Environmental and Energy Policies of Chiba University

Since the Industrial Revolution, humankind has developed our activities using abundant energy resources. As a result, we are now faced with various environmental problems, such as global warming, pollution by chemical substances and loss of biodiversity of living things. The environment, which is the basis of our subsistence, is threatened by environmental burdens produced by human activities. In addition, we need to continue our efforts to solve environmental, social and economic problems while leaving no one behind to achieve the Sustainable Development Goals (SDGs) adopted at the United Nations Summit. Chiba University will contribute to society with collective knowledge, acting as an education and research institution, to improve the world situation at present as well as in the future.

To this end we will take the following actions:

- 1. Combining natural and social sciences, we advance the practice of environmental education and research, in cooperation with our affiliated schools.
- 2. We promote energy and resource saving measures by cycling the use of resources, buying goods considering the environment, and protecting vegetation on our campus. We also manage the safe use of chemical substances to prevent pollution. Through these activities we realize a lush campus with a light environmental load. Above all we understand and comply with legal requirements about the environment and energy which Chiba University agrees with.
- 3. The environmental and energy management system is constructed and operated mainly by the students. We also encourage voluntary activities by students, aiming at a campus where a variety of environmental programs are put into practice.
- 4. We practice our environmental and energy management system while reflecting the opinions of the local community with reflection of their opinions.
- 5. We will keep energy efficiency at the top level among national universities and improve it continuously. We also support designing products and drafts of service and facilities which lead to improvement in energy performance.

Based on this policy, we establish the targets, take actions to realize them, and consider the environmental management system by auditing the actions for continuous improvement of the system. This environmental policy is documented and communicated to the people concerned, including the faculty, staff and students of Chiba University, and related business people who are usually stationed there, and released to the public in a document and on the website.



April 1, 2004 Enactment April 1, 2008 Second revision July 24, 2013 Third revision April 1, 2019 Fourth revision

President of Chiba University Nakayama Toshinori

Sustainable Campus Made by Students

GOALS The efforts for the achievement of Sustainable Development Goals (SDGs)

"SDGs", which were adopted by the United Nations in 2015, are the common goals of the international community. They consist of 17 goals covering a wide range of issues, from environmental problems to gender equality, and 169 targets. Chiba University's efforts, which are applicable to the 5 pillars of our "Environment and Energy Policy" are introduced including the relevance to each of the SDGs 17 goals below:

I. Environmental education and research at a university level

In addition to promoting research on the environment, we provide education related to the environment at each undergraduate and graduate school.







A list of environmentrelated courses can be found here



Botanical factory

Class

Events at the affiliated kindergarten

2. Creation of an environment-friendly "Green Campus"

We do daily energy and resource conservation, garbage separation, and safe management of chemical substances. We are also engaged in various environmental presentation activities such as greening and the 3Rs.











Composting of fallen leaves

Secondhand Book Fair

Introduction of the paper straws Posters for energy conservation

3. Student-centered Creation and Operation of the Environmental Management System Students participate actively with a training instructor and auditor on ISO as well as making minutes of the audits.

















Sustainability Report

Activities within the local community

We work on raising awareness of environmental consciousness by conducting environmental activities in collaboration with companies and participating in environmental events.



Participating in Eco-Pro event



Chiba Winter Fes



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Keeping the Top-level Energy Efficiency among National Universities

We've taken measures such as raising awareness of energy saving, increasing energy efficiency of devices and utilization of natural energy.



Air Conditioner Filter Cleaning







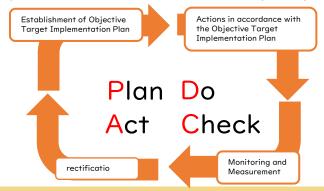


Public awareness stickers

Long term goal "Chiba University aims to achieve REI00 by 2040." Chiba University declared that it aims to achieve RE100 which means that the University will use 100% renewable energy by 2040.

Operation of Environmental Management Systems in accordance with international standards

Chiba University acquired the certification of ISO14001, which is an international standard of the environmental management system in 2005, and in 2013, it acquired the certification of ISO50001 which is an international standard of the energy management system alone at universities in Japan. (In 2019 ISO50001 was a self-declaration.)



Environmental and Energy Management Systems (EMS and EnMS) are mechanisms for the continuous improvement of environmental protection and energy efficiency to manage an organisation by considering those issues. We conduct more environmentally friendly activities based on our policies by following the "PCDA cycle".

%EMS : Environmental Management System EnMS : Energy Management System

Operational effects of the environment and energy management

Educational effects



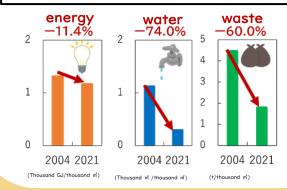
The activities that the Student Committee for EMS are engaging in are unitized. In addition, students who meet requirements, such as to work for 3 years, are awarded credits. The number of students and graduates who have these credits is 670 over 18 years up to 2022. In a questionnaire for graduates, more than 90% of them said that "The activities of the Student Committee were helpful in their work after graduating the university".

Environmental effects



Energy and water consumption per building floor area and amounts of general waste emissions have been significantly reduced compared to fiscal 2004 before the ISO acquisition.

Consumption and emissions per building floor area



Economic effects



We succeeded in reducing costs as well as the amount of utilities used and waste. In particular, we have reduced utility costs by 140 million yen in 3 years since ISO was acquired. Electricity costs had been decreasing until 2019, but they have increased in the past 2 years. Further energy conservation is an issue.

Social effects



25th Global Environmental Award Ministry of Education, Culture, Sports, Science and Technology Award (2016) Award by the Minister of the Environment for Global Warming Prevention Countermeasure activity implementation and dissemination section (2017)

International Sustainable Campus Network Award 2017 Excellence in Student Leadership Award International Green Gown Awards 2017–2018 Student Engagement Award (received an incentive award in 2019) CAS-Net JAPAN (Campus Sustainability Network in Japan) Sustainable Campus Award Student Activities Department Received in 1st(2015) 3rd(2017) 7th(2021)

23rd Environmental Communication Award Environmental Consideration Promotion Act Specified Business Operator Award (2019)

The annual conference of ASCN (Asian Sustainable Campus Network) Students Activity Excellence Award (2022)

What is the Student Committee for EMS?

It was established as an organization of Chiba University in 2003. There are about 200 students from the first grade to the third grade every year and they operate EMS and EMnS. Our organization's activities are credited as "Environmental Management System Practice", a universal education course. Also, students learn about EMS and EnMS, environmental laws and regulations, and moreover how to proceed with work, planning, and practice them in actual activities and situations. Our committee is working on raising awareness of energy saving, environmental education, activities to reduce paper, garbage and energy, greening activity, maintenance of the campus environment, preparation of environmental reports and exhibition of events both inside and outside the university. We acquired NPO corporate status in 2009. And we're working on activities such as an on – site eco class and Satoyama conservation while interacting with companies and communities.



Nishi-Chiba and Inohana campuses



Matsudo and Kashiwanoha campuses

Preparation of minutes for external assessment

Environmental Management System Practice

In addition to learning professional basic knowledge about the operation of EMS and EnMS and audit methods, the committee members deepen their understanding by joining various activities as committee members.

 \cdot Practice ${\rm I\!I}$

Based on learning in Module 1, you practice essentials for EMS and EnMS operation, such as an internal audit and external assessment. You will also play an important role in the student committee.

· Practice III

Students who have obtained a course credit from Module 2 work for public offices and companies as an intern using their experience at Chiba University and the study of EMS operated there.

Environmental and Energy Management Practitioner at Chiba University

This is an on - campus qualification which is given by the President to students who have worked for a year as a committee member after acquisition of credits of Practice II. It is useful for job hunting. It shows to society that they are students who have specialized knowledge about EMS and EnMS which has been learned through their working experience at Chiba University.



Practitioner Certification Ceremony

Cooperation project with companies Recently, the student committee has worked with several companies and it

Recently, the student committee has worked with several companies and it has been a valuable experience for students. The committee "Hang a rainbow from Chiba to the future "Chiba university ×Keiyo Bank ecological project ~" started in 2017 for achieving SDGs and community's enlightening of environmental awareness. Students' opportunities to study society through these activities are also a purpose of the project. (Details http://www.keiyobank.co.jp/ir/eco_project/)



We also work with ZOZO, Mitsubishi Oji Paper Sales Co., Chiba Television Broadcasting Corporation, SOGO Chiba, Epson, and so on.

Contact Us

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P NPO HP

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Related sites

①Chiba University's Environmental Efforts / Sustainability Report <u>https://www.chiba-u.ac.jp/general/approach/environment/</u> ②[Movie] Introduction of student-centered environmental management systems <u>https://youtu.be/cOVn3-D2dRM</u>







Related sites②

 $[\]cdot$ Practice I

Dear students and faculty members of Chiba University

The students and the faculty members are the core of "Do", which is one of the important parts of the PDCA cycle in the environmental management system at Chiba University. Please cooperate with the ecological activities which you can achieve in your daily life.

Energy

When leaving a room, turn off lights and air conditioners. In addition, adequate ventilation should be provided as a measure against COVID-19 and adjust the air conditioners so that the room temperature is 28°C or higher in summer and 19°C or lower in winter.

Paper

Try to reduce paper usage; for example, utilizing online and electronic media, use the rear side of used paper, double-sided and multi-page printing.

Plastic bags

It costs 5 yen to get a plastic bag When you go shopping, choose at Life Centres on campuses. Always have your own eco-bag with you to reduce plastic waste both on and off campuses.

Garbage sorting

Sort out used cans, glass and plastic bottles according to recycling boxes when you throw them away. We are collecting empty contact lens cases and plastic bottle caps for beverages in front of the Life Center at Nishi-Chiba campus.

My bottle

In order to reduce disposable have your own insulated bottle which is eco-friendly.

Green Procurement

goods and services with reduced environmental loads and consider their necessity.

Handling chemicals

When you conduct an experiment, refer to the safety manual published by the Safety and Health Organization at the university and follow your supervisor's instructions. Handle and store toxic substances and high-pressure gas cylinders appropriately according to the laws.

Water

Water is a finite resource and containers such as plastic bottles, even one drop of water is not free. Save water.

Passive smoking prevention

Smoking on campuses is prohibited in principle except at designated spaces. Quit smoking and be considerate of those around you for their and your health if you smoke. You are only allowed to smoke in a specific outside smoking area.

For the latest information regarding COVID-19 prevention and the smoking area map on campuses, please look at the Safety and Health Organization website at the university.



We ask for your cooperation in Do you know that used paper can be sold? the collection of used paper ①Recyclable used paper Sales income of used paper Leave them at paper that can be bundled (Nishi-Chiba) designated collection Copier paper Newspapers sites, which each (Magazines) 2yen/kg \cdot Leaflets faculty has, or in the (OA paper) 6yen/kg Art paper red collection boxes (Newspapers) 4yen/kg Cardboard (only at Nishi-Chiba). (Cardboard) 3yen/kg 2 Mixed paper paper that cannot be bundled Wrapping paper them in the Collecting cost 0 yen/kg · Candy boxes yellow boxes. Paper bags Envelopes ③Combustible waste Dirty paper and thermal paper Throw them away in Collecting cost 29yen/kg \cdot Tissues bins for combustible Drink cartons waste. Receipts

Please follow the bicycle rules.

• You cannot bring your bicycle on campus if it is only for moving around the university grounds.

You cannot bring in or register your bicycle which is only to ride around the university grounds. You can use your bicycle when you go to the campuses.

• Please feel free to use a bicycle-sharing service on Nishi-Chiba campus (COGOO).

The students and the faculty members of Chiba University can use COGOO for free for up to 90 minutes at a time. You can move between the designated ports by using this service. It is unavailable off campus.

• Please park your bicycle within parking area for bicycles (the white lines).

If you don't follow the rules, your bicycle will be removed or you will be fined.

• You have to buy a bicycle parking sticker every year to park your bicycle on campus.

Parking sticker purchases for students and staff who use their bicycles to commute to school Location : General Student Support Center IF Parking management office

(in the Chiba University COOP Resistance and Part-time job Counter)

Application procedure : ① Fill out a request form- Be sure to indicate the anti-theft registration number ② Purchase the parking sticker

*On Matsudo and Inohana campuses, stickers can be purchased at the offices of each school and laboratory.

Regarding bicycle parking special regulation areas

In front of the Faculty of Engineering Building $4 \cdot 5$ and 6, on the first floor of the Engineering Research Building, and at the side of the Centre for Environmental Remote Sensing, there is a special parking area for bicycles (Engineering parking area). Bicycles belonging to students from other faculties are prohibited from parking.



=only in Nishi Chiba campus)

· Do not park your bicycle at the prohibited spaces around train stations

Around Nishi-Chiba, there are many bicycles left by Chiba University students, which hinders pedestrians. Be sure to use the bicycle parking. Bicycles parked in Nishi-Chiba Station and Midoridai Station-prohibited areas may be removed by Chiba City. It costs 2,000 yen to pick up the removed bicycle.

• Follow the appropriate procedures to throw your bicycle away

If you would like to throw your bicycles away, please look at the city's website in which you live to make sure about how you can do that. There are also used bicycle collection events by the Student Committee for EMS on campuses around February and March.

· Please follow the bicycle safety rules!

It's compulsory to enroll in a bicycle insurance in Chiba City. In principle, bicycles should be ridden on the left lane of the driveway and the walkway and priority given to pedestrians. Please slow down your speed along the roadways. Drunk riding, double riding, riding without night lights and riding with friends at the same time will be punished by the law.

• Please cooperate with the separation of roadways.

The area called Yayoi Road between the library and faculty of engineering building is our separation of roadways. Bicycles must be ridden on the left of the bicycle lane. Pedestrians should not walk in the bicycle lane. When you take your bicycle on foot, you should walk in the pedestrian lane.