



# KOFU CITY'S GLOBAL WARMING COUNTERMEASURES GUIDEBOOK



## How can we achieve a zero-carbon society?

Environmental Policy Division,  
Department of Environment,  
KOFU CITY



Risa-chan - Kofu City's  
waste reduction mascot



甲府市は持続可能な開発目標 (SDGs) を支援しています

Kofu City supports the sustainable  
development goals (SDGs)

SUSTAINABLE  
DEVELOPMENT  
GOALS



Takeda Haru-kun -  
Kofu City's PR mascot



Plastics  
Smart

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

The average global temperature is rising due to increased greenhouse gas emissions

## If we don't take any action now, the consequences will be irreversible!



### In the world...

- Vanishing of lands or islands due to sea level rise and causing the ice that polar bears depend on to melt away.
- The number of damages from floods, wildfires, heatwaves and droughts are rising.
- Deteriorating water quality leads lack of access to safely managed drinking water, which correlates with an increase in waterborne diseases such as salmonella, cholera.



### In Japan...



- The frequency of heavy rain and more powerful typhoons are increasing the frequency of landslides and other disasters.
- A significant rise in heatstroke hospitalizations and deaths has been confirmed.
- Having serious and documented impacts on various fields and ecosystems, including the decline of rice quality, the endangerment of the Japanese rock ptarmigan, and the widespread disappearance of coral reefs.

The effects of global warming, which are becoming more severe every year, are already being seen regardless of country or region, and are threatening our safety and security. If global warming continues at a significant rate, the Earth's environment will change dramatically.

If global warming continues at its current rate.....

## What the Earth could look like in the future?

### **WEATHER**

- It is predicted that the average temperature will rise every year, rising by about 4 degrees Celsius in 100 years, and the temperature in Kofu City will be about the same as that of Yakushima Island in Kagoshima Prefecture.
- 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**

- It is said that areas where it is difficult to grow crops are expanding due to climate change, making it impossible to secure food supplies.
- It is predicted that the areas suitable for growing grapes, a specialty of Kofu City, will also change.



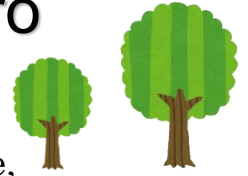
### **OTHERS**

- It is said that more intense and frequent heavy rains will lead to an increase in landslides and floods.

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 to reduce CO2 emissions.

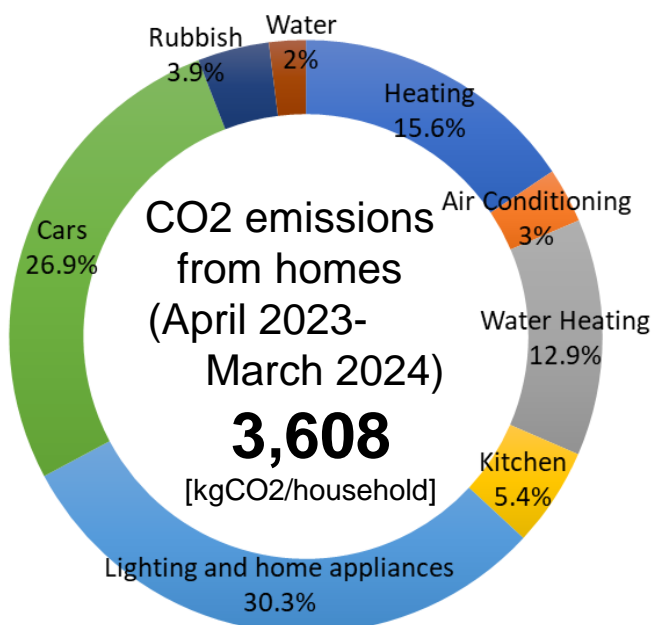
To curb global warming and build a livable future,

# Kofu City aims to achieve carbon neutrality by reducing emissions of carbon dioxide and other greenhouse gases to net zero



To mitigate global warming and create a more livable future, Kofu City declared itself a "zero-carbon city" in February 2021 and aims to achieve net-zero greenhouse gas emissions by 2050.

“Net-zero” refers to a state where the amount of greenhouse gas emissions released by human activities is equal to the amount of greenhouse gases absorbed by properly managed forests, resulting in a net balance of zero. To mitigate global warming, it is necessary to reduce greenhouse gas emissions by promoting energy conservation and efficiency, and to protect and expand forests that absorb greenhouse gases.



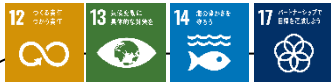
Look at the breakdown of CO2 emissions from homes. More than the half of CO2 emissions from home derive from lighting, home appliances and cars.

These are essential items to us, but you could reduce CO2 emissions by taking small steps.

Source: National Institute for Environmental Studies Greenhouse Gas Inventory Office website

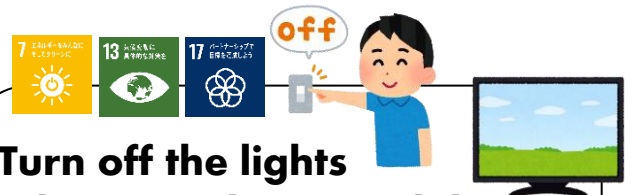
Let's reduce carbon dioxide emissions to protect our living environment.

## Here are some tips to reduce CO2 emissions



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

Why not reduce the use of plastic bags and disposable cups by carrying your own reusable bag or bottle? Find your favorite one!



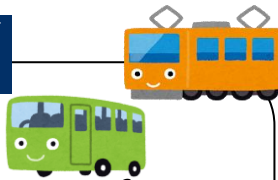
### Turn off the lights when you don't need them

Do you leave the lights or TV on for no reason? Turn off your lights and TV when you are not using them.



### 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.



### Eco-friendly driving

Practice effective driving: avoiding harsh acceleration or braking, avoiding unnecessary high-speed driving.



### Eat local

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!



### No re-delivery

Among the parcels which are delivered by courier every year in Japan, approximately 20% of them are re-delivered. 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 store.



Kofu city food loss reduction matching service

## KOFU TABESUKE

### 甲府タベスケ

You can buy groceries nearing their "Best before date" with discount from shops in Kofu. To use this service, scan the QR code. Enjoy your shopping!

Scan here



iOS Android

Registration  
&  
usage fee  
FREE

If you would like to give more love and take a better care of our planet.....

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



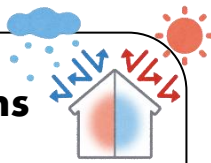
## Switch to LED bulbs and use energy-efficient appliances



LED lighting is highly energy-efficient and saves on electricity costs. It also has the added benefit of attracting fewer insects. Why not replacing old appliances with energy-efficient models?



## Insulation renovations are highly effective



Upgrading insulation in ceilings, walls, and floors creates a thermal barrier, keeping heat out in summer and in during winter.



## Keep your antennas up



Information about global warming and environmental issues are accessible via books, newspaper, or internet. Also search for the Kofu City's global warming countermeasures information website "こうふのeco."



## Use renewable energy



Renewable energy, such as solar power and wind power, does not emit greenhouse gas.

Buy green power which uses renewable energy. When purchasing electricity, consider switching to a plan that uses renewable energy sources.

Furthermore, installing a solar power generation system and generating your own electricity has advantages such as being able to use electricity even during disasters.



## Think twice!



Household waste emits greenhouse gases throughout its lifecycle, from initial collection and transport to treatment and final disposal. By asking "Do I really need this?" before making a purchase, you're encouraging mindful consumerism and moving away from a "throwaway" culture.



Decomposing food waste using the power of nature!

## KIERO.

KIERO uses the power of microorganisms in the soil to decompose and eliminate food waste.

You can make them at home using a planter, and they are also distributed free of charge to those who attend courses in Kofu City.



If you want to learn more about the challenges surrounding us.....

# 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. Why not shift from frequent purchasing and discarding of cheap clothing to cherishing and wearing each garment longer?



## Food waste and global warming



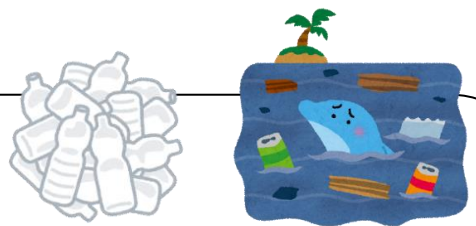
In Japan, it is estimated that approximately 4.64 million tons of food that could still be eaten is wasted every year. (April 2023 – March 2024) This means that, on average, each person in Japan is throwing away the equivalent of one rice ball (102g) every day.

Furthermore, a significant amount of greenhouse gases is emitted during the production, transportation, and disposal (incineration as combustible waste) of food.

There are several different ways you can do to reduce greenhouse gas emissions. For example, do not buy food more than you can eat, do not waste food, and when buying groceries, buy the items closest to their “Best before date”. Enjoy and appreciate your food!



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



A massive number 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 amount of plastic in the ocean will exceed the number of marine lives in 2050. The issue also affects our health. The main sources of plastic debris found in the ocean are land-based. Those fish and wildlife that 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.

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waste reduction mascot

★ Kofu City's global warming countermeasures information website ★  
“こうふのeco”



<https://www.city.kofu.yamanashi.jp/smartcity/>

