

Summary of Sustainability Briefing

December 1, 2020

Asahi Kasei Corporation

Note: The forecasts and estimates mentioned in this document are dependent on a variety of assumptions and economic conditions. Plans and figures depicting the future do not imply a guarantee of actual outcomes.

Reasonable efforts have been made to ensure the accuracy of the transcription, but no representation or guarantee is made with respect to the presence of any errors or omissions.

Participants

Hideki Kobori

President

Tatsuhiko Tokunaga

General Manager, Sustainability Strategy Planning Department

Futoshi Hamamoto

General Manager, Investor Relations

Presentation

Kobori: Our company has been implementing the medium-term management initiative “Cs+ for Tomorrow 2021” since FY2019. Under the current circumstances with COVID-19, I would like to explain once again about our business and outlook for the future from the viewpoint of sustainability.

The COVID-19 pandemic has made us realize two things.

First is the realization around the world of the important causal relationship between economic activity and the global environment. As a result of suspension or slowdown of production and other business activities due to COVID-19, the impacts of those activities on the global environment have become more visible. In these circumstances, our company has renewed our recognition that we need to operate our business keeping the global environment in mind.

Second is that people have a higher awareness of the value of life and health due to the spread of COVID-19 and the risk of future pandemics. It is now important to provide total solutions for the prevention, examination, diagnosis, treatment, and aftercare of various diseases, including development of vaccines and remedies against COVID-19. We should take this perspective in our business activities.

I will explain our vision and outlook of business we pursue to contribute to sustainability of the world.

P. 4 Two aspects of sustainability for Asahi Kasei

First, I will explain about our basic recognition of sustainability.

The chart on the left is the one shown at the start of the current mid-term initiative in FY2019. We operate our business activities aiming to achieve two aspects of sustainability. One is to contribute to sustainable society through our businesses. Another is to enhance sustainable growth of corporate value based on high profitability of such business activities. Our company aims to obtain a virtuous circle through internal and external “connections” to achieve these two sustainability aspects.

Among the stakeholders around our company as shown in the chart on the right, the importance of “responsibility for future generations” was reinforced by the COVID-19 pandemic. We realized the importance of carrying out business activities with even greater consideration for future generations.

P. 5 Focusing resources on sustainability

This chart was also presented at the start of the current mid-term initiative. During the corporate history of about 100 years from our founding, we have transformed our business portfolio according to changing social needs and environment. “Diversity” and “Capability to change” nurtured throughout the corporate history are our strengths and can be leveraged to make contributions to sustainable society by focusing on five priority fields for provision of value from the viewpoint of “Care for People, Care for Earth”.

We are certain that it is the right direction to pursue although there may be some partial changes needed according to the spread of COVID-19.

P. 6 Solutions to social issues

Now I will explain about social issues and trends around our company including COVID-

19-related issues.

In Environment & Energy, production of clean energy is increasingly important and the transition to a decarbonized society is accelerating.

In Mobility, we see new trends such as “CASE” in which environment-friendly cars including electric vehicles (EVs) are widely spreading at a rapid pace.

In Life Material, the information telecommunication revolution is advancing in view of 5G as well as 6G.

In Home & Living and Health Care, social issues in relation to diversification of lifestyles and a society of longevity are becoming increasingly important.

In this situation, the value we create for the world from the viewpoint of “Care for People, Care for Earth” includes contributing to greater production of clean energy and achieving a society of healthy longevity.

P. 7 Main contributions of business

Our group operates in three business sectors and we have five priority fields for provision of value.

In Health Care, our policy to accelerate our efforts to evolve into a global health care enterprise remains unchanged. As contribution in this field is increasingly important, we also increase allocation of management resources.

In Homes, we aim to reinforce and extend value chain management. Despite the effect of COVID-19, there is no major change in this policy.

With regard to Material, on the other hand, in which we focus on Environment & Energy, Mobility, and Life Material, there are significant changes in the environment surrounding the business, including expansion of clean energy, transition to a decarbonized society, and accelerated spread of environment-friendly vehicles. Against the background of these changes, flexible shifting of management resources and transformation of business portfolio are important issues, and we plan to deal with them in our future business strategies.

P. 8 Framework for Sustainability

Our company established a Sustainability Strategy Planning Department in FY2019 and set up a Sustainability Committee with the department serving as the secretariat. As President, I chair the Sustainability Committee whose members include the Executive Officers responsible for the three business sectors and the Executive Officers responsible for technology functions and business management functions in order to cover the entire group. The Sustainability Committee discusses policy and other issues regarding sustainability. As a subcommittee of the Sustainability Committee, we have a Global Environment Committee and it will be necessary in the future to establish other committees focused on subjects such as the circular economy and carbon neutrality.

P. 9 Challenges posed by climate change and COVID-19

Considering social changes such as COVID-19, climate change, and increasing concern about the global environment, I would like to review our efforts from the viewpoint of “Care for People, Care for Earth”.

We will contribute to realization of a carbon neutral sustainable world in “Care for Earth”, and to realization of active life in the new normal in “Care for People”. We will concentrate management resources on the businesses that contribute to these purposes.

P. 10 Opportunities for Asahi Kasei toward 2050

Toward 2050, in “Care for Earth”, we will make contributions mainly in Material through recycling technologies, CO₂ separation and recovery, alkaline water electrolysis system, and battery materials for circular economy, carbon recycling, hydrogen society, and EV.

In “Care for People”, we will make contributions in Homes and Health Care with regard to storm and flood damage, intense heat, new styles of living and working, digitalization, medical care, and prevention of diseases.

We recognize that business opportunities for our company are increasing.

P. 12 Focus of environmental contribution

First, I will explain our activities in “Care for Earth”. We are working on contribution to the environment in the aspects of environmental burden, energy, and resources. In the outlook toward 2050, we aim to realize a carbon neutral sustainable world. As the factors in this objective, we focus on GHG reduction and resource circulation, in particular.

P. 13 Concept for a carbon neutral and sustainable world

The key to reduce GHG is generating power from renewable energy such as solar, wind, and hydro. We will utilize the renewable energy in homes, industry, and mobility.

Storage and transportation of energy are necessary in utilizing renewables, and hydrogen is expected to play a key role. Green methanol, produced by combining CO₂ with hydrogen derived from renewable energy, can be used as fuel or as a raw material for chemical products. The important point will be that those chemical products are not for single use, but can be reused many times.

Our company is working on technology for efficient production of hydrogen using renewable energy and for CO₂ separation, recovery, and use. We believe that our technologies such as catalysts and chemical processes for CO₂ chemistry can make contributions.

P. 15 Technologies/businesses contributing to the world

I will explain our contributions to society through our businesses. “Technologies/businesses today” are shown on the bottom left and “new technologies/businesses toward 2050” are shown on the top right.

Our company operates various businesses and offers many products that contribute to environmental conservation, including Hebel Haus unit homes that help realize carbon neutral living, innovation in chemical product manufacturing processes, various materials for clean mobility, and UVC LED for disinfection that was recently commercialized. In addition, we are working to achieve a mid-term goal of implementation of plastic recycling technology in society.

In the outlook for 2050, we will make contributions to environmental conservation in the fields of manufacturing hydrogen that plays an important role for carbon neutral society and CO₂ separation, recovery, and utilization.

P. 16 Current technologies/businesses

As for technologies and businesses today, we have selected environmental contribution products based on life cycle assessment and are focusing our efforts on their expansion.

These products include Hebel Haus and CO₂ sensors in the residential area; elastomer for asphalt modification in the urban infrastructure area, lithium-ion battery (LIB) separators, lightweighting resin, and synthetic rubber for fuel-efficient tires in the automotive area, and ion-exchange membrane process for chlor-alkali electrolysis, manufacturing process for acrylonitrile, and molding machine purging agent in the manufacturing process area.

We will quantitatively review our contributions based on our own evaluation taking into account the knowledge and insights of third-party experts.

P. 17 Products contributing to the environment in Mobility

In Mobility, various companies and countries are accelerating a shift to electric drive in view of carbon neutral society. The key in this area is LIB separators. Engineering resins are also important to meet the needs for lightweighting. Furthermore, we strive to make contributions to environmental conservation in various aspects by offering different products including synthetic rubber for fuel-efficient tires and elastomer as an additive to enhance the durability of asphalt.

P. 18 Toward a circular economy

Another factor necessary for a carbon neutral sustainable world is resource circulation. We need to shift from the existing linear economy that is based on the assumption of single use to a circular economy, and the 3Rs of recycle, reduce, and reuse will be important.

As shown in blue letters, our company is making efforts in various businesses such as product development for thinner parts and improved recyclability, recycled material input in raw material, and increasing yield and reusing scraps in manufacturing. We also engage in promotion of

reuse by customers and collection of used products, as well as a research to elucidate the mechanism of microplastic formation. In addition, we are implementing technology development and business development to contribute to a circular economy through various businesses, for example, development and practical application of recycling technology for polyethylene and polystyrene.

P. 19 Working with outside entities

To realize a circular economy, it is important to work in collaboration with other organizations in various ways. Our company reinforces our efforts through involvement in various industry initiatives and collaboration with academia.

With regard to the research on elucidating the mechanism of microplastic formation, we are working in collaboration with Kyushu University. The research is advancing to elucidate how microplastics are generated, how it is transformed by the force of waves in the sea, how its chemical structure is changed by ultraviolet light, etc.

With regard to recycling of polyethylene, we are working on the research on circulation of plastics used for containers and packages with academia and manufacturers of consumer products. The research is now led by the New Energy and Industrial Technology Development Organization (NEDO).

P. 20 Effort toward 2050 (1) hydrogen

Toward 2050, we will accelerate the hydrogen society with our alkaline water electrolysis system. The chart shows the whole picture of Fukushima Hydrogen Energy Research Field (FH2R) in Namie-cho, Fukushima Prefecture. Our company has set up the world's largest-scale alkaline water electrolysis system of 10 MW-class and started efficient hydrogen production using renewable energy. FH2R was opened in March 2020 as a technological development project by NEDO. Verification test of the facility is planned to be continued through FY2022 to further enhance its performance.

In Europe, many countries announced their hydrogen strategy. Our company also conducts a similar verification test in Germany aiming at commercialization as the front runner by capitalizing on the electrolysis technology we have nurtured over the years.

P. 21 Effort toward 2050 (2) CO₂ chemistry

Our company has already commercialized CO₂ chemistry for the manufacture of chemical products using CO₂ as raw material. In relation to polycarbonate production technology, we license out our EC process, and have also validated a DRC process. The DRC process enables the production of polycarbonate without restriction to naphtha cracker locations and is also an environment-friendly process.

We are also developing technology to produce isocyanates using CO₂, for replacement of the existing production method of polyurethane and application to special kinds of isocyanate, which can help significant reduction of GHG. We make efforts in CO₂ chemistry to provide environment-friendly products.

P. 23 Reduction of GHG emissions

Here are actions at our company. We make efforts to reduce GHG emissions and plan to reduce the emissions as a proportion of net sales by 35% in FY2030 compared to the level in FY2013. As shown in the line chart in orange, it has been steadily progressing.

The total amount of emissions shown in the blue bar chart is also being reduced with our efforts in reducing coal-fired power and utilizing renewable energy, as well as improvement and innovation of manufacturing processes.

P. 24 Decarbonization and renewable energy use

Our company strives to reduce GHG toward 2050. We work to phase out coal-fired power plants that are independently owned by our company, by switching fuel to LNG or biomass. We also promote utilization of renewable energy through renovation of our hydroelectric power plants and installation of photovoltaic power generation facilities in our own factories as well as on the roof of Hebel Maison apartment buildings.

By 2050 when we will live in the hydrogen society, we will minimize GHG emissions from

manufacturing activities through utilization of renewable energy such as CO₂-free methane.

P. 26 Active life in the new normal

Next, I will explain our efforts in “Care for People”. To realize active life in the new normal, healthy longevity, and on top of that, security and comfort are important factors.

P. 28 Actions against COVID-19 (1)

Under the circumstances with COVID-19, our subsidiary ZOLL increased production of ventilators which are used in the treatment of serious cases. We also take measures such as supplying materials for medical gowns and masks, and increasing production of virus removal filters necessary for manufacturing various biopharmaceuticals, vaccines, etc.

P. 29 Actions against COVID-19 (2)

I introduce two cases of providing new solutions with various technology.

First is a surface disinfection solution using UVC LEDs. In joint research with Boston University, we have found that our high-performance UVC is effective for fast inactivation of the SARS-CoV-2 virus. We are receiving an increasing number of inquiries about the solution and we further promote the development.

Second is a solution for visualizing the “3Cs” that is made in combination of CO₂ sensors and live cameras. It enables checking the 3Cs by measuring CO₂ concentration and displaying people in silhouette outline on live cameras. The solution has a function to notify administrators if CO₂ concentration exceeds the reference value. We are reviewing commercialization of the solution to contribute to avoiding the 3Cs.

P. 30 Contribution to the aging society

Healthy living of the elderly not only increases their own QOL, but also contributes to alleviation of social burden in medical care and elderly care services, and brings about hope for the future. Our company strives to contribute to society with pharmaceuticals and medical devices in such fields as bone and orthopedics for which the risks increase with age, renal diseases, critical care and heart disease, and immune suppression that is necessary for transplants, etc. We further strengthen our efforts in Health Care to realize healthy longevity.

P. 31 Providing resilient homes

People’s life and living may be threatened by earthquake, fire, and wind and flood damage, the risk of which is increasing due to climate change. Homes equipped with preparations against these threats are an important precondition to be able to live with safety, security, and comfort.

Hebel Haus is characterized by a robust building frame that is resistant to earthquake and increasingly severe typhoons, and high-performance insulation that isolates the home from high outside temperature. It can also be equipped with an independent energy supply system in case of disruption of electric power infrastructure due to damage.

We also contribute to increasing resilience in city planning. We are working with the Shinagawa Ward office in Tokyo on a project to redevelop areas densely built with wood-frame houses to be fire-resistant areas.

We provide people with living in safety, security, and comfort in both aspects of housing and city planning.

P. 32 Faster restoration of the normal condition

In preparation for the occurrence of a disaster, we aim for a concept of total resilience, which includes the stages to restore living condition; “protect life”, “protect health”, and “living conditions restored”.

For example, to recover as early as possible from damage caused by an earthquake and get back to daily life, it is important to grasp the damage conditions of individual houses as quickly as possible. We are working on joint research with National Research Institute for Earth Science and Disaster Resilience to develop a system to meet this purpose. We install a seismometer on each Hebel Haus home to quickly output data of the earthquake damage, to estimate areas suffering severe damage,

and take measures for recovery as promptly as we can. We believe that we can contribute to society if this effort is expanded throughout a city.

P. 34 Operating on the premise of remote work

I will explain actions taken at our company. Remote work has been widely introduced due to COVID-19 and we now begin to understand its benefits and issues.

As we evolve our measures in the new normal, more active communication utilizing IT and the security for using IT are increasingly important. Our company makes efforts to heighten management ability premised on remote work with the aim of raising each and every worker's awareness of the purpose of work and increasing their feeling of participation in the organization. Furthermore, we endeavor to support individual workers to realize their career plan and in their health enhancement.

P. 35 Building foundations for employees to thrive

At the start of the current mid-term initiative, we declared that human resources are an asset and everything starts with people. It is necessary to focus our efforts on improvement of the work environment and putting in place efficient systems and processes for work, and strengthening our management ability in order to enhance our employees' engagement and sense of organizational participation.

We make efforts to develop a feeling of "we want to work together" among employees, so that they should engage in business activities and make contributions to our business in cooperation with other workers, rather than thinking "I have to work" which used to be a common attitude of many Japanese workers.

P. 36 Advancing management for health (1)

Our company believes that promoting mental and physical health of employees and their families and advancing management for health will provide individual employee's growth and greater engagement and fulfilment, and as a result, it will create a lively and robust organizational culture. It will in turn lead to increased productivity and further growth of our group and then enable us to make contributions to sustainable society.

P. 37 Advancing management for health (2)

On the basis of that idea, our company issued the Statement on Management for Health. We have assigned an Executive Officer with responsibility, established a Corporate Health Care Promotion Center, and set group-wide objectives. We will address priority matters including mental health, metabolic syndrome, cancer, smoking, and quality of sleep.

Furthermore, we provide our employees with lifesaving workshop using AEDs in which they can learn practically how to take appropriate lifesaving actions in the event of emergency. Asahi Kasei Pharma that offers osteoporosis drugs provides subsidy support for osteoporosis checkups to employees aged 40 and over and their spouses. In addition to Asahi Kasei Pharma, we are reviewing a plan to provide the same support throughout the group.

P. 38 Achieving Care for Earth, Care for People

I explained from the viewpoint of "Care for People, Care for Earth". With regard to sustainability, essential and important elements also include activities for Responsible Care, dialogue with stakeholders, respect for human rights, diversity & inclusion, and DX (digital transformation). Our company continues addressing and reinforcing activities on these issues.

P. 40 Summary

To realize sustainability in two aspects, our company is committed to realization of a carbon neutral sustainable world and realization of active life in the new normal.

From the viewpoint of "Care for Earth", we will focus our efforts on environmental contribution products and resource circulation as well as, toward 2050, clean energy, CO₂ separation and recovery, and CO₂ chemistry. Within the company, we are committed to phasing out coal power, renewable energy use, and technology development and innovation centering on CO₂ chemistry.

From the viewpoint of “Care for People”, we address the issues including measures against COVID-19, healthy longevity, and resilient living. Within the company, we focus on promoting our employees’ work engagement, their growth, and their health.

Today, I provided an overview of business activities our company currently engages in from a viewpoint of sustainability. Financial target figures and KPIs are not included today and I hope to provide an overview on these matters at announcement of the progress of the current mid-term initiative that will be in spring 2021.

Main Substance of Questions and Answers

- Hydrogen production with alkaline water electrolysis system

Q: What is the competitive advantage of the company’s alkaline water electrolysis system? What about future prospects in terms of profitability?

A: In the ion-exchange membrane business, our company offers components such as electrodes, membranes, and electrolyzers, as well as systems. We also have accumulated operation know-how. These are leveraged in our alkaline water electrolysis system business as advantages. In alkaline water electrolysis, we are accumulating know-how on the technology to manage operation in a timely manner in response to fluctuations of renewable energy supply which is dependent on weather conditions, etc. In this field, our company is in the leading position and will further build up our strength by adding operation know-how on top of the existing technologies we possess.

In addition to a technology development project led by NEDO in Japan, our company also participates in a project in Germany that is subsidized by the German government and the EU. We think that the participation in the government-led verification projects is a sign of our advantage.

In infrastructure development where government policy has a great influence, it is also important to ensure that users and suppliers work in coordination. As our company’s independent commitment, we concentrate our efforts on improving efficiency of hydrogen production, while we actively participate in consortiums to work with other companies. Germany is leading the world in terms of the hydrogen-related consortiums.

Timeline such as commercialization is yet to be seen at this moment. However, the Japanese government recently announced the policy that Japan aims to be carbon neutral in 2050, so our company is committed to the development in order to make much more contribution to the goal.

- CO₂ chemistry

Q: What is the competitive advantage of the company’s CO₂ chemistry?

A: We have advantages in catalyst technologies and chemical process technologies which have been nurtured in our long history. These are among our core technologies and we fostered many researchers and engineers in the fields. We set up a committee of human resource development for the next generation talent in such fields.

We are already offering to the world the technology of using CO₂ as a raw material of polycarbonate. Based on this achievement, we are currently working on the development of new technologies for isocyanates and other chemical products.

Q: Is it more effective in terms of profitability to license out the technologies or sell catalysts rather than manufacturing and selling polycarbonate and isocyanates for yourself?

A: We engage in licensing business with regard to polycarbonate because it was not produced by our company. With respect to isocyanates, we offer Duranate HDI-based polyisocyanate which is used in coating materials for special applications. Using CO₂ as its raw material can make our product more environment friendly. With regard to aromatic isocyanates, the market is large and there are various opportunities including licensing and collaboration with other companies. We will review what business model is effective in contributing to the environment and in terms of profitability in our company.

Q: To achieve the goal of carbon neutral, I think that separation and recovery of CO₂ are essential. Upgrading the purity of CO₂ is thought to be difficult. Is separation and recovery of CO₂ such a big challenge even for your company which has various separation membrane technologies that it will take some time? Please explain about contributions the company can make and business opportunities.

A: One of our core technologies is catalysts, which includes zeolite-related technology. We are developing a method to selectively adsorb CO₂ from mixed gases such as CO₂ and nitrogen and CO₂ and methane by using zeolite. The method is characterized by higher adsorption efficiency and lower energy consumption compared to existing adsorbents.

We are increasing allocation of management resources including the number of researchers toward commercialization in 2025 or later. There is an inextricable relation between hydrogen and CO₂, and our company will further focus our management resources on this field.

- GHG reduction

Q: The company set a goal to reduce GHG emissions as a proportion of net sales by 35% in FY2023 compared to the level of FY2013. I suppose, however, that the proportion would be decreasing in accordance with sales growth in Health Care that emits less GHG. Setting a goal of GHG emission reduction in an absolute amount or in relation specifically to the emission as a proportion of net sales in Material seems more appropriate. What do you think about that?

A: The direction of business strategies toward 2050 will remain basically unchanged for Health Care and Homes, but as for Material, we are in an important phase to clarify the direction of the business taking into account the measures to deal with global warming, provision of materials for medical care in a society of longevity, etc. As you pointed out, reduction of GHG emissions is extremely important in Material in particular, and we will review the issue along with business strategy.

Q: Toward the target of reduction of GHG emissions as a proportion of net sales by 35%, the company has already achieved reduction by 32% as of FY2019. Will it be much more challenging to achieve the target from here, or do you plan to review a new target in the future?

A: We are considering reviewing the target. We need to set a higher target in relation to GHG reduction along with the measures to realize a carbon neutral society. Our company will continuously be committed to reducing GHG emissions.

Q: Don't you intend to make a declaration on your commitment to carbon neutrality?

A: The matter is significantly connected to our business strategy. We need to address the issue in collaboration with all related companies in the supply chain, rather than working on it alone. It is under discussion, including making a declaration regarding a carbon neutral commitment at the announcement of progress of the current mid-term initiative in spring 2021.

- Environmental contribution products

Q: Environmental contribution products may require higher costs or higher prices. With an increasing awareness of the environment issues among people, do you see any change in tolerance of customers about prices?

A: In FY2019, our company selected environmental contribution products with the advice from third party organizations and outside experts. As our customers have stronger interest in products that can contribute to environmental conservation, we hope that customers will accept the product value deserving the cost when we explain the contributions quantitatively.

Q: How do you quantify the achievement of "Care for People, Care for Earth" to be recognized in society? Please tell me your idea and mechanism you consider on this matter.

A: It is important to disclose the ratio of environmental contribution businesses in the target figures defined in the medium-term management initiative, as well as to explain the contributions made by

each business. On the other hand, we will downsize, withdraw, or divest businesses of lower performance in terms of environmental contribution, growth, and profitability, to change our business portfolio for the purpose of driving growth and higher profitability. We are considering incorporating a target ratio of environmental contribution businesses toward FY2025 and FY2030 in our new medium-term management initiative starting from FY2022.