Planet

Establishment of a new roadmap to reduce GHG emissions

		Benchmarks	Medium- to Long-Term Targets
Planet GHG emissions	Scope 1 + 2	2021 emissions 3,020 thousand tons-CO_2e	- 2035: 63% reduction compared to 2021 - 2050: Carbon Net Zero
	Scope 3 (Category1)	2021 emissions 2,941 thousand tons-CO_2e	- 2035: 37.5% reduction compared to 2021

"PASSION 2026" Priority Issue Targets and Fiscal 2023 Results

		Benchmarks	FY2023 Targets	FY2023 Results	FY2024 Targets	FY2026 Medium-Term Plan
Planet GHG emissions	Scope 1 + 2	2021 emissions 3,020 thousand tons-CO_2e	3,230 thousand tons-CO_2e or less*1	2,700 thousand tons-CO_2e	3,020 thousand tons-CO_2e or less	
	Scope 3	—	- Identify sources accounting for two-thirds or more of Group-wide emissions - Set numerical reduction targets for 2024-2026	- Under way to identify sources accounting for two-thirds or more of Group-wide emissions	- Identify sources accounting for two-thirds or more of Group-wide emissions - Set emission reduction targets	—

*1 Regardless of the new target setting, FY2023 target is based on the 2019 emissions, which were used as a benchmark at the formulation of "PASSION 2026"

Environmental Management
Global Warming Prevention Updated
Reduction of Environmental Load
Environmental Accounting
Environmental Data
Sustainability Medium-term Plan for Planet

- Global Warming Prevention / GHG Emissions and Reduction Measures
- Grobal Warming Prevention / Response to TCFD Recommendations and Internal Carbon Pricing

Global Warming Prevention

GHG Emissions (Scope 1 and 2) and Initiatives of the Kuraray Group

Total GHG emissions of the Kuraray Group decreased by 6.8% from 2,896 thousand tons-CO_2e in 2022 to 2,700 thousand tons-CO_2e in 2023.

GHG emissions of the Kuraray Group in Japan decreased from 1,236 thousand tons - CO_2e in 2022 to 1,144 thousand tons - CO_2e in 2023. This was largely due to the decrease in energy consumption accompanied by lower production in each business, though, each Kuraray Group production site in Japan continued to work on GHG reduction measures, such as improving product yield, recycling raw materials and utilities, upgrading to energy-saving equipment, and carrying out energy-saving activities (waste elimination activities). In 2023, we implemented measures to reduce 17 thousand tons - CO_2e. In addition, the Kurashiki Plant stopped using coal-fueled in-house power generation facilities in 2022 and switched to using electricity purchased from outside the company and steam from small once-through boilers. This has contributed to GHG emissions reduction.

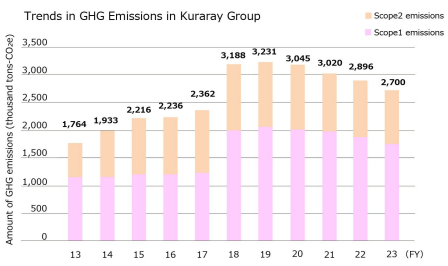
GHG emissions of the Kuraray Group overseas decreased from 1,660 thousand tons - CO_2e in 2022 to 1,555 thousand tons - CO_2e in 2023. (In 2023, the Kuraray Group obtained unbundled energy attribute certificates equivalent to 60 thousand tons - CO_2e. The GHG emissions in 2023 include the reduction of GHG emissions of these certificates.). The overseas Kuraray Group is also continuing to work on energy saving and product yield improvement that leads to GHG emission reductions at each production site. Although production volume increased at a new plant in Thailand, which has newly started operation, GHG emissions decreased due to lower production volume at many overseas Kuraray Group.

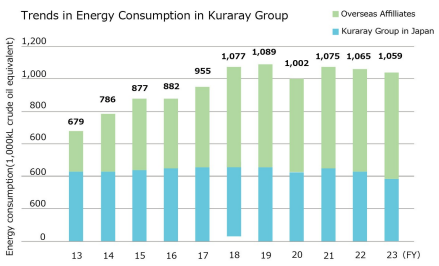
The sales intensity of energy consumption in Kuraray Group, which was set as the targets in the Sustainability Medium-Term Plan for Planet reduced by 16.7% (improvement) in 2023 compared to 2019, far exceeding our target of the "Reduction (improvement) of 5% or more in 2026". Going forward, we will continue to work on further improvement of sales intensity through energy-saving activities that will lead to reduce GHG emissions.

The Kuraray Group's total GHG emissions increased in the period from fiscal 2014 to fiscal 2019 due to the incorporation of businesses through M&A, such as the acquisition of the vinyl acetate business and the activated carbon business (Calgon Carbon Corporation). In particular, the acquisition of Calgon Carbon Corporation in 2018 resulted in a significant rise in the Kuraray Group's GHG emissions. The GHGs emitted by Calgon Carbon Corporation consist largely of the CO_2 generated as a byproduct in the process of producing activated carbon products. Activated carbon is produced by burning a part of coal used in the process to form micropores on its surface. At this stage of the process, the carbon removed from the surface of the coal to form the micropores is released into the atmosphere as CO_2. In this way, activated carbon emits a large amount of CO_2 during production. On the other hand, activated carbon is widely used around the world as an indispensable product for the adsorption and removal of hazardous chemical substances contained in factory exhaust gas and for the purification of industrial effluents and raw water for drinking. Activated carbon thus contributes greatly to improving the global environment and reducing environmental impact. The Kuraray Group plans call for executing CAPEX of 80 billion Japanese yen by 2030, and will continue to consider establishing the technologies to implement Carbon dioxide Capture, Utilization and Storage (CCUS) system, which the CO_2 is a by-product of the production process. We will also work on energy-saving investments and convert electricity to renewable energy. In addition, in our efforts to convert our own power generation facilities, which a large source of our Company's GHG emissions, we aim to achieve Carbon Net Zero by 2050 by identifying and using the effective future technologies such as green hydrogen, green ammonia, and other technologies.

＜GHG emissions (Scope1 + Scope2), Energy consumption (Entire Kuraray Group)＞

			2019	2020	2021	2022	2023
Kuraray Group（in Japan＋outside Japan）	GHG emissions（Scope1+Scope2）	thousand tons-CO_2e	3,231	3,045	3,020	2,896	2,700
	Scope1 emissions	thousand tons-CO_2e	2,060	2,045	1,973	1,877	1,748
	Scope2 emissions	thousand tons-CO_2e	1,170	1,000	1,047	1,020	952
	Energy consumption	crude oil equivalent,1,000 kl	1,089	1,002	1,075	1,065	1,059
	Sales intensity of energy consumption (intensity of 2019 as 100)	target	Reduction of 5% or more in 2026 compared to 2019				
		result	100	—	—	—	83.3 (16.7% reduction)





＜GHG emissions・Energy consumption（Separate in Japan and outside Japan）＞

			2019	2020	2021	2022	2023
Kuraray Group in Japan	GHG emissions (Scope1+Scope2)	thousand tons-CO_2e	1,310	1,229	1,340	1,236	1,144
	Scope1 emissions	thousand tons-CO_2e	1,121	1,067	1,163	1,047	970
	Scope2 emissions	thousand tons-CO_2e	189	162	177	189	174
	Energy consumption	crude oil equivalent, 1,000 kl	452	422	452	430	394
Kuraray Group outside Japan	GHG emissions (Scope1+Scope2)	thousand tons-CO_2e	1,921	1,816	1,680	1,660	1,555
	Scope1 emissions	thousand tons-CO_2e	939	978	810	830	778
	Scope2 emissions	thousand tons-CO_2e	981	838	870	830	777
	Energy consumption	crude oil equivalent, 1,000 kl	637	580	623	635	665

【Notes】As a result of the change in months in each fiscal year, the environmental data and information contained in this report including graphs are as follows.
- Before fiscal 2013: Actuals in 12 months from April to March of the following year
- Fiscal 2014: Actuals for 9 months from April to December + Actuals for January to March 2014 (or estimated value) [Partially overlaps with fiscal 2013]
- After fiscal 2015 : Actuals for 12 months from January to December

GHG Emissions(Scope 3)

The GHG Protocol* classifies GHG emissions into three categories: Scopes 1, 2 and 3.

Scope 1: Direct emissions
GHG emissions generated by fuel combustion at the plants and other facilities of one's own company

Scope 2: Indirect emissions
GHG emissions generated by the use of purchased energy such as electricity, heat, and steam supplied by other companies

Scope 3: Other indirect emissions
The other indirect emissions. GHG emissions along the entire supply chain (from procurement of raw materials to product disposal.)

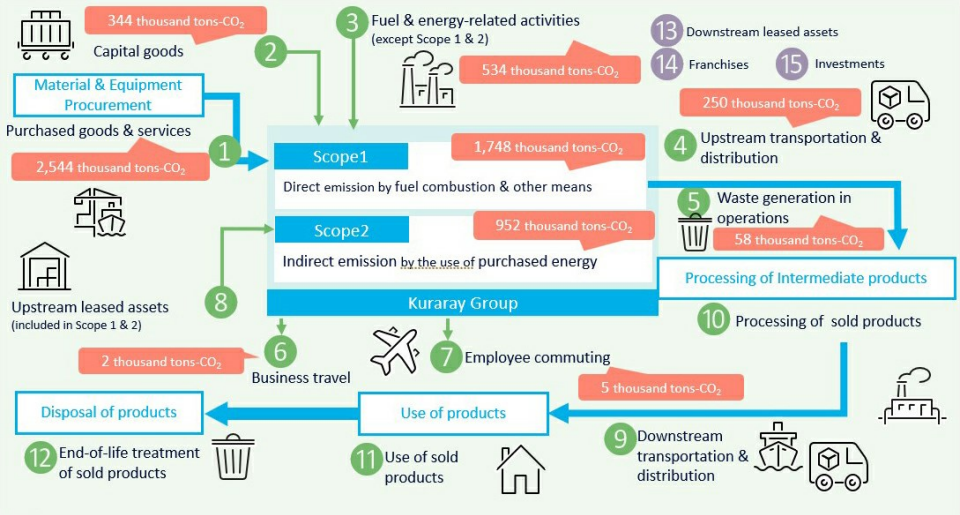
Mandated under the law by which businesses calculate and report Scope 1 and Scope 2 to the government, we report these figures for the whole Kuraray Group to the government and publish the results mainly in the Kuraray Report and on the Kuraray Group's website.

On the other hand, Scope 3, which means the GHG emissions based on the entire supply chain related to us other than Scope 1 and Scope 2, is indirect GHG emissions generated from the viewpoint of a life cycle such as raw material procurement, product distribution, product use and disposal as well as the direct emissions related to our business activities. In 2024, we have changed the calculation method for Scope 3 Category 1 and expanded the scope of calculation to the entire Kuraray Group including overseas. Furthermore, we have greatly increased the number of raw materials, instead of major raw material only. This new calculation method, which uses emission factor applied for individual raw material (i.e., weight basis), has greatly improved the accuracy of our calculations, compared to the previous method by multiplying (i) purchase price

and (ii) emission factor per amount which is defined by “industry category” (i.e., purchase price basis). We will collaborate with our suppliers to promote dialogues on reducing GHG emissions, particularly in Scope 3 Category 1, where GHG emissions are large.

* GHG Protocol (Greenhouse Gas Protocol) is an initiative to develop international standards and related tools on greenhouse gases and climate change led by the World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) and participated in by corporations, NGOs, government institutions and other organizations throughout the world.

Conceptual Image of Control on Emission of GHG in Entire Scope 3 Supply Chain((1) to (15) show categories of Scope 3) (Scope covered : Kuraray Group, Fiscal 2023)



＜GHG emissions（Scope3）*1＞

(Unit: thousand tons-CO_2e)

Category	2021	2022	2023
1.Purchased goods and services*2	2,941	2,872	2,544
2.Capital goods	133	157	344
3.Fuel and energy related activities excluding Scope 1 and 2	546	549	534
4.Transportation and distribution (upstream)	264	284	250
5.Waste generated in operations	78	78	58
6.Business travel	1	2	2
7.Employee commuting	4	4	5
8.Leased assets (upstream)	Emissions from offices, electrical appliances, and company cars are included in Scope 1 and 2.		
9.Transportation and distribution (downstream)	Kuraray Group's products are mainly sold as intermediate materials for various applications, making it difficult to track and account for emissions from transportation, processing, and end-of-life treatment of sold products. Therefore, it is not feasible to reasonably calculate emissions for these categories, and they are excluded from the calculation.		
10.Processing of sold products			
11.Use of sold products			
12.End-of-life treatment of sold products			
13.Leased assets (downstream)	Not applicable because of no leased assets to other company.		
14.Franchises	Not applicable as the company does not operate franchise system.		
15.Investments	Other company's stock was not held for investment purpose as reported in the Securities Report.		

Category	2021	2022	2023
Total Scope3	3,967	3,946	3,737

*1 Boundary is the Kuraray Group's consolidation basis. (Coverage：100%)
*2 GHG emissions were calculated by multiplying (i) weight of goods and services purchased from suppliers accounting for the top 80% of the Kuraray Group's total purchasing amount and (ii) emission factor applied for each of goods and services. Thereafter, emissions equivalent to the total amount of goods and services purchased by the Kuraray Group were calculated.
Emission factors for weight were sourced from the "Managed LCA Content (GaBi) (Sphera)." For a very small portion of purchases where it is not feasible to calculate by emission factor per weight, were sourced from the Ministry of the Environment's "Emission Factor Database for Calculating GHG Emissions through the Supply Chain" that provides emission factor per amount.

<Example of Scope 3 GHG Emission Reduction Efforts (Reduction of Environmental Load during Product Transportation)>

We are working to reduce GHG emissions at the logistics stage, when transporting products to users. For example, to improve the efficiency of transportation by truck, we are consolidating the storage locations of products (warehouses) to ship products previously shipped from multiple locations from a single location. Through such large-lot transportation hubs, we are working so that products previously transported using multiple trucks can be loaded onto a single trailer. We also continue to pursue a modal shift, switching from trucks and other motor vehicles to modes of transportation with less environmental impact, such as freight trains and ships. In addition, in 2019 we submitted a declaration of voluntary activities in support of the White Logistics Movement being promoted by the Japanese government.