


Achieving carbon neutrality without leaving anyone behind

What efforts are being made in our company?


The issue of decarbonization is often covered in the news and in the SDGs.

Uh-huh!


First, let's learn about the first materiality, "Provide energy solutions to enable a carbon neutral world".



To Reduce



Not to emit

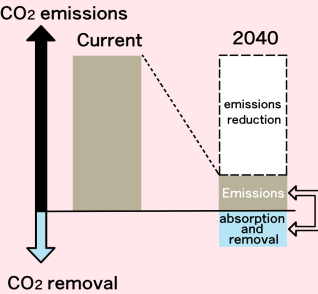


To collect and use

It means that by reducing or collecting and using the CO2 we emit, we can achieve net zero CO2 emissions.

Yeah. Although awareness of the SDGs is growing in society as a whole, The Mitsubishi Heavy Industries Group also aims to contribute to climate change measures by realizing a "carbon neutral society"

carbon neutral
The amount of emissions minus the amount of absorption and removal is zero.



That makes sense. The MHI Group is on its way to achieving carbon neutrality by 2040 against the Japanese national target of 2050.



The MHI Group is also a global leader in the industry, so we have to be proactive in our efforts to decarbonize.

Yeah. Among various industries, the energy and industrial sectors are said to have high CO2 emissions.

① Scope 1, Scope 2, Scope 3 + Contribution to CCUS*1 reduction
2040 NET ZERO
 (= virtually zero direct and indirect emissions)

② Energy Transition
 (= energy supply side decarbonization)

③ Smarter social infrastructure
 (= Decarbonization on the energy demand side)

What are we actually going to do?

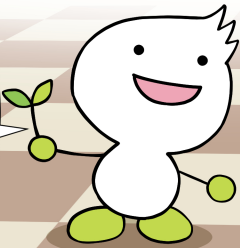

Specifically, there are three things:




Roughly speaking, Scope 1 refers to direct emissions and Scope 2 refers to indirect emissions by outside partners.

Scope is a set of globally shared standards for calculating and reporting CO2 emissions**.

What's "Scope"?


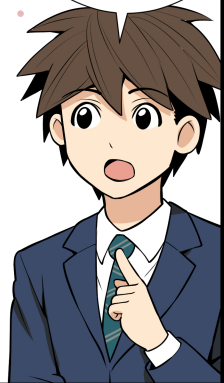



That sort of thing In addition, there is also Scope 3, which defines indirect emissions other than Scope 1 and 2 related to our own activities.

Example) Procurement and transportation of raw materials, commuting, use and disposal of products, etc.

I see!

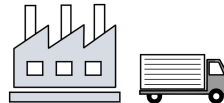
Does that mean that CO2 emissions from our own factories are direct emissions, while indirect emissions come from outside partners who share power to run our factories, etc.?

Scope 3

- Manufacturing of raw materials
- Transportation

CO₂

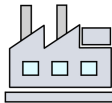


upstream

Scope 1

- Fuel combustion

CO₂

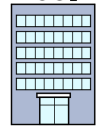


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Scope 2

- Use of electricity

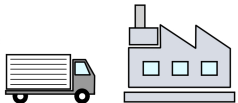
CO₂



Scope 3

- Using Products
- Disposal

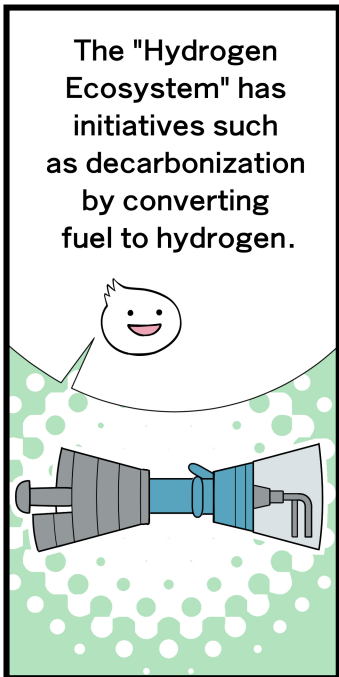
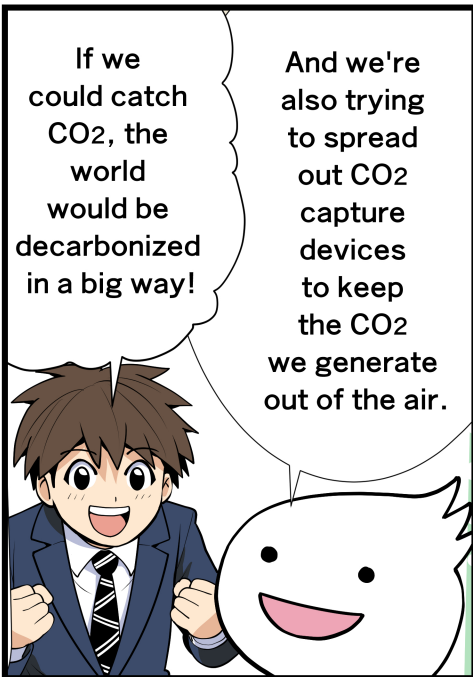
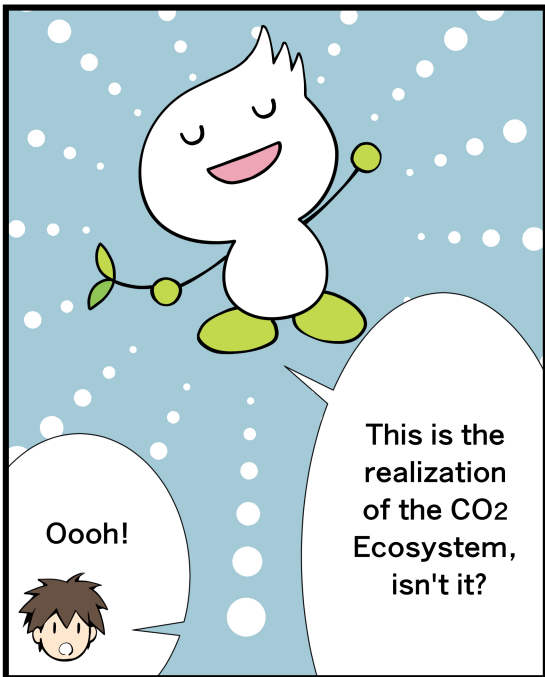
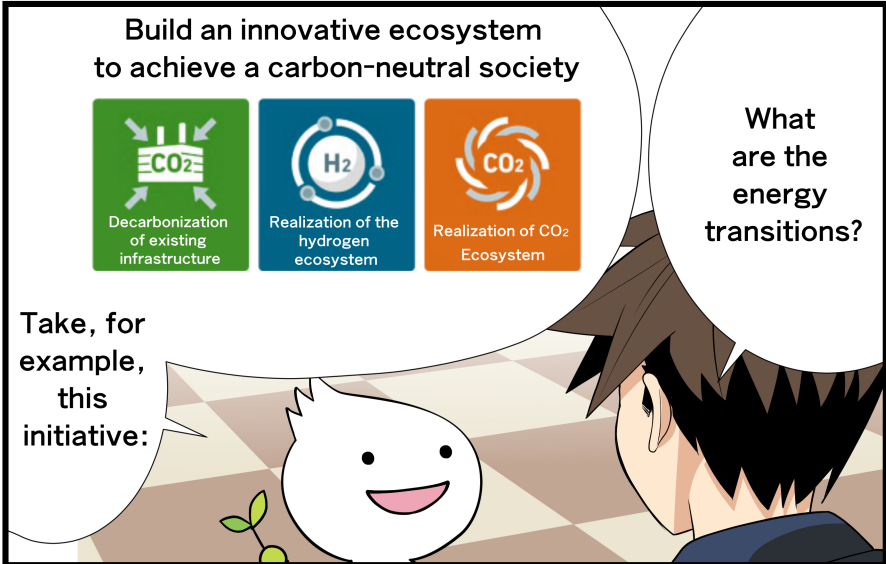
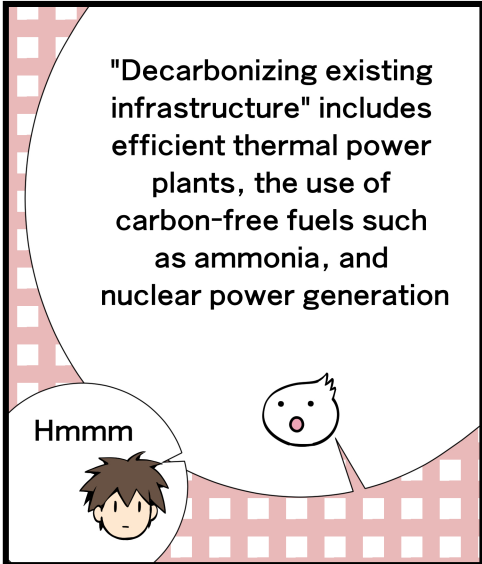
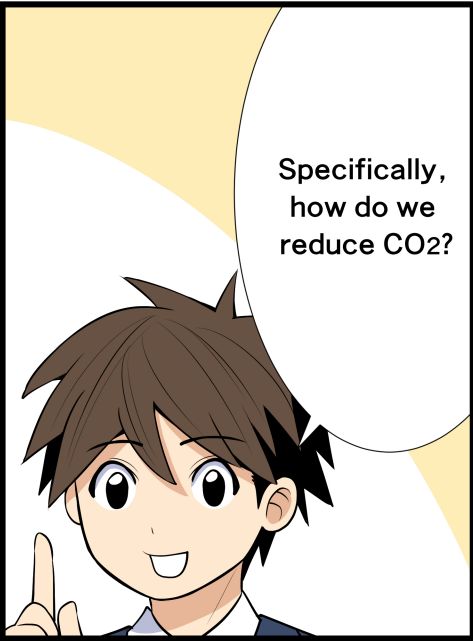
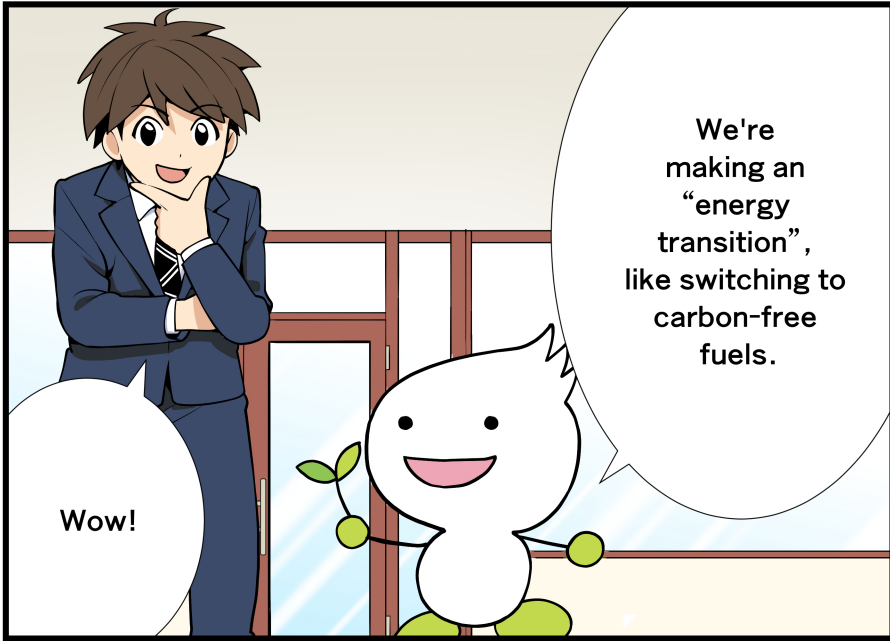
CO₂



downstream

*1 CCUS stands for "Carbon dioxide capture, utilization and storage" and refers to the capture and storage of CO₂ emitted from factories and other sources for effective use.

** 2 For reference: the Ministry of the Environment "Basic Guidelines for Estimating Greenhouse Gas Emissions through the Supply Chain (ver. 2.4)"



Wind power, solar power ...

Wait a minute. If we're going to be carbon neutral, wouldn't it be better to focus on renewable energy that doesn't produce CO₂ in the first place?

Reactor restart

Next-generation reactor development

In nuclear power, we are working on projects to restart nuclear plants and the development of next-generation nuclear reactors.

What do you mean?

Besides, the energy situation varies from country to country and region to region, so promoting renewable energy alone will create regional disparities.

I see...

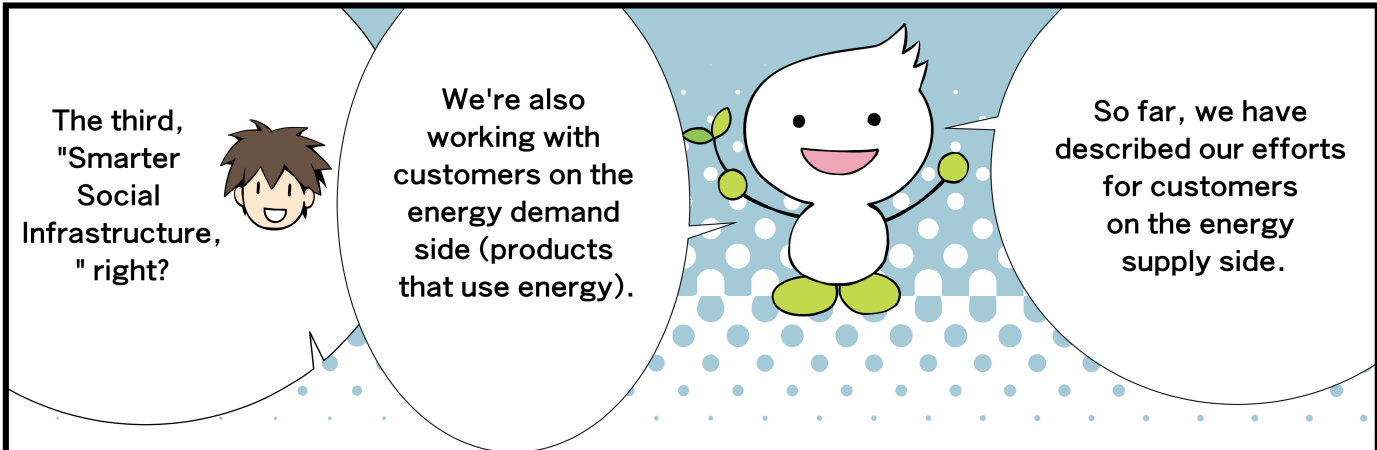
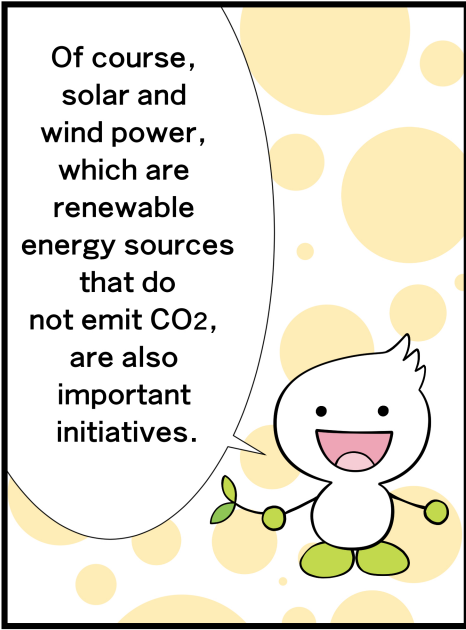
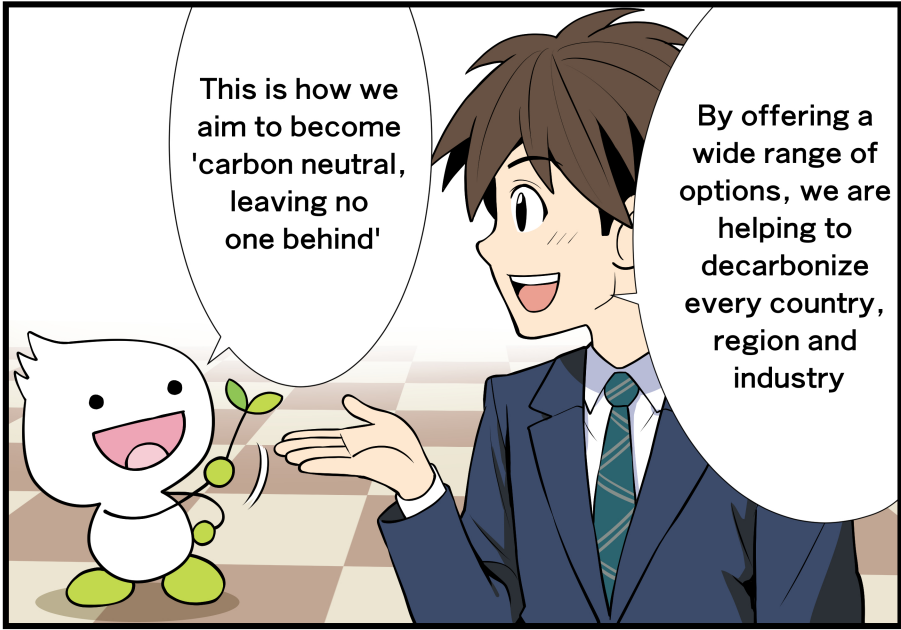
Good question. However, there is also a challenge that it is difficult to provide a stable supply of energy with weather-dependent power generation methods.

I see!

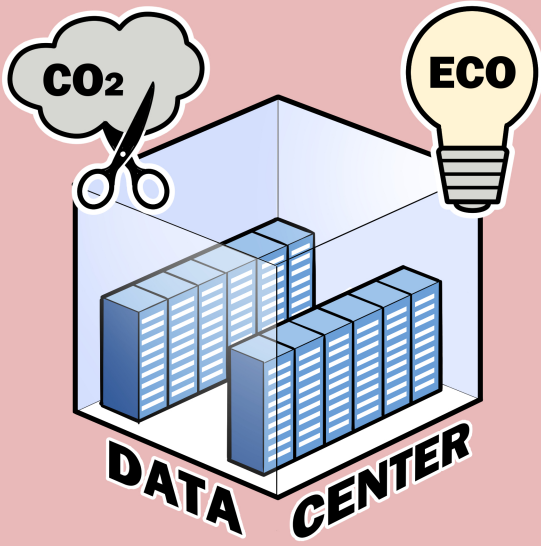
That sort of thing That's why we're also switching to carbon-free fuels and capturing CO₂.

It takes money and space to build renewable energy facilities, so there are some countries and regions that are slow to adopt them.

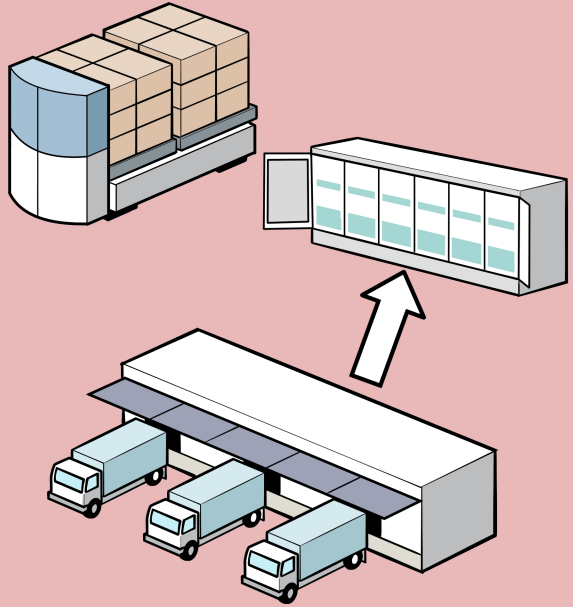
I see. So, not only renewable energy but also decarbonization of existing facilities is important.

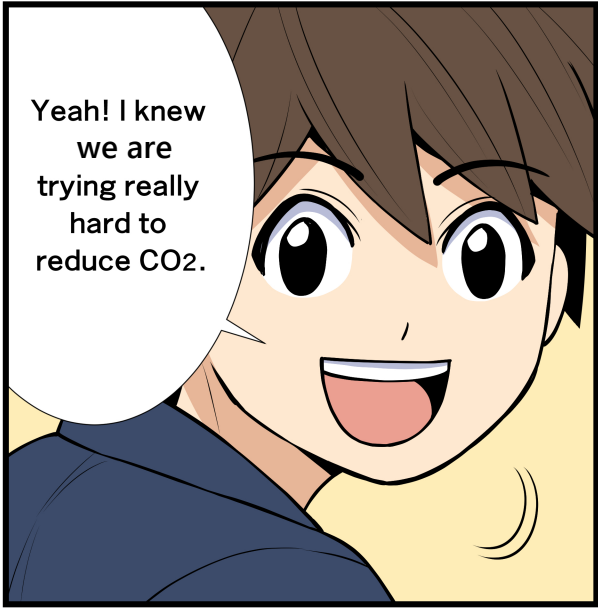


② Data center decarbonization and energy conservation

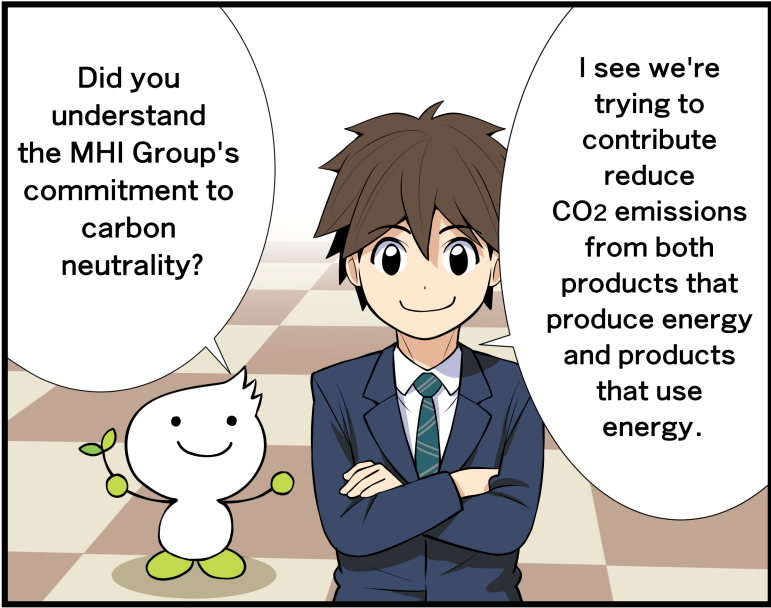


① intelligent logistics system



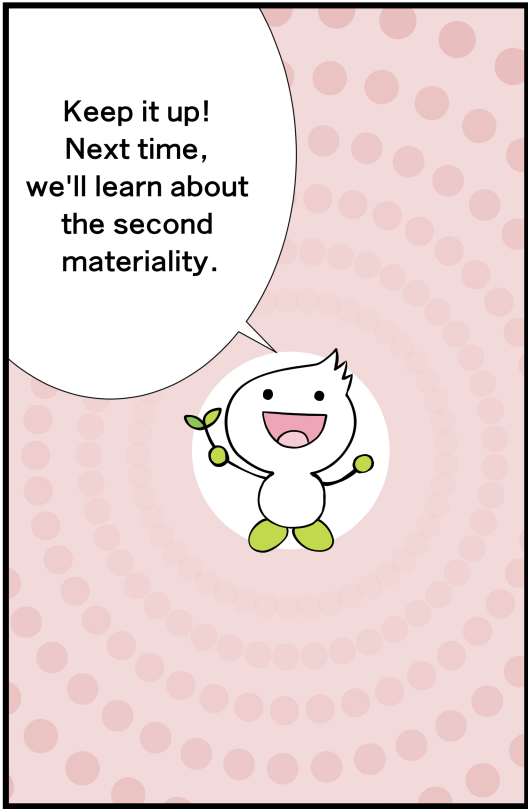


Yeah! I knew we are trying really hard to reduce CO2.

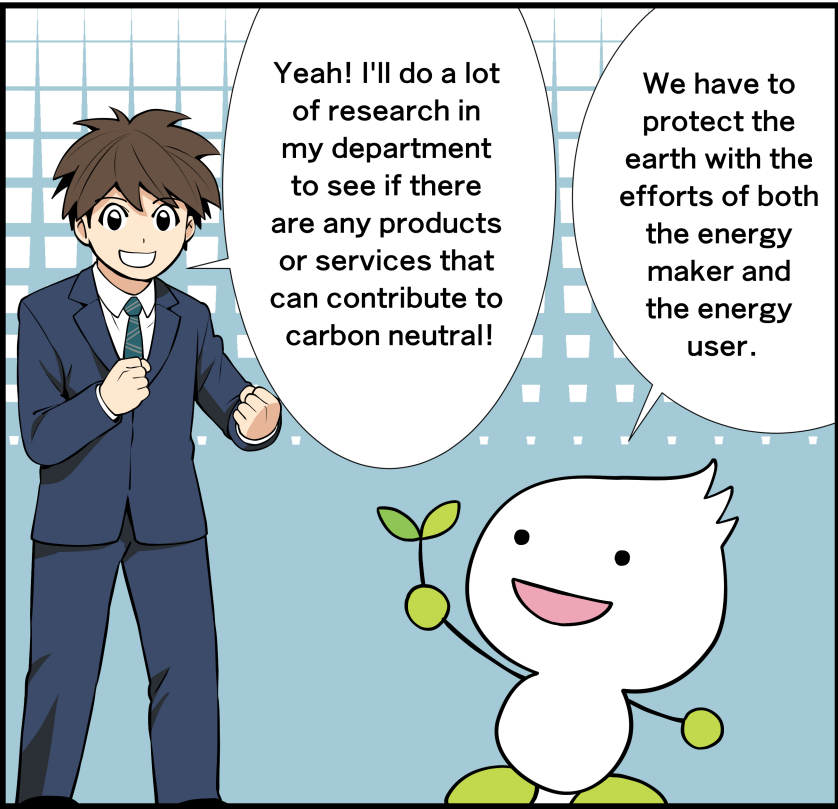


Did you understand the MHI Group's commitment to carbon neutrality?

I see we're trying to contribute reduce CO2 emissions from both products that produce energy and products that use energy.

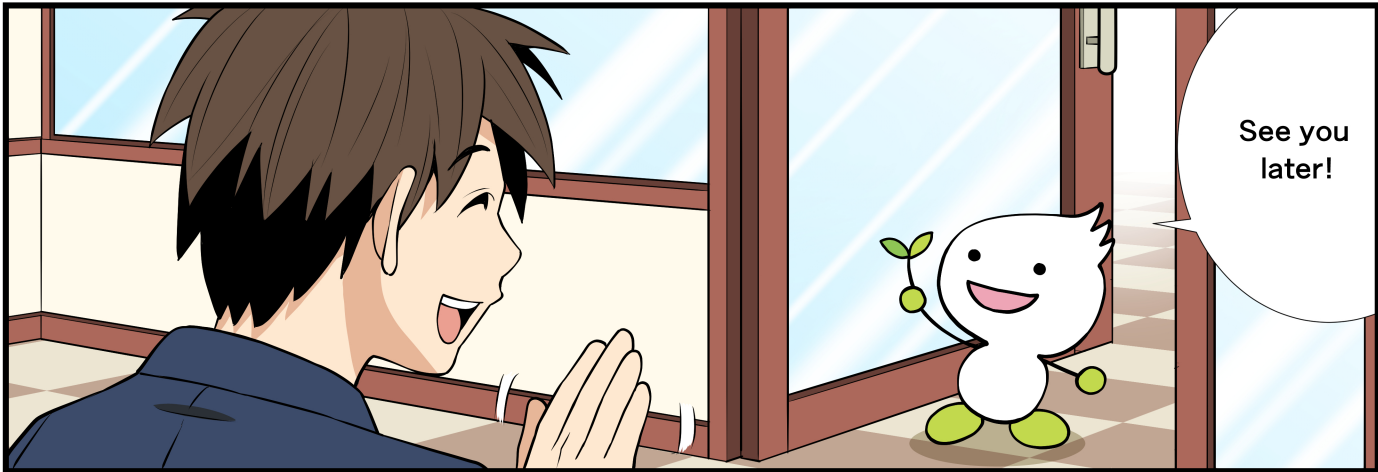


Keep it up! Next time, we'll learn about the second materiality.



Yeah! I'll do a lot of research in my department to see if there are any products or services that can contribute to carbon neutral!

We have to protect the earth with the efforts of both the energy maker and the energy user.



See you later!