Keywords A to Z Vol.18

Keyword Carbon offset

Carbon offsetting is a concept or mechanism that enables individuals, companies, and others to offset (compensate for) their CO_2 or greenhouse gas emissions by purchasing credits or by emission reduction activity at other places.

Trading Offsets to Reduce Greenhouse Gas Emissions

Efforts to deal with climate change, for example by reducing the emission of CO_2 or other greenhouse gases, have been made, mainly by developed countries, around the globe since 1997, when the Kyoto Protocol was adopted. The Paris Agreement, adopted at the 21st meeting of the Conference of the Parties (COP 21) of 2015, established a new framework of voluntary target-setting for both developed and developing countries.

As initiatives on a global level accelerated, the important concept of carbon offsets was created. Because greenhouse gas is not unique to a certain region, the reduction of emissions anywhere on the planet has the same effect. Therefore, if some region, country, or organization cannot sufficiently reduce its CO_2 or other greenhouse gas emissions, the excess can be offset by the equivalent amount of greenhouse gas reduction or absorption by projects carried out at other locations.

The carbon offset mechanism has four major steps.

1. Understand the amount of greenhouse gas emissions made in daily life or in corporate activity.
2. Strive to reduce greenhouse gas emissions as much as possible through energy-saving measures, etc.
3. Purchase offsets (credits) or reduce emissions at other sites to compensate for unavoidable emissions.
4. Offset any remaining emissions by the equivalent amount of credits.

The point is to first understand the amount of emissions accurately, and then to make efforts to reduce emissions as much as possible. If everyone intends to use credits without making an effort, carbon offset cannot reduce greenhouse gas emissions.

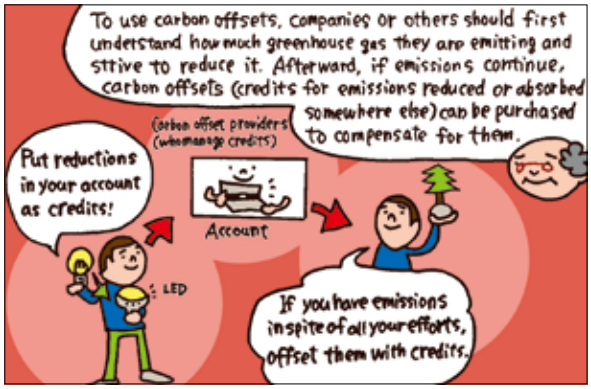
Showing Environmentally Conscious Policy Using Carbon Offsets

In carbon offsetting, credits are traded.

For example, suppose that Company A through various efforts has reduced its greenhouse gas emissions. It can then deposit credits to a carbon offset provider, who manages them. Company B, on the other hand, was unable to sufficiently reduce its greenhouse gas emissions, and therefore purchases credits, in an amount equal to its emissions, that were generated by Company A. With the credits, Company B can offset the emissions it produced.

A company that purchases credits can use them as one way to achieve its targets for reducing greenhouse gas emissions, and the company can also inform the public, etc., of its environmentally friendly policy. Purchasers can choose which credits to buy after checking what kind of project generated them.

Carbon offsets can be used for conferences or events, in order to offset the CO_2 produced by event management, participants' transportation, etc. In fact, carbon offsetting has been used for a variety of conferences and events, including the G7 Ise-Shima Summit.



©ad-manga.com

Use of Carbon Offsets Increasing to Meet 26 % Reduction by 2030

The carbon offset system in Japan is based on guidelines designed by the Ministry of the Environment, and there are various certification systems.

For example, with the Joint Credit Mechanism system, Japanese advanced energy-saving technology can be introduced to developing countries to reduce greenhouse gas emissions, and the reductions can then be used to achieve Japan's own reduction targets. The system can help developing countries where technology and products with high environmental friendliness are not yet common for economic reasons.

Under the Paris Agreement, Japan set the target of reducing greenhouse gas emissions by 26% (compared to fiscal year 2013) by fiscal year 2030, and is expected to use carbon offsets increasingly as it works to achieve the target.

Azbil's large diameter (125–150 mm) model of its motorized two-way valve with flow measurement and control functions, ACTIVAL™+, is equipped with a flow rate calculation function that uses pressure measurements by sensors built into ACTIVAL+ valves used for air conditioning. This enables control of the volume of chilled and hot water even when the difference in pressure between the inlet and outlet fluctuates. Additionally, a temperature-sensing function helps users to understand the energy usage of each air conditioner, so users can have both comfort and energy savings.

ACTIVAL is a trademark of Azbil Corporation.

Cover photo : Thailand Ayutthaya, by Koji Mizutani, Merry Project representative

azbil
www.azbil.com/
Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

azbil Group magazine, *azbil* 2018 Vol. 4, No. 9
Issued by Mikako Takahashi, Public Relations Section, Corporate Planning Department, Azbil Corporation
19F Tokyo Building, 2-7-3 Marunouchi, Chiyoda-ku, Tokyo 100-6419 Japan TEL: 81-3-6810-1006 FAX: 81-3-5220-7274
URL: www.azbil.com/

PRINTED WITH SOY INK
MIX Paper from responsible sources FSC® C002215

PR-3001E-1807 (1807-4K-D)

Company/Branch office