Iwate University Environmental Policy

<Basic Principles>
Iwate University considers environmental conservation and revitalization to be one of the most important challenges of the 21st century. Our university is working proactively on environmental conservation and revitalization education and research, and making contributions toward the achievement of a sustainable society. As part of these efforts, members of our university and its affiliated schools as well as resident university-related parties work together to be environmentally friendly in all activities taking place at the university, making efforts to reduce environmental footprint, prevent pollution, and improve our campus environment as the social responsibility of the university.

<Basic Policies>
Iwate University actively engages in the following activities based on a medium-term plan in order to achieve its basic principles.
1. Enthusiastically expand on education and research related to environmental conservation and revitalization, and develop the environmentally-conscious human resources that society requires.
2. Engage in education, awareness, and outreach, and other such activities geared toward all types of people, including those in local communities, based on the outcomes of education and research related to the environment.
3. Collaborate with community NPOs, government, and other such entities, to be proactively involved in initiatives for environmental conservation and revitalization, and the preservation of biodiversity in the community.
4. Seek continuous improvements to the on-campus environment through environmental management systems, while complying with environmental laws and environmental requirements which Iwate University agrees to.
5. Set annual targets based on the goals of these policies, and work diligently on initiatives such as saving energy and resources, reducing waste, recycling, and green purchasing.
6. Make environmental policies known to all members of the university, and while carrying out these policies also widely publish their results to the general public in writing and on the internet.
### Environmental Management System Governance Structure

**Act**
- **Top Environmental Representative President**
- **Environmental Management Promotion Committee**

**Check**
- **Internal Audit Representative**
- **Internal Audit Committee**
- **Internal Audit Working Group**

**Plan**
- **Environmental Management Representative**
- **Vice President for Environmental Management**

**Working Groups (WGs)**
1. Environmental Impact Assessment WG
2. Environmental Education WG
3. Energy and Resource Conservation WG
4. Trash and Waste Reduction WG
5. Sustainable Campus Planning WG
6. Laws and Regulations Assessment WG

**Do**
- **Office for Environmental Management**
- **Crisis Response Department**
- **Office for Safety and Health Management**

**Iwate University Certified Environmental Management Specialist Subcommittee**

**Graduate School of Arts and Sciences**

**Faculty / Graduate School**

**Corporate Planning Department, Administration Bureau, Education and Research Promotion Center**

**PDCA for Unit**

**PDCA for all of Iwate University**

---

**Note** Enacted November 21, 2005

**Revised March 24, 2017**
The Office of Environmental Management is working to establish, implement, and maintain environmental management system as part of the environment-conscious activities of Iwate University.

The Office of Environmental Management conducts activities with six working groups that help execute specialized operations. Among the working groups, members of the Environmental Management Student Committee actively participate in the Environmental Impact Assessment, Environmental Education, Energy and Resource Conservation, Trash and Waste Reduction, and Sustainable Campus Planning working groups.

During the 2017 academic year the following issues were raised and have been acted upon.

1. Environmental Impact Assessment WG
   (1) Assessing the results of monitoring and measuring environmental objectives, targets, and implementation plans
   (2) Operational management of environmental objectives, targets, and implementation plans (Understanding the implementation plans, and operational standards and procedures in each unit, and monitoring/measuring them for the first semester)
   (3) Base energy studies through separate calculations of energy and water usage, and CO₂ emissions, in each department
   (4) Calculations and benchmarking reviews for the power usage of each building
   (5) Addressing environmental assessments in “Eco-Action 21”

2. Environmental Education WG
   (1) Editing environmental report
   (2) Holding EMS briefing sessions at faculty meetings, etc.
   (3) Formulating environmental education training plans and checking the results
   (4) Planning public EMS seminars
   (5) Conducting developmental training for internal auditors
   (6) Collaboration with “Practical seminar Environmental Management”
   (7) Continuing “Environmental Management and Iwate University” and “Practical Environmental Management” lectures
   (8) Studies to facilitate effective environmental education and training (including ensuring that students/trainees watch the environmental education DVD Video viewing)

3. Energy and Resource Conservation WG
   (1) Monitoring and measurements for initiatives to conserve energy and resources
   (2) Working on implementation plans, and monitoring and measuring energy and resources usage amounts
   (3) Review how environmental objectives, targets, and implementation plans are consistent with energy management standards based on the Energy Saving Act
   (4) Consider sharing of lab devices, based on investigations on lab equipment and other facilities
   (5) Determine priority CO₂ reduction measures based on results of diagnostics of CO₂ reduction potential

4. Trash and Waste Reduction WG
   (1) Following up to ensure separation and collection of trash (setting “criteria” which form the levels of separation)
   (2) Investigations on the processing and management of waste (Sharing information about collaborative efforts with the Environmental Management Student Committee and efforts within each unit)
   (3) Working on reducing trash
   (4) Monitoring and measuring the operational status of each unit
   (5) Spreading awareness of the Laboratory Waste Disposal Manual

5. Sustainable Campus Planning WG
   (1) Research and studies on sustainable campus planning, based on “Eco-Action 21” environmental management systems (EMS)

6. Laws and Regulations Assessment WG
   (1) Review evaluation methods for environment-related rules and regulations at Iwate University
   (2) Gathering information on rules and regulations to be revised

A congress at the Office of Environmental Management
Total Energy Inputs  
Efforts to reduce heat and energy use

Objectives
(1) Intend to reduce energy use and CO₂ emissions (intensity) by 1% compared with AY 2016.

Initiatives
(1) Every month, at the congress of the Environment Management Office, we calculated the CO₂ emissions and compared with those of the same time period of the previous year and the preceding month from the use of seven types of energy—electricity, fuel oil A, kerosene, gasoline, diesel, city gas, and LPG. The amount of electricity used by each unit is calculated.
(2) We promoted the use of stairs and regulated the operation of elevators.
(3) We optimized air conditioner operation timings and indoor temperature settings to appropriately manage energy.
(4) We rectified the operation plans for the University’s air conditioners along the academic affairs.
(5) We strictly enforced the no overtime rule, turned off the lights during lunch break (with the exclusion of the desks of the clerks), and limited the lighting used during unavoidable overtimes to the minimum required.
(6) We informed of people on the use of electric fans, handheld fans, and optimal settings for air conditioners.

Emissions of Greenhouse Gases, etc.  
Efforts to reduce CO₂ emissions

Objectives
(1) Work to reduce energy use and reduce CO₂ emission by at least 1% from the previous academic year.

Initiatives
(1) We calculated the CO₂ emissions from our use of electric power for each unit every month. The results obtained were compared to the same time period of the previous year and the preceding month.
(2) We presented air conditioner usage reports and confirmation tables for rooms where air conditioners were installed.
(3) We summarized the use of electrical power, gas, and water for each faculty management building on a monthly basis. We attempted to conserve energy in a reasonable manner by sharing the results of the usage of such utilities.
(4) We sent e-mails to members during the periods when the demand for the utilities became alarmingly high.
## Input Usage and External Emissions

### Material Balance Data

#### INPUT

**Energy Usage**
- **Power**: 13,083,000 kWh
- **Light oil**: 27 kℓ
- **City gas**: 832,000 m³
- **LPG**: 4,701 kg
- **Gasoline**: 33 kℓ
- **Heavy oil type-A**: 103 kℓ
- **Kerosene**: 97 kℓ
- **Paper (Converted to A4 size)**: 1,189,000 sheets
- **Water**: 93,000 m³
- **Chemicals**: 11.4 tons

#### OUTPUT

**Greenhouse gas emissions**: 9,752 tons of CO₂
- **General waste**: 183 tons
- **Industrial waste**: 148 tons
- **Sewage discharge**: 93,000 m³
- **Sulphur oxides**: 0.1 tons
- **Laboratory liquid waste**: 18 tons
- **BOD contaminant waste (estimated)**: 13 tons

#### External Emission

Tohoku Electric Power greenhouse gas emission factor (adjusted): 0.548 kg-CO₂/kWh.
Topics for the 2017 academic year

Iwate University was first among the national universities in the Tohoku region to acquire the Eco-Action 21 certification for Environmental Management Systems.

This certification program is managed by the Institute for Promoting Sustainable Societies. Iwate University President, Dr. Akira IWABUCHI, Iwate University Director/Vice-president /Environment Management Promotion Office Manager, Dr. Satoshi OGAWA, the Chair, and two Vice-chairs of the Iwate University Environment Management Student Committee attended the reception ceremony for awarding the certificates. Since it was the first official recognition of its kind among national universities in the Tohoku Region, this piece of news was reported by Iwate Nippo and the Nikkei.

The Institute for Promoting Sustainable Societies certified that the Iwate University environment management system is operated in accordance with Eco-Action 21. Also, by this certification, we were able to gain the opportunity to recognize its superior environment management system, which is operated through the collaborative participation of staffs and students.

Two members of Iwate University Environmental Management Committee won the “Excellent Influence Award” at “The 3rd Asian Conference on Campus Sustainability (ACCS).”

Two members of the Iwate University Environment Management Student Committee (EMSC) attended the 3rd Asian Conference on Campus Sustainability held at Kyoto University on December 9 and 10, 2017. Their activities were introduced at this event through student presentations. The green curtain grown annually by the Green Campus Team and the recovery of small appliances during the university festival by the Waste Management Team were represented as some of the activities undertaken by the EMSC. The presentations outlining the compelling impact of these activities and the University’s cooperation with business enterprises were well received at the 3rd ACCS, and EMSC was awarded the “Excellent Influence Award” for the second year in a row.

About the cover

Department of Regional Policy, Faculty of Humanities and Social Sciences, third year
Aya OTASHIRO

The Morning Glory was inspired by the green curtain that is created by the EMS committee every year. The wild pear and freshwater crabs floating by the shore were inspired by a children’s short story titled “Yamanashi” by Kenji MIYAZAWA. The Paulownia represents the school crest of Iwate University. Bountiful nature sometimes attacks us human beings, but it also heals our lives and souls. We hope to nurture the coexistence of humans and nature by promoting actions such as resting in the shade or fishing in a river.
Environmental Activities of Young Children and Students

**Affiliated Kindergarten**
- Five-year old children making seed dumplings and planting bulbs

**Affiliated Primary School**
- Observing creatures by the shore

**Affiliated Junior High School**
- Volunteer cleanup of surrounding facilities

**Affiliated Special Needs Education School**
- Recycling activities

**Environmental Activities of Student Circles**
- Bird watching field-trip to another prefecture (Izunuma)

**Environmental Management Student Committee**
- Teaching kindergarteners about the environment