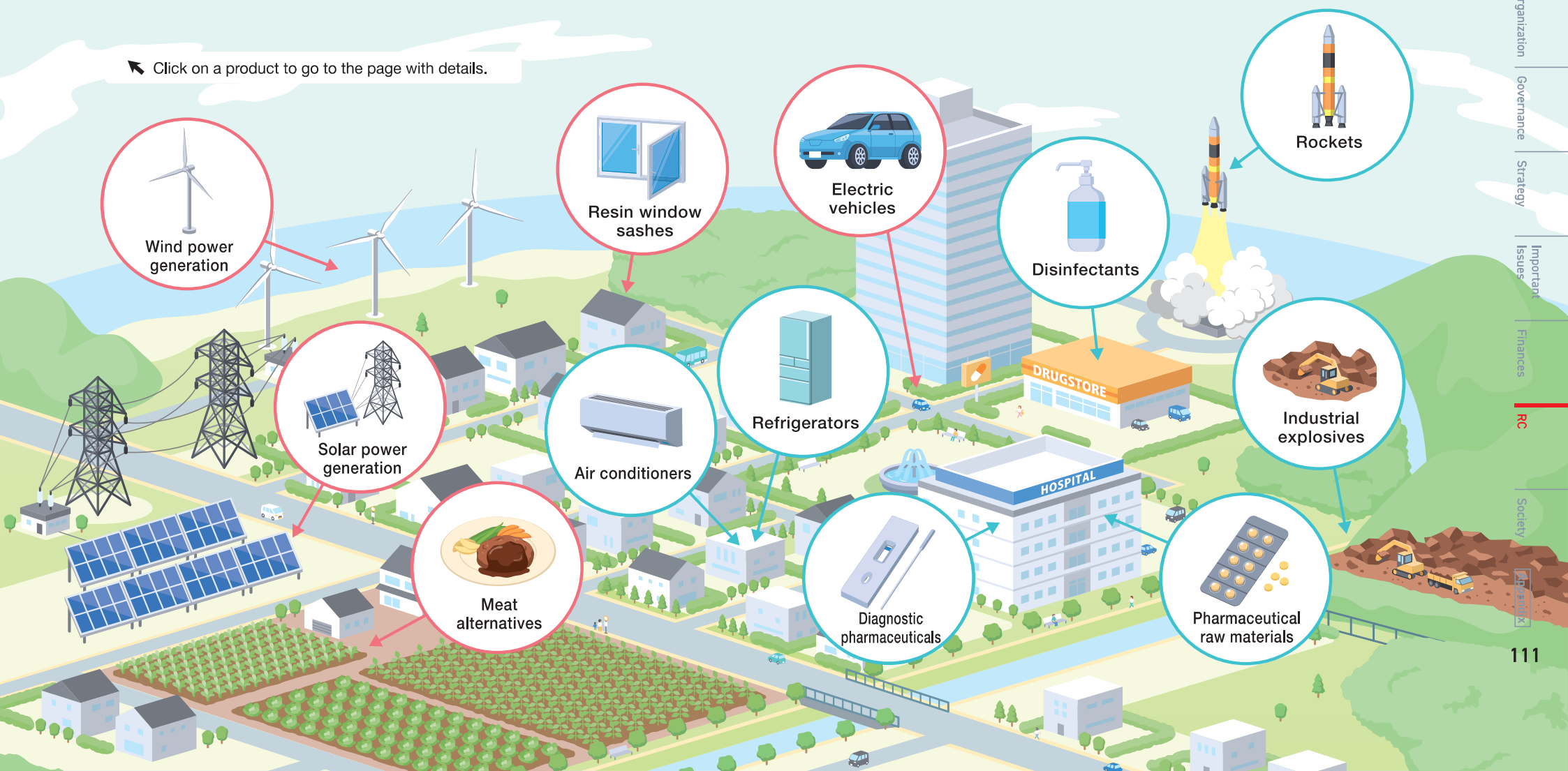




Illustration of products that contribute to climate change

Based on the risks and opportunities posed by climate change, the NOF Group will co-create new value with the power of chemistry by working to develop and provide products that contribute to the reduction of greenhouse gases to **mitigate** the progression of climate change, and products that contribute to **adaptation** by reducing the impact of climate change.

Click on a product to go to the page with details.





Responses to climate change (TCFD)

Disclosure in line with TCFD recommendations:
Strategy

GRI 201-2

Mitigation: 1.5°C and 2°C scenario

*Mitigating the progression of climate change
by reducing greenhouse gas emissions

Electric vehicles

Functional Materials business

Metal Coatings business

Market
scale **Large**

Compared to gasoline-powered vehicles, EVs are expected to cause increased demand for additives for in-vehicle electronic components, lubricants for electronic units, anti-corrosive coatings, and overcoat materials for LCD color filters due to the increase in electronic components (passive components) and electronic units, as well as more and larger LCD panels. In addition, because LED lights are effective in reducing power consumption of EVs, demand for anti-fog agents for LED headlamps is expected to increase. Furthermore, EVs will make vehicles quieter, which is expected to increase demand for resin additives, such as agents that prevent abnormal noises caused by resins rubbing against each other in interior parts.

End uses of the NOF Group's products

For capacitors and LCD panels

(Additives for electronic components /
Lubricants for electronic units / Overcoat materials)

**For agents to prevent
abnormal noises in door
hinges and interior parts**
(Resin additives)

**For antifogging
of LED
headlamps**
(Anti-fog agents)



**For bolts, nuts,
and other parts
that hold batteries
in place**
(Anti-corrosive
coatings)

Wind / solar power generation

Functional Materials business

Metal Coatings business

Market
scale **Medium**

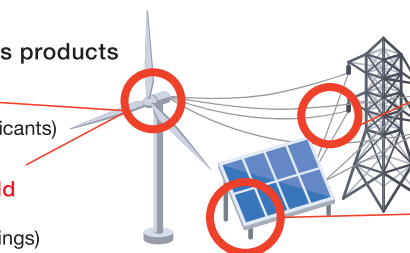
Demand is expected to increase for anti-corrosive coatings for bolts used in wind power generation blades and solar panel mounting parts, as well as biodegradable lubricant required for gear lubrication. Demand is also expected to increase for organic peroxides for cross-linked polyethylene, which is used as a coating material for ultra-high-voltage and high-voltage electric wires used to transmit electricity from wind and solar power generation sites.

End uses of the NOF Group's products

For gear oil

(Biodegradable lubricants)

**For bolts that hold
blades in place**
(Anti-corrosive coatings)



**For ultra-high-voltage
and high-voltage wire
coating materials**
(Organic peroxides)

For mounting parts
(Anti-corrosive coatings)

Meat alternatives

Functional Foods business

Market
scale **Small**

Demand is expected to increase for meat alternative oils and fats that help improve the flavor and texture of plant-derived meat alternatives that reduce environmental impact.

End uses of the NOF Group's products



**For meat alternatives such
as soy meat hamburgers**
(Oils and fats for meat
alternatives)

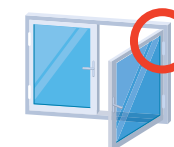
Resin window sashes

Functional Materials business

Market
scale **Small**

Demand for organic peroxides is expected to increase with the spread of energy-efficient housing because vinyl chloride resin is used in resin window sashes with high thermal insulation properties.

End uses of the NOF Group's products



For resin window sashes
(Organic peroxides)



Adaptation

*Reduction of climate change impacts through disaster prevention, etc.

Air conditioners / refrigerators

Functional Materials business

Metal Coatings business

Market
scale **Large**

Demand for refrigerating machine oil, a lubricant for refrigeration equipment, anti-corrosive coatings for fastening parts for external air conditioner units, and polybutene for air conditioner putty is expected to increase due to the increasing need for air conditioners and refrigerators accompanying rising temperatures around the world, including developing countries. The base materials for refrigerating oils sold by NOF are for alternative CFC refrigerants and contribute to climate change adaptation.

End uses of the NOF Group's products

For putty on
air conditioner
pipes
(Polybutene)

For
fastening parts
(Anti-corrosive
coatings)

For lubricants
used in air
conditioners and
refrigerators
(Base materials for
refrigerating oils)

Diagnostic pharmaceuticals / Pharmaceutical raw materials

Functional Materials business

Life Science business

Market
scale **Large**

Due to climate change, there are concerns about the spread of tropical infectious diseases and other diseases and disorders. Therefore, demand for pharmaceutical raw materials is expected to increase due to the rise in disinfectants and additives for diagnostic pharmaceuticals to combat infectious diseases as well as the number of pharmaceutical products against diseases and disorders.

End uses of the NOF Group's products

For disinfecting
hands
(Additives)

For diagnostic
pharmaceuticals
to combat
infectious diseases
(Additives)

For pharmaceutical
ingredients
(Pharmaceutical raw
materials)

Environmental information / Disaster prevention and mitigation products

Explosives & Propulsion business

Market
scale **Small**

As climate change progresses, the need to survey the entire world, including seawater temperatures, may increase, and the amount of marine instruments, rocket launches, etc., for research may increase. In addition, there may be increased applications for temperature indicator materials (labels, stickers, etc.) for temperature control that change color when a specific temperature is reached. Furthermore, with the increased risk of storm surges and other such conditions, there may be an increase in embankment construction using industrial explosives involving procurement of rocks and soil from mountainous areas.

End uses of the NOF Group's products

For marine instruments
and rockets
(Marine instruments,
rocket fuel)

To procure soil
for embankment
construction
(Industrial explosives)