

## 5. Globalization of Environmental Issues (2000 onward)

### Toward a Better Atmospheric Environment

While the atmospheric environment in Kawasaki had improved tremendously, achieving atmospheric environmental standards in communities along major roads in the Tokyo metropolitan area continued to pose a challenge, and demands for measures against exhaust gases, particularly focusing on diesel vehicles, continued to be heard. So it was that in 2002 the national government put into force the Automobile NOx and PM Act, advancing measures such as restrictions on the operation of diesel vehicles in the Tokyo metropolitan area and encouragement of adoption of low-pollution vehicles. In Kawasaki, the City promoted environmentally friendly driving practices (“eco-driving”), which are effective in reducing emissions of air pollutants and CO<sub>2</sub>, and established environmentally friendly “eco-transport” systems. All areas of Kawasaki achieved environmental standards for suspended particulate matter (SPM) in 2004 and for NOx in 2013.

As new issue on the atmospheric environment, health impact caused by PM<sub>2.5</sub> (extremely fine particulate matter), for which environmental standard was specified in 2009, raised great concern among citizens. Well before introducing environmental standard on PM<sub>2.5</sub> by national government, the City of Kawasaki had implemented systems for the constant monitoring and measurement of PM<sub>2.5</sub> in 2000. Later, thanks to reductions in emissions of substances that are factors in PM<sub>2.5</sub> from factories, workplaces and diesel vehicles, the City of Kawasaki achieved its environmental standards for PM<sub>2.5</sub> in all areas of the City.



Restrictions on operation of diesel vehicles

### Toward International Partnerships

With so much knowledge and experience in grappling with pollution, and so much environmental technology in the hands of its companies, the City of Kawasaki wanted to share this expertise with the world. In 2008 the City founded the Kawasaki Environmental Technology Knowledge Center for this purpose. In addition to accepting observers and trainees from China, Southeast Asia and elsewhere, the Center worked with organizations such as the United Nations Environment Program (UNEP) and the Japan International Cooperation Agency (JICA) to share information and partner with countries and regions around the world on advanced measures in the environmental field.



Trainees from Shenyang, China



Kawasaki International Eco-Business Forum waste

### Establishment of the Kawasaki Environment Research Institute [Kawasaki Environment Research Institute]

In 2013, Kawasaki city newly established Kawasaki Environment Research Institute (KERI) integrated with Kawasaki Pollution Research Institute, Kawasaki Pollution Monitoring Center, and Kawasaki Environmental Technology Knowledge Center in order to respond to becoming diversified and complicated environmental issues. . KERI located in KingSkyfront area conducts monitoring, surveying and research to improve the region’s environment and prevent pollution. In addition, KERI intentionally works together with various entities such as National Institute for Environment Studies (NIES), United Nations Environment Program, and private companies in Kawasaki. In 2020 the Kawasaki Climate Change Information Center, which conducts research and disseminates information on climate change, opened within KERI.



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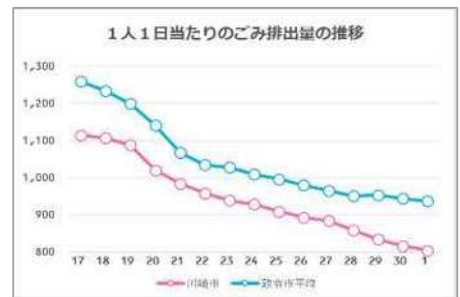
### Change the waste management policy into 3R based policy

In 2005 the City of Kawasaki drafted the Basic Plan for General Waste Treatment, also known as “Kawasaki Challenge 3R”. As extending an existing policy of reducing waste focusing on recycling, the Basic Plan advanced measures based on “3R”: Reduce, Reuse, Recycle. As part of these efforts, to reduce further the amount of waste incinerated, the City of Kawasaki started separate collection of mixed papers and plastic containers as recycle materials in addition to the existing categories for separate collection of glass bottles, cans and pet bottles in order to further reduction of waste incinerated. A new Basic Plan known as “Eco Living Plan: Leading to the Future of Trash Reduction,” was drafted in 2016. This plan focused on promoting reduction and reuse, which were most effective in reducing environmental impact, and advanced measures to reduce kitchen waste and food loss. As a result, Kawasaki’s waste volume per person per day was the lowest among all ordinance-designated cities during 2017 to 2019.



“Sankiri”: “Use it up” (*tsukaikiri*), “eat it up” (*tabekiri*), “strain it” (*mizukiri*)

Waste sorting app for mobile phone



Waste volume per person per day

### Preserving Biodiversity

The problem of biodiversity loss from human activity is a hot topic of discussion in international circles. Attracting particular interest is the efforts being made by the world’s cities, which today account for roughly half of the world’s population. In 2010 the 10<sup>th</sup> meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) convened in Nagoya, Aichi Prefecture, building momentum in Japan in support of preservation of biodiversity. In 2014 the City of Kawasaki drafted “The Kawasaki Biodiversity Strategy: A Plan to Connect People to Living Things.” Guided by this strategy, the City of Kawasaki engages in a wide array of initiatives on biodiversity, such as hosting observation tours to connect with nature, preserving habitats and disseminating information on biodiversity.



Nature observation tour



Kawasaki bio-map

### Toward a Zero Carbon Society

The Earth’s average temperature is continuing to rise, causing various problems around the world, including abnormal weather and natural disasters. Effective measures to restrain emissions of the greenhouse gases that cause global warming are increasingly in demand. In 1998 the City of Kawasaki created a plan for tackling global warming, launching a series of actions City-wide to mitigate the problem. In addition to calling on companies and citizens to cooperate in reducing greenhouse-gas emissions, the City is advancing the use of renewable energy, promoting the formation of a recycling-oriented society and implementing a strategy to achieve a hydrogen-based society. These efforts have borne fruit with a 23.6% reduction in greenhouse-gas emissions for Kawasaki in 2019 as compared with 1990 (provisional figures). Aiming for a zero carbon society by 2050, in 2020 the City of Kawasaki drafted a decarbonization strategy called as “Kawasaki Carbon Zero Challenge 2050,” the strategy succeeded in strengthening the City’s efforts to mitigate global warming.



Ogishima Solar Power Plant, a large-scale solar generating facility in Kawasaki



Mirai, a fuel-cell automobile that runs on hydrogen