

# Sustainable Campus Made by Students 2019

## Environmental and Energy Policy of Chiba University

Since the Industrial Revolution, we, humankind, have developed our activities with 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 ground of our subsistence, is just threatened by environmental loads produced by human activities. In addition, we need to continue our efforts to solve environmental, social and economic problems at the same time under the idea that no one will be left behind to achieve the Sustainable Development Goals (SDGs) adopted at the United Nations Summit. Chiba University will contribute to the society with collective wisdom, acting as an education and research institution, to improve such a world situation at present as well as in the future.

To this end we will take the following actions:

1. Accumulating the wisdom of natural and social sciences, we advance practice of environmental education and research, taking advantage of the characteristics as a university in cooperation with the attached schools.
2. We promote energy and resource saving measures by cycling the use of resources, buying goods considering the environment, and protecting vegetation in our campus. We also manage the safety 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 by the students as main constituents. We also encourage voluntary activities by the students, aiming at a campus where a variety of environmental programs are put into practice.
4. We practice our environmental and energy management system open to the local community with reflection of their opinions.
5. We will keep the energy efficiency at the top level among national universities and improve it continuously. We also support designing products and drafts of service and facility which lead to improvement in energy performance.

Standing on this policy, we establish the targets, take actions to realize them, and think better of 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 website.

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

Takeshi Tokuhisa President of Chiba University

# Environmental and Energy Policies and Activities

## 1. Education and Research Regarding the Environment, Taking Advantage of Characteristics as a University



Botanical factory



Clean Day



Class



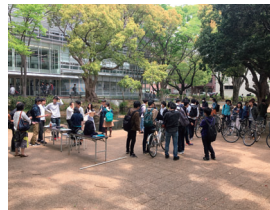
Class about environment

Visiting local schools including Chiba University kindergarten, elementary school and junior high school

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



Composting fallen leaves



Reusing bicycles



Separating the garbage



Flower planter

Adopting various "3R" practices

## 3. Student-centered Creation and Operation of the Management System



Basic training about the management system



Internal audit



External audit



The Environmental Report

Participation of students in the training and auditing

## 4. Activities with the Local Community



Garden for the community



Activities in Chiba University



Taking part in a local event



Eco project by Chiba University and Keiyo Bank

Environmental activities cooperated with Local companies

## 5. Keeping the Top-level Energy Efficiency among National Universities



Air conditioner filter cleaning



Solar power generatio



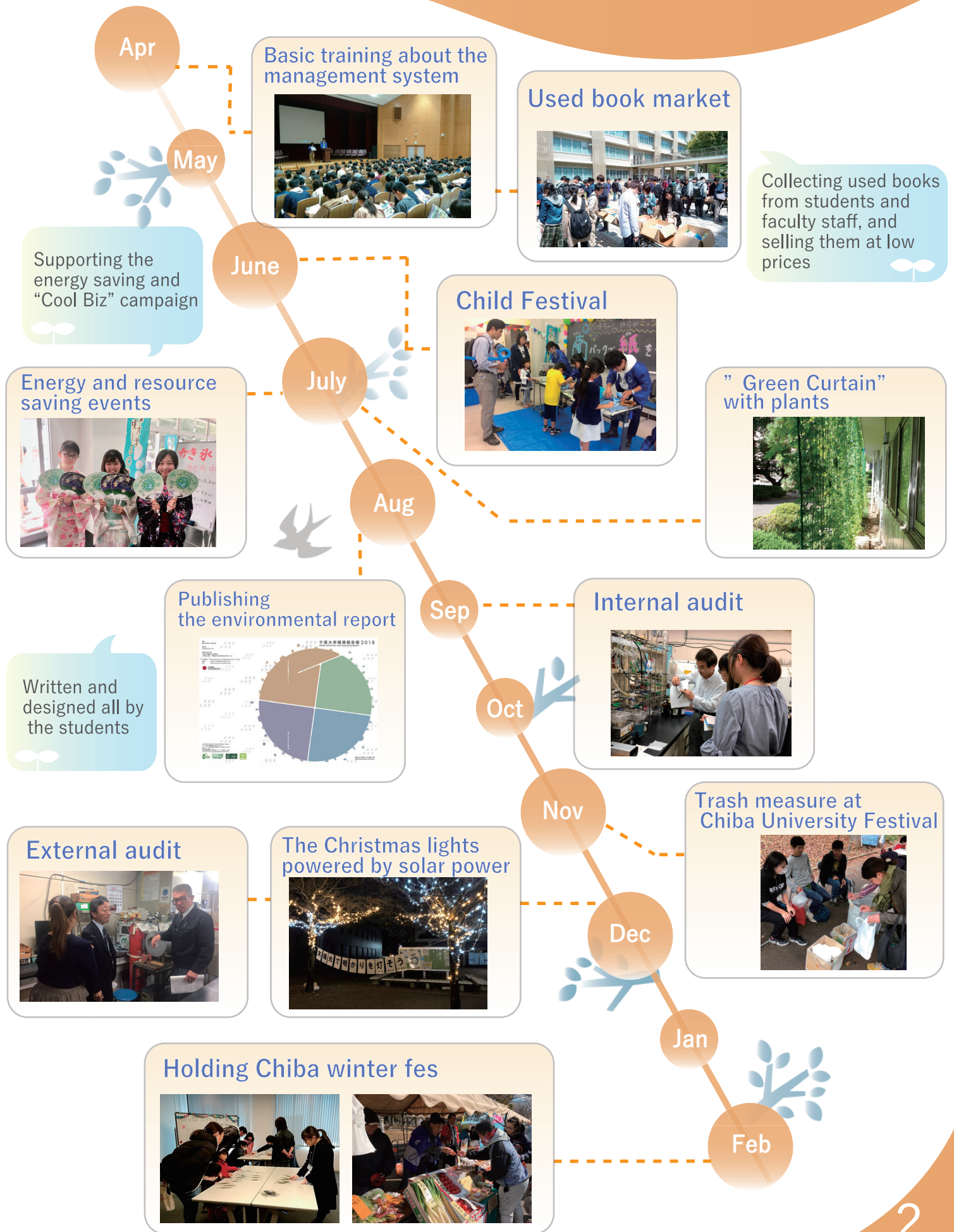
Energy-saving fan



Energy-saving stickers

Total annual energy consumption has significantly decreased compared to before the introduction of ISO. (2004)

# Main activities for fiscal 2018

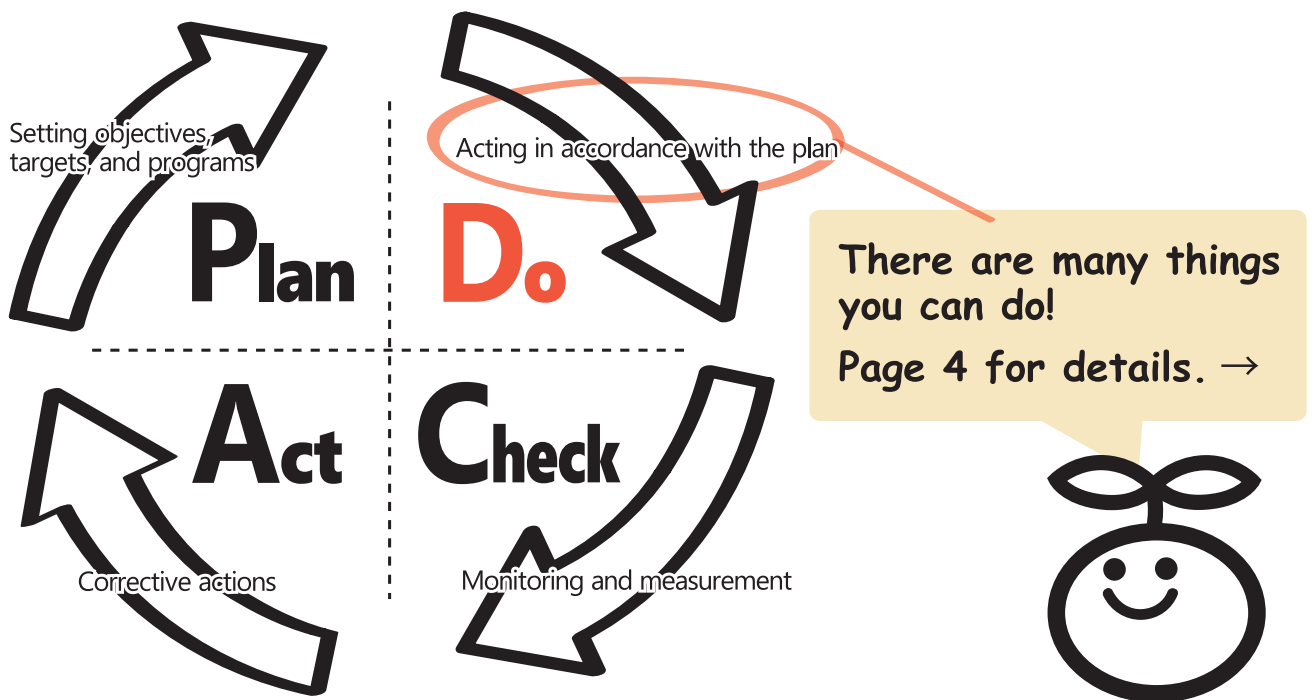


# What is Environmental and Energy Management system?

(EMS : Environmental Management System, EnMS : Energy Management System)

**Environmental and Energy Management System(EMS, EnMS)** is a system for continuous organizational operation considered to reduce the load on the environment and improve the energy efficiency through systematic activities of the organization. In this system we decide on our policy about the environment and energy and implement it by promoting more eco-friendly activities on the "PDCA (Plan-Do-Check-Act) Cycle" .

Through the environmental and energy management system, Chiba University obtained ISO14001 certification that is international standards about EMS in 2004, and ISO50001 certification about EnMS in 2013.



## Organization Chart



# Do Things that students and faculty staff can do in daily life:

The actors of "Do" , which is a very important part of the PDCA cycle, are students and faculty staff.

What kind of eco-friendly actions can we take in our daily lives?

Start step by step with whatever you can do.  
Your positive attitude and effort can produce great results!



**Paper**  
Please use the rear side of used paper. Also print on both sides and **take waste paper to the collection point for recycling.**



**Plastic shopping bags**  
More than 99% of people did not use a plastic shopping bags in the COOP in 2017.  
On campus and elsewhere , **refrain from using plastic sopping bags unless it is necessary.**



**Water**  
Water is an indispensable and limited resource.  
**Please try to save water.**



**Energy**  
Turn off lights and air conditioners if you are the last person to leave the room.  
**Air conditioners should be set to keep the room temperature not below 28°C in summer and not above 19°C in winter.**



**"My bottle"**  
We could cut down the number of single-use bottles and, moreover, keep the tea hot or cold in "my bottle" .  
Bringing "my bottle" is more economical than buying single-use bottles frequently.  
Let' s have our "my bottle" with us.



**"Green purchasing"**  
**Choose environmentally -friendly products**, considering their environmental loads and necessity when you purchase products.  
You can get the goods conforming to the "green purchasing" rules in Yamatoya and COOP.



**Passive smoking prevention**  
T he University campus is in principle non-smoking on site. For your health, let's work on smoking prevention and passive smoking prevention.



Smoking permitted only at designated smoking areas. Juveniles accessing there is prohibited.

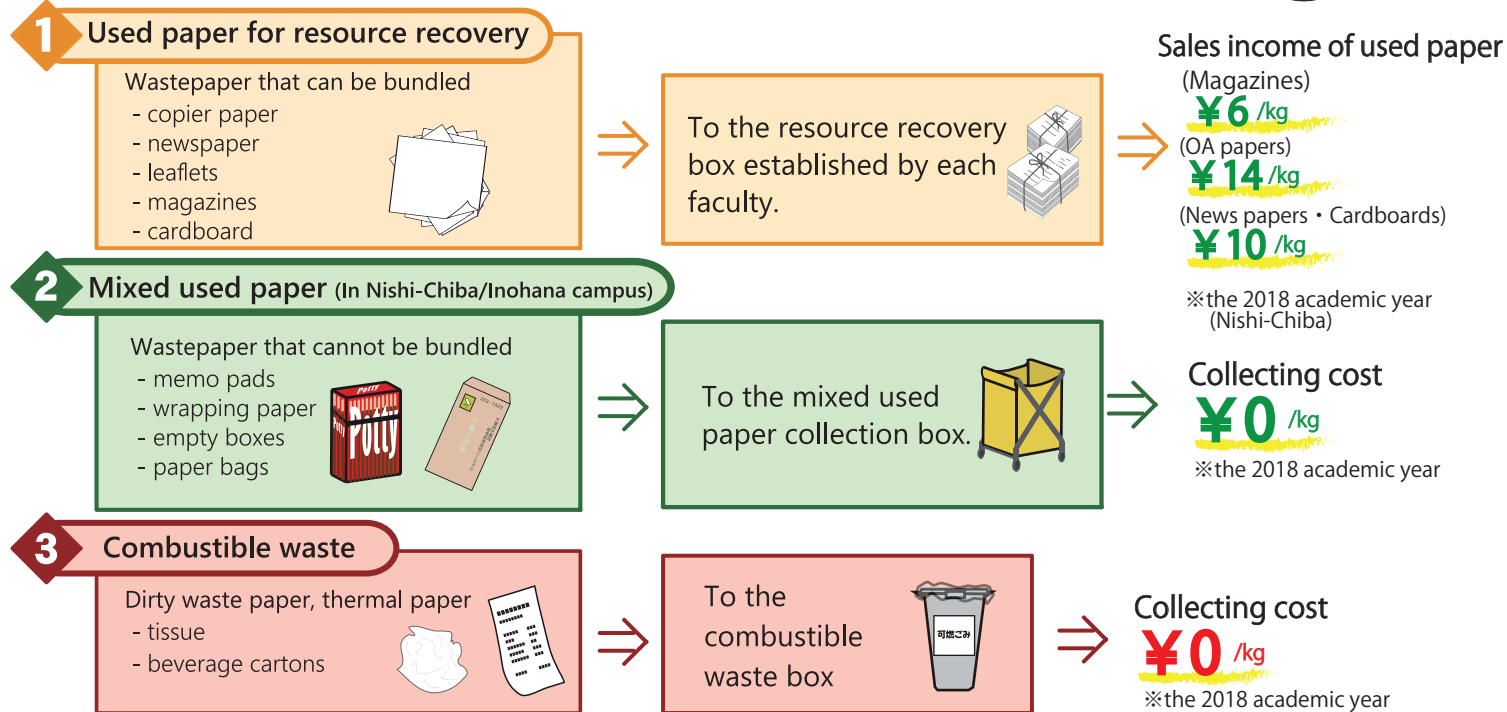
**Garbage**  
Please **separate** cans, bottles and PET bottles, **for recycling.**



# Keep the following rules and be a GREAT Chiba member!



Do you know that used papers can make money?  
~We ask for your cooperation in used paper collection~



## Handling of chemical substances

When chemical substances are wrongly handled, serious accidents can occur.

You must handle such substances according to the relevant laws and ordinances and under the auspices of an adviser after reading the general hygiene security management manual and the Safety Data Sheet carefully.



## Observe good bicycle manners. (Nishi-Chiba campus)

**Do not bring in your bicycle for using exclusively on campus.**

Chiba University aims to eliminate bicycles that are used only on campus. (Bicycles used to commute from home will be permitted.)

**Use the on-campus bicycle sharing system ("COGOO").**

**Observe cycling etiquette**

All bicycles on campus must have a 2018 parking sticker. Cyclists should consider the safety of pedestrians and use assigned bicycle parking lots. Failure to observe the rules may result in a fine and bicycle confiscation.

**Please do not park your bicycle in prohibited areas near the train station**

**Do not abandon bicycles**

Bicycles no longer required due to graduation or other reasons must be disposed of appropriately. Bicycle collection events are also held on campus. The Chiba City website provides information on how to dispose of bicycles.

## Parking sticker purchases

For students and staff who use their bicycles to commute to school (Nishi-Chiba campus)

### 【Location】

General Student Support Center  
1F Parking management office  
(in the Chiba University COOP  
Residence and Part-time-job Center)

### ① Fill out a request form

- Be sure to indicate the anti-theft registration number.

### ② Purchase the parking sticker

- general : **¥800/year**

- exclusive use of the south gate : **¥2000/year**

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

# What are the benefits of Environmental and Energy Management System?



## Effect on Environment

In 2017 results data (excluding Chiba University hospital), although the number of Chiba university people and the total floor space increased, the total energy usage decreased 6.2% and the total amount of general waste decreased 52.8%, compared to those in 2004 before ISO certification.

## Effect on Education

A distinctive feature of Chiba University is that the students create and operate EMS/EnMS by themselves. You can get a university credit for your ISO Student Committee activity. Students who complete the requirements are awarded a school certificate. The number of certificates awarded is 468 in the twelve years up to 2018. In a survey for the graduates, 81% of them said "Student committee activity experiences are very useful for work."



## Effect on Management

Comparing year 2004 to the year we obtained the ISO certificate, which was 2017, we have managed to cut down on enormous costs. We have saved 18,700,000yen(171,560 US dollars) per year through reduction of electricity usage, and 19,100,000yen (175,230 US dollars) per year through reduction of general waste.(values are calculated from the average unit price of the usage fees.)



## Effect on Society

### -Our press history in 2018-

- 3/20 "Report of Results of Environmental Awareness: Collaborative Project of Chiba University and Keiyo Bank" , Chiba Nippo
- 4/6 "Selling Used Paper Collected in the University, Book Jackets Distributed to 3500 freshmen" , Chiba Nippo
- 6/19 "Contribution to Reduce Environmental Burden, 'International Green Gown Awards' awarded" , Daigaku Shinbun
- 7/1 "Cleaning Air Conditioner Filter for Better Cooling Efficiency" , The Asahi Shinbun
- 7/17 "Paper Fans for Energy Saving, Chiba University Students Call" , Sankei Shinbun
- 9/6 "Student Centered Energy Management, Seminar at Ministry of Education" , Denki Shinbun

### \*Eco project by Chiba University and Keiyo Bank

Environmental contribution project by Keiyo Bank and Environmental ISO Student Committee that aims to raise environmental awareness from Chiba to the earth.

[http://www.keiyo-bank.co.jp/ir/eco\\_project/](http://www.keiyo-bank.co.jp/ir/eco_project/)

### -Awards received in 2018-

- 『International Green Gown Awards 2017-2018』 Student Engagement academy  
The International Green Gown Awards recognize exceptional sustainability initiatives being undertaken by universities and colleges, and are administered by EAUC (The Environmental Association for Universities and Colleges). We were assessed that we continuously operate the environmental management system through acquisition of ISO with students, and that our way can be introduced not only in Japan but also in foreign educational institution.
- 『22th Environmental Communication Awards』  
It was awarded "Prize of Environmental Consideration Law specific business operators" to The Environmental Report.



# What is Students Committee for EMS?



The student Committee for EMS was established in 2003. It plays a role in the development and operation of EMS and EnMS with faculty staff as a part of the university organization. Environmental Management System Practicum general credits were awarded for activities conducted in the work of the Committee, which had about 200 members in 2018. They learn about EMS and EnMS as well as how to carry out the work, planning and conducting.



Nishi-chiba/Inohana district



Matsudo/Kashiwa-no-ha district



## About Environmental Management System Practicum

### Practicum I (Mainly for freshman)

This is a course where you will learn technical and practical knowledge of EMS and EnMS as a member of the Students Committee.

### Practicum II (Mainly for sophomore)

In this course, you will be working as central members of operating EMS and EnMS using the knowledge you have learned in Practicum I, for example Internal audit and External audit.

### Practicum III (Mainly for junior)

In this course, you will go outside of Chiba University and learn about EMS operated at public offices and companies as internship using your experiences acquired at Chiba University.



Mock internal audit



The general meeting



## Environmental and Energy Management Practitioner

This is a university qualification that is awarded to those who have supported EMS/EnMS through a year. You will receive this qualification after getting Practicum II credit. Having the qualification means that you can operate EMS/EnMS in practice based on the work experiences as a member of the students committee.



An awarding ceremony of Environmental Management Practitioner

### “Environment-related subjects” web page

Many classes related to the environment are offered at Chiba University. The classes are defined as “Environment-related subjects” by the Students Committee for EMS. You can find a list of the classes on the committee’s website, which will lead you to the official syllabus of Chiba University. Make use of the syllabus in deciding on your class schedule.

[http://env.chiba-univ.net/nishichiba/info\\_lecture18.html](http://env.chiba-univ.net/nishichiba/info_lecture18.html)

■ Student Committee contact for each campus  
Nishi-Chiba / Inohana district : iso-student@chiba-u.jp  
Matsudo / Kashiwanoha district : iso-student-m@chiba-u.jp



■ Publisher : Chiba University Environmental ISO Students Committee  
Mail : kankyo-iso@office.chiba-u.jp  
HP : http://kankyo-iso.chiba-u.jp/  
■ Planning and editing : Chiba University Environmental ISO Students Committee  
HP : http://env.chiba-univ.net/  
Twitter : @chibaiso  
Facebook : 千葉大学環境 ISO 学生委員会  
■ Design : Mayu Tanaka  
Edit : Yusuke Azuma Eri Agatahama