



CASE STUDY

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SONY LEADS THE CHARGE OF RENEWABLE ENERGY IN JAPAN

Sony is instrumental in prompting an increase in a wider range of renewable electricity use by numerous leading Japanese companies through its Green Power Certification System, making it a renewable energy leader. It is also one of the largest users of renewable energy in Japan.

THE COMPANY

Sony is a leading global manufacturer of audio, video, communications and information technology products worldwide for the consumer and professional markets.

WHAT MAKES SONY A RENEWABLE ENERGY LEADER?

Sony plays a lead role in promoting renewable energy in Japan, specifically through its development of the hugely successful Green Power Certification System.

THE CASE

Sony's involvement in the scheme started with the 'Sony Environmental Vision' in 2000 that established principles for environmental management activities throughout the Sony Group worldwide. Sony set eco-efficiency targets to reduce greenhouse gas (GHG) emissions from its business operation, while exploring a new way of using renewable energy not currently available to companies in Japan without their own power generation facilities.

Sony first chose wind power (causing little environmental impact) and later added the popular wood chip biomass (a stable power generation system unaffected by weather and allowing some collaboration with the local community). But to use green power



Sony needed its own power generation facilities, or have such power supplied by a nearby power generation plant. So, in 2000, in cooperation with Tokyo Electric Power Company, it developed Japan's first 'Green Power Certification System'.

The scheme allows a company or individual to entrust certain providers to generate power from renewable resources, and bears the cost of the power generation. The idea is to 'regard it as use' of green power. This system means that green power can be used at a location far from where the power is generated.

Initially, the green power certificates were only given for electricity generated from qualified technologies, such as solar, wind, geothermal, biomass and hydropower. However, the Green Power Certification System was expanded in 2008 to include green thermal energy for heat generation.

SONY

- Led the development of the Green Power Certification
 Scheme
- In just over a decade the Scheme has prompted an increase in a wider range of renewable electricity use by more than 400 leading Japanese companies.



Although solar thermal energy was the main target, the thermal project scope was enlarged to include snow and ice energy, as of 2010.

This expansion increased the interest in green certificates further, and today over 400 companies and organizations in Japan buy energy from the Green Power Certification System.

Sony also uses the scheme to contribute to the conservation of forests. Noshiro wood biomass power plant in Akita Prefecture, with which Sony has agreed a Green Power Certification System purchase contract, uses timber gained from tree thinning as its main fuel. However, the high cost of transport means excess timber is often left where it is cut. From 2008 to 2012, Sony donated funds to cover part of the transportation cost of timber for this program.

As well as making extensive use of green power, in April 2012 Sony signed a three-year biomass heat production contract with Japan Natural Energy Company Limited, and began buying Green Heat Certificates for heat generated by wood biomass combustors. Green Heat Certificates recognise that the user is buying green heat produced through the combustion of biomass (or other renewable energy technology that does not increase the volume of CO₂), so contributing to the reduction of CO₂ emissions. With this contract, Sony has agreed to buy 133,333 GJ of green heat a year, making it the largest purchaser of Green Heat Certificates in Japan

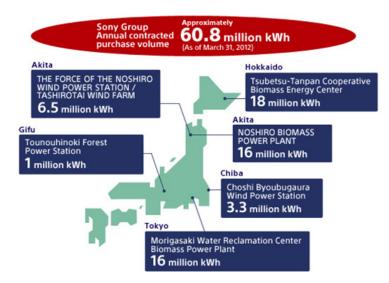
THE IMPACT

- In 2011, the Green Energy Certification
 Center certified a total of 330 million kWh
 of green power, recording a historical high
 since the Scheme started in 2001. The
 increase was due to subsidies introduced
 by the national and local governments in
 2009, which boosted the number of new
 installations of residential PV systems.
- The cumulative amount of certified green power generated under the Green Power Certification System has been steadily increasing; from a base of 0 in 2000, cumulative generation rose to more than 1,400 GWh in 2011.

"JOINT DEVELOPMENT OF THE GREEN POWER CERTIFICATION SYSTEM IN JAPAN HAS BROUGHT US MANY CHALLENGES AND OPPORTUNITIES AS A PIONEER OF RENEWABLE ENERGY USE. THE BIGGEST CHALLENGE WAS TO GAIN THE AWARENESS AND SUPPORT WITHIN THE COMPANY FOR THIS ENTIRELY NEW CONCEPT, AS WELL AS FROM THE SOCIETY. STEP BY STEP, WE WERE ABLE TO GAIN RECOGNITION FROM BOTH INDUSTRY AND CONSUMERS. IN 2011 WE STARTED TO PURCHASE GREEN HEAT CERTIFICATES. WE ARE VERY HAPPY TO TAKE THE INITIATIVE IN INTRODUCING RENEWABLE ENERGY FOR A RANGE OF APPLICATIONS."

YASUHIRO TAKEMURA, MANAGER, CORPORATE WORKPLACE SOLUTIONS, SONY CORPORATION.

Contracts and Annual Volume Purchased in 2011



- The total number of green power generation facilities accredited by the Green Energy Certification Center in 2008 increased to 121, equaling a total power generation capacity of 161 MW, up from 94 MW in the previous year.
- And as of March 2011, the Sony Group finalized a Green Power Certification System purchase contract for 60.8 million kWh annually, equivalent to around 3.45% of the Group's total power use in Japan.
- The use of renewable energy is also a key part of Sony's effort to reduce GHG emissions. In 2011, the use of the Green Power Certification System and the introduction of solar power generation systems helped reduce Sony's CO₂ emissions by approximately 123,000 tons; while the contract with the Japan Natural Energy Company Limited will reduce Sony's GHG emissions by approximately 8,000 tons a year, and raise the total green power purchased by all Sony Group companies in Japan to about 55.45 million kWh.

BY PROMOTING THE USE OF CLEAN POWER THAT DOES NOT INCREASE CO EMISSIONS, THE SONY VISION OF A GREENER FUTURE IS WELL UNDERWAY.

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