

# Carbon Offset Solutions

Carbon offsetting—self-initiated activities to reduce greenhouse gas emissions—has now commenced in Japan. *The Japan Journal* asked Professor **Hironori Hamanaka**, chair of the Institute for Global Environmental Strategies Board of Directors, for his views on the challenges ahead.

## Please give us the background to the carbon offsetting movement.

Emissions of CO<sub>2</sub> and other greenhouse gases cannot be avoided completely in our daily lives and economic activities, even if we strive to reduce them. The concept of carbon offsetting is one of investing in greenhouse gas reduction activities at a level commensurate with the unavoidable emission volume, to compensate for it. We therefore need to establish the amount of greenhouse gas emissions that accompany each activity. This is referred to as the carbon footprint, and it is a prerequisite for carbon offsetting. The carbon footprint refers to measures such as a manufacturer disclosing the amount of CO<sub>2</sub> emissions in the life-cycle of a product, or the greenhouse gases emitted before their products are displayed in stores. More citizens and companies are expected to get to know the amount of greenhouse gases that have been emitted by purchasing or consuming these products, and through these activities be aware of the emissions and try to reduce them in their daily lives.

Carbon offsetting measures are now being offered in the United Kingdom and other countries in the West. These activities have also been disseminated in the private sector in Japan, but they are not directly related to the obligation to reduce CO<sub>2</sub> emissions in the Kyoto Protocol. Rather, carbon offsetting consists of self-initiated activities to reduce greenhouse gases, or voluntary actions by companies and individuals that genuinely aim to achieve carbon neutrality in the future.

## How does carbon offsetting contribute to CO<sub>2</sub> reduction?

There are said to be three factors that

contribute to CO<sub>2</sub> reduction. The first is reducing the carbon footprint from power generation and other forms of energy. In other words, nuclear power, hydraulic power or renewable energy should be used more to reduce dependency on fossil fuels. The second factor is conserving energy in households and offices such as the energy consumed for lights, air conditioners and appliances. And the third factor is lifestyle. This refers to reviewing and changing what one has taken for granted, for instance switching to bicycles or walking rather than taking the car when traveling short distances.

It is relatively easy to formulate policies for the first two, but lifestyles derive from each individual's sense of values. In this regard, individuals need to take self-initiated and voluntary actions to reduce their carbon footprint, by attempting to conserve energy and deviate from power generation methods that emit carbon dioxide. If carbon offsetting worked to remind people and provoke such actions, then it would be very meaningful.

## What potential do you see for carbon offsetting?

In Japan, environmental improvement measures such as energy and resource conservation, as well as the acquisition of ISO certificates, have been actively pursued mainly by the environmental administrative divisions of companies. Today, the trend has spread to product planning with carbon offsetting. Product planning and other divisions have displayed narrative-type descriptions of carbon offsetting associated with tree planting, forest conservation and other activities being undertaken by the company.

This indicates that a new element called the environment has started

being incorporated into businesses. The fact that mainstream divisions of companies have started addressing carbon offsetting, which was initially treated like CSR, seems to predict that the movement will grow into a major one in the future. In order for the movement to take root, carbon footprints need to be clarified as discussed above. Otherwise the trend will just be a temporary development, and no ongoing actions will result.

Times are certainly changing. For example, even though crude oil and gasoline prices, which surged last year, later returned to their previous levels and stabilized, people are no longer depending on cars as they did before, and a greater number of people are now purchasing or considering the purchase of hybrid cars. In this regard, the current economic crisis could lead to the reduction of future greenhouse gases.

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## Companies still seem to regard environmental measures as costs. What do you say to this?

The environmental management systems of the ISO14001 series have already been disseminated among companies, so many of them satisfy the requirements for energy conservation, recycling and reuse. In many cases, companies try to eliminate the negative aspects of corporate and business activities. However, the intrinsic mission of companies is to manufacture products or develop services of the highest possible quality

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chair of the IGES Board of Directors



and offer them to the public. By integrating environmental measures with this mission, companies can respond to the needs of our times and society. This is known as environmental business administration.

For example, there are companies that spent money on introducing recycled components, and began making a profit within several years. There are other companies that recognize employees who try to incorporate environmental measures into business activities, to initiate a company-wide movement. There are yet more companies that attempt to reduce the carbon footprint of their business activities and announce their target of reducing it to zero. A movement has started whereby each organizational unit aims for carbon neutrality, be it the local government, a company or the national government.

#### **What about national government commitment?**

In Norway, for example, the entire nation is working on carbon offsetting. In France, attempts are being

made to make the electrical power sector carbon-free.

In Japan, a bill for a Feed-in Tariff Law has been approved by Cabinet, which stipulates a cost of about 50 yen (50 cents) to purchase 1 kW of electricity produced by a home photovoltaic unit. This will be about double the charge for household electricity when the Law takes effect.

In 2008, the then Prime Minister Fukuda announced the Fukuda Vision, and the Cabinet approved the Action Plan for Achieving a Low-carbon Society at the end of July. For example, the target of increasing the amount of solar power generation to forty times the current level by 2030 is an ambitious, innovative target. If momentum builds, the actual amount might become even greater. There could come a time when more than half of the private houses in Japan are equipped with rooftop solar power generators. By then, cars will run on electricity, and they could even be charged with the electricity produced at home using solar power.

#### **The importance of environmental**

**investment is now known throughout the world, but the financial crisis has gravely affected the situation. What are your views on this matter?**

It is essential to build a new economic model for the twenty-first century, rather than rebuilding the economy of the twentieth century. The new system should enable the economy, energy, environment, climatic and global warming issues to be addressed at the same time. The threat of global warming does not go away even in an economic crisis, and energy will not last if it is used in the same ways as before. An economic vision needs to be formulated to simultaneously resolve these issues that are common to human society.

To achieve a low-carbon society, we need to set an ambitious target and create an atmosphere in which everyone can work toward the goal. Needless to say, regulations and economic incentives also form part of the system and atmosphere. □

Interview by Hitoshi Chiba, *The Japan Journal*