpn/jpn\\_index.htm](http://www.cosmoseiwaagriculture.co.jp/jpn/jpn_index.htm))

Lines of business: Manufacturing and marketing of an ALA-contained high-functional fertilizer (Pentakeep-V) for agriculture for the export market; and  
Manufacturing and marketing of an ALA-contained high-functional fertilizer for horticulture for the home market in Japan.

## Auto B-cle Car Care Convenience

“Auto B-cle” is a coined keyword combining “auto(mobile)” with an acronym of “Best Car Life Entertainment.”

This refers to a business model that an SS comes with a convenience store carrying car care products and a garage to provide a variety of related services:

Such services include repairs and maintenance, car wash and lubricating oil change.

Self-service & Auto B-cle SS refers to a type of self-service SS that comes with an Auto B-cle convenience store and a service garage

Full-service & Auto B-cle SS refers to a type of full-service SS that comes with an Auto B-cle convenience store and a service garage

## **Auto B-cle Key Station**

A full-service or self-service SS equipped with a designated or certified garage for a statutory inspection and other facilities that can meet all sorts of car care needs.

A network is built centering on a key station in a given geographical area by connecting neighboring satellite Auto B-cle SSs to the station, which would allow each key station to meet needs of more customers residing in a broader trade area than it can do alone by accepting car inspection orders even if it has no such facilities on its own, for example, thereby enabling the entire network to gain a large share in the local market where it is located.

It would also help reduce investment costs across the network by focusing necessary capital investments on its key station.

## **Car Care Gross Margin**

Gross margins from sales of car care products and services are called value added gross margins.

## **Car Care Merchandise**

It includes car inspection, repair, lubricating oil change, and car wash services, tires, batteries, accessories, and other automotive products and services, which represent the value added merchandise.

## CM Aromatics Co., Ltd.

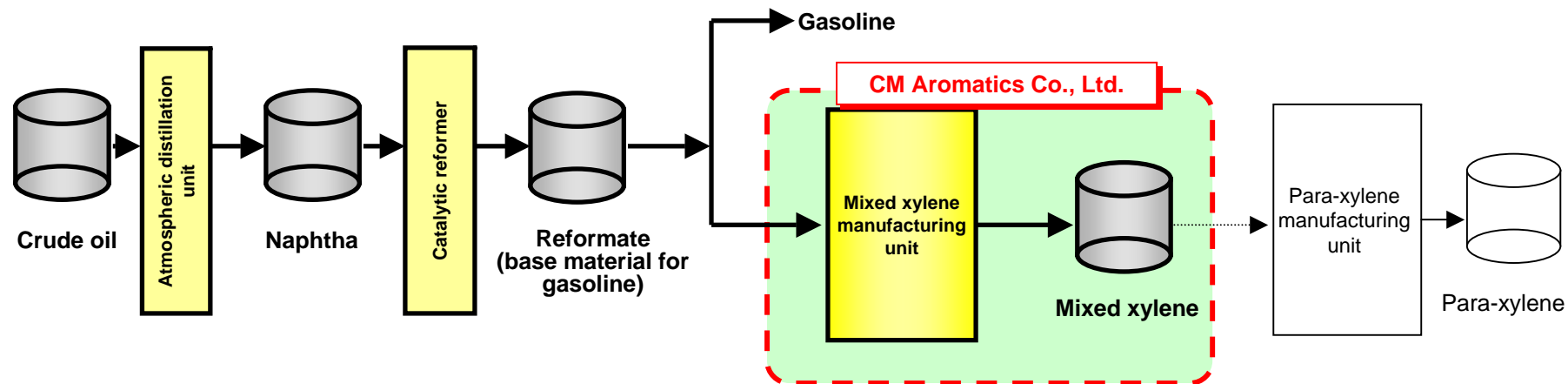
A joint venture company established by Cosmo Oil and Maruzen Petrochemical Co., Ltd. to procure the base material to manufacture mixed xylene and to store and market it.

Date of establishment: April 1, 2005

Capital: ¥100 million

Invested by: Cosmo Oil at 65% and Maruzen Petrochemical Co., Ltd. at 35%

President: Masahide Furuzono (managing director of Cosmo Oil)



## Cosmo Gasoline Mileage

A frequent customer program as part of the Cosmo The Card system, which offers cardmembers rebates based on their spending on automobile fuel, kerosene, and car care products and services, every time their cardmember accounts are settled.

This program helps increase sales of car care products and services and automotive fuel sales at the same time.

The program compels customers to visit Cosmo SSs on a continued basis, as well as to use their Cosmo The Card functions.

How the Program Works:

Customers will be offered one mile per ¥1,000 spent on car care products or services (as well as bonus miles depending on their spending levels)

Customers will also be offered one mile per ¥3,000 spent on gasoline, kerosene or diesel fuel.

- Customers receive a refund of ¥10 (worth of one liter of gasoline) per mile earned -

For example,

Purchase of the lubricating oil change service with the Cosmo The Card ¥5,000 → 5 miles earned

Bonus miles\*1 → 10 miles earned

Purchase of gasoline with the Cosmo The Card ¥6,000 → 2 miles earned



A refund of ¥170 (equivalent to total 17 miles earned multiplied by ¥10) at the time of account settlement in the following manner:

Lubricating oil change service purchase: ¥5,000

Gasoline purchase: ¥6,000

Refund: (170) (= 17 miles x @¥10)

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Total amount charged to the account: ¥10,830 (exclusive of consumption tax)

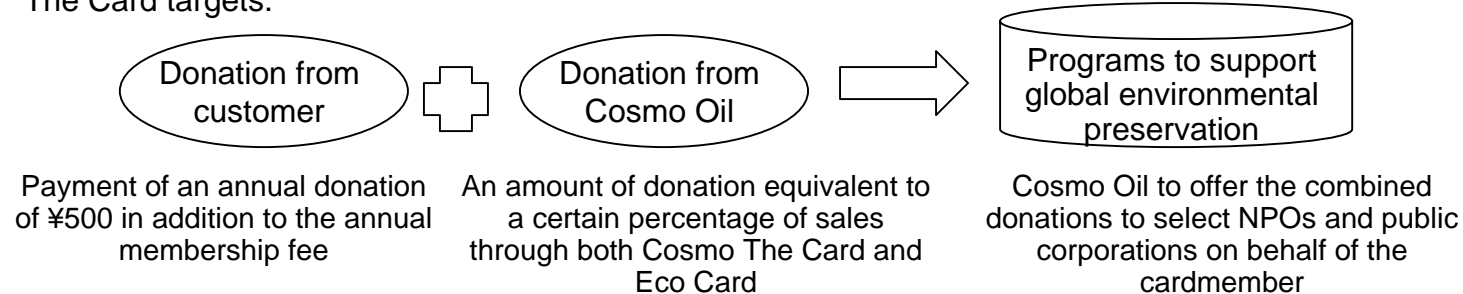
Note: \*1. A 10-mile bonus to be offered for a monthly purchase of ¥5,000 or more.

→ Please refer to Net Cardmember.

## Cosmo The Card “Eco” (or Eco Card)

Cosmo Oil’s proprietary card provides an opportunity for cardmembers to “join environmental programs” in addition to enjoying benefits offered by the regular Cosmo The Card.

The Eco Card is designed to acquire new customers highly sensitive to environmentalism in addition to attracting Cosmo The Card targets.



\* In addition to the above, the Eco cardmember will receive the Cosmo Oil Environmental Report and the Cosmo Oil Green Report providing information about the company’s environmental activities and how to use the financial donations.

## Cosmo Oil-Owned SS

A service station (SS), whose building and land, where it stands, are owned by Cosmo Oil.

The company leases the SS building and land to an SS operator.

## **Cosmo The Card**

Cosmo Oil's proprietary credit card that is available only at Cosmo Oil SSs.

↔ Triple Card (or Affinity Card)

The card provides great benefits for the three parties customers, dealers (SSs) and Cosmo Oil, respectively, as follows:

Customers: Immediate card issuance, cashless payment for purchases at the SS, the rebate program (please refer to the "Cosmo Gasoline Mileage" program), card loan, and many other benefits available

SS: The card provides a mechanism that encourages customers to use Cosmo SSs (or compels them to choose Cosmo SSs without fail) on a continued basis. Marketing activities by utilizing POS (point of sales) data gathered through card use would help dealers enhance the ways they operate their SSs and increase sales. The card also makes it easy for SSs to process customer payments and offers the issuer's commission lower than credit sales companies'.

Cosmo Oil: Enhancement in marketing tools and SS management is expected to bring more sales and more card commission revenues.

## **Cosmo The Card Sales Ratio**

The ratio of the volume of automobile fuel oil sales to Cosmo The Card members against such total sales at an SS. An SS with a higher card sales ratio would mean that it is supported by a larger number of customers on a continued basis.

## **Cosmo The Card Triple**

A credit card issued through a tie-up with a credit card company

↔ Please refer to "Cosmo The Card."

## **Dealer Head Office NV Index**

Objective: This index is designed to raise cost awareness at the dealer head office (dealer administrative management department) of an SS operator in order to help it enhance its management (establish such an operating organization that can grow profitability even in a hostile business environment that may reduce operating margins). Every year, a new target index level is recommended by Cosmo Oil to each SS operator.

Description: Have each SS operator understand the management policy of minimizing SS operating expenses and of maximizing automobile fuel oil sales at the same time.

This and the SS NV Index are combined into the Dealer NV Index, which indicates the level of management capabilities of an SS operator.

Please refer to "Dealer NV Index" and "Total NV Index".

## **Dealer NV Index**

Dealer NV Index refers to a combination of the SS NV Index and Dealer Head Office NV Index.

→ Please refer to "SS NV Index"

→ Please refer to "Dealer Head Office NV Index."

## **Desulfurization Catalyst**

The typical desulfurization process is such that sulfur (S) is removed in the form of hydrogen sulfide by reacting the sulfur contained in crude oil with hydrogen (H).

A catalyst is used to promote this chemical reaction.

## **Dealer**

SS operator

Independent SS operator.

## **Dispersed Power System Supply Business**

A business that a power generator is installed in the site of a customer for heat and power supply

Cosmo Oil does everything from fuel supply to operations and maintenance to sell generated electricity and heat to the customer at competitive prices.

## **Distribution Margin**

The distribution margin is the net market price (combining wholesale with retail prices) of a product from the deduction of crude oil procurement cost and it provides a revenue source for an oil company and its independent dealers.

## **Eco Card**

- Please refer to Cosmo The Card “Eco” “
- Please refer to “Cosmo The Card”



## FCC (Fluid Catalytic Cracking Unit)

FCC stands for fluid catalytic cracking unit.

This is a secondary decomposition unit designed to produce a larger quantity of lighter fuel oil fractions (mainly the gasoline fraction).

## F Index

An index that dealers use to manage their SSs (or to raise their cost awareness)

The primary objective of introducing this index is to have each dealer understand the ratio of the gross margin of sales of the value added merchandise (including statutory car inspection, lubricating oil change, car wash, tires, batteries and accessories and other services and products) to labor cost to draw their greater attention to cost.

An SS with a larger index would be stronger with value added sales.

Every year, Cosmo Oil provides each dealer with a target F index to meet.

$$\text{Calculation method} = \frac{\text{Value added gross margin}}{\text{Labor cost}} \times 100$$

E.g., F Index value of more than 100%: A value added gross margin is offset by labor cost.

F Index value of more than 120%: Labor is more than offset by a value added gross margin. = Strong SS.

→ Please refer to "SS NV Index"

→ Please refer to "Dealer Head office NV Index"

## **Gas oil**

It refers to diesel fuel.

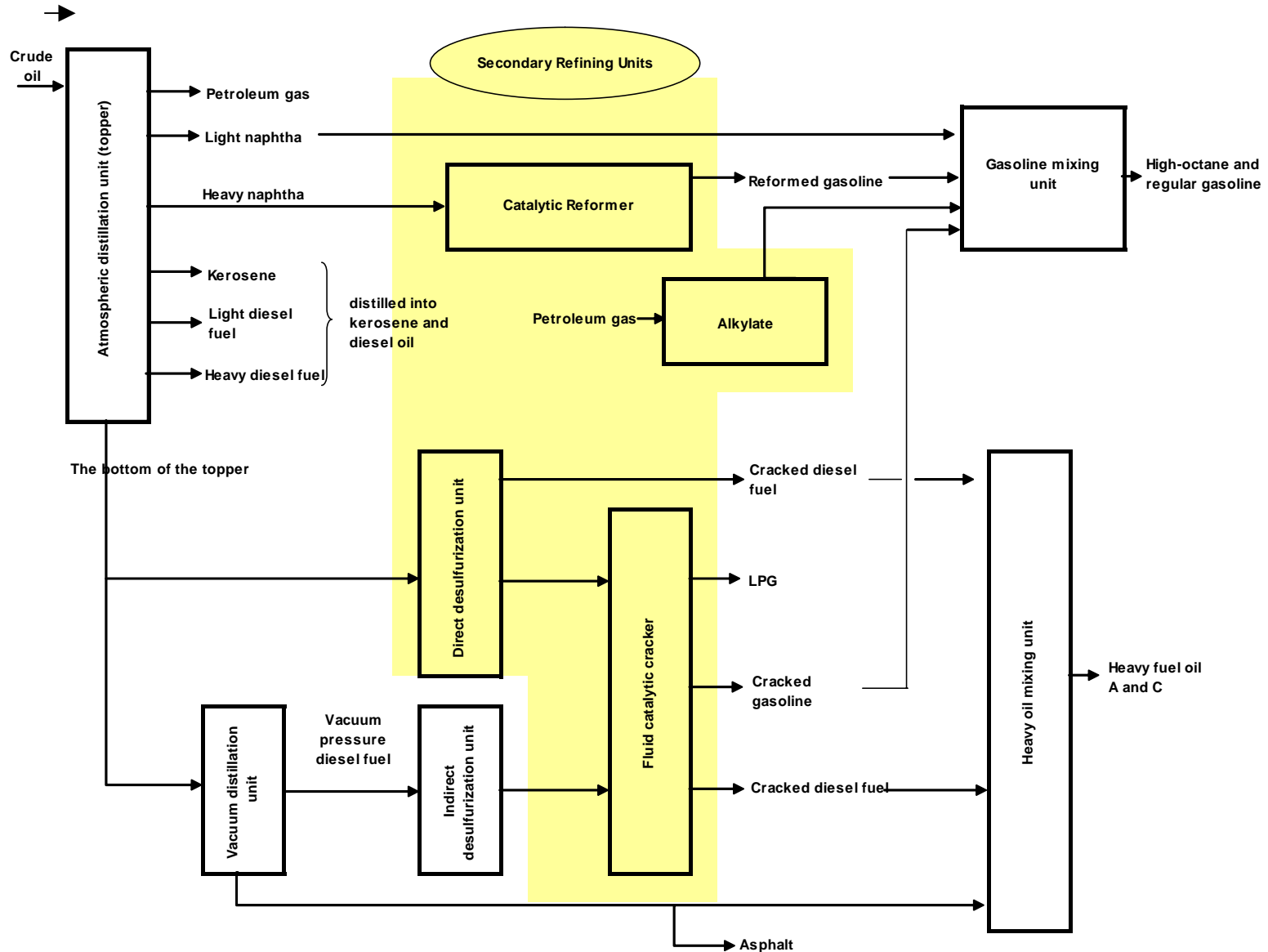
## **GTL (Gas To Liquid)**

Liquefied fuel oil manufactured based on natural gas.

It includes almost no sulfur or any other impurities, so that it is expected to provide one of the clean energy resources in the future.

# Heavy Fuel Oil Desulfurization Units (Direct and Indirect)

Units designed to recover sulfur from what is in the bottom (or heavy fuel oil) of the atmospheric distillation unit  
 Please refer to “Desulfurization Catalyst” as well.



## **Independently Owned SS**

A service station (SS), whose building and land, where it stands, are owned by an independent operator.

## **IPP (Independent Power Producer)**

Electricity wholesale business

Cosmo Oil has built a 200,000-kw power station adjacent to its Yokkaichi Oil Refinery, currently supplying electric power to Chubu Electric Power Co. starting from July 2003.

## **Island payment method**

A payment method adopted at the self-service SS, which allows customers to pay for gasoline purchases after filling up their cars by themselves, right on the spot without moving an inch from the pump (or an island). Customers find this payment method more convenient than the so-called “in-store payment method” that requires them to come to the SS’s office to pay for the gasoline purchased.

## **Isomer**

A unit to use a catalyst to improve the value of octane contained in light naphtha (from 70 to 80) so that the improved material can be used as a base material to produce regular gasoline (at an octane value of 90).

## **Loyal Customer**

Exceptionally good customers purchasing a certain amount of purchases or more with their “Cosmo The Card” cards every year are positioned as “loyal customers” with whom Cosmo Oil makes efforts to maintain long-term and amicable relations.

## **MG Sales Volume**

This refers to a sales volume of motor (or automobile) gasoline

## **Mileage, Mile**

→ Please refer to “Cosmo Gasoline Mileage” program.

## **Mixed Xylene**

A raw material used to manufacture para-xylene. Mixed xylene is mainly produced based on reformat (base material for gasoline) that is manufactured by an oil company.

→ Please refer to “Para-xylene”.

## **MX Business**

It refers to a business dedicated to producing mixed xylene, which is the raw material to manufacture para-xylene.

## **Net Cardmember**

A “Cosmo The Card” cardmember who is also a member of the “Cosmo Gasoline Mileage” Web site operated by Cosmo Oil on its own (URL: <http://www.g-mile.com/>).

This Internet mileage offering program benefits both customers (Net cardmembers) and Como Oil as follows:

Customers: In addition to miles that can be earned on car care product and service purchases with their “Cosmo the Card” card at the SS, Net cardmembers are offered further opportunities to earn miles based on purchases made on on the Cosmo Oil and member shops’ Websites. Such accrued miles will be returned to the cardmembers in the form of rebate rewards for gasoline purchases made with the card every time their cardmember accounts are settled.

Cosmo Oil: Such rebate rewards (at the time of card account settlement) are borne by the gasoline mileage program’s member shops and miles earned on purchases made on member shop sites are allowed to be used for rebates for gasoline purchases at Cosmo Oil SSs to encourage Net cardmembers to continue to use Como Oil SSs. For example, the Net cardmember will be entitled to earn certain levels of miles for a variety of activities on the Net, including:

Net cardmember registration: 20 miles; and  
Request for an information material: 10-50 miles.

→ Please refer to “Cosmo Gasoline Mileage.”

## **Number of Cards in Force**

The net number of “Cosmo The Card” cardmembers after the deduction of the number of ex-cardmembers.

The actual number of cardmembers as of today.

→ Please refer to the “Total Number of Cardmembers Issued”.

## **Profitability Improvement Program**

Cosmo Oil to hire an external consulting firm that is commissioned to scrutinize operations of its Supply Department to aim at identifying how to create or improve values.

The external consulting firm will review how the refineries are operated to improve percentages of production of lighter distillate, or lighter distillates, and processing volumes thereof.

## **PPS (Power Producer and Supplier)**

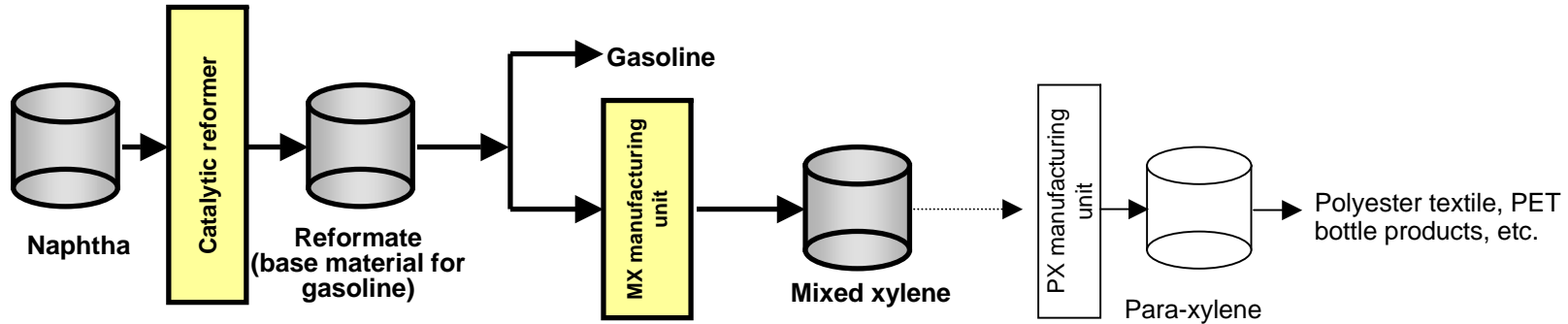
Electricity retail business

Cosmo Oil joins the electricity retail business by utilizing surplus power generated at its oil refineries and others.

## Para-Xylene (PX), Mixed Xylene (MX)

Aromatic compounds that are used to manufacture PET bottles and polyester textile products.

\* CM Aromatics Co., Ltd. is involved in manufacturing mixed xylene.



## Quick Box

An unmanned machine installed in a self-service SS, designed to automatically issue a “Cosmo The Card” card to a customer.

The adoption of a simplified credit examination process for customers (except the requirement of showing their driver’s license) allows the machine to issue a temporary card to them (who will subsequently receive a formal membership card). Customers find this quick response convenient and offering one of factors for which Cosmo The Card wins great support (in terms of a larger number of cards issued).

## **RPS (Renewable Portfolio Standard)**

The Japanese government's policy to provide standards to introduce and promote renewable energy resources in Japan.

Based on the "Law on Special Measures for the Utilization of New Energy, etc. by Electric Power Companies," each electric power company is required to use electricity generated from new energy and other resources at a certain percentage or more of the total amount of electricity the company sells every year for promotion of such new energy resources.

<Requirements for electric power companies>

1. Generate new energy and other resources on their own; and
2. Purchase new energy-generated electricity from other companies.

To meet these requirements, Cosmo Oil has worked on a new power generation business using wind power as a new energy source aiming at joining the power product supplier (PPS) market.

New renewable energies are defined as wind, solar, geothermal, hydraulic and biomass resources.

## **Sales Unit, or SS Sales Unit**

A monthly sales volume of automobile fuel oil per SS

## **Satellite Auto B-cle Station**

An SS that has no designated or certified garage for statutory inspection but with an Auto B-cle convenience store so that it can accept car inspection orders from customers.

## **SCM (Supply Chain Management)**

SCM stands for supply chain management.

## **Self & Wash SS**

A type of self-service SS that only has self-service filling and car-washing machines.

↔ Self-service & Auto B-Cle SS or full-service & Auto B-cle SS

→ Please refer to "Auto B-cle Car Care Convenience."



## SS NV Index

This refers to a management evaluation index that provides navigation for SS operators to strengthen their management of SSs (or to build the management basis to improve profitability even if they face such an unfavorable business environment that may reduce operating margins).

The primary objective of the introduction of this index is to have SS operators understand the management policy of minimizing costs to operate an SS, while maximizing a value added gross margin (to be earned from selling statutory car inspection, lubricating oil change, car wash and other services and tires, batteries and accessories and other products) and gasoline and diesel fuel sales.

Every year, a new target index is recommended by Cosmo Oil to each dealer.

A dealer would become stronger if it achieves a smaller index value (or even minus figures).

Minimize SS operating expenses

Calculation method = 
$$\frac{\text{Direct SS operating expenses} - (\text{Value added gross margin} + \text{Kerosene gross margin})}{\text{Automobile fuel (gasoline + diesel fuel) sales volume}}$$

Maximize a combined non-fuel gross margin

Maximize a combined fuel sales volume

→ Please refer to “Dealer Head Office NV Index”

## SS with A Convenience Store

One of the SS business models Cosmo Oil adopts.

This business model has been jointly developed by Cosmo Oil and the “Mini Stop” convenience store chain to make the SS more competitive.

→ An SS with car-care convenience facilities: Please refer to “Auto B-cle Car Care Convenience”

→ Please refer to “With/In Mall SS”.

## Sulfur-Free Gasoline and Diesel Fuel

Gasoline and diesel fuel containing 10 ppm of sulfur or less, respectively.

## **Topper**

An atmospheric distillation unit. Generally speaking, the crude oil processing capacity of an oil refinery is represented by its topper's processing capacity per day.

## **Total Number of Cards Issued**

The cumulative number of "Cosmo The Card" cards issued so far, including the number of cardmembers who have been withdrawn.

Please refer to "Number of Cards in Force."

## **Total NV (Navi) Index**

Total NV Index refers to a combination of the SS NV Index with the SS Operator NV Index.

- Please refer to "SS NV Index" and "SS Operator NV Index".
- Please refer to "Dealer Head Office NV Index."

## **Value Added Purchase Amount**

An amount of purchases of car care products and services other than gasoline and diesel fuel.

Such car care products and services include lubricating oil change, tire change, car wash, statutory car inspection, and repair and maintenance services.

## **With/In—Mall SS**

One of the Cosmo Oil's SS-style businesses

An SS is located along "with" (or adjacent to) a large-scale shopping mall or "within" the mall

- As for an SS with car-care convenience facilities, please refer to "Auto B-cle Car Convenience"
- As for an SS with a convenience store, please refer to "SS with A Convenience Store"