

To Establish Mie University as the Most Environmentally Advanced University in the World under University Social Responsibility (USR)

Environmental Management Report 2010



Focus Issues



TOPICS 2

Striving to be the Most Environmentally

3R Activities (Reduce / Reuse / Recycle)

1. Eco-Bag Project
2. Illegally Parked Bicycle & Used Electric Appliances Project
3. Used Paper to Toilet Rolls Project

Awarded 'The Minister of Environment Prize Promoting 3R Activities' in 2008

Mie University was awarded a prize in excellence from the Ministry of the Environment in recognition of its efforts to promote environmental awareness through its ongoing 3R activities. This special award aims to encourage and to help expand campus based 3R activities. The Environmental ISO Student Committee helps lead and maintain these important activities. Our campus is striving to create an atmosphere for direct student participation in the shaping of the Most Environmentally Advanced University.



Reduce

Stop Global Warming NOW!

No Plastic Shopping Bags

- Distribute Eco-Bags to All Faculties and Students
~The First Case of Universities in Japan~
- Charge of Plastic Shopping Bag (Jan 1st, 2008, 5Yens/sheet)
~Cooperation with COOP~
- Effected to reduced 3,500 liters of fuel which has 9 tons of CO₂ as a result
- Opened the Convenient Store MINISTOP with No Plastic Shopping Bags on Oct 1st, 2009.
~The First Case in Japan~

Distribution of Eco-Bags
<Dec. 2007>



Started Campaign
<Nov. 2007>



Eco-Bags!
We carry no plastic bags.



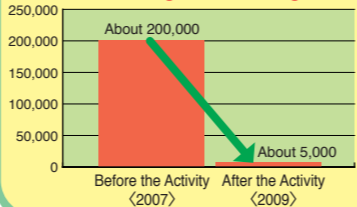
Charge of Plastic Shopping Bag
<Jan 1st, 2008>

Zero Plastic Bags Convenient Store <Oct 1st, 2009>



MINISTOP at Mie University

Annual Change in the amount of
Consuming Plastic Bags

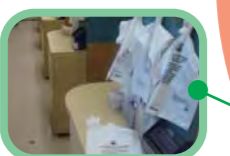


Reduced 200,000 plastic shopping bags in an year / about 9 tons of CO₂

Distribution of Eco Bags
<Oct, 2007>



Eco-Bag Design Contest
<May, 2007>



Advanced University in the world based on Environmental ISO Movement (3R Activities)

Reuse

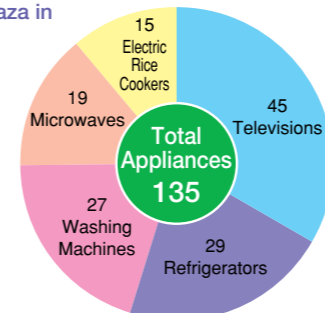
Sustainable Society

Reuse Electric Appliance Plaza

We collect 5 kinds of electric appliances from graduating students and give them to campus based freshmen and exchange students.



Reuse Corner of Electric Appliances
(Circulate it!! Reuse Plaza in Mie University)



The Numbers of Collected Electric Appliances

Reuse Illegally Parked Bicycles

Bicycles are a very eco-friendly and healthy form of transportation. We aim to promote this bicycle culture for all our students. However, every year our campus is littered with illegally discarded and unclaimed bicycles. This program aims to reshape the thinking about bicycles on our campus.



Repairing unclaimed and broken bicycles

Putting tags on illegally parked and discarded bicycles



Shared Reused Bicycles in Campus

Handing out the newly reused bicycles to students



Before

After

Recycle

Recycle Used Papers

Used Papers that you put into our Used Paper's Collecting Container will be recycled into toilet rolls.

Kinds of Collecting Garbage

- Magazines
- Newspapers
- Advertisement papers
- Used Papers
- Snacks' Cartons
- Milk's Cartons



Used Paper's Collecting Container



- ※ Please tie up newspapers and fliers tightly
- ※ Don't tie up magazines and used papers
- ※ Crush all snack cartons

In the Eco Station, we collect these 6 kinds of garbage:
● Old papers
● Milk's Cartons
● Batteries
● Disposable chopsticks
● Cartridges of ink
● Caps of PET bottles
And they will be recycled



Mie University Eco Station

20% of Toilet Rolls are made from recycled paper in Mie University



Used paper products became university toilet rolls!



Carbon Free University & Smart Campus Plan

A Message from Mie University President Atsumasa Uchida

Mie University Awarded the 'Environmental Business Management Pearl Prize'

The environmental initiatives set by Mie University including campus wide activities such as 3R (Reduce, Reuse, Recycle), the Environmental ISO Student Committee and our Education Support for Environmental Qualification programs have been given the highest recognition with the recent awarding of the Environmental Business Management Pearl Prize. It brings me great pleasure to be a part of this whole campus mission to push forward to materializing our goal of creating a Carbon Free University and towards building a cleaner and more efficient future with our total Smart Campus Plan. Mie University has been awarded many prizes over the years but I believe that this honor is especially worthy for its recognition of our efforts today and for our plans in the future.

COP10 in Mie

The United Nations 10th session of the Conference of Parties on Biological Diversity (COP10) will be opened in Nagoya city this October 2010. What a truly excellent opportunity for us as a university and as a community to join this extremely important international event. As part of our belief that the youth of Japan need greater exposure to the understanding of our natural world and our effect upon it, Mie University will be spearheading an interactive conference between Japanese youth and those from all over the Asia-Pacific region. Activities will be spread over several days and include two hundreds of children and youth and many volunteers from our campus community. The participants will be treated to a journey on our very own ship, Mie University Seisuimaru, to discover and learn about the biological diversity of Ise Bay and the surrounding areas. There will be several excursions to a nature park in nearby Kameyama city and also a tour through classic Seki town. Also, our youth will have the opportunity to visit the state of the Sharp's Kameyama Plant to get a taste of high-tech Japan. We hope this time will be of immense value to all our participants.

Carbon Free University

As the declaration in our 2009 Environmental report states, Mie University aims to become the Most Environmentally Advanced University in the world under the University Social Responsibility (USR). A major part of our push to be a leader in the world will come in our campus wide goal of reducing overall campus CO₂ emissions by 30% in 2020 from those in 1990.

Smart Campus Alliance

Our Carbon Free University model must coincide with a larger push to create a viable campus based smart grid system. This smart grid management system would create, use, and monitor all our energy on campus. Our dream here at Mie University is to see this smart grid system come to fruition and for related educational programs to provide the knowledge and knowhow in dealing with these new and exciting technologies. Combining new technologies with expert human resources is our focus for these long term initiatives.

From the Smart Campus to the Smart Community

The Green Innovation is the cornerstone of our nation. And Mie University wants to be at the forefront of this movement. We desire to be a leader in developing a more sustainable and healthy society for all. It is of the utmost necessity that we in our unique role of creating, developing and expanding new and exciting ideas, take these successful models to our communities. We truly welcome an effort on all fronts from our staff and students to the community beyond our campus. In the spring of this year, I welcomed many new students to our university family and had the pleasure of meeting many parents as well. I remember well the joy I felt when a parent commented to me on how beautiful our campus looks. Yes, we have much green, flowers and the fresh breezes from Ise Bay but I know that we have so much more work to do. We must be strong in our conviction that a greener future will benefit us all.



September 2010

President of Mie University
Atsumasa Uchida, M.D, Ph.D.



Special Section 1

Environmental Education of Mie University Brand

Part 1. Education Support for Environmental Qualification Program

'Education Support for Environmental Qualification Program' since 2007
Training Environmental Human Resources based on region



Education Support for Environmental Qualification Diploma
March 31st, 2010

- 1 The Subjects Based on 'Education Support for Environmental Qualification Program' in 2009**
Attended: 2,659 students (About 42.9% of about 6,200 students in the campus) Acquired Credits: 2,123 students (About 34.2%)
- 2 Started 'Training Seminar of Environmental Auditor' in 2009**
Registered to Environmental Auditor in 2010: 77 Students
- 3 Expanding Corporation Receipts 'Environmental Internship' students**
Sharp Cooperation, CHUBU Electric Power Co.,Inc., Mie Prefecture, Mie Prefecture Environmental Conservation Agency(MCCCA), etc
- 4 Completed 'Education Support for Environmental Qualification Program' in 2009**
16 Students (Forth year student: 1, Second year student: 10, First year student: 5)



United Nations Framework Convention on Climate Change (COP15)
(Denmark Copenhagen in December 15th 2009)



Ship for World Youth Program
(Omani and Australian youth with Mie University students in January 15th, 2010)

Part 2. International Environmental Education Program

'International Environmental Education Program' since 2009
Training Environmental Human Resources Works Internationally



Asia-Pacific University Environmental Education Consortium
in October 23rd, 2009

- 1 'Environmental Issues in English'**
Acquire basic skills to understand the issues in English and strengthen ability of international communication.
- 2 Expanding Corporation Receipts 'International Environmental Internship' students**
companies in Korea (Samsung, Hyundai, LG, etc.), NPO, United Nations organizations (UNESCO, United Nations Framework Convention on Climate Change(UNFCCC), United Nations Convention on Biological Diversity (UNCBD), etc.
- 3 'International Environmental Internship'**
4 students joined United Nations Climate Change Conference (COP15, Denmark Copenhagen)
- 4 Started International Environmental Education Workshop and Symposium in October 23rd, 2009**
Build up 'Asia-Pacific University Environmental Education Consortium' and expanded to 33 universities in 9 countries in 2010 (Australia, China, Indonesia, Japan, Korea, Mongolia, Russia, Thailand and USA).

These activities aim to build a top level environmental education program and to establish the Environment PCDA Program. Mie University seeks to create the most exciting opportunities for its students, giving them every opportunity to be fully active in the discussion of environmental policy and action.

[Website : <http://mie-brand.ee.gp.mie-u.ac.jp/>]



Environmental Communication of Biodiversity Conservation 'COP10 in Mie'

Date: August 5th (Thurs.), 2010 10:00am-12:00pm

Venue : Room of the President, Mie University

Modulator: Prof. Hye-Sook Park

Presidential Aide of Mie University

(Head of the Environmental ISO Promotion Office)

A meeting concerning the partnership between Mie University and COP10 was held in order to discuss the upcoming event. The discussion focused on the activities related to local biodiversity and how each one is working to support it. Each participant was given the opportunity to share his/her ideas in relation to 'COP10 in Mie'.

President : Atsumasa Uchida

Mie University is actively promoting various environmental activities with a larger aim of becoming the Most Environmentally Advanced University in the world. One program in particular, 'Environmental Qualification Supporting Program,' is designed to give our students the knowledge and the tools to continue working towards a more green future.

Director/Vice President : Masakazu Goto

The symbol of 'COP10 in Mie' is designed to show that this movement is one that involves all of us making an effort, a 'Whole Mie'. It is imperative though that our young leaders push this movement forward.

Chairperson of COP10 Execution Student Committee : Tomoe Ito

COP10 in Mie student staff will be engaged in supporting three areas: conduct, research and information parties. As a COP10 student leader I will be involved in helping to coordinate our activities.

Vice-Chairperson of COP10 in Mie Executive Student Committee : Tsubasa Hamasaki

On the basis of our experience at COP15 in 2009, we think it is vitally important to get the information out to everyone that environment issues are the most pressing of our generation.

Manager, Kameyama Environment & Industrial Safety Center of Sharp Corp. : Yuriko Fukaya

We have been conducting a project which fuses industrial tours and environmental education since last year. We will practice this environmental education in 'COP10 in Mie'.

Assistant Manager, Environment Department, Environmental Management Group, CHUBU Electric Power Co., Inc. : Nobuhisa Naito,

Vice-President, Miyaike is going to make a speech in a symposium of 'COP10 in Mie' and event about environment & energy for children.

Director of Environment & Industry Department, Kameyama City : Jun Kokubu

The participants of 'COP10 in Mie' will pump a pond in order to survey the organisms, fish crayfishes which are



an alien species, study Japanese culture in Sekijuku, or make rice cakes or pop-rice.

Environmental ISO Student Committee : Daisuke Araki

In this year, we decided that the theme of the environmental learning at Kitarissei Elementary School is biodiversity. In the first session, we surveyed water quality in River Shitomo, where is a close natural environment.

Prof. Graduate School of Bioresources/Faculty of Bioresources : Atsushi Tanimura

We are going to have a boat trip with Seisuimaru on Ise Bay. Although, biodiversity of Ise Bay is not very high, there are a lot of peculiar species.

Vice-Chairperson of Kameppuri (Turtle Conservation) Club: Masanari Doi

We are going to have a boat trip with Seisuimaru on Ise Bay. Although, biodiversity of Ise Bay is not very high, there are a lot of peculiar species.

Director of Mikimoto Pearl Island Museum : Kiyoo Matsuzuki

I do not think we should make the ocean dirty with our waste. We recycle shells of Pearl Oysters as handiworks or cosmetics and non-eating meat and sticking materials on the shell as compost.

Exchange Student from Korea Republic : Kija Ra

'COP10 in Mie' is a fantastic event. In my opinion, elementary school and junior or senior high school students should join it. I think we should keep going environmental education with there growing, not only in the childhood.

Director of Mie Prefecture Environmental Conservation Agency : Akira Morimoto

We will totally cooperate in 'COP10 in Mie' because we think it is really meaningful that many people from Mie Prefecture will participate to COP10, not only from Nagoya, Aichi Prefecture.

Chairperson of Environmental ISO Student Committee : Honami Hirano

Environmental ISO Student Committee is doing a variety of activities such as 3R inside and outside of the campus. Particularly, looking toward to COP10, we aim to success of Asia-Pacific Children and Youth Environmental Conference.



TOPICS³

Carbon Free University

Reduction of CO₂ Emissions by 30% in 2020 from those in 1990

Mie University, which aims to become the Most Environmentally Advanced University, is working towards a 30% reduction in campus CO₂ emissions from that in 1990 by 2020. The university created a 'Saving-Energy Examination Committee' in 2009 to draw up plans for this reduction.

The committee concluded that considering an expected increase of CO₂ exhaust at around 6%, coupled with an estimated 19% reduction due to the improvement of equipment at the university's hospital, another estimated reduction of around 14% through improved management programs such as Eco-Keeper and Eco-Point and an additional 3% reduction due to various students/alumni led activities, the university can indeed reach its overall goal by 2020.

Estimated Reduction in CO₂ — Comparing with 1990

Estimating total reduction in CO₂ until 2020 — Comparing with 1990

| Improvement of the equipment | Matter | Contribution |
|---|---|--------------|
| 19.3% | Redevelopment of the hospital | |
| | Energy Station | 8.8% |
| | Inpatient (I) | 1.0% |
| 10.3% | Outpatient (II) | 0.5% |
| | | |
| 9.0% | Renewal of machinery | |
| | Matter | |
| | Repairing Construction in 2009 | 0.4% |
| | Energy Saving with Introducing Well Water | 0.3% |
| | Purchase with Energy Saving Expenditure | 1.0% |
| | Disusing Boilers at Bioresource Dept. | 0.9% |
| | If Air Conditioners & Lighting Renewed | 6.4% |
| | | |
| Inside of the university | | Contribution |
| 14.0% | Energy saving activities | 14.0% |
| Outside of the university | | |
| 3.2% | CO ₂ off-set in the habitation | 3.2% |
| Reduction Rate with Effort since 1990 (1990-2008) | | |
| - 5.8% | | |

30.7% of CO₂ Reduction from that in 1990 by 2020

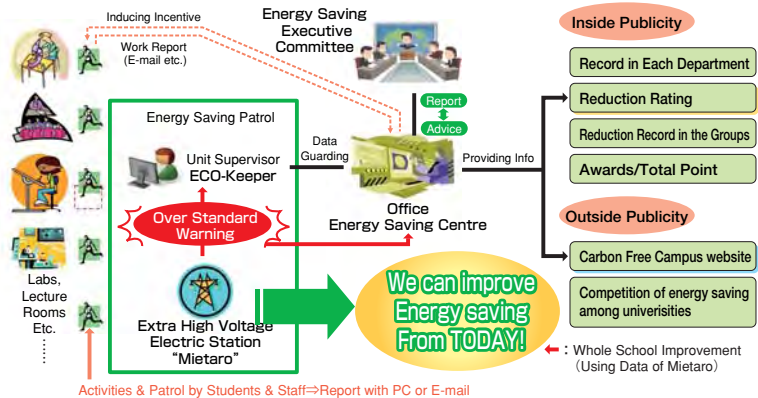
From Campus Based Initiatives to Community Wide Involvement

Mie university has been involved in conducting energy saving programs under ISO Environmental Management System (EMS) for many years now. The 'MieTaro' monitoring system is one of our important ongoing programs.

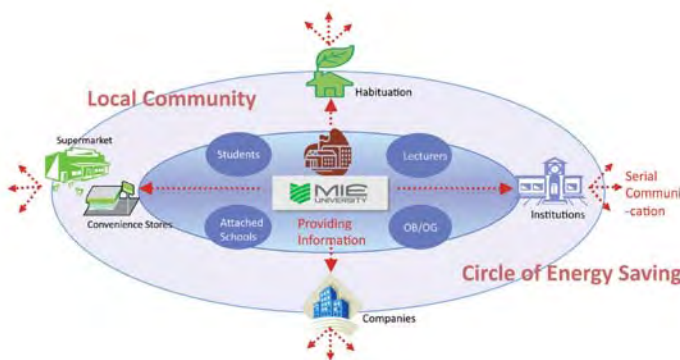
This system is installed in each department in order to monitor energy consumption and save it accordingly. MieTaro sends warning e-mails before the cost exceeds the standard operating limit.

Unit supervisors and Eco-Keepers can then make the proper adjustments to make sure that limits of energy consumption are not exceeded.

Schematic System of the Campus Management Policy



Realization of Development of Carbon Free Campus, Spreading Outside of the University



On June 15, 2010, Mie University President Uchida introduced the 'Carbon Free University Framework,' and discussed the establishment of the Promotion Office for Carbon Free University. The introduction of 'Carbon-Offset' as a university wide initiative is taking hold on campus. We also feel it is our responsibility as the Most Environmentally Advanced University to spread these ideas beyond our campus borders. We plan to develop these activities on campus and off campus to promote a better way of life for our communities.



Mie University Recognized for Environmental Efforts

University Awarded the Environmental Business Management Pearl Prize

The Award of Japanese Environmental Business Management is sponsored by Mie Prefecture. Any public or private organization and or institution regardless of size is eligible to receive this award. The organization/institution must be actively involved in the development of better environmental business management and working towards creating an active environmental culture. Greatest value lies in those whom engage in pioneering environmental activities in business management.

Mie University was selected as the recipient for the 2010 Pearl Prize based upon its commitment to a more environmentally friendly future. Several key factors led to Mie University becoming the first academic institution to receive this award. The University attained ISO14001 certification for all sections on campus during 2007, introduced and promoted campus wide 3R based environmental activities, and has actively set out to increased the volume of environmentally related courses and activities under the 'Environmental Education of Mie University Brand' curriculum.

On June 1st, 2010, the commendation ceremony was held in Tsu city and University President Atsumasa Uchida received the award on behalf of Mie University. During the event, President Uchida took the opportunity to discuss in detail the ongoing environmental activities taking place at Mie University.

It was an extremely special event for the University and also an excellent platform with which to share the special role of the University in creating a more earth friendly future.



The Chairperson of The Award of Japanese Environmental Business Management Committee : Ryouichi Yamamoto (Left) and the President of Mie University : Atsumasa Uchida (Right)



The Commendation Ceremony



The Certificate

COP10 in Mie

1. Mie University Booth at COP10 (Oct.11-29, 2010)
2. Asia-Pacific Children and Youth Interactive Conference: ISE Bay & Satoyama Nature Park Excursion, Seki Town and Sharp's Kameyama Plant (Oct.14-15, 2010)
3. Consortium of Asia-Pacific Universities International Education Conference on the Environment, Mie University (Oct.16, 2010)
4. Environmental Excursion to Toba Area (Oct.17, 2010)
5. International Environmental Forum at COP10 Nagoya (Oct.18, 2010)



Satoyama in Kameyama



Seisumaru (Mie University's Ship)



- Vegetable Ink was used in the printing of this booklet.
- No water was used in the printing of these materials.

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