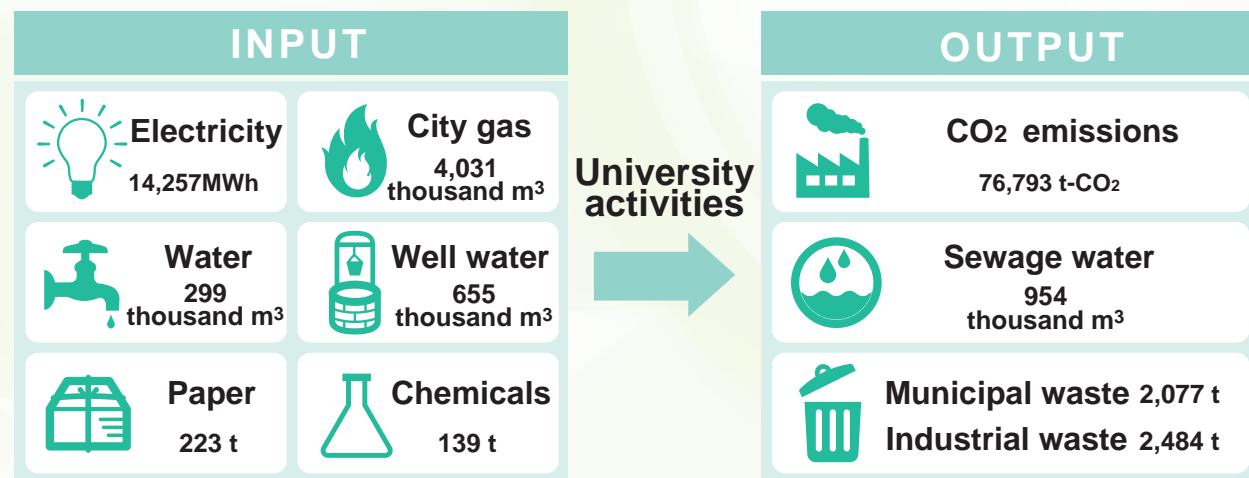




Let's learn more about Nagoya University's environmental impacts

Material Balance

We are working hard to reduce our ecological footprint by collecting and analyzing data of the environmental impacts of our activities (education, research, and medical services). The figure below shows the input of natural resources and energy and the output of substances of concern for 2018.

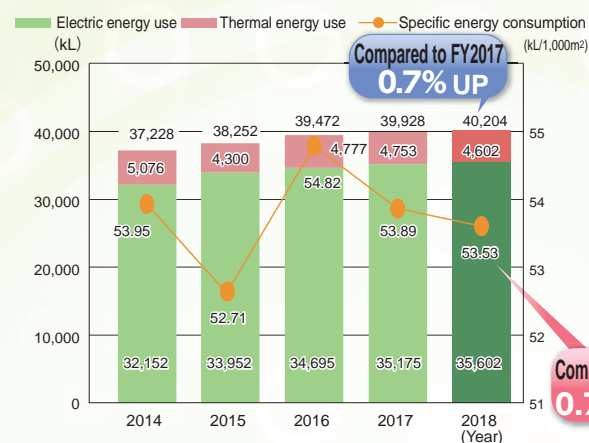


Energy consumption and CO₂ emission

Scope of data collection: our all campuses
(excluding university housing and some of the private businesses on campus)

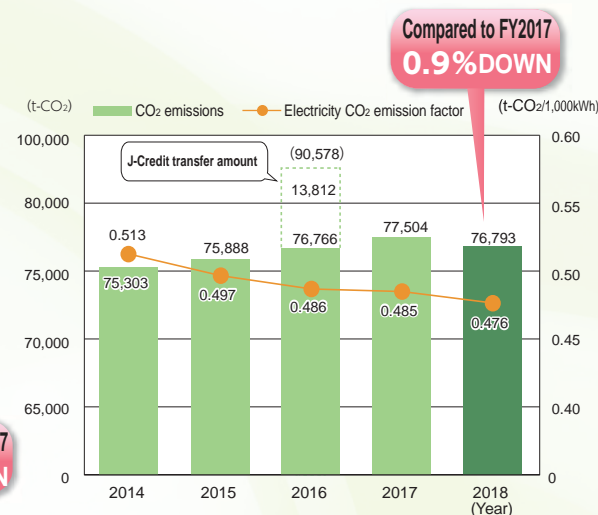
Energy consumption (crude oil equivalent)

Due to the operations of newly constructed buildings, etc. on campus, in 2018 our energy consumption increased by 0.7% over the previous year; however, the specific energy consumption (i.e., the amount of energy consumed in relation to the total area of our buildings and facilities) decreased by 0.7% over this same period.

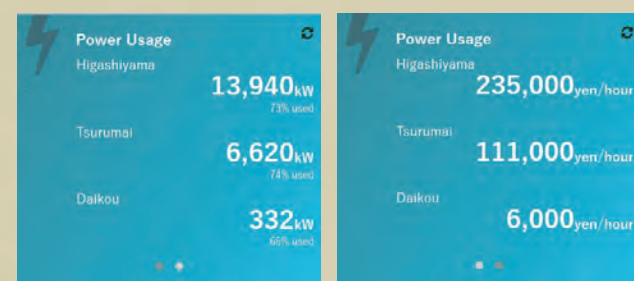


CO₂ Emission

Though our energy consumption increased by 0.7% over the previous year, CO₂ emissions in 2018 decreased by 0.9% due to an improvement of electricity CO₂ emission factor.



Understanding Energy Usage and Costs Through Visualizations - Disseminating Information and Improving Awareness About Energy Conservation -



Understanding energy usage in real time

Thanks to collaboration between Information & Communications, the Facilities Control Department, and the Campus Planning & Environmental Management Office, information on energy usage and energy costs can be viewed in real time on the Nagoya University Portal. This portal is a one-stop information center where the University's faculty, staff and students can access information and services necessary for educational and research activities. There has been a large response to the visualizations of energy usage and costs, with students saying that it is good to know about the actual energy situation and they have an increased will to save energy.

(Featured on p.30 of the Report)



NAGOYA UNIVERSITY

Nagoya University Environmental Report 2019

— The University Taking Steps Towards a More Sustainable Society —

Education and research on the environment

Where is it on campus? See the map on the back to find it out.

Education 1

Creating Mechanisms that Enable Poor Countries to Implement Environmental Measures

Through group work such as cause-and-effect charts and virtual overseas business trips, this class considers the efforts that can be made by developing countries to address the environmental problems that often accompany their economic development.

(Featured on pp.9 - 10 of the Report)



Education 2

Nurturing Talent That Will Contribute to the World's Sustainable Development through Careers in International Organizations

The Graduate School of International Development offers a special program for graduate students who wish to work in international organizations in future by providing them with a practical education that develops the skills, knowledge, talent, and global perspective necessary to let them thrive as future global leaders.

(Featured on pp.11 - 12 of the Report)



Research 1

Leading the Energy Revolution with GaN (Gallium Nitride)

Presented here is new facilities of the Institute for Materials and Systems for Sustainability. The new facilities support research on GaN (gallium nitride), which has a variety of potential uses that can help us realize a low-energy society.

(Featured on pp.13 - 14 of the Report)



Research 2

Understanding Invisible Tiny Particles Using Numerical Simulations

Students interviewed Assistant Professor Hitoshi Matsui, who develops and computes numerical models on tiny particles (aerosols) in the atmosphere in order to research the effect of these particles on the Earth's climate.

(Featured on pp.15 - 16 of the Report)



Research 3

Connecting Researchers and the General Public Through a Transdisciplinary Research Platform

The Research Center for Future Earth aims to develop studies that will contribute to finding solutions for global environmental problems. The Center conducts a variety of research crossing the divide between science and society, and research results are shared with the world.

(Featured on pp.17 - 18 of the Report)



Research 4

Towards the Eradication of Striga, the Parasitic Plant Ravaging Africa

Researchers have taken a step forward for eradicating parasitic plant Striga which has threaten food security in Africa. They developed a synthetic compound that kills Striga seeds by inducing germination before host crops are planted.

(Featured on pp.19 - 20 of the Report)



The Environmental Report provides an overview of many activities on campus towards a sustainable society, carried out by our students, faculty and staff members in the previous year.

It introduces a wide range of environmental activities that seek the realization of more sustainable societies.

At Nagoya University, we view initiatives relating to our social responsibilities as environmental activities as well in the broadest sense of the term.

Please refer to the 2019 Environmental Report for full-length articles.
http://web-honbu.jimu.nagoya-u.ac.jp/fmd/06other/guideline/e_rpt.html
 (It can be found on the page of Nagoya University Facilities Control Department.)



Environmental Communication

SDGs Workshop - Spread Discuss Gain Square -

SDGs (Sustainable Development Goals) Workshop held at the Central Library. In this workshop, participants learned the fundamental philosophy and values necessary to create the world that the SDGs strive to realize.



(Featured on p.23 of the Report)

Disaster Prevention

Enhancement of Large-Scale Disaster Responses and Regional Cooperation

Nagoya University enhances its planned countermeasures for future natural disasters, such as disaster safety measures, steps taken to ensure the continuance of the University's important functions, and the strengthening of regional cooperation.



(Featured on p.29 of the Report)

Diversity

Nagoya University Basic Principles and Support on LGBT+ Issues

We implemented the "Nagoya University Missions and Guidelines for LGBT+-inclusive Practices" in May 2018. These guidelines include the University's support and strategy regarding issues faced by the LGBT+ community, such as information regarding name change, classes, student life, benefit programs for staff members, and consultation desks.



(Featured on p.24 of the Report)

Students' Environmental Activities

Achievements of environmental activities by students in 2018 (Featured on pp.25 - 27 of the Report)

Executive Committee of MEIDAI-SAI (University Festival) by Students

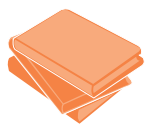
Collection of plastic bottle caps



Collection : 21.2kg

Profits from recycling were used for the vaccination of children in developing countries.

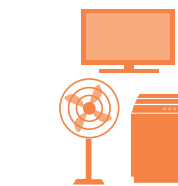
Sold used books donated by campus and the local residents



Collection : 4,502 books
Sale : 4,000 books
To the new owner

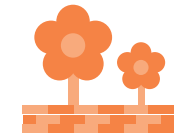
Student Environmental Circle "Song of Earth"

Reuse of goods for student daily life



Handling items : 238 items
Visitors : 124 people

Planting flowers



Flower bed : 454m²
Flower pots : 60 pots
Seeding : 20,000 seeds
Planting : 960 plants

Environmental workshop at MEIDAI-SAI- Handicraft toys from wastes



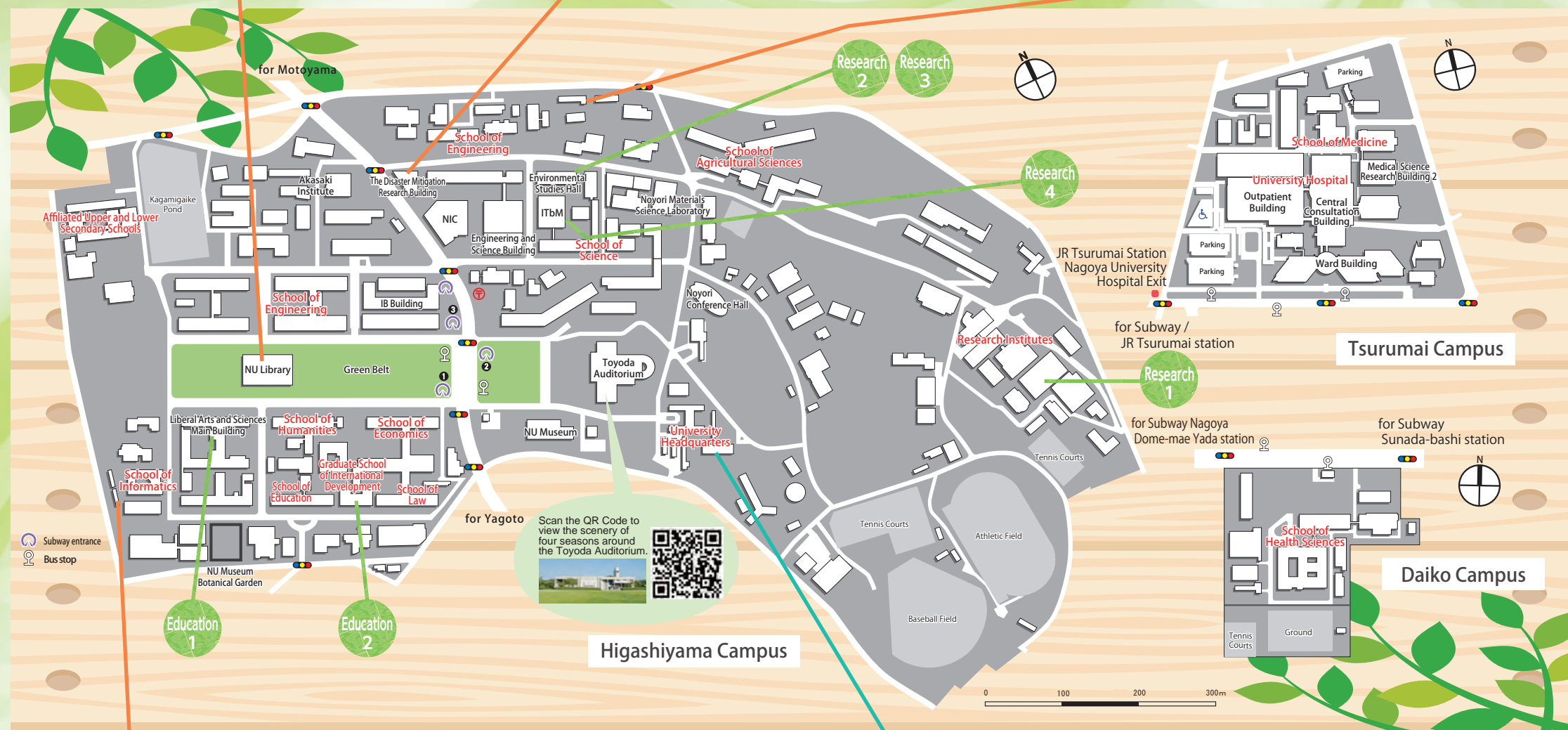
Participant : Approximately 100 people participated
Crafts using plastic bottles and milk cartons

Student Circle "NAGONEKO" for Stray Cats on Campus

Spayed and neutered : 2 cats
Adoption : 5 cats



Passed away : 1 cats
Treated : 1 cats



Students' Environmental Activities

Starting an Eco-Friendly Lifestyle as a University Student

Under the theme of "Thinking about environmental activities that university students can practice," the Nagoya University Environmental Club "Song of Earth" conducts a variety of activities both inside and outside the University, such as a used and recycled goods free distribution event, environmental beautification activities, and eco-friendly handicrafts.



(Featured on pp.25 - 26 of the Report)

Environmental Performance

Health and Safety Initiatives

We make efforts to promote safety awareness among University members. As a part of such efforts, the accident casebook "Learning about Safety from Accidents — 85 Selected Cases of Accidents at Nagoya University" and the general safety manual "Guide on Safety — General Safety Version" are published in 2018.

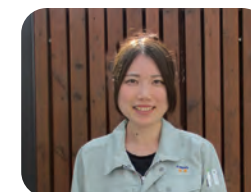


(Featured on p.41 of the Report)

A graduate's career

CO₂ Emissions Reduction and Carbon Storage by Wood Utilization

Making full use of the experience and knowledge she gained as a student, Nagoya University Graduate School of Bioagricultural Sciences alumna Chika Tsuzuki currently plays an active role in the wood industry.



(Featured on p.28 of the Report)

Cover art competition for Environmental Report 2019



As a part of our public relations campaigns, in 2016 we started to seek artwork to be used for the cover of the Nagoya University Environmental Report with the expectation that readers will be inspired to reflect further on environmental issues.

[2019 Gold Prize]

Akari Uto

Environment, Health & Safety office