
Prof. Schellnhuber's
Fun School
Second issue, July 2019
THE ASAHI GLASS FOUNDATION
www.af-info.or.jp

[Main characters] Gring Woodin

I'm Gring, and this is Woodin. We are working to protect the Earth.

We've received a letter from Kota!

Hi, Gring. How are you? Polar Bear, my friend in the Arctic, is having trouble finding a place to live. The ice there is melting. Please tell me what is going on.

Kota
*Read Gring and Woodin's Adventure in Water Kingdom 4

The CO_2 monsters in particular are increasing at a fast rate.

CO_2 (carbon dioxide gas)

The CO_2 monsters increase little by little when people use energy (for driving, flying, heating etc.) that comes from coal, oil, and gas.

You can read the previous issues of this comic on the website of the Asahi Glass Foundation (You can find the URL on the final page).

We've come to visit the Potsdam Institute for Climate Impact Research.

Welcome. I'm Prof. Schellnhuber, director emeritus of this institute. Since you asked why the Arctic ice is melting, I'm going to explain how bad the situation on the Earth is right now.

Even though the amount of CO_2 produced by a single person is small, the amount of CO_2 produced from all people around the world is very large. The CO_2 accumulates in the sky and becomes a monster.

Trees and other plants have helped by eating at least some of the CO_2, but much has stayed in the air.

Let's think of the Earth as a living organism.

Hello!

I'm being attacked by monsters!

And our cities and daily routines still produce more and more CO_2...

The CO_2 monsters have come together and covered the Earth.

This CO_2 works like a too thick blanket, holds in the warmth around the Earth, so we have Global Warming.

If the temperature keeps rising, this will be dangerous for many living beings.

Global warming ...

but when the temperature increases little by little, the change in the environment must be subtle, right?

Once it drops, it can't go back up the cliff.

it has crossed the point of no return!

The higher the temperature, the closer we are to the point of no return.

We can stop it whenever we want, right?

There are many people who think that way.

But things are not that easy, and we are already in trouble!

WARNING!

That is why Prof. Schellnhuber called out to international people.

If we don't have strong countermeasures, temperatures will continue to rise more than anything the Earth has seen in millions of years. This is a danger to people and animals!

When a ball rolls down a gentle slope, its speed is slow.

But what if there is a cliff?

Suddenly, it will drop at high speed.

He suggested that we should control the increase in temperature to less than 2°C, and the world agreed with him.

2℃

This is called the Paris Agreement.

2℃

It was a very important step that we set a specific guardrail number instead of a vague goal!

For example, if all the polar ice melts and becomes part of the ocean ...

...the face of the Earth will change drastically!

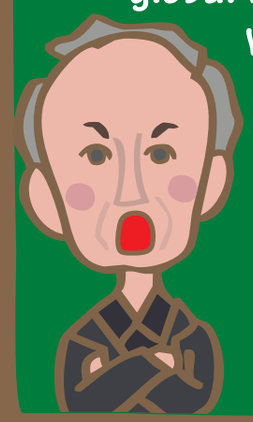
People from around the world discuss keeping the promise of controlling temperature rises to less than 2°C.

The sea level will eventually rise 70 meters, and most land areas near the sea will be covered.

Not only will the polar bears lose their place to live, but people and many other animals will, too.

Everyone needs to think about how we can cut CO_2 in our lifetimes and take action to realize it.

CO_2 is a major cause of global warming. We need to decrease CO_2 as fast as possible!



WARNING!

Then, the companies will have no choice but to follow. We need to change the minds of individuals and politicians to survive.

We will work to decrease CO_2 like you! Thank you, professor.

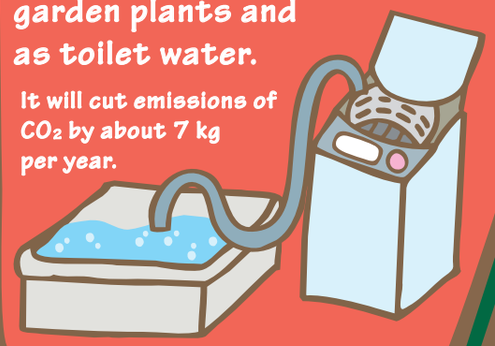
We researched what we can do to control the emissions of CO_2!

For air conditioners, set each one 1°C higher for cooling and 1°C lower for warming.

It will cut emissions of CO_2 by about 33 kg per year.

Reuse the remaining water in the bath for the washing machine.

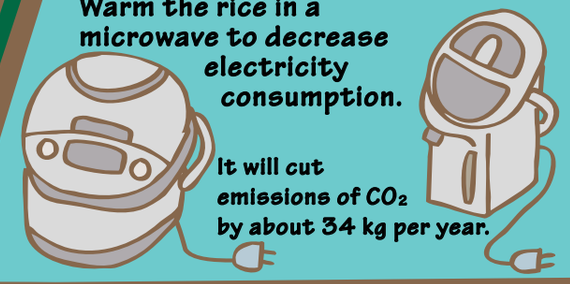
It can also be reused for watering garden plants and as toilet water.



It will cut emissions of CO_2 by about 7 kg per year.

Stop using the "keep warm" feature of rice cookers and electric kettles.

When you keep rice or water hot for a long time, it consumes a lot of electricity.
Warm the rice in a microwave to decrease electricity consumption.



It will cut emissions of CO_2 by about 34 kg per year.

Cut 8 km worth of driving twice a week.

It will cut emissions of CO_2 by about 184 kg per year.

Use buses and trains, as well as bicycles, for commuting and shopping! Moving on foot or by bicycle is good for your health, too!

Stop idling for 5 minutes per day by turning off the car engine when stopping the car when waiting for a while.

It will cut emissions of CO_2 by about 39 kg per year.

When all members spend time in a room rather than individual rooms, you can cut the use of air conditioners and the lights by 20%.

It will cut emissions of CO_2 by about 238 kg per year.

Bring your own bags for shopping and buy unwrapped products. Plastic trays and wraps are thrown away at home. You can decrease the use of plastic bags by using your own bags.

It will cut emissions of CO_2 by about 58 kg and save resources.

Decrease standby power consumption by 50%.

Turn off the power supply. If you will not use the device for a while, pull the plugs.

When you are buying a new household appliance, select one with low standby power consumption.

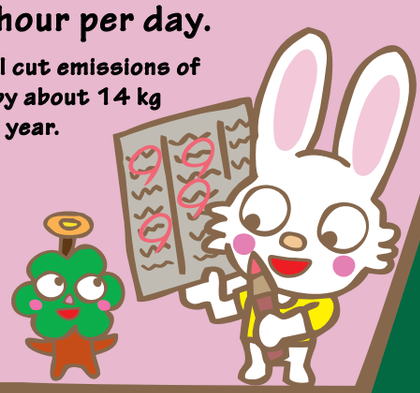
It will cut emissions of CO_2 by about 60 kg per year.

Decrease showering time by one minute per day.

It will cut emissions of CO_2 by about 69 kg per year.

Choose which TV programs to watch beforehand to decrease the use of TV for an hour per day.

It will cut emissions of CO_2 by about 14 kg a per year.



Source : Japan Center for Climate Change Actions

Blue Planet Prize Symbol

What is the Blue Planet Prize?

It is a prize given to the people who work hard to protect the Earth's environment....

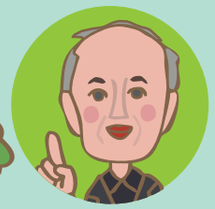
Blue Planet Prize Story

http://blueplanetprize.org/en

You can learn what the prizewinners think in order to protect the environment of the Earth and leave it to the next generation, and how they have been working for that purpose on the website.

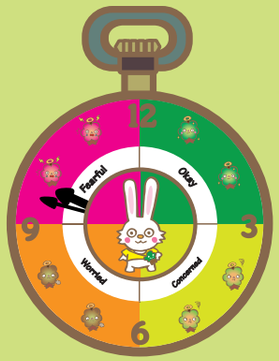
Winners of the Blue Planet Prize 2017

You can readn stories about Prof. Schellnhuber and Prof. Daily



Prof. Schellnhuber

Prof. Daily



Environmental Doomsday Clock

A clock that shows how worried people are around the world about the Earth's environment.

As of 2018, the time is **9:47**

Prof. Schellnhuber's Fun School

July 2019, The Asahi Glass Foundation