

The New Energy Award

Recipient projects for the thirteenth New Energy Award were finalized in December 2008. **Masaki Yamada** examines the status of new energy development and application in Japan as seen through the winning projects.

The New Energy Award was launched in 1996 as the Award Program for 21st Century Type New Energy equipment/System and Application (New Energy Vanguard 21; the name changed to New Energy Award in 2000), with the aim of encouraging the growth of new energy by recognizing outstanding new energy equipment and their applications. In FY2004, the category of the awards was expanded as part of improvements geared toward promoting new energy.

A total of 146 projects have been awarded over the thirteen years to FY2008. Each has played a significant role in developing and encouraging the use of new energy equipment and systems, with some cutting-edge and leading examples. Makoto Tanaka of the New Energy Foundation, which oversees the New Energy Award under the auspices of the Ministry of Economy, Trade and Industry, explains the circumstances that led to the establishment of the Award.

“The Japanese government developed the Basic Guidelines for New Energy Introduction in 1994, and in response New Energy Vanguard 21 was established, the predecessor of the New Energy Award. The government began a major effort to promote the use of renewable energy obtained by solar power and wind power generation and recycling energy exemplified by waste power generation, which were still at a nascent stage at the time the Award was established. New Energy Vanguard 21 started hand in hand with these government initiatives.”

The New Energy Award is not only given to tangible products such as energy equipment and systems. In fact, there are eight divisions to the Award, which include advanced and unique

services related to new energy (including financial products), actual adoption of new energy by local governments and NPOs, and activities for promoting new energy and raising awareness. Starting in FY2008, a Best Green Energy Introduction category was added for corporations and local governments that use new energy through the Green Power Certification System, a program for contracting power generation using renewable energy.

The criteria for examining the New Energy Award are multi-faceted, and include its innovativeness, track record, future potential, economy, and effectiveness in encouraging use and building awareness. Selections are made by the New Energy Award Review Board, which consists of experts in the field. In FY2008, forty-six applications were received from all parts of Japan, and nine were awarded as a result of the strict but fair selection procedure.

Projects Praised

The Minister of Economy, Trade and

Industry Prize, the New Energy Award equivalent to the gold prize, was given to the Tsubetsu-Tanpan Cooperative of Hokkaido. The Cooperative directly incinerates large volumes of sawdust generated from a local lumber factory that processes conifers and recovers electricity and heat, thereby reducing waste treatment and energy costs for the factory and establishing a more economic woody biomass cogeneration system. Fossil fuel consumption was reduced by 24,000 kiloliters per year in crude oil equivalent, along with a reduction in CO₂ emissions of 69,000 tons. The Cooperative also supplies part of the electricity generated as green electricity, thereby successfully establishing a business that encompasses forestry, lumber manufacturing and biomass energy use. The Award gives high marks to the innovative and effective use of woody biomass.

The Director-General of the Agency for Natural Resources and Energy Prize, equivalent to the silver prize, was given to the Bureau of Sewerage, Tokyo Metropolitan Government and Sony Corporation. The Bureau successfully produced carbide fuel from sewerage sludge that was formerly treated by incineration, and used the fuel as biomass fuel to be mixed with coal at coal thermal power plants. The initiatives to improve the efficiency of energy systems and convert sludge into an energy resource are the main points credited.

Sony Corporation introduced the Green Power Certification System in



The Hokkaido factory of Tsubetsu-Tanpan Cooperative, a lumber manufacturer praised for its innovative and effective use of woody biomass.



Example of a Certificate of Green Power purchased by Sony Corporation.

use of new energy, we must deepen understanding among those who are not yet familiar with it.” As an example, the minister mentioned that collaboration with other ministries and agencies would be sought to adopt solar power generation systems in facilities of the national government and railway and other public facilities, so that the public would get to see actual systems.

Beyond Development

A look at the recipients of the first New Energy Vanguard 21 reveal that they are mostly projects by major companies, such as an electric vehicle

(Toyota Motor Corporation), a solar power generation system for multimedia (NTT), a solar power generation system for households (Sharp Corporation) and a collective wind power generation system (Tohoku Electric Power Co.). In recent years, however, “Not only large projects by major companies but also small and midsize companies and local governments that have made sustained efforts to develop and adopt new energy

have come into focus,” noted Tanaka. The nature of the projects recognized also seems to have undergone significant changes in the past twelve years.

Tanaka explains: “One of the major changes is that the number of composite projects and comprehensive and diversified services has increased among recipient projects. In the past, the majority of recipients were for a single technology, such as solar power generation, wind power generation and fuel cells. Today, we see recipi-

ents of composite technologies that combine solar power generation and fuel cells, and comprehensive services where operation support and maintenance services are provided instead of merely selling new energy equipment. We also see businesses making use of the Green Power Certification System, as evidenced by the establishment in FY2008 of the Best Green Energy Introduction category. At the outset, awards were given mostly to new energy equipment and products that were newly developed. In recent years, many of the recipients have been companies, local governments and NPOs that have adopted energy equipment and have been involved in activities to encourage the use of new energy and promote awareness. In other words, new energy is now moving on to the phase of broader aware-

2001 and is the greatest user of green electricity among Japanese corporations today. Sony is also actively engaged in supporting forest conservation, which provides fuels for woody biomass power plants. The company was praised for its contributions in encouraging the adoption of new energy, in terms of both demand and supply.

Five more entities were also awarded the Chairman of New Energy Foundation Prize, including Sekisui House for commercializing a ready-built house product that significantly reduces CO₂ emissions by utilizing solar power generation systems and fuel cells (CO₂ Off House); Numata Town Government of Hokkaido for developing a cold energy station utilizing large volume of collected snowfall; and Electric Power Development for building Japan’s largest wind farm, with an output of 65,980kW.

Also, the Forum for the Future Energy, Okayama, which received the Review Board Chair’s Prize, earned recognition for its consistent efforts in raising awareness of new energy through its natural energy caravan, dispatching lecturers and hosting events, which started when the organization set up a solar power generation facility at a local kindergarten.

Regarding this year’s recipients, Minister of Economy, Trade and Industry Toshihiro Nikai commented that, “To continue to encourage the



The carbonized sewerage sludge facility of the Bureau of Sewerage, Tokyo Metropolitan Government, praised for the efficiency of its energy systems and for converting sludge into a resource.

ness enhancement, incorporation and practical application, expanding from the phase of development.”

In addition to recognizing cutting-edge examples and promoting new energy development, a major theme of the New Energy Award is to inform the public of the current status of new energy through promotional activities, and to deepen public awareness of energy usage and related issues. ■

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