The 2012 Low-Carbon Cup

What is the Low-Carbon Cup?
To encourage the development of a future low-carbon society, various grassroots groups have been involved in activities all over Japan. The Low-Carbon Cup is an opportunity for schools, volunteers, NPOs and corporations to exhibit their work, and to communicate with other groups and participants, to learn from each other, and to expand their friendship and relationships. Among a number of entries from all over Japan, 41 groups have passed a rigorous screening panel, and the best activities will be awarded.

Date: Sat., February 18, 2012, 13:00 – 18:00
Sun., February, 19, 2012, 13:00 – 16:00
Venue: Tokyo Big Sight, Conference Tower 7F (International Conference Room)
Presented by: Executive committee for Low-Carbon Cup (Chairperson: Hiroshi Komiyama)
Co-presented by: LIXIL Corporation
Seven-Eleven Foundation
McDonald’s Japan
Japan Network for Climate Change Actions
Special Cooperation from: British Council
Sponsored by: Alterna Inc.
NPO Weather Caster Network
Kihara Mokuzaiten (Kita-Harima Small-Diameter Wood Processing Center)
Under the auspices of: Ministry of the Environment
Organized by: Office of Executive committee for Low-Carbon Cup
(Japan Network for Climate Change Actions)
About the Prize-Giving

Trophy Making and the Photo Exhibition

The Low-Carbon Cup’s trophies for the Environment Minister’s Prize winners were made by Mr. Koutaro Saito, a local artist, with the cooperation of students from Ishinomaki Minato Elementary School, which suffered damage during the Great East Japan Earthquake. The trophies are made from the rubble of Ishinomaki-city. The students also created special trophies for themselves to celebrate their graduation, and to commemorate getting through the earthquake.

The Trophy Making Process

1. December 20th, 2011
Mr. Koutaro Saito gave orientation talk to the sixth grade students at Ishinomaki Minato Elementary School about making trophies for the Low-Carbon Cup, and about their graduation commemoration trophies.

2. January 11-12th, 2012
For two days, Mr. Koutaro Saito provided instruction to the students for making the commemoration trophies. At the same time, the students added their own messages to the “Low-Carbon Cup” trophy made by Mr. Saito.

Comments from the Trophy Makers

At the award ceremony of the 2012 Low-Carbon Cup, the facilitator, Ms. Sakurada, asked the trophy makers, Mr. Saito and staff and students from the Minato Elementary School, for some comments.

“Comments from Mr. Kourato Saito”

Ms. Sakurada: How did you feel when you were asked to take part this trophy making?

Mr. Saito: I’m a person who crafts things. After the great earthquake, I really wanted to express something through crafting. I had been wishing to contribute, so I thought this was an ideal opportunity being provided to me.

Ms. Sakurada: How did you come up with the image of the trophies?

Mr. Saito: These are trophies for the Low-Carbon Cup, but I had to think how I would connect the trophies to the great earthquake. Children are the bearers of the future, but they are the ones who need the most help now. I thought about how we could reach out to children, and how we could draw upon their feelings.

Ms. Sakurada: Please tell us about the material of the trophies.

Mr. Saito: We used rubble inform the Minato area of Ishinomaki-city. There is a high chance that the rubble was a part of the childrens’ own houses, or in any case, it was a part of their town. We used this rubble to make the trophies for the Low-Carbon Cup as well as for special trophies for the students themselves.

Ms. Sakurada: How were the students?

Mr. Saito: I was anxious about whether these children could express themselves through art work. However, they actively engaged in their work and expressed themselves very well. I think I saw the future there.

Ms. Sakurada: It seems children’s applause for the Low-Carbon Cup participants has formed into these trophies.
Ms. Sakurada: How did you feel when you first heard about this trophy making?

Mr. Kakara: Unlike regular graduation work, these students made their way to graduation through the great earthquake. With the support of Mr. Saito, I wanted the students to feel that they had done a great thing and award trophies to themselves.

Ms. Sakurada: What was your impression of the crafting process?

Mr. Kakara: I was surprised by how seriously the children took their work, and the figures they created. I was impressed by Mr. Saito’s faith in the project and children’s ideas. The trophies were really great.

Ms. Sakurada: I heard you have a something you would like to say.

Mr. Kakara: The children and the school have become cheerful again because of everyone’s support. Thank you very much. Another thing is that reconstruction has been sluggish because the rubble disposal is not making progress. Please help us by providing us with support in this matter.

Ms. Sakurada: Ms. Terakami, how was the trophy making?

Ms. Terakami: It was interesting. I had felt that I had a special connection with the rubble.

Ms. Sakurada: Thank you for the great trophies.
**Photo Exhibition for the Trophy Making**

There was a photo exhibition on the wall panels of the lobby of the Low-Carbon Cup venue to show participants the process of trophy making with the students.

**Entrance to the exhibition**

**The exhibition as a whole**

**Participants looking at the photos**
Mr. Saito is an artist who has his roots in the Tohoku area and currently lives in the Gunma prefecture. He has a good insight into environmental issues and works as a Gunma climate change action officer. For the 2011 Low-Carbon Cup, he made a trophy from windfall trees, a material that is a theme throughout his work. He is an artist who has a deep understanding of the ideas and concepts behind the Low-Carbon Cup.
Looking at nature through the lens of agricultural high school students, we carried out activities for saving reed wetlands in the Watarase retarding basin inhabited by many rare creatures. We also contributed to energy saving in the summer time by reactivating reed-screen production in farming communities. Furthermore, we are promoting activities to pass on a lifestyle with reeds to the next generation; for example, we have developed “environment-friendly reed compost” made from waste reeds and we participate in forestation in the Ashio Copper Mine.
“Nanohana (Field Mustard) have huge potential!” By cultivating field mustard in deserted arable land and making use of field mustard, we can realize environment preservation and agricultural and rural revitalization at the same time. Through our activities aiming at the creation of a recycling society with field mustard, we expand cooperation with local residents, schools, and other organizations. We therefore contribute to community revitalization and strengthening connection among people.

Environment Minister’s Award: Golden Award (Community Activities Group)
Revitalize Akita with Field Mustard! (Recycling Society with Field Mustard)

Akita Nanohana Network, NPO Corporation (Akita)
1-3-10 Mukaihama, Akita-city, 010-1601
(Phone) 018-862-6686
URL: http://www.akita-nanohana.com

1-2-3-4
5-6-7-8
9-10-11-12
13-14-15
Aihara high school is a unique technical school with three commercial departments and three agricultural departments. We study at the zoo technical science department where we mainly learn about livestock and agriculture. We also engage in daily activities in a livestock group that manages cows, pigs, and chickens. The livestock group started coordinating with many companies several years ago for research and product development.
Environment Minister’s Award: Golden Award (Corporate Activities Group)

CO₂ Zero-Emission Project for Overall Community, throughout Japan

Started in 2008, Eyefulhome’s CO₂ zero-emission project considers housing as a community-based local industry and aims at the establishment of a low-carbon society by 2015 with a total of a million people including corporations, customers, and local residents.
We have established seed banks for each area in accordance with “national land classification for biodiversity” determined by the Ministry of the Environment. Using the seeds, we produced vegetation mats with a unique patent technology and provided them for roof greening in big cities. This contributes to reducing heat island effect and recovering biodiversity.
While fuel was not able to be procured due to the March 11 Great East Japan Earthquake, we produced BDF in the local BDF network, delivered emergency supplies and food using Iwate co-op trucks, and distributed meals. We present these activities as well as the following work aiming at expanding the use of BDF in Iwate.
NPO Japan Forest Biomass Network is engaged in creating a sustainable society through the utilization of forest resources. We promote the establishment of a local recycling society with self-reliable energy and employment, centered round Miyagi, through the dissemination of woody biomass fuel in reconstruction from the Great East Japan Earthquake.

Special Award: Contribution to the Region Damaged by the Great East Japan Earthquake (Extra Prize: McDonald’s Special Award)

Reconstruction Support with Dissemination of Woody Biomass Fuel

<Community Activities Group>
NPO Japan Forest Biomass Network (Miyagi)
11-1 Genko, Horiguchi, Shiwaheime, Kurihara-city, 989-5625
(Phone) 0228-22-6721
URL: http://jfbn.org/
We are aiming at the creation of a recycling society through donating solar power facilities to kindergartens all over Japan and raising awareness about local environment, starting with kids’ questioning “what we should do to stop Sora and Bea's tears.” We also contribute to the reconstruction in a unique Japanese way, using solar power trucks that can generate and supply electricity while delivering.
It is said that 70% of Japan’s land has underground water veins. Such underground water has stable temperature all year round, and it is an available resource that can be utilized widely. Making effective use of this resource, underground water heat pump air conditioner reduces the energy consumption and thus running cost; therefore, it can serve as a driving force for realizing a low-carbon society.
Sponsoring and Cooperating Companies’ Award: Best Global Award (Awarded by British Council)  
Alternative Energy Utilizing Waste Heat from Hot Springs and their Drainage with Biomass Fuel

<Community Activities Group>
The Regional Council for Global Warming Measures in Nasu Onsen (Tochigi)  
182 Oaza-Yumoto, Nasu-cho, Nasu-gun, 325-0301  
(Phone) 0287-76-2755  
URL: http://www11.ocn.ne.jp/~shinnasu/ondankakyougikai/kyougikai.htm

In the background of an increasing global need for Global Warming Measures, Nasu, a royal resort with an Imperial Villa, is promoting active use of biomass and unused energy sources to create a carbon-neutral town with the aim of reducing greenhouse gas emission by utilizing waste heat from hot springs and their drainage as an alternative energy, as well as by cooperating with forestry, agriculture, pasturage, and industry.
We are a window wholesale firm in the Tokyo metropolitan area. Our main products are “windowpanes” and “sashes” with various eco-friendly functions. With our corporate philosophy of “Contribute to the society through windows,” our staff together with local business partners are making efforts for environment preservation through our business, such as energy saving and CO₂ reduction in housing.

Sponsoring and Cooperating Companies’ Award: Best Home Ecology Activity Award (Awarded by LIXIL Corporation)

“CO₂ Reduction” by Reforming Existing House Windows to Heat Insulation

Matex Corporation (Tokyo)
2-14-11 Kamiikebukuro, Toshima-ku, 170-0012
(Phone) 03-3916-1256
URL: http://www.matex-glass.co.jp/
Students are managing a cafe in Naoshima, an island in the Seto Inland Sea. Through its management, we are working on various environmental activities. Also, we actively participate in local environmental events to facilitate activities rooted in the community.
The basic principles of Soto School of Buddhism are “respect for human rights,” “establishment of peace,” and “conservation of environment.” Chosenji Temple started environmental activities from the standpoint of “spirit of valuing life and things.” We have obtained ISO 14001 to avoid ad hoc-ism, and aim at establishing a big circle of environmental activities involving supporters, believers, and local communities.
Focusing on “town,” “life,” and “corporate activities” such as commercial facilities, hospitals, nursing homes, and sports clubs, we have established a unique “community for saving energy and water” with leading-edge “ECOIS” as a core technology, which is “an energy network,” “an analysis tool for saving energy and water,” and “a supporting tool for energy saving” developed by joint research with Tokyo University.

ECOIS: Advanced Energy Saving Network, Analysis, and Support System

Sponsoring and Cooperating Companies’ Award: Best Communication Award (Awarded by Alterna Inc.)

Pico Ada Co., Ltd. (Tokyo)
Nozawa Building 4F, 9-8 Ichiban-cho, Chiyoda-ku, 102-0082
(Phone) 03-3453-4074
URL: http://www.picoada.co.jp/
Obayashi Corporation rebuilt a company’s dormitory (5-story, 122-room) with energy saving, resource saving, and CO$_2$ reduction technologies, aiming at making an “environment-friendly company dormitory” that would contribute to a low-carbon society. It increases the residents' awareness about natural ecosystem preservation, and it also targets the preservation of the local environment.
We started engaging in environment education in 1995, with preserving oak woods as a biotope. Since then, for 17 years, we have implemented hands-on environment education by doing the best we can for nature and the environment, with support from parents, local community, government, NPOs, and enterprises.
We established “Santou Child Care Supporters” under the basic principle that “ecology is necessary for the physical and mental development of children, and parents are fostered by children and community.” We are engaged in environmental activities in our school, children’s home, the school area of Santou, and all over old Ueki-machi in order to contribute to global warming prevention. We are the representative of Kumamoto for Low-Carbon Cup 2012.

Sponsoring and Cooperating Companies’ Award: Best Community Ecology Activity Award (Awarded by NPO Weather Caster Network)

“Eco Fosters E-ko (Good Children) and Community”

We established “Santou Child Care Supporters” under the basic principle that “ecology is necessary for the physical and mental development of children, and parents are fostered by children and community.” We are engaged in environmental activities in our school, children’s home, the school area of Santou, and all over old Ueki-machi in order to contribute to global warming prevention. We are the representative of Kumamoto for Low-Carbon Cup 2012.
Sendai Factory of Chuetsu Pulp & Paper produces 300,000 tons of paper a year in Kagoshima. We put much effort into paper production utilizing local resources including bamboo and thinnings, and we are the only bamboo-made paper producer in Japan. We contribute to the society and environment through paper production rooted in the local community.
Asaza project, a citizen-oriented public project, considers the government as a part of the society's network and realizes the public good with public and private sectors actively working together. In this project, we spread Global Warming Measures into various sectors of the society. Ushiku-city, with which we have cooperated in community development learning, and we together started the development of a "biomass town plan."

Jury's Special Award: Best Regional Cooperation Award
A Project for Proposing a Social Model that Realizes a Recycling Society (Low Carbon Society), with BDF Production around Ushiku-City as a First Step of Implementation.

NPO Asaza Fund (Ibaraki)
6-387 Sakaecho, Ushiku-city, 300-1233
(Phone) 029-871-7166
URL: http://www.kasumigaura.net/asaza/
Started in 2006, Tokyo Trucking Association’s “Green Ecology Project” is a continuing effort of eco-driving by trucking businesses on the basis of the association’s unique CO₂ reduction measures. It promotes CO₂ reduction, cost reduction, and accident prevention, and it also supports active engagement in eco-driving.

Jury’s Special Award: Best Innovation Award

Green Ecology Project Promotion

<Community Activities Group>

Tokyo Trucking Association (Tokyo)
3-1-8 Yotsuya, Shinjuku-ku, 160-0004
(Phone) 03-3359-3617
URL: http://www.totokyo.or.jp
Since 2004, we have been engaged in dissemination of renewable energy and promotion of energy saving in Southern Shinshu region centered around Iida-city of Nagano Prefecture, in cooperation with citizens, the government, and private enterprises.

Jury’s Special Award: Best Innovation Award

Local Energy Production for Local Consumption Invested by the Citizens

<Social Business Group>
Ohisama Shinpo Energy (Nagano)
2-15 Honmachi, Iida-city, 395-0044
(Phone) 0265-56-3711
URL: http://www.ohisama-energy.co.jp/

Since 2004, we have been engaged in dissemination of renewable energy and promotion of energy saving in Southern Shinshu region centered around Iida-city of Nagano Prefecture, in cooperation with citizens, the government, and private enterprises.
Our company produces and sells moss sheets for roof and wall greening with moss. This project is engaged by moss professionals, focusing on the unique characteristics of moss, such as that moss dies holding CO₂ inside, while other plants emit CO₂ when they die, and also moss is maintenance-free.
Nasunogahara Land Improvement Districts is aiming at “local food and energy production for local consumption” in an area of 40,000 ha along Nasu Drainage. We engage in renewable energy and forest preservation including seven small-scale hydroelectric generation projects, resource utilization with woody biomass, and community activities such as paddy field school, aiming at the establishment of a low-carbon society in cooperation with various entities.
Kawasaki Citizens Ohisama Project started installation of renewable energy facilities in 2006, funded by citizens and businesses. We installed a solar energy facility in Kawasaki International Center in 2008 and a solar water heater in Kawasaki Frontale’s clubhouse in 2011. Currently, we are discussing installing a third facility.
This Green Curtain Project enables “fun,” “cool,” and “tasty” CO₂ reduction throughout spring, summer, and fall, resolving the problem of “earth-friendly = bothering”! There were a large number of various participants in the project due to the cooperation with local residents, nursery schools, public administrations, companies, and students as well as broadcasters.
Original Characters “Environment Fighter Eagle-Man” and “Mr. CO₂” teach kindergarten and nursery school children about “global warming” in a way that children can understand. They use “ECO ninja arts” to instruct them about i) switching off TV when not watching, ii) frequently removing cords from the wall outlet, and iii) quick opening and closing of refrigerator doors. They also perform “Stop Global Warming Dance.”
Nishiyama Forest Improvement Promotion Council engages in forest improvement activities in cooperation with various entities. In partnership with Forestry and Forest Products Research Institute, we started managed tree trimming to stimulate sprouting and vegetation survey, as well as a “practical survey for the establishment of modern Satoyama (village forest) maintaining system,” which utilizes trimmed trees as biomass energy by introducing wood stoves in the region.
Okinawa is Japan’s only prefecture where Japan Railways (JR) is not running, and thus heavy reliance on vehicles is causing troubles in daily life. In such a situation, a civic group “Bus Map Okinawa” is aiming at promoting the use of buses, which are an eco-friendly public transportation. Since 2008, we have been creating and distributing “Bus Map Okinawa,” an information tool for public transportation including buses.
Triggered by students’ desire of “producing electric vehicles,” we started production in the fall of 2008. We also produced electric generation and storage devices using renewable energy and a garage with charging equipment. This no-CO₂-emission system was developed by the concentration of all school knowledge, in cooperation with local companies.
In this project, students themselves spotlight waste in their own school, engage in recycling activities exploiting their knowledge as engineering students, and propose a system that shares their achievements with a wider community. By doing so, we engage in the establishment of a new low-carbon society. This is a model of human resource development and social action, putting students as main actors, in cooperation with industry, government, and academia.

Excavation of Unused Resources on Campus

<Student Activities Group>

Chiba Institute of Technology (CIT) Manufacturing Project (Chiba)
2-1-1 Shibazono, Narashino-city, 275-0021
(Phone) 080-5533-5896
Junior high school and high school students with love of making things get together and produce fuel-efficient vehicles. We hand-make bodies and frames. Every year, we participate in the “HONDA Eco-Mileage Challenge National Competition” in which people compete how far their vehicles can go with one liter of gasoline. In the 31st competition held in October 2011, we recorded our best, 300 km/L.

Production of Vehicles that can Travel around Japan with One Liter of Gasoline.

<Student Activities Group>
Junior High School and High School of Kogakuin University, Motor Vehicle Club (Tokyo)
2647-2 Nakanomachi, Hachioji-city, 192-8622
(Phone) 042-622-9291
URL: http://www.js.kogakuin.ac.jp/
Based in Hitotsubashi University, Qanbei makes plans about systems that contribute to global environment improvement, and introduces and manages them on campus. We also engage in the deployment of the systems so that they can sustainably work even when managed by those other than Qanbei.
In cooperation with Mie University that aims at the “world’s best environmentally advanced university,” we conduct various activities including promotion of energy saving and 3R (Reduce, Reuse, Recycle) on campus, community contribution, and international environment activities. Through these activities, students increase awareness of the environment and start actively addressing environmental issues in society and in their personal lives, which would lead to promotion of a low-carbon society.

Environment Activities by Mie University’s Environment ISO Students Committee

Mie University, Environment ISO Students Committee (Mie)
1577 Kurimamachiyacho, Tsu-city, 514-8507
(Phone) 080-1563-6707
URL: http://www.ceme.mie-u.ac.jp/student/
Our research group is a club where environmentally aware students seek to be environment professionals responding to the new environment and energy era. We aim at reducing CO₂ through planning, developing, and installing small-scale hydropower facilities. We also learn from collaboration with local government, communication with and contribution to the local community, and instruction from company engineers (advisory teachers) about environment technology and manufacturing.
In collaboration with Obihiro-city, an Environmental Model City in Japan, we started the use of biodiesel fuel made from collected waste edible oil for delivery vans in June 2011. In the same month, general sale of biodiesel fuel started in local gas stations; therefore, we also widely conducted promotion activities for biodiesel fuel use, including the introduction of necessary vehicle equipment.
We engage in delivering a healthy life to families and creating a truly affluent society, through house building with domestic solid woods and traditional construction and through our proposal for actively taking natural energies into our life.
A J-League team Shimizu S-Pulse started ecology activities named “S-Pulse Eco-Challenge” in the 2008 season. We achieve carbon-offset 5 years of CO₂ emitted by home games (about 360 t/y). We also make an effort in promotion to encourage supporters to practice countermeasures against global warming.

S-Pulse Eco-Challenge

<Corporate Activities Group>
S-Pulse CO., LTD (Shizuoka)
2695-1 Miho, Shimizu-ku, Shizuoka-city, 424-0901
(Phone) 0172-97-2157
URL: http://www.s-pulse.co.jp/

ご清聴ありがとうございました。
We came up with the idea of putting moss (racomitrium canescens) on the roof of a pickup truck. This is a “car with (tyaku) moss (koke) on the roof (yane),” so we named it “Ya-ne, Koke Tyak-Car.” It absorbs CO₂ and generates O₂. It’s going to be fun if this becomes a global standard. Why don’t you try moss yourself?
We are engaged in various activities preventing global warming in order to expand the wave of ecology from an eco-friendly hot spring inn. We have developed a boiler that can directly use thinning from local forest and largely reduced CO₂ emission. It attracted a great deal of interest from other regions, and we also cooperate with Manno-cho’s biomass town plan.
Due to the decision made by the Japanese government following the Kyoto Protocol, 2/3 of planned CO\textsubscript{2} reduction should be absorbed by the forest. The forest that can be counted for CO\textsubscript{2} reduction under international agreements is "manageable forest." Therefore, many forest managers do "cut-off thinning" in which thinning are wasted without being used. We are making efforts for commercializing the use of unused thinning.
We collect waste edible oil from members of our organic vegetable delivery service managed by Daichi wo Mamoru Kai and make diesel fuel from it. The fuel is used as tractor and other fuel for producing vegetables, which are then sold as “Yukaina Yasai Monogatari.” For the word “yukai” (cheerful), “yu” means oil and “kai” means collection. This is a recycling-type alternative energy rooted in daily life, which solves CO₂ and recycling issues.