

The First 100% Renewable Energy University in Japan!

To contribute to the creation of a sustainable society,
CUC is promoting the introduction of renewable energy
and CUC students are carrying out
energy conservation activities on campus.

Environmental Goals

Goal for 2018

**To make CUC the first
“100% renewable energy
university of electricity” in Japan**

CUC will **offset the electricity consumed** on the
Ichikawa campus by the power generated by
CUC's Noda Mega-Solar Farm and others.

Goal for 2023

**To make CUC the first “100%
renewable energy university of
final energy consumption” in Japan.**

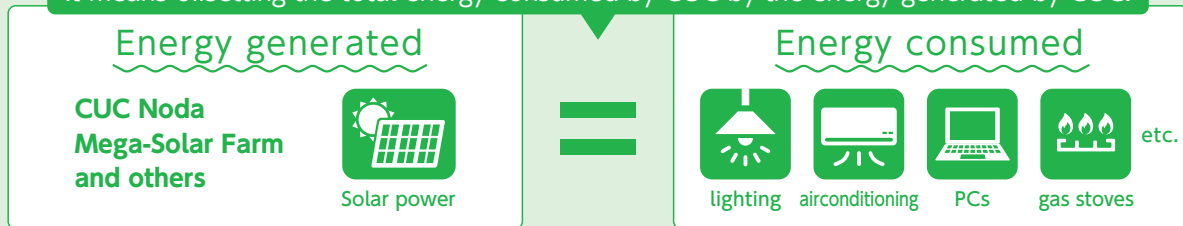
CUC will **offset the total energy consumed** on
the Ichikawa campus by renewables generated
by CUC's Noda Mega-Solar Farm and others.

Achieved



What is a 100% renewable energy university?

It means offsetting the total energy consumed by CUC by the energy generated by CUC.



Through energy generation and energy conservation, CUC aims to become the first 100% renewable energy university in Japan in 2023.

CUC's environmental efforts



● Installed solar power generation equipment on the roof of Building #1

The electricity generated covers part of the power consumed by Building #1

● CO₂ emissions Achieved 10% reduction from 1990 levels

● CUC Noda Mega-Solar Farm started operation

To contribute to environmental preservation to combat global warming, CUC built a mega solar farm (10,032 solar panels, with a capacity of 2.45MW) on its land in Noda City, Chiba Prefecture, the largest one in Japan as a single university. It started a solar power generation project, selling the generated electricity to TEPCO.



● Sep The Beginning of a 100% Renewable Energy University

A group of dedicated faculty members organized a joint seminar with the goal of transforming the 100% Renewable Energy University. This initiative was announced in a press release by President Harashina, who was the Dean of the Faculty of Policy Informatics at the time.

● University-wide activities towards a "net zero energy campus" were started

The "energy conservation and creation project" was officially launched as a university project. UCHIMIZU, cool down by sprinkling water, was carried out as a conservation week activity.



● CUC Energy Inc. was established

- 2001 ● Established student council to acquire ISO 14001 certification
- 2002 ● Educational Institution Chiba Gakuen developed its environmental policy
- 2003 ● Acquired student-led ISO 14001 certification, the first in Chiba prefecture
- 2007 ● Set a goal to reduce CO₂ emissions on campus by 10% from 1990 levels by 2010, the first such attempt by a university in Japan

- 2010
- 2012 ● Gave up the ISO 14001 certification

- 2013 ● "CUC open lecture in Marunouchi" started

2013 theme: "Considering Sustainable Environment and Energy Politics"

- 2014 ● "Energy conservation and generation project" launched by the Faculty of Policy Informatics

- 2015 Learning that the electricity generated by the Noda Mega-Solar Farm in fiscal 2014 corresponded to 77% of the campus power consumption, CUC started considering reducing the remaining 23% by energy conservation and generation. This was the first step in making the electricity consumed by CUC equal to the electricity generated by the CUC Noda Mega-Solar Farm and others, thus realizing a "net zero energy campus."



CUC Energy Inc.

CUC-ENERGY

Dr. Sachihiro Harashina was appointed CEO in May 2018.

Established in May 2016 by CUC as a regional energy company, CUC Energy Inc. is carrying out energy service business towards making CUC a 100% renewable energy university and aims to extend its business to the wider Ichikawa area in the future.

● Apr 1 President's Projects were launched

Dr. Sachihiko Harashina, the Dean of the Faculty of Policy Informatics, became the President of Chiba University of Commerce. Under his strong leadership, the initiative to make CUC a 100% renewable energy university and the core of the locally distributed energy community was re-launched as the President's Project #4.

● Nov 13 CUC declared, both domestically and internationally, that CUC will become the first 100% renewable energy university in Japan



● Nov 13 Registered on the 100% natural energy platform

CUC became the first educational institution in Japan to have its declaration and action plan registered on the global initiative 100% renewable energy platform operated by CAN-Japan.

● Dec 9 CUC received the COOL CHOICE LEADERS AWARD by the Environment Ministry



2017

SONE

Student Organization for Natural Energy

SONE addresses energy conservation and prevention of global warming from the students' perspective and works together with the university. SONE aims to reduce CUC's electricity consumption by planning and implementing various activities and by making proposals to the university.



2018

● Mar Student Organization for Natural Energy (SONE) launched

● Aug 2017 - Feb 2018 More solar panels installed at the CUC Noda Mega-Solar Farm

The total number of panels increased to 11,642 with a capacity of 2.88MW.

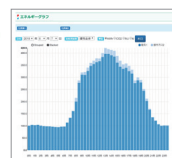
● Sep 2017 - Feb 2018

All lighting on campus replaced by LED lights

● Sep 2017 - Feb 2018

EMS (Energy Management System) installed

By making CUC's energy consumption visible, electricity generation and electricity consumption can be monitored and controlled.



2018 Environmental goals

**Electricity consumption equals electricity generation
=RE100 university**

● Oct 2018 - Feb 2019 More solar panels installed on campus

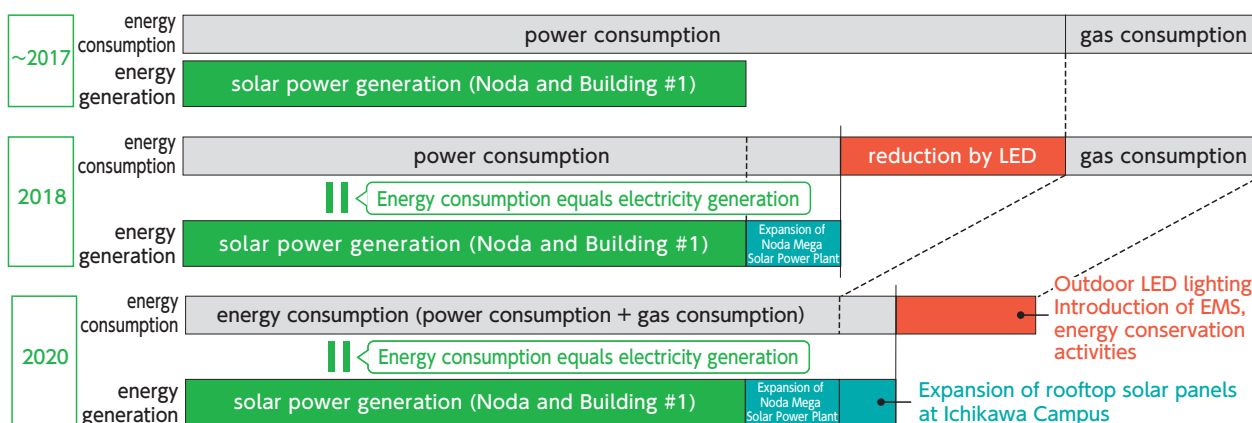
The total number of panels increased to 1,430 with a capacity of 460kW.

2019

2020 Environmental goals

**Energy consumption equals electricity generation
=100% renewable energy university**

Process for these achieving goals



In Japan, the fiscal year is from April to March the following year.

Even more
diverse activities
to be carried out
from 2019

- Expansion of solar power panels to 10 rooftops on Ichikawa campus buildings, fully self-consumed.



- Feb 27 Achievement as Japan's first "RE100 University" in electrical power was announced at the Japan National Press Club.



- May 29 Mr. Takaaki Katsumata, Parliamentary Secretary of the Ministry of the Environment visited our university.

He toured the grape vineyard utilizing solar sharing, observed solar panels and exchanged views with students.



Jan
2019

SDGs12 : Duty to create, duty to use
**Equalize renewable power
generation and
power consumption
=RE100 University**

Achieved

Feb

Hereunder, the portions indicated in blue ● are student activities of "Student Group SONE" or "CUC100 Wine Project." Students engaging in energy conservation and solar sharing with the university proactively took part in these activities.

Mar

- Mar 5 CUC100 Wine Project Started grape production

Started the production of Ichikawa-made CUC original wine from grapes cultivated by on-campus solar sharing. Hands-on grape planting was carried out.



May

- Jun 29 CUC100 Wine Project A garden party was held.

We invited those who provided crowd funding to cover a part of the operation funds, gave them a tour of the vineyard and hosted a BBQ.



Jun

Jul

- Jul 15-19 Carried out "Uchimizu (water sprinkling) Cool-Down Strategy."

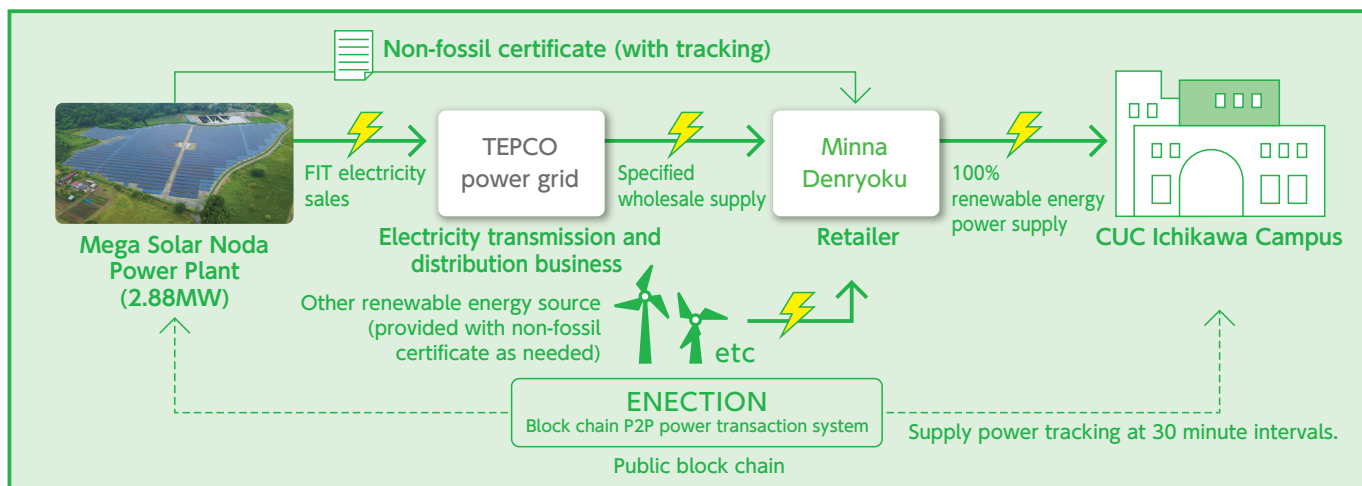
In addition to SONE members, over 40 students who were recruited took part as the uchimizu (water sprinkling) staff. The effects of uchimizu were verified and questionnaire on energy conservation was also conducted.



Aug

- Aug 1 100% renewable energy achieved in energy procurement

Energy generated at Mega Solar Noda Power Plant was purchased back with non-fossil certificate from the buyer Minna Denryoku. Combined with the roof power generator at Ichikawa Campus, 100% renewable energy was achieved in procuring energy.

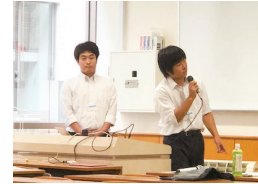


•Specified wholesale supply of FIT electricity from Mega Solar Noda Power Plant supplied to Minna Denryoku through the TEPCO power grid.

•By using the block chain P2P electricity traceability system of Minna Denryoku, FIT electricity from Mega Solar Noda Power Plant can be certified as being supplied to the university's Ichikawa Campus. The deficit is supplemented by other types of FIT electricity or power generated from renewable energy (wind power, biomass, etc.). Furthermore, by means of the non-fuel certificate with tracking, 100% use of renewable energy may be attained.

● Sep 13-14 Participated in Society of Environmental Science Conference 2019

SONE participated in the Society of Environmental Science Conference held in Nagoya and comprehensive discussions with other university students were held.



Sep



● Oct 9 Participated in the “100% Renewable Energy Declaration RE Action” for the first time as a university

Participated for the first time as a university in the initiative in which municipalities, educational institutions, medical institutions and medium and small-scaled enterprises manifest a 100% renewable energy declaration and endeavor to translate their goals into action.



Oct

● Oct 20 SONE was an exhibitor at the “Ecomesse 2019 in Chiba”



● Oct 26 SONE held a lecture at “CUC Open Lecture in Marunouchi”



● Urgent message for the intensifying climate change issue

With recognition of the critical status of the global environment, we have proactively studied and put into practice countermeasures against climate change and disseminated a message contributing to the attainment of SDGs.

Nov

● Nov 3-4 Participated in the 70th Mizuho Festival (school festival)

Student group SONE set up a booth for the first time at the school festival selling sweet potato sticks and advertising “Solar Chikuden kun.”



● Dec 2 Received the “22nd Minister of the Environment’s 2019 Commendation for Global Warming Prevention Award”

Received the Environmental Education Activity Category Award

The university’s initiative for achievement in the prevention of global warming was highly acclaimed under the Environmental Education Activity Category.



令和元年度
地球温暖化防止活動
環境大臣表彰
環境教育活動部門



Dec

● Dec 2 Gave a speech at the “Climate Change Measures from the Field of Education NOW! Re Action For Teachers”

A SONE student gave a speech at a symposium to consider the role played by educational institutions in the climate change issue.



● Nov 24 SONE displayed a panel for the “16th Environmental High School Student Summit.”



● Dec 5-7 SONE was an exhibitor at Eco Pro 2019



● Dec 16-20 SONE created an on-campus solar-powered illumination

Using solar power generated during the day, SONE decorated the campus with illumination during Christmas season.



Activities continued
from 2020 onward!

● Jan 10 Received 2020 Asia-Pacific
Triple E Awards, first
“Green University of the Year”

ACEEU (Accreditation Council for Entrepreneurial and Engaged Universities), in their commendation of higher educational institutions and individuals in the Asia Pacific region, gave high recognition to the university's environmental protection activities.



● Jan 29 Received the Special Recognition Award in the Energy
Conservation Best Practice Category for the “2019 Energy
Conservation Grand Prize”

Achievements in energy conservation activities were recognized, making the university the sole award recipient as an educational institution in 2019.



Jan
2020

● Mar 23 First signing as a
Japanese university in the international
“Climate Emergency Declaration”

The university was the first Japanese university to sign the Climate Emergency Declaration drawn up by 3 higher and further education institutions across the globe engaged in environmental issues.

* EAUC (Environmental Association for Universities and Colleges), U.K., Second Nature, U.S., and “Youth and Education Alliance of UNEP (United Nations Environment Programme)”

Mar

● Jul 6 Joined the private-public partnership platform
for promoting SDGs for regional revitalization

CUC joined the private-public platform, established by the Cabinet Office, to deepen the partnership with diverse stakeholders to promote SDG efforts in Japan, leading to further regional revitalization.

Jun

Jul



私たちは持続可能な開発目標 (SDGs) を支援しています。

● Jun 12 The university's
initiative was published
in the Annual Report on
the Environment, the Sound
Material-Cycle Society and
Biodiversity
in Japan 2020.



● Jul 29 Environmental target year
changed to 2023

As a result of various COVID-19 containment measures, the on-campus energy consumption dropped drastically. The renewable energy rate (electricity + gas) from July 2019 to June 2020 was 102.9%, reaching the 2020 environmental target, making CUC the first “RE100 University” in Japan.

However, this was achieved under special pandemic conditions, which was expected to continue for some time. To make a rational and fair evaluation, the next two years were excluded from the assessment, and the target year was changed from 2020 to 2023.

● Jul 31 Participated in an online event
hosted by Ohkawa Printing
“No More! SDGs Wash Vol. 4
Taking the First Step, Here we are,
RE100 university and company”

CUC participated in an online event hosted by Ohkawa Printing, which promotes “environmental printing,” where the students talked about their energy-saving activities.



Environmental target

Equalize renewable energy generation*1
and energy consumption*2
=100% renewable energy university

Target year changed from 2020 to 2023

*1 Power generated by CUC's Noda Mega-Solar Farm etc.

*2 Total energy consumption of CUC (electricity + gas)

● Aug 3 Became the first educational institution in Japan to support the RE-Users' proposal to expand renewable energy RE-Users = corporate network of renewable energy users

CUC became the first educational institution in Japan to support the proposal made to the government and electricity providers to make Japan a user-friendly country for renewable energy.

Aug



● Nov 1 SONE participated in "SDGs Youth Conference" held at Eco Messe in Chiba 2020

● SONE carried out its project to promote energy-saving actions using "shikakeology (trigger for behavior change)" on the Ichikawa campus



Oct

● Oct 5 Joined the United Nations University SDG-universities platform

CUC joined the platform focusing on SDGs to strengthen partnerships among universities in Japan, cooperating with stakeholders, to enhance the presence of Japanese universities in the international society, and to contribute to the sustainable development of Japan and the world.



Nov

● Oct - Dec Held a series of seminars online to work towards the achievement of RE 100 University

CUC shared with university personnel nationwide how RE100 was achieved, the background, and know-how.



Dec

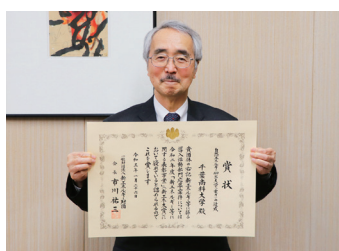
● SONE conducted a survey of the effects of double-glazed windows in some classrooms on the Ichikawa campus



Jan 2021

● Jan 26 In the "2020 New Energy Grand Prize" of the New Energy Institute, CUC was awarded the New Energy Institute's Chairman's Award in the Implementation of New Activities Category.

It was in recognition of the leading role CUC is playing in promoting renewable energy.



新エネ大賞
新エネルギー財団会長賞
自然エネルギー100%大学(電力)の達成

● Dec13 Special Session "Multi-faceted significance of RE100% University" held as an online event

At the 2020 Environment Information Science Research Presentation Meeting hosted by the Environment Information Science Center, CUC presented on the multi-faceted significance of universities using renewable energy.



Feb

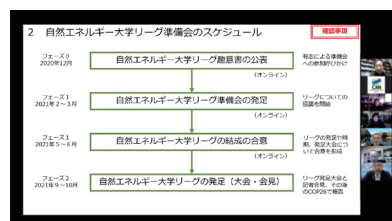
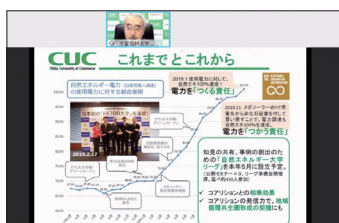
● Feb 28 Natural Energy University League Preparatory Committee launched

The first Preparatory Committee meeting was held, with presidents of 5 universities including CUC as core members, to establish a "Natural Energy University League" aiming to increase the number of RE100 universities and reduce the environmental burden accompanying university activities.

Mar

● Mar 23 Online presentation at a summit of presidents of universities contributing to the achievement of carbon neutrality

CUC participated in a summit where presidents of universities launched a university coalition that will work towards the achievement of carbon neutrality by 2050.



2021 activities from here

Apr
2021

● Expressing support for the “JIC message to the Japanese government to set an ambitious 2030 target towards achieving the Paris Agreement”

Since September 2018, CUC has participated in the Japan Climate Initiative, or JIC, a network of companies, municipalities, and NGOs who are proactive in climate change countermeasures and committed to cooperating and enhancing their efforts. CUC expressed support for the JIC message.

May

● Jointly with Toho University, SONE proposed environmental activities to a company and implemented them

Jointly with Toho University's student organization that promotes energy-saving activities, Toho Ecolution, SONE implemented an “Eco-Routing Project,” calling for a company to take environmental action. The proposal made to Ishido Co., Ltd. involved activities to heighten children's environmental awareness, using environment check sheets.

Jun

● Jun 7 Launching of “Renewable Energy University League” with President Harashina as representative

Japanese universities gathered to establish a “Renewable Energy University League,” with the aim of reducing the environmental burden caused by university activities and achieving decarbonization by using renewable energy.



自然エネルギー大学リーグ
RENEWABLE ENERGY UNIVERSITY LEAGUE OF JAPAN

Renewable
Energy University
League website



Renewable Energy University League

University management, faculty, students and experts throughout Japan are making known both in Japan and abroad the purpose of establishing the Renewable Energy University League, which is to promote the use of renewable energy at universities and increase the number of RE100 universities. They plan to do this by sharing their knowledge, networking, mutual development, nurturing human resources, and exchanges with overseas universities.

Members

Campus members (10 universities)

- Ashikaga University
- Sophia University
- Chiba University of Commerce, Ichikawa Campus
- Chiba University
- Tokyo University of Foreign Studies
- The University of Nagano
- Nagoya University
- Hiroshima University
- Ritsumeikan University
- Wayo Women's University

Supporting organizations (8 companies)

- Envision Digital Japan
- E-konzal
- WELLNEST HOME
- Yanekara Co., Ltd.
- Shimizu Corporation
- Patagonia International Inc., Japan Branch
- Panasonic Corporation
- Minna Denryoku

(as of end-March 2022/in Japanese alphabetical order)

Renewable Energy University League founding members (core members)

Representative member

Sachihiko Harashina (President, Chiba University of Commerce)

Core members

Shoichiro Iwakiri (President, International Christian University)
Koji Kishida (President, Wayo Women's University)
Toshiaki Koso (President, University of the Sacred Heart)
Kayoko Hayashi (President, Tokyo University of Foreign Studies)
Masumi Kindaichi (President, University of Nagano)
Yoshiaki Terumichi (President, Sophia University)
Mitsuo Ochi (President, Hiroshima University)
Yujiro Tanaka (President, Tokyo Medical and Dental University)

● Jun 25 Keynote address by President Harashina given online as a side event of the “Ministerial Thematic Forums for the United Nations High-level Dialogue on Energy”

President Sachihiko Harashina gave a keynote address entitled “Sustainable Energy Revolution from Universities: An Initiative of the first RE100 University in Japan” at a side event of the “Ministerial Thematic Forums for the High-level Dialogue on Energy.” This event, titled “Accelerating Multi-Stakeholder Action in Japan Towards the Achievement of Net-Zero Emissions and the SDGs,” was organized by the UN Department of Social and Economic Affairs.

● Jul 5-9 SONE held “Uchimizu, Cooling down by sprinkling water 2021”

SONE carried out Uchimizu, a traditional Japanese way of cooling down without using air conditioning, to promote energy-saving awareness.



● Jul 21 CUC's environmental initiatives introduced on TV Asahi's “Hodo Station”

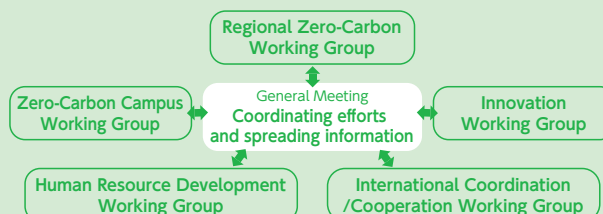
President Harashina was interviewed about CUC's environmental initiatives on TV Asahi's news program “Hodo Station.”

● Jul 29 Participation in the “University Coalition Contributing to the Realization of Carbon Neutrality”

CUC participated in a platform formed by MEXT, MOE, and METI in July 2021 to spread the initiative to achieve carbon neutrality from universities to the region, country, and the world and to bring about positive changes to society. The platform now has 191 member universities. Of the five Working Groups, CUC belongs to the “Zero-Carbon Campus Working Group.”

Purpose of the Coalition and the Five Working Groups

- ① Lateral expansion of knowledge from universities, etc.
- ② Promoting research by strengthening cooperation with municipalities and companies and implementing research results
- ③ Enhancing the power to spread information in Japan and abroad



Jul

● Jun 15 Specially-appointed Visiting Associate Professor Kimiko Hirata received the Goldman Environmental Prize

Specially-appointed Visiting Associate Professor Kimiko Hirata, who is working to abolish coal-fired power generation, received the Goldman Environmental Prize, referred to as the “Nobel Prize for environmental NGO activities.” She is the third Japanese to receive the award after a period of 23 years, and the first female recipient from Japan.



At the award presentation symposium on July 4, both Japanese and international environment leaders such as former US Vice President Al Gore, Administrator of the UN Development Program Achim Steiner, and (then) Environment Minister Shinjiro Koizumi sent video messages honoring Ms. Hirata's work. Ms. Hirata gave a lecture on two topics: “Japanese Society and NGO” and “The Importance of the Coal Issue in Dealing with Climate Change,” followed by a panel discussion with experts.



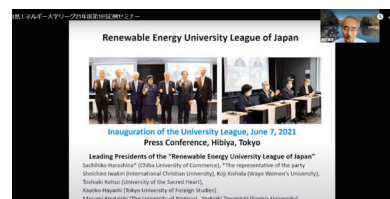
Aug

● Aug 7 CUC's initiatives towards achieving RE100 University introduced on “NHK WORLD-JAPAN”

President Harashina was interviewed on “NHK WORLD-JAPAN,” NHK's English language channel broadcast around the world, about the road to achieving a RE100 University.

● Aug 12 Renewable Energy University League's 1st Regular Seminar held online

President Harashina spoke on the “Establishment of the Renewable Energy University League,” followed by information sharing and exchange of ideas with other presenters about the use of renewable energy and decarbonization at university.



● Aug 20 4th CUC Open Lecture 2021 “Creation of Regional Value Through Renewable Energy” held online

The 4th CUC Open Lecture 2021 reported on how CUC is creating regional value through renewable energy from three points, organization, research, and students. Experts with SDGs expertise were invited as guest commentators.



•Special Report “Establishment of Renewable Energy University League”
Sachiko Harashina, CUC President

•Report 1 “What Regional Value is Created by Renewable Energy?”
Takuo Nakayama (then) Full-time lecturer of Fundamental Education, CUC

•Report 2 “Environmental Activities in the Community by CUC Students”
Susumu Teshima, Associate Professor of Fundamental Education, CUC/President's Project 4 leader
Tsubasa Mizuide (then) 2nd year student, Faculty of Commerce and Economics, CUC/student organization SONE member

•Panel discussion

Tomoko Hoshino, Deputy Director, Environmental Partnership Council
Sachiko Harashina, President, CUC
Takuo Nakayama, (then) Full-time lecturer of Fundamental Education, CUC
Susumu Teshima, Associate Professor of Fundamental Education/President's Project 4 leader
Tsubasa Mizuide, (then) 2nd year student, Faculty of Commerce and Economics, CUC/student organization SONE member
[MC] Shinichiro Tanaka, Associate Professor of Fundamental Education /President's Project 4 sub-leader

● Sep 10-11 SONE presents online at the Society of Environmental Science

CUC student organization SONE presented at an online symposium of the Society of Environmental Science Planning 2021 "Expanding and Deepening Awareness of SDGs Activities in Communities." Their presentation was entitled "Developing SDGs Activities in today's Remote Work/Study Environment."

● Joined the "Race to Zero Circle," an Official Partner of the Race to Zero Campaign

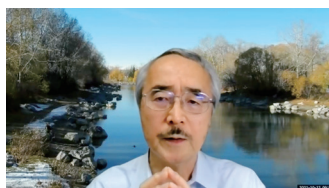
Race To Zero is an international campaign spearheaded by the Secretariat of the United Nations Framework Convention on Climate Change, or UNFCCC, that calls for non-government entities such as global companies, municipalities, investors, and universities to take action in achieving net zero emissions of greenhouse gases by 2050.

Through the Japan Climate Initiative, or JCI, CUC joined the JCI's member circle "Race to Zero Circle," an official partner of the Race to Zero campaign. CUC is a member of JCI, a Japan-based group formed to contribute to global decarbonization.

Sep

Oct

● Oct 12 President Harashina gave a lecture at the Alliance for Climate Action, "Your Path to Impact in the Race to Zero," How Universities & Colleges Can Take a Lead in Climate and Transform Our Collective Future



● Oct 13 President Harashina gave a lecture at the Climate Change Initiative, "Climate Change Action Japan Summit"



● Oct 16-17 SONE participated online in Eco Messe in Chiba 2021

SONE presented at Eco Messe in Chiba 2021, Chiba Prefecture's largest environmental fair on the initiatives of CUC and CUC students working towards achieving 100% renewable energy university as an activity of SDG 12, Responsible Production and Consumption.



● Oct 19 President Harashina gave a lecture at the "Daimaryu SDGs ACT5 Online Seminar: "Choosing Renewable Energy in Your Life and Business"

"Daimaryu SDGs ACT5," based in the "Daimaryu" area, comprising Otemachi, Marunouchi, and Yurakucho districts, promotes activities towards attaining SDGs. As CUC has a Marunouchi Satellite Campus, President Harashina gave a lecture as a prosumer on CUC's initiatives and the significance of promoting renewable energy on campus at an online seminar held by Daimaryu SDGs ACT5 Executive Committee.

● Nov 22 President Harashina gave a lecture at Ehime Nikkei Konwakai on "The University's Role in SDGs and Renewable Energy University League"

Nikkei Konwakai is a membership meeting where leaders from the economic, industrial, administrative, and academic sectors representing various regions throughout Japan gather for self-development. President Harashina gave a lecture at the regular meeting in Ehime Prefecture.

● Nov 2021-March 2022 Installation of a storage battery system on campus announced

It was announced that a storage battery system would be installed in campus buildings from February 2022 so that electricity generated by rooftop solar panels could be used as an emergency power source in disasters.

Nov

Dec

● Dec 8-10 Exhibited in "Eco-Pro 2021"

President's Projects exhibited at "Eco-Pro 2021," where products, services, and initiatives focusing on the solution of social issues come together, and promoted CUC's initiatives.

● Dec 25-26 7th National High School Environmental Speech Contest —Thinking amid the Covid-19 Pandemic held online

Written speeches were submitted by high school students interested in the environment on two topics, "Renewable Energy and Our Future" and "What We Can Do Now for SDGs." After rigorous screening, 11 candidates were chosen as finalists, and the winner was selected based on speech videos and online Q & A.



● Oct 19 CUC's initiatives to achieve a RE100 University were introduced on NHK radio's "NHK Journal"

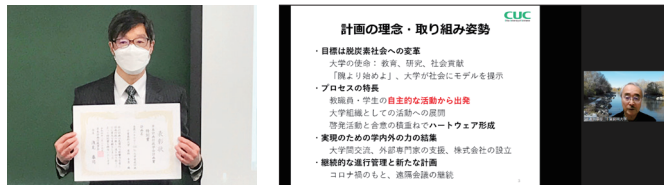
President Harashina was interviewed on "NHK Journal," an NHK radio program, about CUC's initiatives to achieve RE100 University and SDGs efforts.

● Jan 21 8th CUC Open Lecture 2021
“Human Resource Development to Meet the Needs of a Zero-Carbon Society” was held as a hybrid event

In the 8th CUC Open Lecture 2021, a report was given about collaborative efforts between government-university, human resource development in leading companies, and human resource development at CUC, followed by a panel discussion including the audience.

● Feb 25 Received the Special Award of the “19th Planning Award” by the Japan Association for Planning and Public Management

CUC was recognized for its extensive efforts in pursuing 100% renewable energy to achieve a decarbonized society, the founding of CUC-Energy, Inc. based on the 3 pillars of hardware-software-heartware, and other unique initiatives, and received a special award. “The Planning Award” was instituted by the Japan Association for Planning and Public Management to give recognition to innovative and advanced plans that meet new social needs, such as environmental issues, longevity, and the use of information technology.



Jan
2022

Feb

● Dec 9
SONE participated in the “Insulation DIY Workshop” held at Ueda High School in Nagano Prefecture

SONE participated in the insulation retrofitting workshop in the classrooms at Ueda High School, a school tackling environmental issues. After seeing the high school students install high-insulation materials in walls and windows, CUC students were inspired to install insulation at the university, too.



● Dec 20-24 SONE held a campus illumination event using solar power

Christmas illuminations were displayed, using stored electricity generated by solar panels. The trees were made from reused plastic bottles collected on campus.



● Dec 29
CUC’s case was introduced at an online study meeting of the “Zero-Carbon Campus Working Group,” part of the “University Coalition Contributing to the Realization of Carbon Neutrality”

Mar ● Mar 12 “SONE” presented at the “National Students SDGs Forum in Chiba”

SONE participated in the “National Students SDGs Forum in Chiba,” cosponsored by an NPO organization, Environmental Partnership Chiba and a student organization “Origami” and reported on its daily activities.



● Mar 31 President’s Project Publication “SDGs and University—Challenges of a 100% Renewable Energy University—” released

President’s Projects started in 2017 as a university-wide endeavor across faculties, involving faculty, staff, and students. This publication is a compilation of its research activities and results.



Environmental target achievement status

Renewable energy rate
from January-December 2021

Electricity

138.4%

Electricity
and gas

112.8%

*Renewable energy rate: Amount of energy generated, divided by the amount of energy consumed (rounded down to one decimal point)

*As a result of various COVID-19 containment measures, on-campus energy consumption dropped drastically, resulting in the actual consumption reaching the university’s Environmental Target 2.

However, as this was the result of a pandemic-induced state of emergency, the year to reach the Environmental Target 2 was changed to 2023.

2022 activities from here

Apr
2022

- Apr 1 CUC's "Energy production and energy conservation" was introduced in the "Official Textbook for Environmental Kaorisuta Test"

In the textbook, President Harashina presented CUC's case on "Energy production and energy conservation" and gave advice on how to introduce renewable energy.

- Apr 8 Diamond Inc.'s "Diamond Online" introduced CUC as a university which made a Climate Emergency Declaration, or CED

- Apr 13 CUC's initiatives on environmental and energy issues were introduced in the Academic Journal on Education published by the Association of Private Universities of Japan

President Harashina's article on CUC's initiatives on environment and energy issues was published in the journal.

May

- May 30 SONE presented CUC's renewable energy initiatives on Nippon TV's program "news every."

President Harashina and the student organization SONE presented CUC's renewable energy initiatives on the program.

Jun

- Jun 16 First anniversary seminar of the launch of the Renewable Energy University League held online

A seminar commemorating the first anniversary of the "Renewable Energy University League," which was launched on June 7, 2021, was held, with the representative President Harashina as panelist and discussed "How universities can achieve renewable energy and decarbonization."



Jul

- Jul 7

Winner in the '2030 Climate Action' category of the International Green Gown Awards 2022, an international award co-sponsored by the UN Environment Program, given to universities worldwide

CUC's RE100 university initiative was selected as the winner in the new '2030 Climate Action' category of the International Green Gown Awards 2022, becoming the first winner in the category. This award is co-sponsored by the United Nations Environment Program (UNEP), the Association of Commonwealth Universities (ACU), the Association of Francophonie Universities (AUF), the International Association of Universities (IAU), and the Higher Education Sustainability Initiative (HESI), and awards are presented to universities around the world with outstanding ideas contributing to a sustainable society. In the International Green Gown Awards 2022, 56 institutions from 19 countries worldwide were selected as finalists in six categories. CUC was the only recipient from Japan.



● **Aug 26 4th CUC Open Lecture 2022**
“How to Have a Decarbonized Campus?”
 held as a hybrid event

At the 4th CUC Open Lecture 2022, a guest lecturer was invited to give a report on an energy-plus elementary school in Germany as well as collaborations of universities throughout Japan. SONE reported on the planning and implementation of the Insulation Retrofitting Workshop, scheduled for August 31 and September 1.



Aug

● **Sep 8-9 Presentation at the Society of Environmental Science** ----- **Sep**
 held as a hybrid event

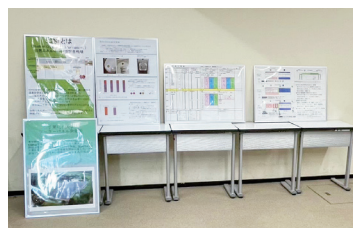
President Harashina presented at the 2022 Society of Environmental Science annual meeting on the “Promotion of Decarbonization by the Renewable Energy University League.” Associate Professors Susumu Teshima and Takuya Sugimoto spoke on the “Development of Sustainable Human Resources Through the Planning and Operation of Classroom Insulation Workshops” at the symposium on “SDGs Activities as PBL: Consideration of Evaluation Methods of Developing Competence Through Continuous Activities.” SONE also presented on its Insulation Retrofitting Workshop.

● **Sep 25 CUC’s 100% renewable energy initiatives**
 introduced in NHK’s program “Commitment to 1.5°C:
 Let’s act now to stop the temperature rise”

CUC’s initiative to achieve 100% renewable energy was introduced, with President Harashina’s comments.

Oct ----- ● **Oct 29-30 SONE exhibited**
at the 72nd Mizuho Festival

At CUC’s campus festival event, SONE displayed the results of the Insulation Retrofitting Workshop.



Nov

● **Nov 11 Visit by ten private universities**
from the Kansai area

Thirty personnel from the facilities division of private universities in the Kansai area, members of the “University Coalition Contributing to the Achievement of Carbon Neutrality” just as CUC, visited CUC to observe CUC’s environmental initiatives, including “RE100 University” efforts. President Harashina gave an overview of CUC’s initiatives, and specific policies were explained by faculty members in charge, followed by tours of campus facilities, including solar panels.



● **Aug 31-Sep 1 SONE’s**
“Insulation Retrofitting Workshop”

Inspired by the insulation DIU workshop in Nagano which they visited in December 2021, SONE explored the possibility of carrying out insulation work at CUC and made a proposal to the university. In cooperation with Energy Machizukuri-sha, Inc. and Abiru Co., Ltd., a company managed by CUC’s alumnus, an insulation retrofitting workshop of a classroom was realized.



● **Nov 13 SONE exhibited at**
“From here to the future! Earth School in Chiba”

SONE exhibited at an event to promote understanding of SDGs through hands-on experience, sponsored by the Girl Scouts Chiba under the slogan “Making the future, making the earth, made by children.” The purpose of the event was for children, the leaders of the future, to learn about SDGs and to become a “SDGs master” by making a commitment to act with a view to the future. CUC students participated as the children’s supporters.



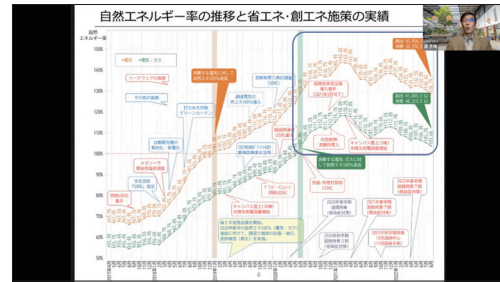
● Nov 19 SONE presented at
“Ichikawa Power Community’s 2nd Online Seminar”

As the front runner of the RE100 University,
SONE presented CUC’s activities.



● Nov 25 “Renet Chiba 8th Online Study Meeting

Associate Professor Teshima spoke on the subject “Efforts to Achieve a 100% Renewable Energy University—Forming a Renewable Energy University League—”



Nov

Dec

Jan
2023

● Dec 1-2 8th National High School
Environment Speech Contest

Written speeches were submitted by high school students interested in environmental issues on two topics, “Renewable Energy and Our Future” and “What We Can Do Now for SDGs.” Out of 75 applicants 11 candidates were chosen as finalists after rigorous screening. The winner was then selected based on speech videos and online Q & A.



● Dec 7-9 SONE exhibited at “Eco Pro 2022”

SONE participated in Eco Pro 2022 held at Tokyo Big Site with a poster display showing its activities and achievements.

● Dec 19-23 SONE arranged
campus illumination
using solar power

SONE planned and implemented Christmas illumination, using stored electricity from solar panels.



● Dec 27 SONE presented at the Chiba Prefecture
Environment Basic Plan Public Awareness Seminar

At the seminar sponsored by the Chiba Prefecture Environmental Policy Division entitled “Student x SDGs—What We Can Do Now for the Earth’s Sustainable Future,” SONE presented on “Balancing Energy Conservation with Comfort—Implementing Classroom Insulation Workshop (InSONEtion)” and exchanged views with students from high schools and other universities in Chiba Prefecture.

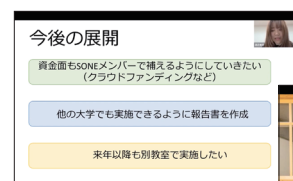
● Jan 11 SONE participated
in an energy conservation seminar
with a university from Saudi Arabia

Students from the President’s seminar and SONE presented in English on “Making a 100% renewable energy university” at the Workshop on Energy Efficiency held with King Saud University of the Kingdom of Saudi Arabia.



● Jan 31 SONE presented online
at the “Climate Action Workshop”
on the Insulation Retrofitting Workshop

In the “Climate Action Workshop—Thinking about What We Can Do to Stop the Climate Crisis—” sponsored by the Climate Network, SONE presented at the 2nd workshop entitled “How to Achieve School Insulation,” explaining the significance of the insulation work at CUC and how they carried out the Insulation Retrofitting Workshop.



● Feb 6 SONE presented at “CUC x NHK SDGs Interactive”

SONE appeared in an event co-sponsored by CUC, which promotes SDGs mainly as the President's project, and NHK Chiba Broadcasting Station, as part of an NHK SDGs campaign. The event aimed to motivate CUC students to think about SDGs and to take action. SONE spoke on its achievements, including retrofitting classroom insulation.



● Feb 22 SONE presented online its achievements in the Eco Routing Project

To the Ishido Co., Ltd.'s students, SONE, together with Toho University students (Toho evolution) reported on making SDGs *sugoroku* a traditional Japanese board game similar to snakes and ladders.

● Feb 22 SONE introduced CUC's RE100 university initiatives in the program “Horijun Morning Flag” on Tokyo MX

President Harashina and SONE were interviewed about CUC's 100% renewable energy initiatives.

Feb

Mar

● Jan 23 SONE introduced CUC's activities on “The Future of Our Hometown” on TBS TV

SONE was interviewed about various initiatives implemented by CUC.

● Jan 27 10th CUC Open Lecture 2022 “How We Are Decarbonizing Our Campus” held as a hybrid event

At the 10th Open Lecture 2022, a guest lecturer was invited to report on the concept of an insulation retrofitting workshop and cases throughout Japan, and the latest international initiatives toward climate change. SONE also reported on its Insulation Retrofitting Workshop held on August 31 and September 1.



● Mar 20-21 SONE participated in “Nobeyama Solar Farming and Holiday Home Utilization Project—Community Base-Building Workshop—”

SONE participated in a workshop sponsored by the Community Power Association and Institute of Sustainable Energy Policies (ISEP). Discussions were held on how to cooperate with local residents to utilize agrivoltaics and neighboring holiday homes as a community base.



● Mar 25 SONE received an Excellence Award at the “2022 Next-Generation SDGs Implementation Contest”

SONE presented on “Planning and Operation of an Insulation Workshop” at the “Next-Generation SDGs Implementation Contest,” co-sponsored by the Coalition of Local Governments for Environmental Initiative (COLGEI) and Sustainable Professionals Development Organization (Sus-Pro) and received an Excellence Award.



Environmental target achievement status

Renewable energy rate
from January-December 2022

Electricity

124.5%

Electricity
and gas

99.9%

*Renewable energy rate: Amount of energy generated, divided by the amount of energy consumed (rounded down to one decimal point)



2023 activities from here

Apr
2023

● Apr 1 SONE holds a family event to think about global warming

SONE organized a family event for children from 4th grade up and their families from Ichikawa to think about global warming. The event was held at CUC, which is the first 100% renewable energy university in Japan for electricity. SONE students, who engage in energy-saving awareness activities on campus, acted as instructors to explain the causes of global warming and its impact on our environment.

Using last summer's classroom insulation project as an example, they also talked about the effectiveness of insulation as an energy-saving measure and introduced DIY insulation methods which can be implemented at home.



May

● May 20 President Harashina lectures at a Continuing Professional Development (CPD) event sponsored by the Chiba Prefectural Branch of the Institution of Professional Engineers, Japan

President Harashina gave an online lecture on CUC's SDG initiatives, including RE100.

Jun

● Apr 19 CUC's efforts towards a 100% renewable energy university were introduced in the morning edition of the Sankei Shimbun

● Jun 26 Visit by Gyeonggi Hybrid Town Taskforce (Gyeonggi Province Construction Headquarters, Republic of Korea)

Representatives from Gyeonggi Province Construction Headquarters visited CUC to observe our RE100 efforts and other facilities on campus to obtain information about the promotion of RE100. The visit was arranged by the Korean Embassy.



● Jun 24-25 SONE visits Yatsugatake Eco-House "Hokuhoku" in association with the Asahi Shimbun's Asahi World Forum

Seven students, including those from SONE and other universities, visited Yatsugatake Eco-House "Hokuhoku" to learn the mechanism of the eco-house. They aim to apply their knowledge to practice eco-innovation and disseminate information.



● Jun 24 CUC co-sponsored a Symposium with the Japan Branch of the International Association for Impact Assessment (IAIA): Is the Meiji Jingu Gaien Redevelopment Plan compatible with SDGs?: The role of Environmental Assessment

At this symposium, Dr. Mikiko Ishikawa, Professor Emerita of the University of Tokyo and Professor of Chuo University's Research & Development Initiative, spoke about the value of Meiji Jingu Gaien and the reliability of the environmental assessment data. This was followed by President Harashina's talk on Environmental Assessment and the SDGs, a case study of the Meiji Jingu Gaien redevelopment plan.

In the latter half of the symposium, Gabriela Factor, former president of the IAIA and an expert on environmental and human rights issues, and Rochelle Kopp, management consultant and representative of the petition against the Meiji Jingu Gaien redevelopment plan, gave comments. Nearly 150 participants engaged in lively discussion both in person and online.



● Jul 5 SONE's efforts in becoming a 100% renewable energy university and the 2022 insulation retrofitting workshop featured in the Education and Science Weekly

● Jul 17-20 Sprinkling Water to Cool Down as a part of Energy-Saving Week

"Sprinkling water to cool down" event was held as a part of the university-wide energy-saving awareness and promotion campaign. President Harashina, faculty, staff, and students participated in the event.



Jul

Aug

● Aug 25 4th CUC Open Lecture 2023: Exploring the possibility of local carbon neutrality from the university's perspective

Guest speakers were invited to report on the collaboration between universities and local communities and municipal governments. SONE students presented on "Carbon neutral from the students' perspective."



● Sep 14-15 Visit by the Osaka University of Economics and Law

Staff of the Osaka University of Economics and Law visited CUC over two days to observe our renewable energy efforts. On Day 1, they visited the Noda Mega Solar Power Plant with the CUC staff and SONE students. On Day 2, they observed the rooftop solar panels and other facilities on campus and participated in discussion with our staff and students.



Sep

● Aug 30-31 SONE's Insulation Retrofitting Workshop

With the help of Abiru Construction, whose Chairman Takeshi Abiru is a CUC alumnus, SONE carried out a two-day Insulation Retrofitting Workshop in Classroom 414 as they did in 2022. Two students each from Toho University and Nagoya City University also participated in the event. Online lectures and briefings were provided prior to the workshop.



● Sep 15 Renewable Energy University League of Japan General Meeting 2023 & Special Forum

Renewable Energy University League of Japan General Meeting 2023 & Special Forum was held on the CUC campus, with President Harashina, the representative coordinator of the League, playing a central role. About 150 interested parties, experts and students participated in the event, including the Mayor of Ichikawa City and representatives from the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of the Environment. The keynote speaker was Professor Yukari Takamura of the Institute for Future Initiatives of the University of Tokyo and President of the Central Environmental Council of the Ministry of the Environment. Excursions, workshops, and networking sessions were also held.



● Oct 3 President Harashina speaks at the Japan Climate Action Summit (JCAS 2023)

President Harashina spoke at the Top Leaders Session as a part of the kickoff event for launching the Leaders Circle. The Leaders Circle consists of top Japan Climate Initiative (JCI) members who aim to lead initiatives across various sectors, focusing on accelerating decarbonization, fostering co-creation and collaboration, highlighting the importance of leadership, and actively engaging in policymaking.

● Oct 9 CUC participates in the Asahi World Forum 2023

President Harashina and the SONE students participated in Asahi Shimbun's Asahi World Forum 2023 held at Yurakucho Asahi Hall, with simultaneous streaming from the venue, under the theme, "Dialogue is the way to open the post-COVID world." The meaning of the theme is as follows: Four years from the onset of the pandemic, although the spread of the virus has subsided, the global landscape has changed drastically from pre-pandemic days, with division, disparity, inequality, poverty, recession, and a swing to the right becoming more prominent, leading to a heightened sense of anxiety and uncertainty. Even in such times, we must continue to have dialogues, remembering the importance of empathy, cooperation, and hope if we are to pave the way towards the future of the world and society.



Oct

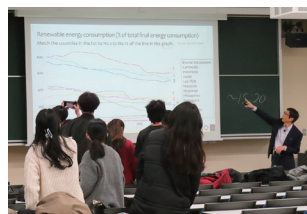
● Dec 8 SONE guides 6th graders from Yawata Elementary School on campus energy-saving facilities

SONE provided explanations on insulation in Room 414 and guided visitors to on-campus solar panels and vineyards.



● Dec 11 Associate Professor Susumu Teshima gives lecture during visit for JENESYS2023 ASEAN-Japan Students Conference

As part of the Japan-ASEAN Friendship and Cooperation 50th Anniversary Commemorative Project, approximately 20 university and graduate students from ASEAN countries and East Timor were invited to visit our university. The program aimed to enhance awareness of problem-solving and foster mutual understanding to strengthen the network of friendship and cooperation. During their visit, Associate Professor Susumu Teshima provided a lecture on initiatives related to renewable energy. This was followed by group discussions and campus facility tours with our university students, aiming to share common regional issues and deepen mutual understanding.



Nov

Dec

● Nov 10 Announcing the plan for the global initiative 'Race to Zero': CUC is the only private university from Japan to participate

CUC joined the Race to Zero initiative in February 2021 as the first university from Japan. This time, CUC announced our goal, based on the reduction of greenhouse gas emissions up to 2022. As climate change and global warming have become pressing issues, achieving net zero greenhouse gas emissions by 2050 has become a global goal. Japan has committed to "Carbon Neutrality (Net Zero) by 2050" and by 2030 aims to reduce greenhouse gas emissions by 46% compared to 2013 levels. CUC will continue to disclose our greenhouse gas emissions and promote energy conservation and campus-wide renewable energy initiatives.

● Nov 27 Visit by the Faculty of Human Sciences, Waseda University

Thirteen members of a research group composed of faculty from various disciplines such as sociology, psychology, and biology, with the aim of establishing a research hub for carbon neutrality, visited CUC to observe our initiatives. They engaged in discussion with President Harashina and Associate Professor Susumu Teshima and toured the facilities on campus.

● Nov 30-Dec 1 9th National High School Environment Speech Contest

High school students throughout Japan interested in environmental issues were invited to submit speech manuscripts. Through a rigorous selection process, 11 out of 43 applicants were selected to compete in the final round, which took place online. Winners were decided based on the submitted speech videos and the Q&A session with the panel of judges.



Jan 19 Visit by Korean Aerospace University

Ten students and an accompanying faculty member participating in the RE100 project at Korean Aerospace University visited CUC. Associate Professor Susumu Teshima gave a talk on CUC's RE100 initiatives, followed by group discussions with CUC students, fostering further exchange, and a tour of our facilities.



Jan 26 9th CUC Open Lecture 2023: Exploring CUC's carbon neutrality from a local perspective

CUC reported on the latest campus decarbonization initiatives and shared with a wide range of stakeholders, including university personnel and municipal officials, our collaborative decarbonization efforts with the community. The panel discussion provided a forum for a lively exchange of opinions and questions.



Jan 15 President Harashina attends Certification Ceremony

President Harashina attended the Certification Ceremony where CUC was certified by the Minister of the Environment as a co-proposer of the application by Sosa City, Chiba Prefecture, to be recognized as a 'leading decarbonization area.'



Jan
2023

Feb

Feb 17 Solar Sharing Festival & Launching of Original Wine #2

CUC held a symposium featuring an address by President Harashina, presentations on the solar sharing status of various regions, discussions on technical challenges, environmental and policy issues. The exhibition booths in the lobby were very popular with the visitors. Many students volunteered to support the event by conducting campus tours, sales of goods, and explaining CUC's SDG initiatives, greatly contributing to the symposium's success.



Feb 27 Visit by Fukushima Prefectural Odaka Industrial Technology and Commerce High School

Ever since being designated by MEXT as a Meister High School Project, this high school has been focusing on renewable energy for the past three years. Even after the conclusion of the Meister High School project, the school wishes to continue to include renewable energy, carbon-neutral society, and "deco" activities, short for decarbonization and ecology, in its education, and expressed interest in CUC as a 100% Renewable Energy University. In response to their request, Associate Professor Susumu Teshima gave a talk and conducted a tour of our facilities.

Feb 28 Visit by Takasaki City University of Economics

Takasaki City University of Economics visited CUC to conduct a field survey on the decarbonization of universities. Associate Professor Susumu Teshima and staff gave a talk on CUC as a 100% Renewable Energy University, the system supporting the initiative, the effect on students, the community, and other relevant parties, as well as research support related to decarbonization. A tour of the campus facilities was also conducted.

Mar

Mar 6-7 SONE Field Work Camp

During the spring break, SONE visited Shizuoka Mirai Local Energy, Suzuhiro Kamaboko, and Odawara Kanagote Farm. Visiting these companies and workplaces, they were able to learn firsthand about what motivated these companies to go into the renewable energy business, solar sharing, and how they are interacting with the local community. Learning the specifics directly was a valuable experience.



Achievement of environmental goals

Renewable energy rate
from January-December 2023

Electricity

120.7%

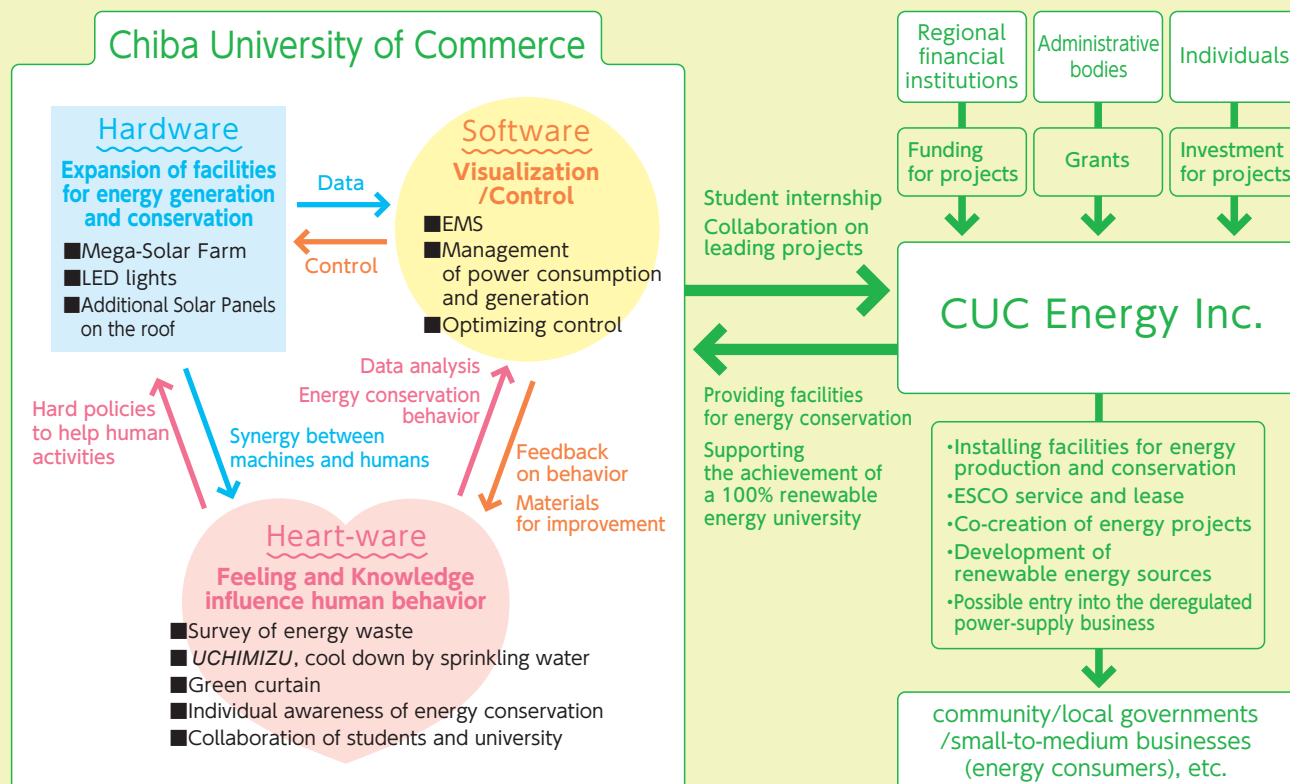
Electricity
and gas

96.3%

*Renewable energy rate: Amount of energy generated, divided by the amount of energy consumed (rounded down to one decimal point)



To achieve its environmental goals, CUC is promoting, with its past activities to tackle global warming at the core, a university-wide scheme based on the three initiatives of hardware, software and heart-ware. Through these initiatives, CUC aims to make this a model case for the local production and consumption of energy and support the establishment of a decentralized energy distribution society for the local community.



Message from the President

Towards a decentralized energy distribution society

CUC is aiming to become a "100% renewable energy university." It is a first step in offsetting all our energy consumption with renewable energy. CUC is the first RE100 university in Japan. We hope that many other universities and small-to-medium businesses will use our case as a model to become RE100. If they do, and communities shift to local production and local consumption, new jobs will be created and the industrial structure will change. Japan must use private power and the power of commerce to promote and expand decentralized energy distribution and shift to a sustainable society. I believe that's the only way for Japan to move forward.

Chiba University of Commerce
President
Sachihiko Harashina, Ph.D.



PROFILE

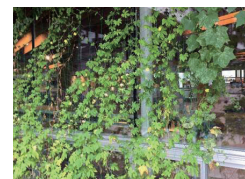
Dr. Harashina received his Ph.D. from the Tokyo Institute of Technology (Tokyo Tech) in 1975. His specialty is environmental planning and policy, with a focus on the study of public participation and consensus building. He is well known both at home and abroad as the foremost scholar in the field of environmental impact assessment.

At CUC, students, faculty and staff will continue to work together to promote activities which foster the awareness of energy conservation.

Insulated and energy-efficient classrooms



Green curtain



令和6年4月発行