



# NISHO POSTS

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## How do students see global warming?



Nisho students talking about environment

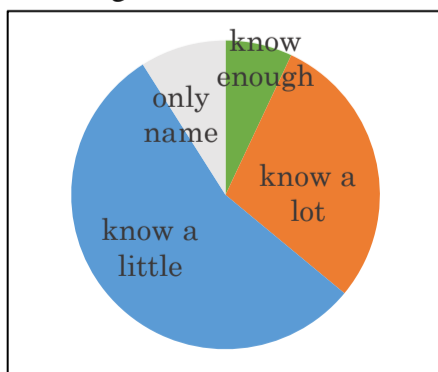
Photo by Gunge Tamaki

The earth's environment is getting worse and worse these days. The cause of this problem is said to be affected by the environmental problem. The meaning of environmental problem is the change of environment that cause by human action on the earth. Depends on what humanity will take actions, the way how the environment changes is different, and what could be the worst change for the earth to have?

In this paper, questionnaires has been taken in 140 people including both teachers and students so that we can find out what environmental problem is seemed to give the biggest problem from the view of Nishogakusha students and teachers.

The questionnaire asked, "What environmental problem must be improvised at first?" There were global warming, acid rain, deforestation, air pollutions , water pollution in choices. The people who

have answered our questionnaire gave the other opinions sometimes, but global warming had the most. More than 50% answered it would be global warming. Global warming itself means the temperature of earth is getting higher. Reason why the global warming has seen as the biggest problem to earth is if the earth got warmer and warmer every year, it may cause a big impact to a lots of other environment problems. At second, another survey has taken to see how interested they are. We were interested in how much recent students have knowledge about global warming.



[Result of second survey]

It asked "How much do you know about global warming?" 108 students in the highest classes of 1st grade and 2nd grade answered this survey, and as an additional question asked, "Why do you think the global warming gives the biggest impact to earth?" is asked. As a result, most of them answered that they know little or more about global warming. Responses to the second question, there was a various ways of answers. Some students answered, "Because it is the cause of other environmental problems." as another example, there were also opinions like "Because if the temperature goes up, it will melt Antarctica ice. Antarctica ice melts, then it will make the sea level rises and if the sea level rises, it will decrease the land that human can live". From the result of the survey it seems like the student of Nishogakusha high school students understand what will happen if the global warming

progresses. Based on the result of the survey, another survey was taken to students. The survey was to ask, "What do you do to prevent global warming?" some students were doing nothing to prevent global warming progresses. Although there were students who took measures like separating garbage or saving electricity, still it was fewer than the students answered doing nothing. Although even if students knew how much global warming can give a bad influence to earth, most of them are doing nothing. Nishogakusha high school may need to make the students attend volunteer work for nature conservation mandatory.

By  
Yosuke Sugai, Sho Watanabe,  
Tamaki Gunge, Takehito Shoda

# The influence of global warming

POINTER	CHANGE
Average temperature	About 0.6°C rise in the 20th century
Average sea level	10~20cm rise in the 20 <sup>th</sup> century
A hot day	Likely to have increased
A cold day	Decreased in almost all land
Heavy rain phenomenon	Increase in the northern hemisphere
Drought	Increased frequency in some areas
Glacier	Broadly retreated
Snow accumulation area	Area reduced by 10%

Information by IPCC

Global warming has had a variety of adverse effects on the global environment and the ecosystems close to it. If global warming continues, it is predicted that the temperature will rise 4.8

degrees in the worst case in 2100 compared to the average between 1986 and 2005. If global warming continues, it is predicted that the temperature will rise 4.8 degrees in the worst case in 2100 compared to the average between 1986 and 2005. The effects of

global warming are said to be more harmful when temperature rises above 2-3°C, and potentially catastrophic when temperatures rise close to 5.8°C.

There are three main effects of global warming.

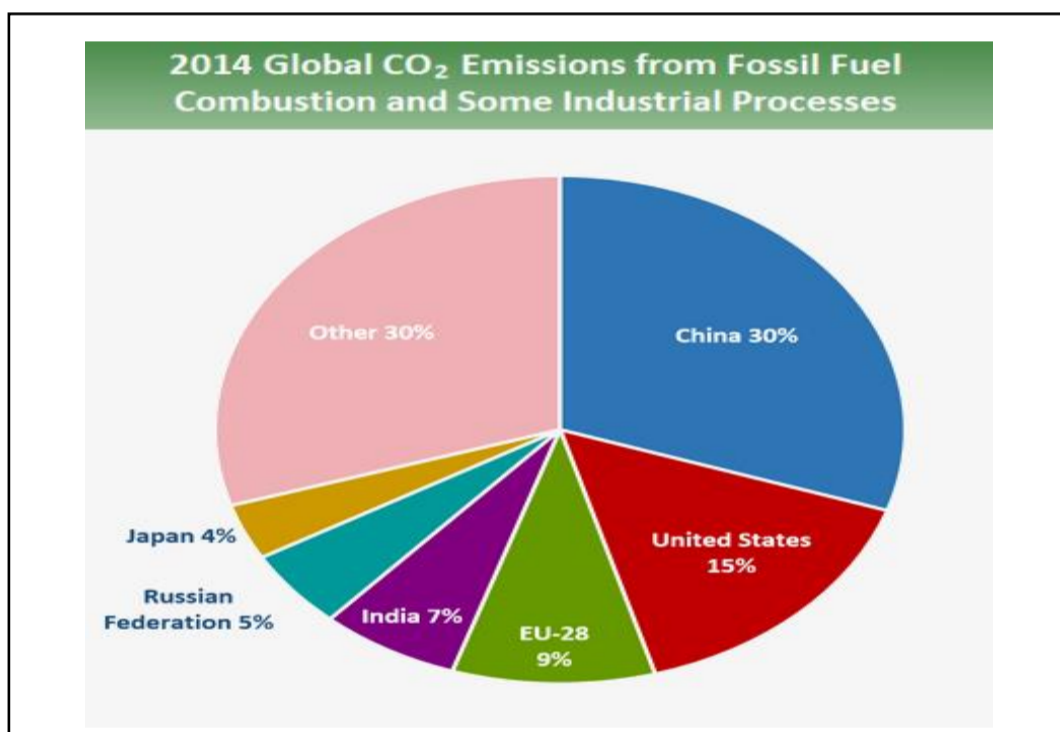
The first is that the sea water and less lands. The melting of Antarctic ice can lead to the loss of living habitats. It also raises the temperature of the tundra in the Arctic, leading to the release of methane, a very powerful greenhouse gas.

The second is that due to climate

change, the stable water supply of agriculture is very likely to be disturbed by floods and droughts. This also leads to a decrease in plants and animals. If this happens, the rise fields and fields will be damaged, and not only will crops such as rice and vegetables be removed, but the ecosystem will change and there will be fewer opportunities to take meat and fish.

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 By Eri Takase, Natsuho Asakawa  
 , Sou Nemoto, Sota Nakano  
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## The cause of global warming



The main causes of global warming are greenhouse gases such as carbon dioxide and methane. The average temperature of our earth is about 14 degrees Celsius, but if there is no greenhouse gas such as water vapor, carbon dioxide and methane in the atmosphere, it will become 19 degrees Celsius, So it

is said that the greenhouse gas is cause of global warming. Actually, it is necessary for the Earth. In recent years, however, the concentration of greenhouse gases such as carbon dioxide and methane has rapidly increased and the amount of heat absorbed from earth's surface has also increased, resulting in an abnormal rise in temperature. The

development of industry, deforestation and incineration of garbage also increase greenhouse gas emissions. Because of these problems, if could to lead to abnormal weather, sea level rise, water shortage, food depletion, desertification and water pollution. The graph below shows the ranking of countries with high CO<sub>2</sub> emissions from Fossil fuel combustion and some industrial processes in 2014. According to this graph, China's CO<sub>2</sub> emissions from Fossil fuel combustion ratio is 30

percent, the highest. Air pollution in China was becoming serious problem. However, China has taken various measures since 2014, and is now on a declining trend. For example, China has improved energy efficiency in both production and use of electricity and they shifted from coal dependence to renewable energy, mainly

sunlight. Furthermore, by 2020, they have already achieved the goal of reducing CO<sub>2</sub> emissions by 40 to 45 percent compared to 2005 in terms of gross domestic product (GDP) units (the amount of CO<sub>2</sub> emitted when creating certain GDPs). And second place is the United States with 15 percent. And Japan ranked sixth place in the world. For example, in comparison with Germany, although the area and population are almost the same, Japan has a greater percentage of CO<sub>2</sub> emissions than Germany. So, this is an important issue for us and we have to think about what we should do to improve it. Recently, CO<sub>2</sub> is decreasing, but there are still many things to be improved.

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 By  
 Hina Itou, Tatsuya Okamura  
 Kengo Tomiya,  
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# Technology for environmental problems



In the world, various environmental problems caused by the development of civilization such as cars and smartphones are increasing year by year. In that, we looked at technologies that might solve the ocean problem. 97.5% of the water on earth is seawater. And there's only 2% freshwater there. Even though there's hardly freshwater and it is said that it will be decreasing because of global warming these days the technology called 'Pervaporation' is being

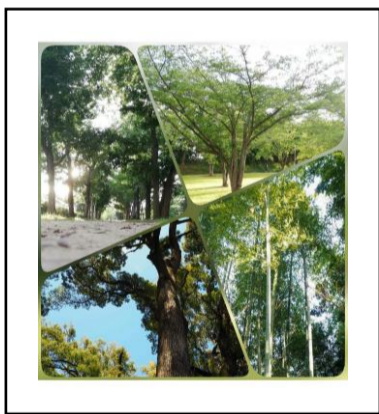
developed. It removes salt and impurities from seawater by using the special filters. This apparatus doesn't need electric power since it's also cheap, it draws many people's attention. Currently, many countries prohibiting "disposable plastic shopping bags" is increasing, and regulations are being strengthened in each country. 'LIMEX' is made from 60% of Limestone. Limestone is found in large quantities throughout the world and can be supplied in Japan. Moreover, We can make LIMEX

into paper and plastic called LIMEX's sheet. In addition, "LIMEX sheet" is as light as conventional paper, has high printability and is inexpensive. Now, marine plastic waste problem has evolved into a big problem. So, development of biodegradable plastics which can be broken at sea is progressing. This is made of polyester, Cellulose, and Polylactic acid. Because biodegradable plastics are decomposed into hydrogel oxide and carbon dioxide by the action of microorganism finally, it will not keep floating on the sea consecutively. Plastic has been made in bulk since 1950s. It is cheap, high durability and useful. But it doesn't rot and change to soil. That is troublesome waste we can't throw away and burn. Before, China imported dirty plastic to recycle and produced new ones. In 2017, however, it was banned because of worsen environment. So, many trashes last their way. McDonald's and Starbucks

abolished plastic straws in 2018. And they are to switch by 2025 and 2020. Plastic straws are strong enough to drink smoothly. Although, it costs a lot and indulge. In 10 minutes, it becomes limp. So, all over the world are working hard to improve. This moment is an also eco appeal. We believe this technology can reduce oil and plastics that cause water shortage and marine pollution. Due to this marine problem, marine creatures accidentally swallowed plastic, and died. Moreover, there is a danger that we humans may eat without knowing the fish that we accidentally swallowed. There may be something we can do.

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 By  
 Miyabi Tsuchiya, Miyu Okano,  
 Kaori Ikawa  
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# Organizations that carry out activities to reduce the burden on the earth



There are

Thailand, Malaysia, Vietnam, and Indonesia. On the other hand, there are companies that carry out the eco-friendly business. First, I focused on water. According to the newspaper, Suntory Holdings has succeeded in preserving a forest that produce twice as much water as it uses. In addition, they will consider maintenance around overseas factories In the future. These efforts will prevent landslides and enrich the ecosystem. Second, I found that encourage The Sustainable Development Goals. MS& AD supports renewable energy operators. They sell insurance for renewable energy provider (Solar power, Wind-power generation, etc...).

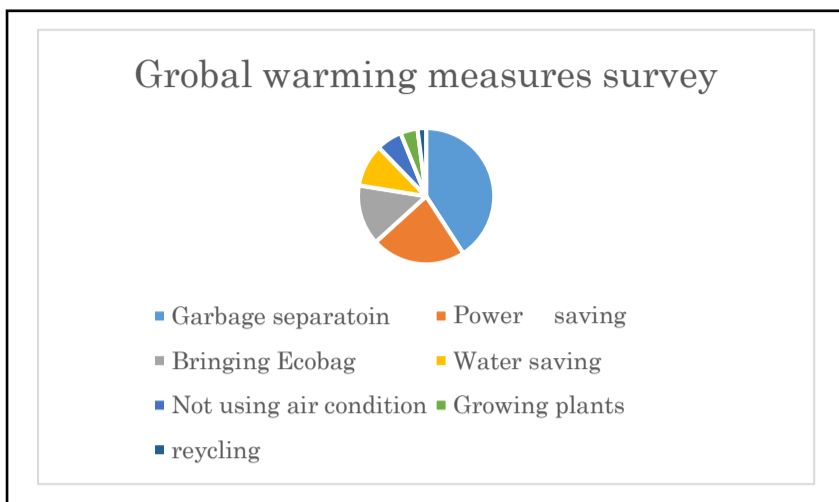
This business will help combat greenhouse gases and promote the resolution of environmental problems. Third, I researched Factory in Japan. Carbon dioxide emitted from Japanese factories was over 614 tons. They are reviewing and improving inspections and maintenance in the factory, and are working to reduce carbon dioxide. In addition, their fuel was changed from heavy oil and LPG to reduce carbon dioxide. Finally, I researched ECO-Drive. In businesses that use cars, they are working on "eco-driving". Actively introducing hybrid vehicles and other efforts to reduce carbon dioxide. And some people use public transport when their luggage is small. I think that Global warming is currently the most serious problem in the world. This is because global warming is

a threat to human life. But, the cause of global warming is human behavior. In this situation, animals will suffer. So we must solve global warming. The increase in carbon dioxide is closely related to global warming. An increasing number of people are conscious of the need to reduce carbon dioxide. In fact, these things found this. I think these activities will contribute to The Sustainable Development Goals. This is the first step in resolving global warming!

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 By  
 Hina Watanabe, Hana Otsuki,  
 Misuzu Kimura, Aruru Saito  
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Organizations that carry out activities to reduce the burden on the earth  
 There are organizations that plant trees. Reforestation is a fundamental means of reducing carbon dioxide and increasing oxygen. For example, the Japan International Forestry Promotion and Cooperation Center has carried out Reforestation overseas since 1992. They are mainly doing it in developing countries and Southeast Asia. In fact, they carried it out Afforestation in Myanmar,

# What are you doing to prevent global warming?



Have you been doing anything to prevent global warming?

Global warming is the result of various actions which humans have done to this date. We have pursued a rich and comfortable life, and have continued to develop civilization while destroying nature.

This time, 25 people were surveyed about "How they country global warming in their daily lives and examined their awareness of global warming.

The most common measure is garbage separation. Garbage separation reduce the amount of carbon dioxide produced during combustion by removing plastics from being destroyed by combustion, thus preventing

Global warming. Power saving prevents global warming by using less power. Since many machines that use electricity generate heat, global warming can be prevented directly.

The third most common measure is to have an eco-bag. Eco bags are bags that consumers bring with them shopping. Having an eco-bag eliminates the need to use a plastic bag and reduces the amount of garbage.

Other ways people prevent global warming, there were saving water and raising planets.

When water moves, it consumes a lot of power, so saving water can save energy naturally, so it can be effectively taken.

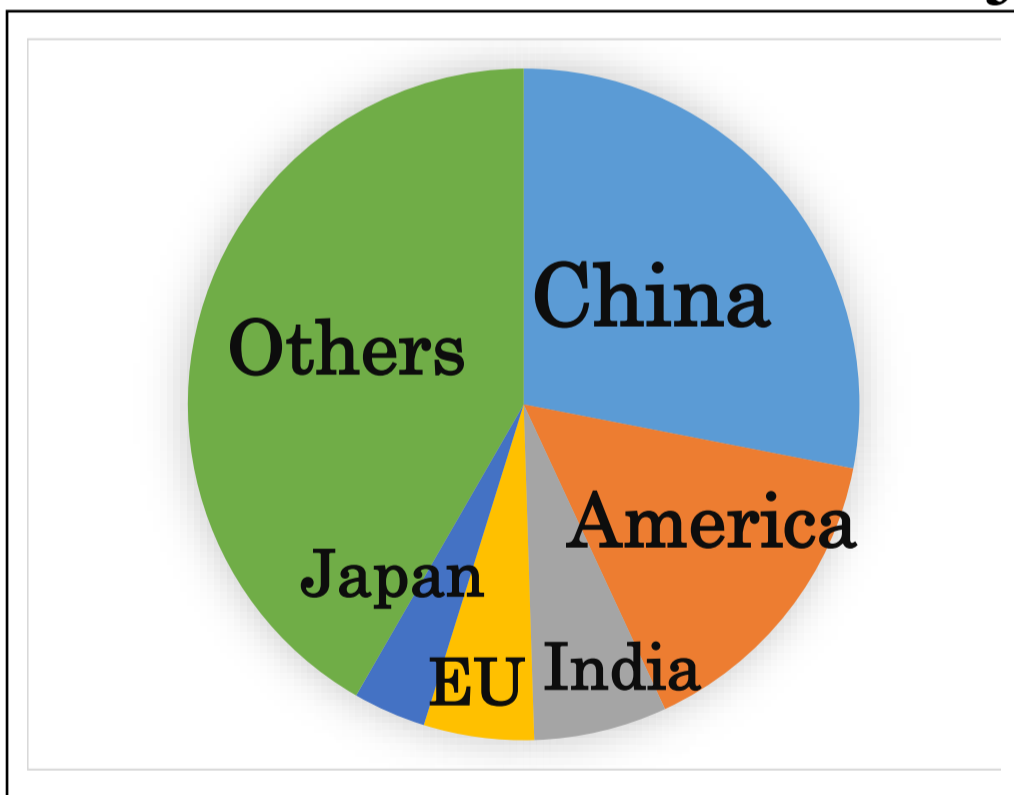
Growing planets leads to lowing the carbon dioxide concentration in the air, which is a major cause of global warming. In addition, the temperature of the room can be prevented with a vine-like plant, saving power.

These measure are not very effective even if one person works hard. The only way to change the state of the earth today is to make many small efforts like this.

If we consider only the development of civilization and continue to destroy nature, civilization will be destroyed by natural phenomena that are side effects of abundant living. In order to prevent this happening, it is important for each individual to be aware of and be aware of environmental issued.

By Sara Aikawa Yuta Nabetani  
Soma Sato

# Governments counter major to Global warming



Carbon dioxide emission each countries grams can make an even greater impact. As an example of a government's effort, I would like to introduce the policies of Seattle, an American city that is a great

inspiration to the world in this. In Seattle, the government's environmental and other departments in the city participated in an energy-conservation project of the city's city lighting company. A "Neighborhood project" involving both citizens and private companies is also underway. A free survey of city housing lighting called *City Light* will investigate how to conserve energy and water. They will provide light-bulb style florescent lamps and energy-saving showerheads for households involved in the survey. The target is around 200 households.

They will meet 50-70% of the costs of providing improved insulation for apartment buildings that are electrically heated. As you can see from this example, the

government is in a position to provide information to the public and effectively promote environmental conservation. As a result, we can see that governmental and parliamentary decision-making can have a major impact on the environment.

We have to make an effort to choose talented politicians dedicated to these goals ourselves. This shows that elections have the power to affect environmental issues. I think that we students, who will have the power to vote soon, should begin to have the will to help solve environmental problems this way.

By  
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