UTokyo Sustainability Campus Project

Activities Report 2016

■ Introduction to this report

- Environmental load data for this report cover the entire estate of the University of Tokyo.
- Environmental loads for this report cover FY2015 (period between April 2015 and March 2016).
- The CO2 Emissions baseline target year is 2006 (143,300 tonnes of CO2 emissions).
- The content of this report is extracted from sections that are relevant to TSCP activities introduced in "the University of Tokyo Environment Report 2016" edited/published by the Division for Environment, Health and Safety of the University of Tokyo.
- "The University of Tokyo Environment Report 2016" can be downloaded from the following URL (Japanese language only) http://www.u-tokyo.ac.jp/fac06/public05_j.html

■ Basic Data

Founded: 1877

Number of facilities: 54

Total area of estate: 326,025,080 m

Total floor area: 1,702,077 m

Number of executive officers, academic and

administration members: 7,880

Number of undergraduate students: 14,116 Number of postgraduate students: 13,957

■ Basic Policy for the Environment

1. **(Education and Research)** To contribute to advancing science and technology related to the environment, and to developing a culture that pays careful attention to the environment

- (Social Responsibility of the University of Tokyo) For all members of the university to abide by state laws for the environment and university standards for the environment, and to strive to prevent environmental pollution caused by research activities
- 3. **(Reducing Environmental Load)** To promote reducing environmental load and conserving natural resources and energy, and to make the most effective use of natural resources that are entrusted by people and society
- 4. **(Sustainable Development of Global Society)** To pursue research actively, while liaising closely with other universities and research institutes, and to contribute to the sustainable development of the global society
- 5. **(Environmental Conservation for Local Areas)** To engage in university management, while paying careful attention to the environment as a member of the local community, and to contribute to the environmental conservation of local areas
- 6. **(Self-improvement)** To define purpose and targets for environmental conservation activities, and to review progress for further improvements
- 7. **(Public Information)** To monitor activities that may impact the environment, and to release information that is gathered to the public

■ TSCP Activities Report

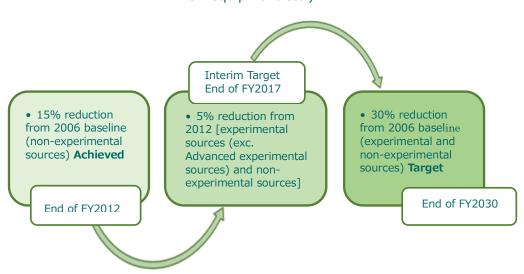
Responsibilities and Tasks of the University of Tokyo for Tackling Global Warming

✓ Achieving a low-carbon society through initiatives from the university

The University of Tokyo launched the UTokyo Sustainable Campus Project in April 2008 with a view to presenting an exemplar of a sustainable society created at the initiative of the university. UTokyo Sustainable Campus Project Office was established in July 2008 under the direct management of the President. The areas covered by the project include energy, waste, water usage, product procurement, and greenbelt. However, current activities focus on the task of reducing CO2 emissions. The targeted reductions are described in the TSCP Action Plan below.

TSCP Action Plans

Reducing CO2 emissions from energy sources within the campus (HVAC, experimental equipment, lighting, OA equipment etc.)



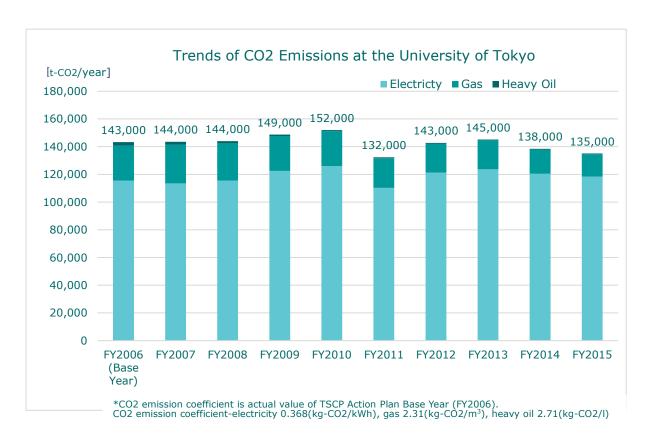
CO2 emissions within the campus are largely attributed to energy consumption associated with educational and research activities. A long-term plan for reducing CO2 emissions should be designed to improve energy efficiency comprehensively (energy saving), and then to increase the use of natural energy (create energy). The order of such actions is important.

The short-term TSCP2012 target was achieved. It is possible that the target was achieved because the monitoring survey covered general-purpose facilities and equipment, but excluded experimental facilities specific to university activities. This achievement helped the university comply with obligations to reduce CO2 emissions (8% reduction of total emissions on average between FY2010 and FY2014) stipulated under the Tokyo Metropolitan Ordinance on Environmental Preservation.

Under the TSCP's long-term plan, our activities have entered the phase of improving the energy efficiency of experimental activities. We have also launched activities to use natural energy, although the cost-benefit performance is not considered to be very high, in anticipation of benefiting from possible technological innovations and lower market prices.

If the University of Tokyo, which has a scale similar to an entire city, can show successful results in its low-carbon performance, that will pave the way toward achieving a low-carbon society as a whole. There are always difficulties involved in promoting low carbon without hampering the educational and research activities of the university. However, TSCP is committed to undertaking projects that execute the university's mission for society.

√ TSCP Action Plan—Trends of CO2 Emissions



✓ Specific Measures for Reducing CO2 Emissions

1. Facility renewal · · · We plan to renew campus facilities by giving priority to buildings featuring high-density energy consumption. We will improve the efficiency of air-conditioning systems in computer server rooms, and save energy by effectively treating heat generated by the servers. We also plan to compile energy-saving guidelines for computer servers located across the campus in order to realize university-wide energy savings through the

efficient use of servers

- 2. University-wide collaboration among all staff members · · · Centering on TSCP Officers, who are academic and administrative staff appointed by the president of the university, the university engages in continuous environmental activities and effective management of facilities involving all staff members
- 3. Production of guidelines by the University Corporate Relations Study Group ··· The University Corporate Relations Study Group was set up in FY2014 with the aim of promoting energy savings at experimental facilities. In FY2015, we focused on draft-chambers and supercomputers, which are used in large numbers across the campus, while consuming substantial amounts of energy, and produced energy-saving guidelines for managing those facilities.

✓ Establishing TSCP Student Committee and its Activities

• Outline of TSCP Student Committee

We established the TSCP Student Committee in July 2015 to promote TSCP activities from the students' perspectives. The members encourage people to practice sustainable behavior and inspire them to sustain that behavior at their own judgement. Furthermore, they stage campaigns not only within the university but also outside the campus to disseminate information on TSCP activities and to collect information on environmental activities carried out by other universities.



TSCP Student Committee meeting

Activities

 Participation in the Global University Climate Forum ··· In December 2015, the forum was held in Paris as part of events organized for the International Alliance of Research Universities Conference (IARU). TSCP Student Committee members participated in the forum and presented their project for environmental activities, which is designed for students to make use of smart phone apps.

Participation in the Eco-product 2015 Exhibition ··· TSCP Student Committee members participated in one of the largest environmental exhibitions in Japan. The members introduced activities of the Student Committee and TSCP and, at the same time, they received useful opinions from visitors to their booth. The members exhibited a model showing levels of CO2 emissions per unit area from campus buildings with bars of different heights and colors set up.



Model showing levels of CO2 emissions on the Hongo Campus

• Field study and research on other universities' activities · · · The University of Tokyo has its own experimental forests called University Forests where forest-thinning operations are underway. The members visited one of the operation sites at the Hokkaido University Forest to conduct a field study, and also met with their counterparts from other universities to exchange information.

Future activities

 To save energy consumed by experimental facilities, the Student Committee will set up a mechanism for promoting energy-saving activities targeting heavy users—students. In addition, it plans to pay attention to paper resources and conduct a fact-finding survey on paper consumption as part of activities outside CO2 emissions reduction tasks.