

Environmental Conservation of Air, Water, and Other Areas

Correctly understand and manage chemicals

There are tens of thousands of chemicals in circulation

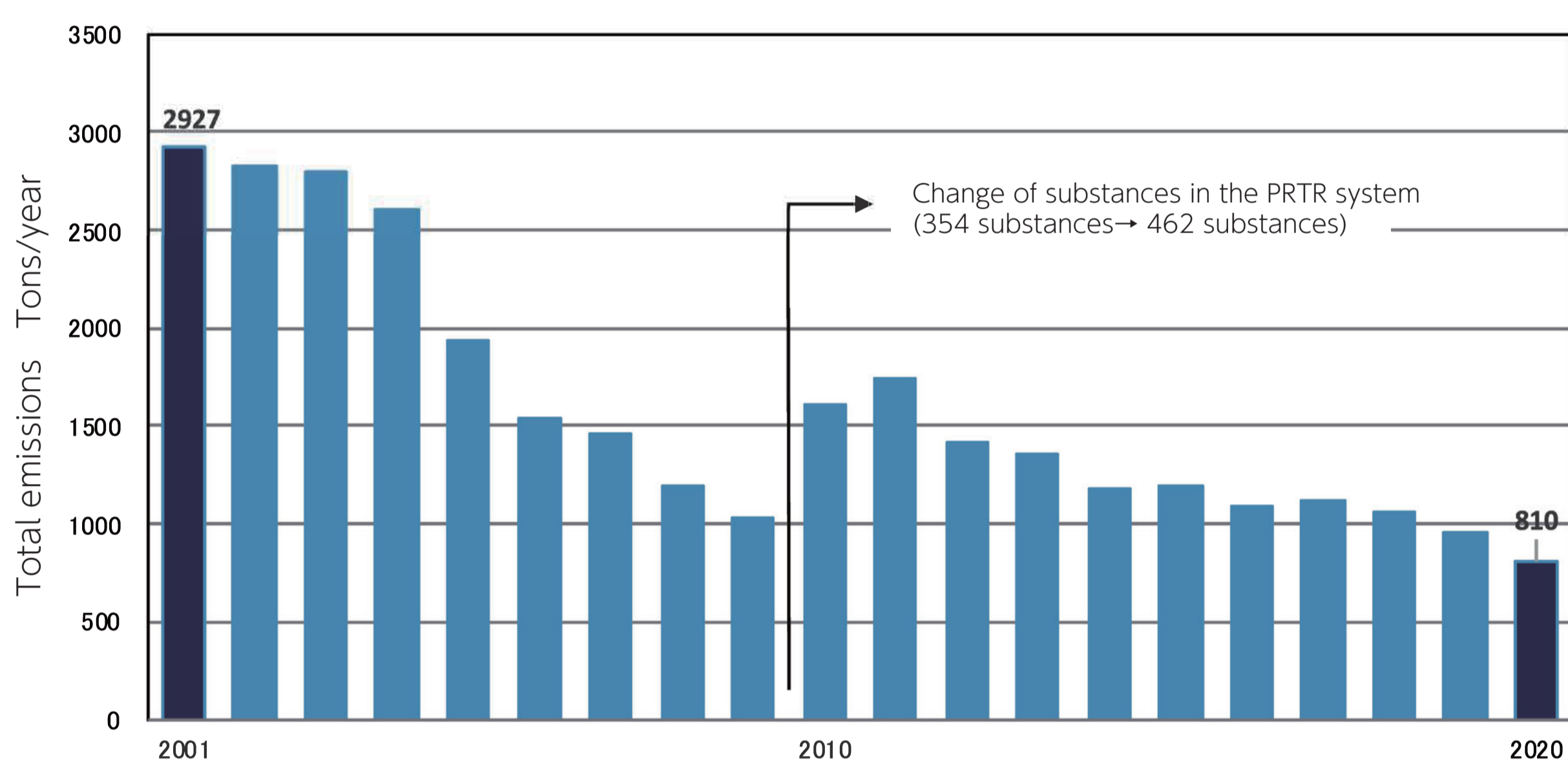


Chemicals are indispensable to our daily lives, and new chemicals are regularly being created. Due to the negative impact chemicals can have on our health and the ecosystem, they need to be properly understood and managed.

Initiatives to Properly Manage Chemicals

Kawasaki City has several chemical treatment plants and is implementing the following three initiatives.

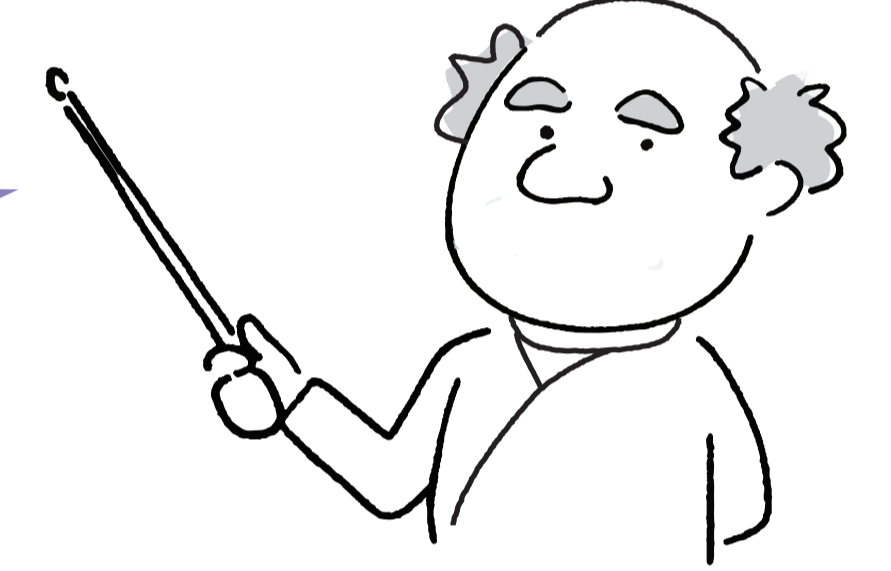
1. We are urging factory owners to reduce emissions as much as possible.
2. We encourage businesses to properly manage chemicals in consideration of environmental risks^{*}.



Changes in total emissions of PRTR substances in the city (emissions from notified companies)
PRTR is an abbreviation of Pollutant Release and Transfer Register A system in which the government annually publishes aggregated information on the release and transfer of chemicals

3. We provide citizens and businesses with information on the environmental risks of chemicals (risk communication).

All substances are toxic.
None of them are not poisonous.
The dosage distinguishes a poison from medicine.



Paracelsus M.D., Switzerland

^{*}The environmental risk of chemicals refers to the possibility that they may adversely affect our health and the habitat or growth of animals and plants as shown in the figure below.



Exposure:
The amount taken into the body



Aiming for 0 days of photochemical smog warning

Issues in the atmosphere "Photochemical Smog"

In Kawasaki City, a photochemical smog warning is issued every year. Photochemical smog occurs when the concentration of photochemical oxidants increases and may cause health hazards such as "itchy eyes" and "sore throat."



Normal sky



Sky at the time of warning

- It is generated when volatile organic compounds (VOCs)^{*} and nitrogen oxides (NOx) undergo chemical reactions with ultraviolet light from the sun.

^{*}VOCs easily become gaseous and are found in familiar substances such as gasoline, paint, and spray cans.



Many detailed production processes remain unexplained.

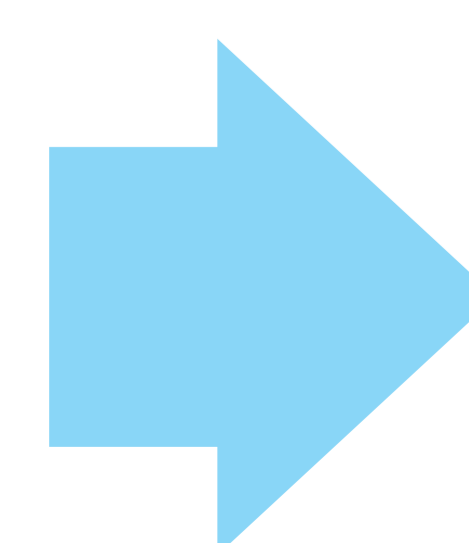
Efforts to reduce photochemical smog



周辺自治体と連携した広域のVOC調査・研究



工場などの排出状況の調査



We call on citizens and businesses to reduce the highly impactful VOC emissions.

We are investigating and researching which of the many VOCs have a large effect on the generation of photochemical smog.