Examples of the Best Practice

Year	FY 2007 (the Grand Prize winner)	Area	Kyoto City in Kyoto Prefecture
Title	Let's reduce "wood mileage" by using local trees		
Applicant	Forest Research Course, Kyoto prefectural Kita-kuwata High School	Participants	about 100 people (Students, Teachers)
		Budget	—
Outline	➢ The Kitayama area of Kyoto City has supplied wood and timber for building purposes to Heian-Kyo, the ancient capital of Japan for 1200 years. However in recent times, due to the inflow of imported timber and the depression, local forestry and timber industry are in decline. ➢ Since 1993 this school has promoted the use of local timber by building furniture and log houses using coniferous wood raised in Kyoto City.  ➢ In 2005, following the enforcement of Kyoto Protocol, the promotion of proper management of artificial forests (absorption of CO2) and consumption of local timber (reduction of wood mileage) were focused upon as means for the reduction of CO2 emission. ➢ In 2006 the initiative was recognized as "Local timber using business" (first among schools) and achieved the certification of "Wood Mileage accreditation system" by the Kyoto Prefecture. Also implemented a PR campaign that explained CO2 reductions to the buyer during the sale of local wood products.  ➢ In 2007, a model house was built using J-pod system (A new building method that promotes the effective usage of thinned wood) developed by Kyoto University and usage of thinned wood as a building material is being evaluated and proposed.		
URL	http://www1.kyoto-be.ne.jp/kitakuwada-hs/		

Year	FY 2007 (the Gold Prize winner)	Area	Tsuru City in Yamanashi Prefecture
Title	Small-scale hydroelectric power plant financed woth publicly offered bond		
Applicant	Tsuru City (local governmental body)	Participants	34,429 Citizens , 161 Creditors
		Budget	150,000 Yen Annual
Outline	➢ Tsuru city ,which is blessed with a rich water resource, had a hydro electicity power station from 1903 to 1953 that used river water for power generation and was the one of the first areas within the prefecture supplied by electricity. ➢ In this background, the "Tsuru City Regional New Energy Vision " (2002) focused on hydroelectricity generation as a priority policy and started to investigate the possibility of implementation. ➢ In 2004 which was the 50th anniversary for the City, it was decided to build a small scale hydroelectric power plant. Considering the visual impact and the contribution to environmental education, the facility was located in a place easily accesible to the public (in front of the city office building, next to a primary school) and in the shape of an open wooden wheel and has been operating since 2006.   ➢ About 40% of the installation cost was supplied by a publicly offered Local Government Bonds prepared for the construction of the hydroelectric power plant. ➢ The electricity produced in the power plant is used in the city office building and is contributing not only to the reduction of CO2 emision but also to the reduction of electricity bill for the city office ➢ The "Small scale hydro electricity town (Aqua valley - TSURU) promotion policy" which was formulated in 2006 , is evaluating the potential sites for installment off small scale hydro electricity plants and the potential users for the electricity produced".		
URL	http://www.city.tsuru.yamanashi.jp/forms/info/info.aspx?info_id=2681		

Year	2007 (the Silver Prize winner)	Area	Toyama City in Toyama Prefecture
Title	Transformation of the Toyama port line to LRT (Light Rail Transit)		
Applicant	Toyama city (local governmental body)	Participants	—
		Budget	—
Outline	➢ Increase in the usage of private cars and the scattering of city areas in Toyama City has let to the weakening of the public transport and the Toyama Port line operated by JR-West also has seen a large reduction in the number of users raising questions about its existence. ➢ In response to an aging society and to move towards a low carbon society, Toyama city decided to reactivate its public transport and centralize the urban infrastructure to construct a compact city where one can live without depending on cars. ➢ As the first project, the Toyama port line opened as a LRT in April 2006 and managed to greatly increase the convenience to the public by improving the service level. ➢ In terms of operation, the number of trains operating during the day (1hour interval to 15 minutes interval) ,and the time of the last train (9 PM to 11 PM) was improved. In terms of installation, all the trains were changed to ones with a low floor and a barrier free environment was created in the platforms by getting rid of steps. ➢ The number of users of the Toyama Light Rail increased by about 2.1 times in weekdays and by 4.6 times in holidays compared with old Toyama Port Line. Out of the total number of users, 12% were people who actually started using train and stopped using their own cars.		
URL	http://www.t-lr.co.jp/		

Year	2007 (the Bronze Prize winner)	Area	Numata town in Hokkaido
Title	Usage of cold energy from snow as a local resource		
Applicant	Numata Town (local governmental body)	Participants	3,934 people
		Budget	Annual 1,000,000 Yen
Outline	➢ Numata town has an annual snowfall level of 10m and has agriculture as the main industry. Snow, which used to be a nuisance, is now being used for the storage for agricultural products. ➢ In 1996, a rice storage facility using snow (“Snow Cool Rice Factory”) was constructed which had an adequate environment for the storage of rice (temperature of 5 degrees celcius and a humidity of 70%). The rice sold from here was branded as “Setchumai” (rice in the snow). ➢ After the success of this facility, interest in the usage of snow greatly increased and various facilities started using the cold energy from snow. ・ Public facilities (educational facilities, aged care facility, snow museum etc) using snow cooling ・ Cooling of cattle shed, cultivation experiment of agricultural products and flowers ・ In the Snow Museum, the snow room has been made available to the public for free which can be used for storing agricultural products. ・ Several cases are seen where residential houses and shops have started using snow cooling. ➢ Following “Setchumai”, various products have been designed on the concept of utilization of the local agri products and storage/maturation using snow, including Japanese sake, miso (fermented soy bean paste) and noodles. ➢ At present, an initiative where snow thrown out from roads is collected at one place as a giant snow mountain and used in the next summer (Snow Mountain Centre project) is being investigated. The concept visualizes creating a snow mountain of 5000 tons in 2008 and of 100,000 tons in the future.		
URL	http://www.town.numata.hokkaido.jp/		

Year	FY 2008 (the Grand Prize winner)	Area	Kyoto City in Kyoto Prefecture
Title	Reduction of CO2 from classroom by 80% by using wood heating		
Applicant	Kyoto municipal Kumogahata junior high school	Participants	35 people
		Budget	18,000Yen
Outline	➢ The Kumogahata area of the Kyoto City lies in a forest area which preserves water resources for the Yodo river which supplies water to Kyoto and Osaka. However, in this area the usage of firewood has become very rare and the co-relation with the forest has become very weak. ➢ From FY 2004, as a part of environmental education, the usage of wood stove was started as an experiment. The usage of stoves was increased and in FY 2007 all the classrooms used wooden stoves for heating which saved the usage of 1,350 liters of kerosene. ➢ Activities such as tree thinning, logging, wood splitting are carried out by the students and the teachers along with the families of the students and university students. The number of students in this school is only 8 but about 70 people participated in this activity in FY 2008. ➢ The students started measuring the room temperature since using the wooden stoves and found that the temperature was quite different between the floor and the ceiling. From this observation, a fan (using electricity from solar sources) was used to mix the air in the room and hence use the heat more effectively in the room. ➢ Using the solar panel which the students installed themselves in the roof, activities such as sprinkling water in the roof, using fans are being carried out to stop using air conditioning during summer.		 
URL	http://www.edu.city.kyoto.jp/hp/kumogahata-c/		

Year	FY 2008 (the Gold Prize winner)	Area	Ojiya City in Niigata Prefecture
Title	Build in snow room, A house where snow from the winter is used for cooling in summer		
Applicant	Study Group on Snow Country Housing (Voluntary group of architect and builders)	Participants	28people
		Budget	420,000 Yen Annual
Outline	➢ Ojiya City has heavy snowfall with snow accumulation of 2m in average winter. The Study Group on Snow Country Housing was formed in 1989 and has been carrying out research work relating to houses suitable to the climate of areas with heavy snow. ➢ In FY 2005, with the support of Niigata Prefecture, houses with snow aided air conditioning was proposed to people who had lost their homes due to the earthquake of September 2004. Houses with built-in snow rooms completed in April 2006. ➢ The usage of snow in these houses is as shown below ・ A room in the ground floor of a 3 storey house is made as a “snow room” and used for storing snow that slips down from the roof. ・ The stored snow (about 30 tons) is used for cooling 3 rooms. 30 tons of snow is sufficient to cool an area equivalent to about 35 square meters for one summer. ・ A small freezer room (about 6 square meters) is located next to the snow room where rice, sake and vegetables can be stored at 5C. ➢ The snow air conditioning system is very simple and hence the consumption of electricity is very little (electricity bill is only about 1000 yen for the whole summer). Additional benefit is that dust etc from the air gets attached to the snow helping clean the air.		  
URL	http://www.yukidaruma.or.jp/experiment/ http://www2.ocn.ne.jp/~yukiken/		

Year	FY 2008 (the Silver Prize winner)	Area	Geisei Village in Kochi Prefecture
Title	Implementation of a low carbon agriculture by using wood pellets as fuels for greenhouse cultivation		
Applicant	Kochi Biomass Farm	Participants	10 people
		Budget	Annual amount of 10million yen
Outline	➢ Greenhouse cultivation, which is one of the main industry of Kochi prefecture, has a high consumption of diesel for heating during the cultivation of vegetables and flowers in winter. It is estimated that CO2 emission from greenhouse cultivation amount to about 5% of the total emission in Kochi Prefecture. ➢ The proponent of this project is a group consisting horticultural farmers involved in the cultivation of green pepper, egg plant and flowers. In winter (November to April) diesel for the members' greenhouse amounted for CO2 emission equivalent to 870 tons in a season. ➢ In FY 2007, cooperation was given to an experiment involving heaters using wooden pellets. In FY 2008, all the members started using 1 or 2 heaters using wooden pellets. From next year onwards, it is intended to increase the number of there heaters and subsequently substitute all the diesel heaters with the ones using wooden pellets. ➢ It was possible to obtain a subsidy for using the heaters under the "voluntary national emission trading scheme" operated by the Ministry of Environment. It was promised that during 2005 to 2007, a reduction of CO2 by 300t (from 870 t-CO2) would be obtained. ➢ Heating is being done without any problem by using wood pellets. At present, pellets from other prefectures are being used but in the future if a factory is available inside the prefecture, local product from the prefecture will be given preference.		  
URL	http://www.jccca.org/daisakusen/area3/kouchi/index.html		

Year	FY 2008 (the Bronze Prize winner)	Area	Miyakojima City in Okinawa Prefecture
Title	Japanese buckwheat cultivation (double-cropping with sugarcane) project in the Coral Island		
Applicant	Environmental Study Group, Okinawa prefectural Miyako vocational high school	Participants	6 People
		Budget	Annual 40,000 yen
Outline	➢ Miyakojima, which is an island made of uplifted coral, has no rivers and depends on groundwater for drinking water. The biggest challenge is the contamination of groundwater by chemical fertilizers. ➢ Sugarcane, which is the main agricultural product of Miyakojima, has a high CO2 fixing capacity and is being focused as the raw material for bio-ethanol. However, cultivation of sugarcane only is not sufficient for people from economic point of view ➢ The usage of the Idle land after harvesting of sugarcane was investigated and it was concluded that it was suitable to grow Japanese soba (buckwheat), which had never been cultivated in Okinawa. ・ Additional income to farmers engaging in sugarcane cultivation ensuring that the production of sugarcane can become economically sustainable ・ Very good for nitrogen intake capacity from the soil and also contributes to the preservation of groundwater ・ Buckwheat grows so fast, that it can be harvested before the start of the typhoon season. ・ After harvesting, leaves and stems can be used as fertilizers in the cultivation of sugarcane. ・ Contribution to the reduction of food mileage by the consumption of local product. ➢ In 2008, Japanese soba was cultivated in a field equivalent to 25 ares and 250 kg was harvested. The quality of the soba powder received a very good review from experts.		  
URL	http://www.miyasou-h.open.ed.jp/		