# KOFU CITY GLOBAL WARMING COUNTERMEASURES GUIDEBOOK



How can we achieve a zero-carbon society?



KOFU CITY

**Environmental Policy Division** 









Kofu City supports the sustainable development goals (SDGs)



Kofu City has been registered with the "Plastic Smart" campaign run by the Ministry of the Environment

Risa-chan - Kofu City's waste reduction mascot Takeda Haru-kun - Kofu City's PR mascot The average global temperature has been going up due to increase in CO2 emissions

## Here's what's at stake if we don't act now



## Below are some of the impacts that are currently visible throughout the world

- Vanishing of lands or islands due to sea level rise and causing the ice that polar bears depend on to melt away.
- Increase in frequency of floods, forest fires, heat waves and damages caused by droughts.
- Difficulty of ensuring safe drinking water due to deterioration of water quality. Water-borne diseases, such as cholera or salmonella diseases are increasing.



Below are some of the impacts that are currently visible in Japan

• Increase in frequency of sediment-related disasters which were caused by frequent heavy rains and intensified typhoons.



- The number of people who are sent to hospitals and that of heat-related deaths are increasing.
- Impacts on many different sectors and factors of ecosystems, such as degradation of rice grain quality, extinction risks for Japanese grouses and coral reefs are increasing.

The impacts which have been caused by global warming are becoming severe. We can see those impacts all over the places and they are threatening our security and safety. If we don't stop global warming now, the global environment will change drastically.

### How the world will look in the future?

#### WEATHER

- The average global temperature would increase by 4 degrees Celsius over the next 100 years. It has been said the temperature of Kofu City would be about the same of that of Yakushima Island, Kagoshima.
- It has been said that number of days on which the temperature rises above 35°C will be increasing. Health issues relating to heatstroke will be even more problematic.

#### FOOD

- Drylands around the world will expand at an accelerated rate because of future climate change. This will likely aggravate food insecurity.
- It has been predicted that global warming will have a great impact on one of Kofu's specialties: Wine.

Global climate change may stimulate large-scale geographic shifts in lands suitable for grape production.

#### OTHERS

• Increase in frequency and intensity of heavy rains will cause sedimentrelated disasters and water-related disasters.

In order to make our society safe and pleasant place to live in,

Impacts caused by global warming will be seen in various fields such as agriculture, fishing industry and natural eco system. Reducing global warming and protect our environment will help us secure safety life. Let's take an action in order to reduce CO2 emissions.





## Kofu City has announced its commitment to net zero carbon emissions

Kofu City announced its commitment to become a Zero Carbon City in February 2021 and it also announced its commitment to net zero carbon emissions by 2050.

'Net zero emissions' refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.

In order to reduce global warming, it is vital to reduce greenhouse gas emissions by promoting saving energy. It is also helpful to save and increase forest areas which absorb CO2.





Japan Center For Climate Change Action (https://www.jccca.org/)

Take look а at the breakdown of household carbon emissions. More than the half of the carbon emissions derive from lighting, home appliances These and cars. are essential items to our lives, but you could reduce carbon emissions by taking small steps.



#### Tips to reduce CO2 emissions



#### Carry a reusable shopping bag and a water bottle



Reusable bags and water bottles which you can use many times over are great for the environment. That's because they replace single-use plastic bags and cups and cut down on the amount, you're using each time you shop.

#### Taking public transportation more often

You can enjoy a less stressful journey and it gives you plenty of quality time by letting someone else do the driving.

### Eat local

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Sourcing locally takes less gas for transportation. Buying fruits and vegetables in season helps reducing greenhouse emissions into the air. Shop at your local farmer's market!





#### Turn off the lights when you don't need them

Turn off your lights and TV when you are not using them. This will help reducing CO2 emissions.



### Eco-friendly driving

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Practice green driving. Steer clear of harsh accelerations and sudden, intense braking.

No re-delivery

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Receiving packages in one go without redelivery helps reducing greenhouse gas. Among the parcels which are delivered by courier every year in Japan, approximately 20% of them are re-delivered.

When sending a package, tell the recipient that you will send a parcel, check the date and time that the other party can receive it, and specify the delivery date and time. When receiving your parcel, you should receive it in one go without re-delivery by designating the time slot at the time you can receive it and by designating a place where you can receive your parcels, such as your home, a convenience stores.



### Let's make some changes in the way we live!



## There are many other ways that you can help fight global warming

#### Fashion and Global warming



Stylish and affordable "Fast fashion" stimulates impulse buys and satisfies many of our appetite.

On the flip side, we have been placing a heavy burden on the environment. Domestically, as much as 3.5 billion pieces of clothing is produced and 95 million tons of greenhouse gas is emitted every year, which is equivalent to about 27 kg per kilogram of clothing. Also this is equivalent to amount of CO2 that one car emits which is driving at 100km per an hour. Don't buy so much. And make sure the clothes you do buy are made to last.

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## Food waste and Global warming

Quite a few people in Japan eat "Ehomaki" (Sushi Roll for Wishing for the Year's Good Fortune) on "Setsubun" February 2. Ehomaki which were not sold by this date are thrown out. A significant amount of food produced in the world is thrown away before it even gets to the table. During manufacturing process, a significant amount of greenhouse gas is emitted. There are a number of different ways you can contribute to reduction of greenhouse gas. For example, do not over buy and use leftovers. Another thing is to buy near-expired food. Usually these food are displayed in a front row of a display



## Marine plastic pollution is one of the most serious environmental problems





A massive amount of plastic debris floating in the open ocean. It is reported that 5 to 13 million tons of plastic end up in the ocean every year and has been estimated the mount of plastic on the ocean will exceed the number of marine life in 2050. The issue also affects our health. The main sources of plastic debris found in the ocean are landbased. Those fish and wildlife eat plastic debris are becoming intoxicated. Consequently the toxins from the plastics have entered the food chain, threatening human health. Recycle plastics to protect our environment and health.



Kofu City Environment Center

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Risa-chan - Kofu City's waste reduction mascot

 $\bigstar$ Kofu City's Global warming information site

https://www.city.kofu.yamanashi.jp/smartcity/index.html