

The Current Status of Carbon Offsetting in Japan

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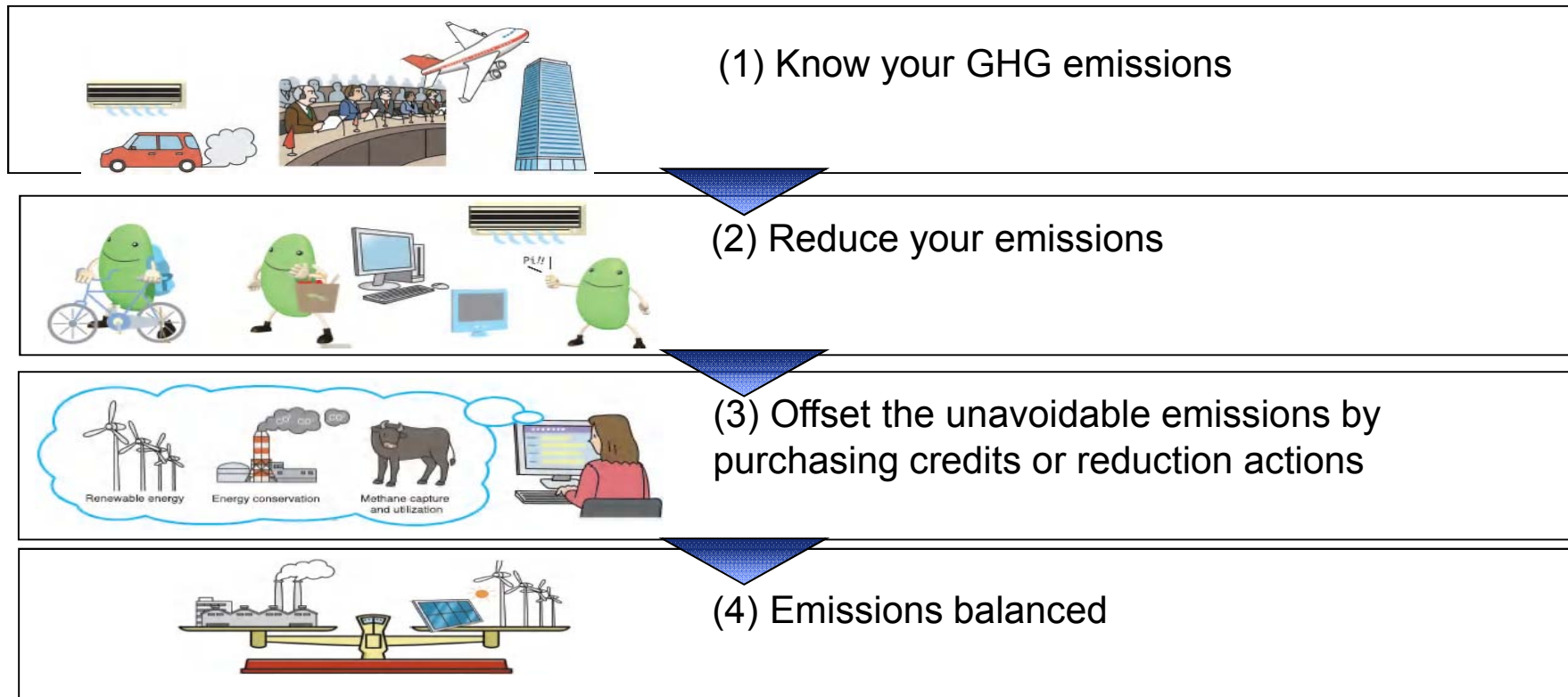
Ministry of the Environment, Japan

What is Carbon Offsetting?

Carbon offsetting is defined as: (1) first knowing your GHG emissions, (2) then making efforts to reduce the emissions, (3) offsetting unavoidable emissions by purchasing GHG reduction credits or undertaking reduction activities.

The benefit of carbon offsetting includes:

- (1) Promotion of proactive GHG reduction activities by companies and citizens;
- (2) Shifting the corporate activities and lifestyles towards low-carbon society by visualizing the cost of GHG emission;
- (3) Providing funds to GHG reduction/removal activities both domestically and abroad.



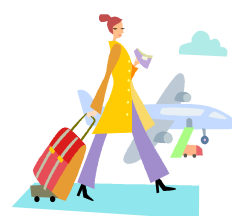
Examples of Carbon Offsetting

As of the end of December 2009, there were over 750 offsetting products & services, events or other initiatives in the carbon offsetting business in Japan (according to the press).



Carbon offsetting New Year's cards

Help the purchasers to offset their CO₂ emissions



Carbon offset tours

Offset CO₂ emissions from transportation (including airplanes) by additionally paying for credits



Carbon offset gasoline

Offset CO₂ emissions from consumer vehicle use



Offsetting conferences, e.g. Hokkaido Toyako G8 Summit (July 2008)



Offsetting sporting events

e.g. FIFA World Cup Germany

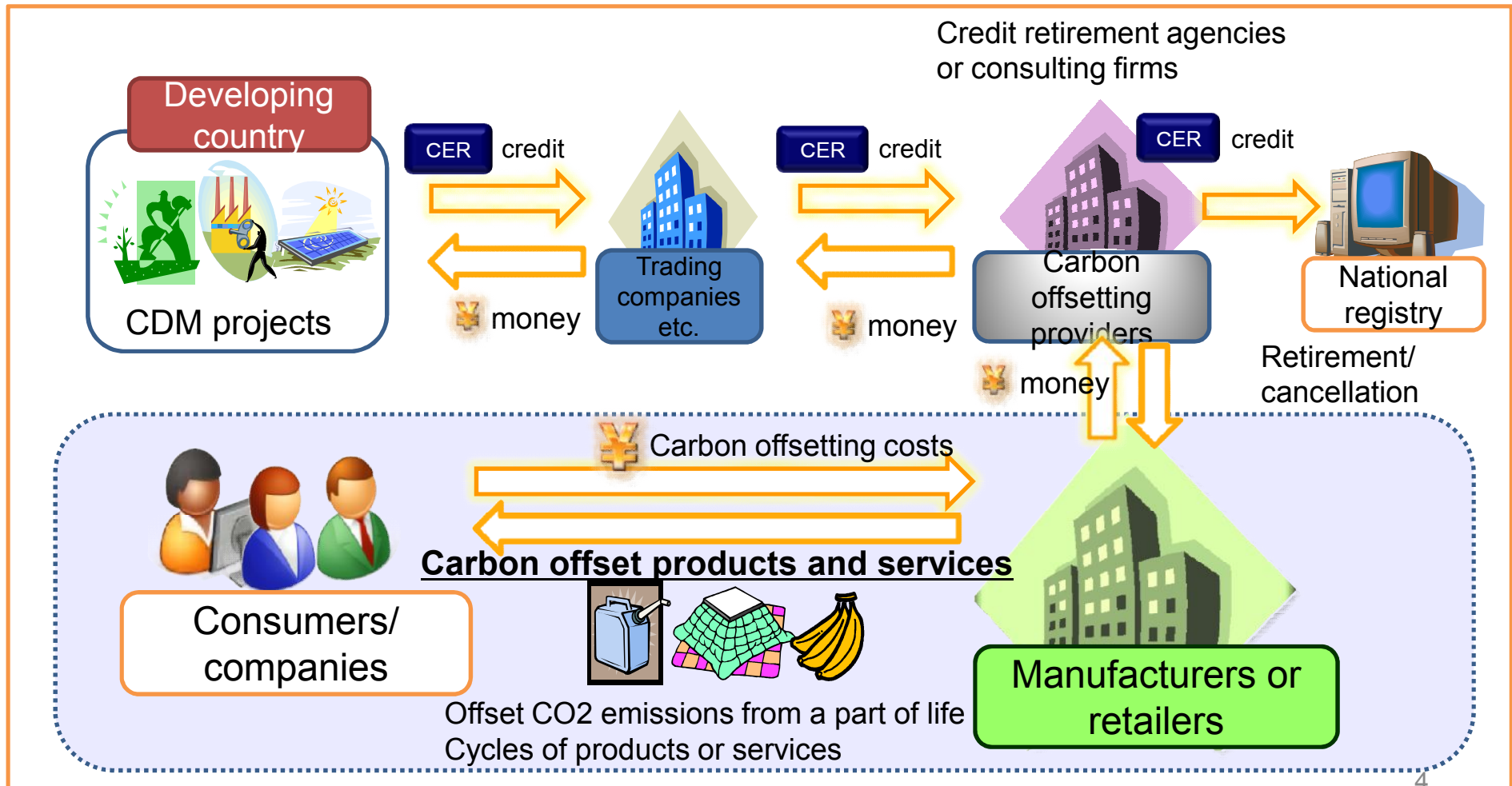


Offset GHG emissions from daily life

e.g. Offsetting CO₂ emissions from electricity consumption

How carbon offsetting works

This chart illustrates an offset scheme where the GHG emission from the production or use of products or services are offset by purchasing Certified Emission Reduction (CER).



MOE's Initiatives on Carbon Offsetting

- ① General guidance: Guidelines for Carbon Offsetting (February 2008)
- ② Publicity
 - Establishment of Carbon Offset Forum (J-COF) to provide information and provide a help desk service. (April 2008)
 - Cooperate with Carbon Offsetting Network (CO-Net) of companies that encourage carbon offsetting. (Since April 2009)
 - Model projects to promote advanced carbon offsetting activities. (8 models adopted in September 2009)
- ③ Enhancing credibility
 - Establish guidelines for calculating GHG emissions of activities to be offset, and guidelines on information provision on carbon offsetting. (Oct. 2008)
 - Third Party Certification (Labelling) Standards for carbon offsetting. (Since March 2009)
- ④ Establishing credible emission credits for offsetting: Japanese Verified Emissions Reduction Scheme (J-VER) (Since November 2008)
- ⑤ International cooperation: Statement of Cooperation by DEFRA, UK and MOE, Japan on information exchange regarding carbon footprints and offsetting. (September 2008)



Carbon offsetting certification label

Promote and secure credibility of carbon offsetting

Guidelines for Carbon Offsetting in Japan

- Expert Group met five times since September 2007.
- Reviewed examples in Japan and abroad, as well as policies of foreign governments.
- After public commenting, published guidelines for carbon offsetting in February 2008.

Contents of the guidelines

Rationale of carbon offsetting:

- Promote voluntary emission reduction activities by citizens and companies.
- Contribute to raising funds for domestic & overseas projects to reduce or remove GHG and to achieve sustainable development.

Challenges in carbon offsetting

- Raising awareness, encouraging offset activities, and broadening markets
- Build credibility for carbon offsetting:
 1. Calculate GHG emissions to be offset accurately.
 2. Ensure the certainty and permanency of emissions reduction/sink which produce credits.
 3. Calculate emissions reduction/sink which produce credits.
 4. Avoid double-counting of the credits.
 5. Ensure transparency of the activities of carbon offsetting providers.
 6. Share awareness that carbon offsetting does not justify taking no action to reduce own GHG emissions.

Types of Carbon Offsetting

◇ Marketable credit type

- ◇ Offset products or services
- ◇ Offset events
- ◇ Self-action offset
- ◇ Support for offsetting personal activities

Carbon offsetting which uses credits traded between markets.

◇ Unilateral/bilateral type

Carbon offsetting which does not use third-party verified credits
e.g.: undertaking tree-planting to offset the emission

Carbon Offsetting Model Projects in Fiscal 2008 (9 projects)

Offset product or services (1 project)

- ◆ gConscious, Inc. ·· Visualize emissions of food manufacturers and offset the emissions by CER.

Offset Events (2 projects)

- ◆ Institute for Sustainable Energy Policies ·· Offset CO2 emissions from the site of FIS freestyle ski tournament 2009 and hotels by green electricity nearby.
- ◆ Hyogo Environmental Advancement Association ·· In cooperation with sports and culture facilities, offset CO2 emissions from event facilities by solar generation VER, set by additional carbon offsetting costs.

Self action Offset (2 projects)

- ◆ Recycle One, Inc. ·· Offset CO2 emissions from transport (transport of discarded home electronics from mass home electronics retailer to specified place) of recycling for 4 types of consumer electronics by VER or CER.
- ◆ Hitachi, Ltd. ·· Monitor the amount of electricity from each facility and offset CO2 emissions failed to reduce.

Nonmarketable credit type (4 projects)

- ◆ Asahi Kasei Homes Corporation ·· Offset emissions of manufacturing and building houses, by using emissions reduction from software so-called "Eco zousan club" which promotes environmental actions by residents.
- ◆ NPO KES Environmental Organization ·· Monitor CO2 emissions of KES certified firms (participating in environment implementing activities based on environment management system) and offset CO2 emissions difficult to reduce, by using solar generation VER.
- ◆ Shinjuku City ·· Based on statement with Ina city regarding cooperation in global environmental protection in 2008, offset CO2 emissions in Shinjuku using sinks increased by forest protection in Ina city.
- ◆ Scenic Byway Resource Center HOKKAIDO ·· The firm manages a scheme in which driving tourists pay money for their own CO2 emissions and a local group will plant trees on their behalf.

Carbon Offsetting Model Projects in Fiscal 2009 (8 projects)

Product – Service offset (4 projects)

- ◆ INFOCOM Corporation
Fuji Television Network, Inc. .. Offset CO2 emissions from events and manufacturing CDs by J-VER and promote on TV programs and in Fuji TV shops.
- ◆ All Nippon Airways Co., Ltd. .. Offset CO2 emissions from flights mainly by J-VER and promote among airport users, and through flight magazines and events.
- ◆ TOPPAN FORMS CO.,LTD .. Provide offset postcards and envelopes for which CO2 emissions from manufacturing, printing, sending and disposal are offset. Also apply certification scheme for labeling.
- ◆ BUNKAHOSO KAIHATSU CENTER INC .. Broadcast a part of one radio program as an offset program and offset CO2 emissions from broadcast by J-VER.

Event Offset (1 project)

- ◆ BillingSystemCorporation
JTB Kanto Corpotation .. Offset CO2 emissions from hot spring by CER and promote carbon neutral hot springs. This scheme will start from Ikaho and spread throughout Japan.

Support for offsetting personal activities (2 projects)

- ◆ Japan Post Service Co., Ltd. .. Apply postcard to certification scheme for labeling and promote through website, magazines and various other means.
- ◆ Eco-food Research Group
(Business Brain Showa-ota Inc.) .. Sell offset products in supermarkets, airports and highway service shops all over Japan and carry out promotion campaign.

Non marketable credit type (1 project)

- ◆ Oki Data Corporation
CO2 balance Group Limited (CO2 balance)
K.K. Satisfactory international (KCSI) .. Offset CO2 emissions from 3 factories (including abroad) manufacturing printers by VER.

Credits used in Carbon Offsetting

Types of credit:

The Guidelines for Carbon Offsetting by MoE mentions VERs (verified emission reductions), in addition to Kyoto Units (CER etc), as credits to be used in carbon offsetting.



Potential of VERs:

For credits for carbon offsetting, credibility is essential in terms of certainty of GHG reduction/removal, avoidance of double counting, etc.

General preference and demand was observed in credits from domestic reduction/removal activities rather than Kyoto units.



MOEJ set up an expert group in March 2008 to look into the possible design of VER (Verified Emission Reduction) certification standards.



In November 2008, MOEJ established the **Offset Credit (J-VER) Scheme**, a verification scheme for credits generated through the reduction/removal by sinks of greenhouse gases carried out via domestic projects.

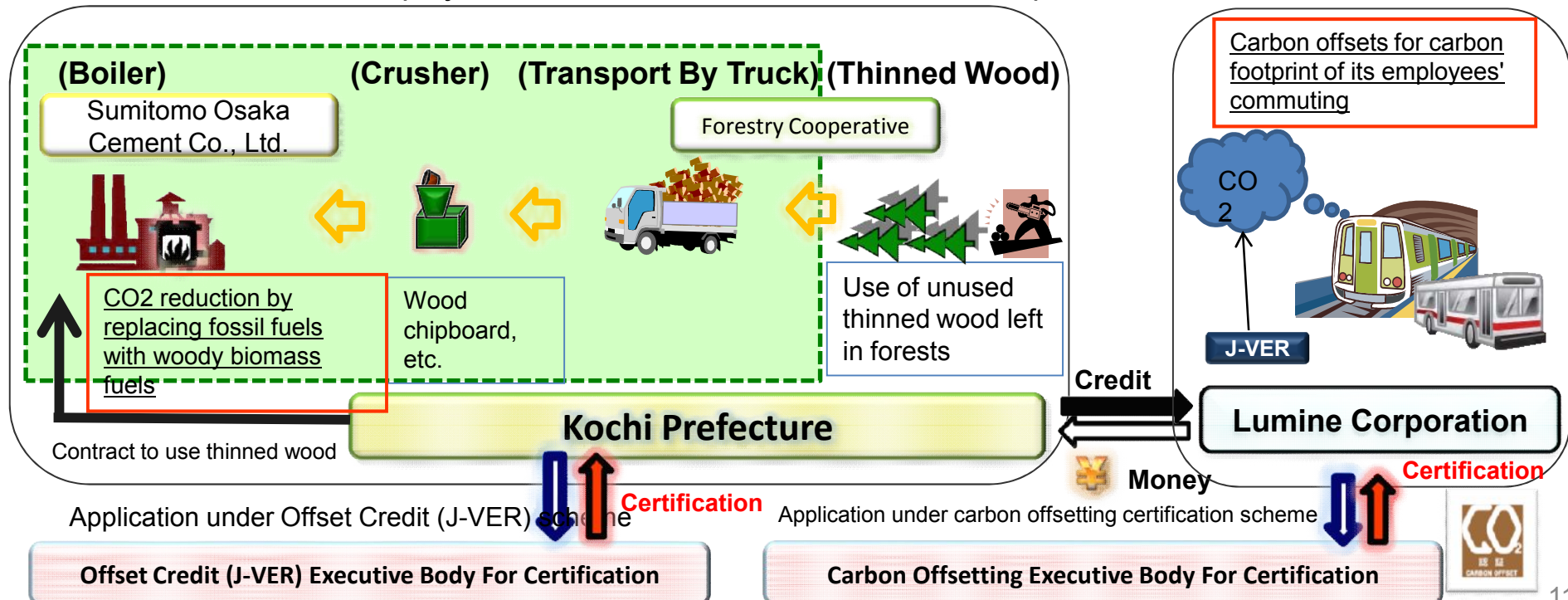
Example of Offsetting using (J-VER)

- Major examples of carbon offsetting via J-VER are listed below:

Lumine Co., Ltd.	J-VER is used for carbon offsets for the carbon footprint of its employees' commuting.
Japan Post Holdings Co., Ltd.	J-VER is expected to be used in its Carbon Offsetting New Year's Card in 2010, and cumulatively compensates for the daily carbon-emitting activities of its customers.
ANA	J-VER is used for carbon offsets for its aviation carbon footprint.

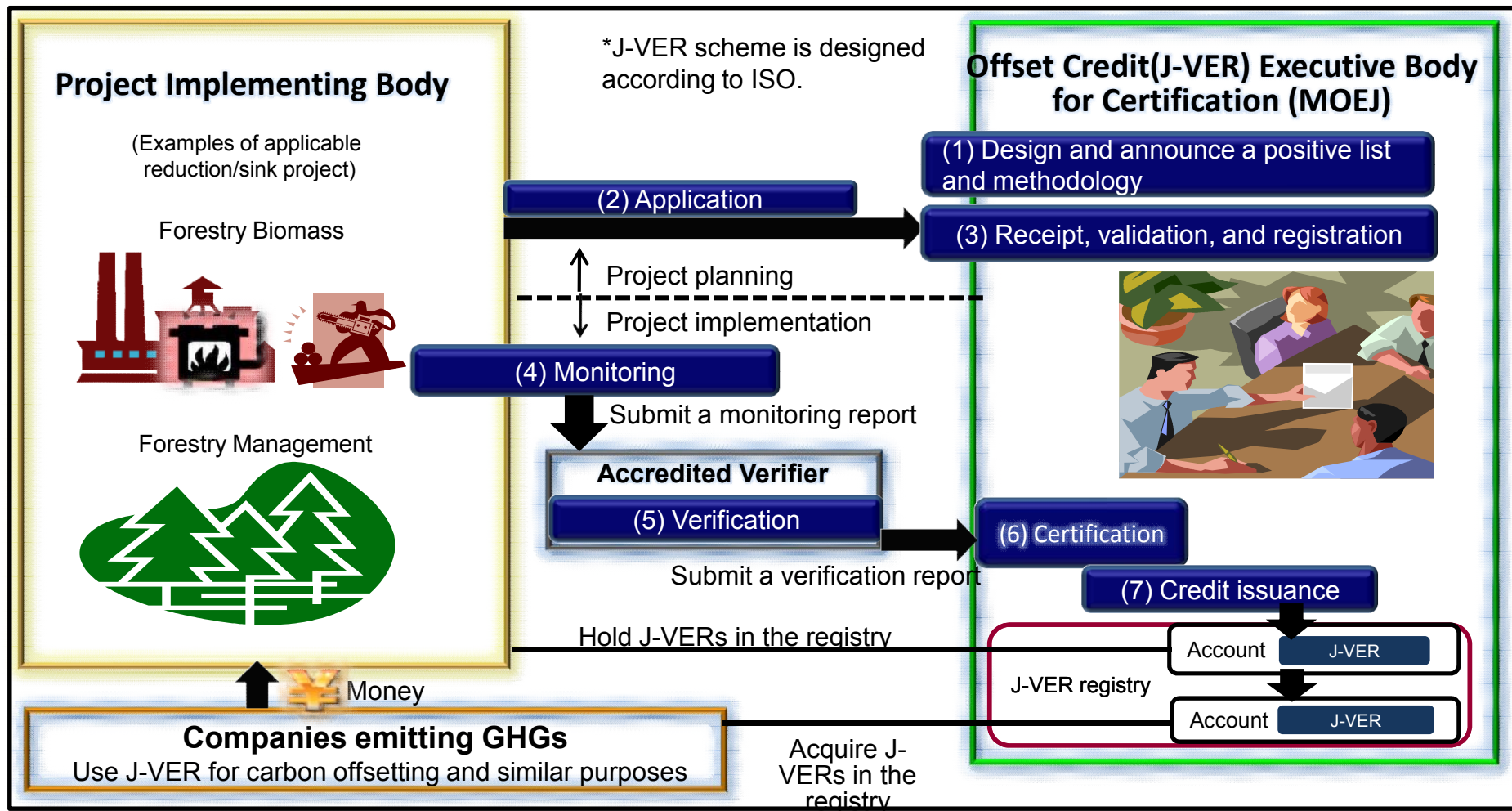
Example of J-VER Scheme Project (Kochi-Lumine Model)

This project certifies reduced GHG emissions as equivalent credits.



Offset Credit (J-VER) Scheme

- J-VER Scheme, established by MOEJ in November 2008, is a verification scheme for credits generated through the reduction/removal by sinks of greenhouse gases carried out via domestic projects.
- By utilizing the J-VER scheme, individuals, businesses, municipal governments and others can return funds for carbon offsetting (funds for purchasing J-VER) to domestic project planners in forest management or local industries. J-VER is a new mechanism to promote the domestic *Green New Deal* program through a global warming prevention campaign, expansion of job opportunities, and economic measures by using private-sector capital.



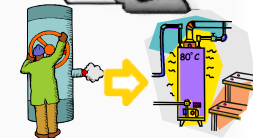
Target Project Types for the J-VER Scheme

as of Feb. 2010

The J-VER Certification and Steering Committee (MOEJ) identifies project types that should be promoted under the scheme because of current low feasibility caused by poor profitability. These projects are then added to a list of target project types for the J-VER scheme.

Emission reduction:

E001	Fuel switching from fossil to woody biomass fuel for a boiler
E002	Fuel switching from fossil to woody pellet biomass fuel for a boiler
E003	Use of woody pellet heater
E004	Use of waste oil-derived biomass fuel for vehicles and others
E005	Fuel exchange from fossil to sewage sludge-derived solid biomass fuel
E006	Collection and use of low-temperature waste heat



Forest carbon sinks:

R001	Forest Management Project (Shelterwooding)
R002	Forest Management Project (Sustainable Forest Management)
R003	Afforestation Project



MOEJ invites ideas on project types to be added to the list, as project models and comments are always accepted by the Certification Center on Climate Change (4CJ) serving as secretariat of this scheme. For details, see: <http://www.4cj.org/>

List of Projects Certified and Registered under the J-VER Scheme

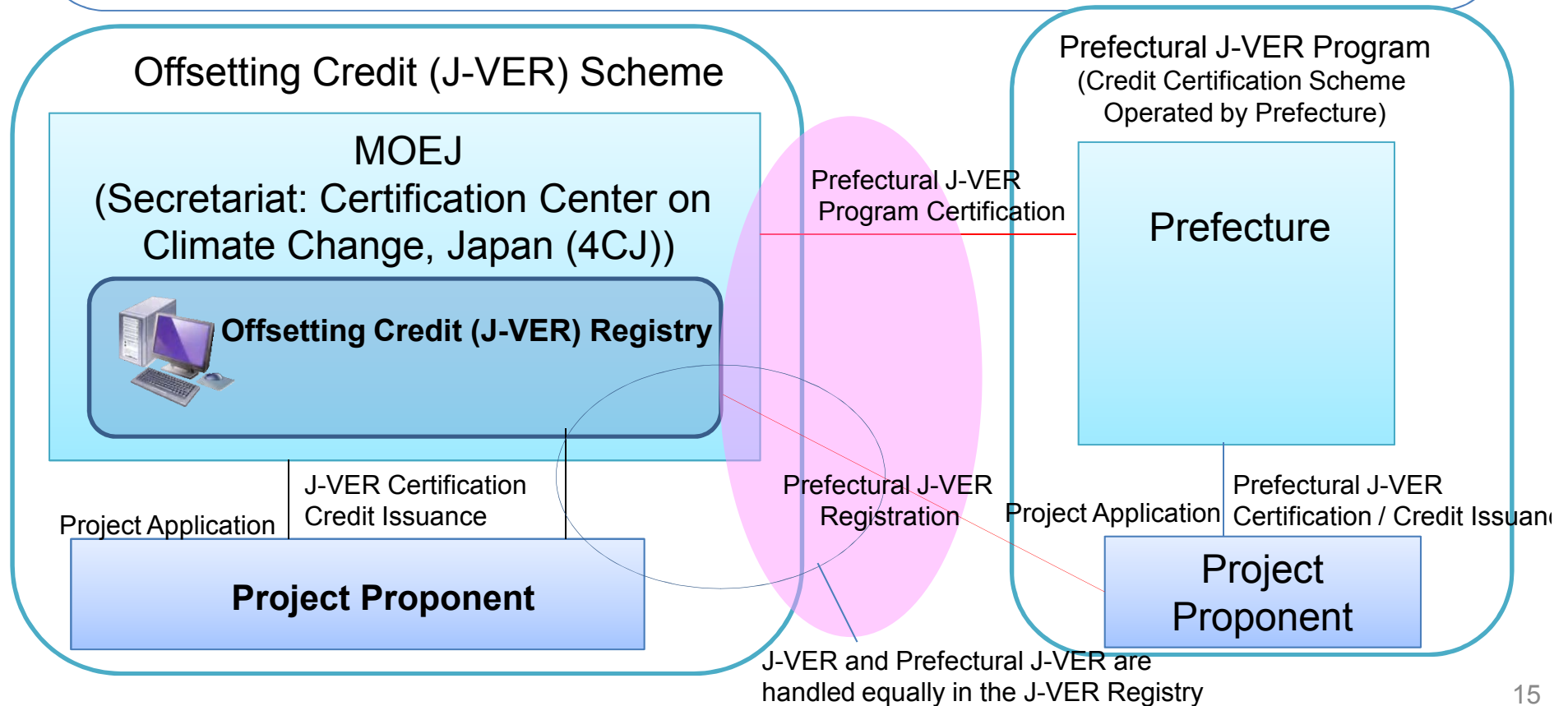
Three J-VER projects have been credited currently.

*as of 5 Feb. 2010

Project planner	Project site	Issued J-VER amount (t-CO ₂)	Project type
Kochi Prefecture	Sumitomo Osaka Cement	2,831	Fuel switching from fossil fuel to forestry biomass fuel for a boiler
Sumitomo Forestry Co., Ltd.	Yoshigo town, Shiiba town, Miyazaki Prefecture	2,083	Forest Management Project (Sustainable Forest Management)
Promotion Council for Absorption Utilizing Forest Biomass, Hokkaido	Ashoro town, Shimokawa town, Takinoue town and Bihoro town, Hokkaido prefecture	5,863 (P)	Forest Management Project (Shelterwooding)

Prefectural J-VER Program Certification

- In the Offsetting Credit (J-VER) Scheme, the Prefectural J-VER Program Certification Scheme has been established. The J-VER Certification and Steering Committee designates a Prefectural Scheme which certifies and issues GHG emissions and removal as a credit to match the national J-VER scheme.
- Credits (Prefectural J-VER) issued by Prefectural J-VER Program are registered in the J-VER registry, in the same way as J-VER.
- Niigata and Kochi Prefectures are certified as of Feb. 2010.



Future Developments of J-VER Scheme

- To expand scope of J-VER project types (eg. agriculture, fisheries, waste management)
- To improve efficiency of J-VER certification process, while ensuring reliability
- To support regional development projects using J-VER.
- To organize tax incentives for J-VER trading and annulation.
- To allow the offset by J-VER in the Mandatory Greenhouse Gas Accounting and Reporting System based on Act on Promotion of Global Warming Countermeasures

Carbon Offsetting Certification Scheme

Scheme was launched by the Certification Center on Climate Change, Japan in April 2009.
30 projects have been certified by February 2010.

Purpose

To promote awareness of implementing carbon offsetting and build a fair market.

Requirements

- ① **Awareness of emissions**
Calculation methods (e.g. guidelines for calculation, carbon footprint, etc.)
Collection of various data, etc.
- ② **Carrying out reduction efforts**
Comply with the law (e.g. Global Warming Act), efforts to reduce emissions of target activities
- ③ **Purchase of credits for offsetting**
Types of credit (CER, J-VER, JPA, etc.), contracts related to credit purchase, etc.
- ④ **Compensation for emissions**
Handling credits vs. offset volume, methods of invalidating credits
- ⑤ **Provide information**
Information Provision Guidelines, etc.

Labeling

Issue label for projects approved by certification committee.



Safe Offsetting Provider Scheme

In this scheme, the Certification Center on Climate Change Japan periodically checks the offset providers' appropriate handling of credits, and discloses the information on a website. This ensures ongoing transparency and credibility to companies and consumers.

By using the providers who participate in this scheme, companies gain advantage in terms of period and cost for applying the certification scheme.

あんしんプロバイダー制度参加者一覧(申込順)

 / 株式会社エコノス (As of October, 2009)


三井住友ファイナンス&リース / 三井住友ファイナンス&リース株式会社

 / 一般社団法人モア・トゥリーズ

 / カーボンフリーコンサルティング株式会社

 / 株式会社リサイクルワン

 / 三菱UFJリース株式会社

 / ジーコンシャス株式会社

 / 株式会社アドバンテック

 / 株式会社イグアス

What is a Carbon Offsetting Provider?

In the guidelines established by MOE, it is defined as "firms that provide credits and consulting services when citizens or companies plan carbon offsetting."

Carbon Offset Network (CO-Net)

What is CO-Net?

CO-Net is a **network mainly of businesses**. Its purpose is to recognize carbon offsetting as an effective means of vitalizing Japan's transition to a low-carbon society, and to ensure sustained, constructive activities for popularizing and promoting carbon offsetting.

Companies in the Council (In alphabetical order)

- ◆ Aeon Retail Co., Ltd.
- ◆ All Nippon Airways Co., Ltd.
- ◆ Asahi Kasei Corporation
- ◆ Dentsu Inc.
- ◆ DOWA Holdings Co., Ltd.
- ◆ Japan Post Service Co., Ltd.
- ◆ Kajima Corporation
- ◆ Marubeni Corporation
- ◆ Mitsubishi UFJ Trust and Banking Corporation
- ◆ ORIX Corporation

- ◆ Sampo Japan Insurance Inc.
- ◆ Sony Corporation
- ◆ Suzuyo Holdings & Co., Ltd.
- ◆ Tokyo Electric Power Company

Administrative companies (In alphabetical order)

- Deloitte Tohatsu Evaluation and Certification Organization Co. Ltd.
- Mitsubishi UFJ Research and Consulting Co., Ltd.

*70 participants (February 2010)

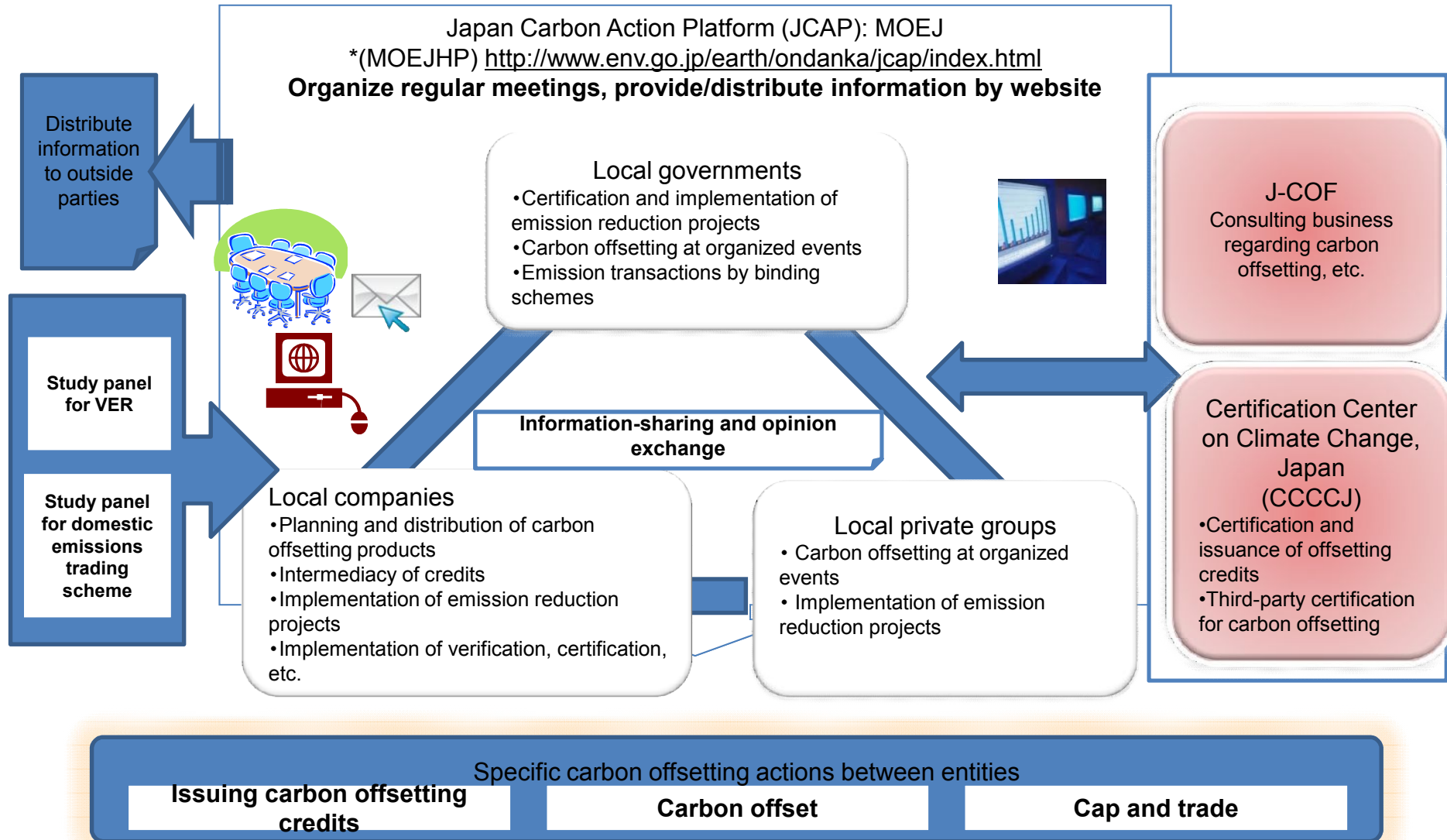
(Principal CO-Net businesses and activities)

- Collaboration with other schemes and proposals for expanding the use of carbon offsetting
- Insistence on boosting and forming markets related to carbon offsetting efforts
- Development of carbon offsetting products and services as well as support for improving reliability
- Creation of projects to generate highly reliable carbon credits for GHG reduction/removal by sinks and support for project utilization

Contact:

- Carbon Offset Network Office (inside Overseas Environmental Cooperation Center)
- TEL: 03-5472-0144 e-mail: info@carbonoffset-network.jp
- Website: <http://www.carbonoffset-network.jp/>

Japan Carbon Action Platform (JCAP)



Conclusions

- Ministry of the Environment promotes carbon offsetting as a means of voluntary contribution to GHG reduction/removal efforts.
- Credibility is a key to further development of carbon offsetting.
- As a relatively new policy area, further improvement is needed in guidelines, crediting scheme and third-party certification scheme.

Some discussion points

- How is carbon offsetting categorized? What guidance can be provided for each category?
 - Offset products and services, offset events, self-activity offsetting, assisting consumers offsets?
 - Marketable credit type, unilateral/bilateral type?
- What type of credits should be used?
 - CER, AAU, RMU, EUA, domestic VER, overseas VER?
- Should we aim at carbon neutral or carbon minus? Is partial offsetting justified?
- What is the relationship between carbon offsetting and carbon footprint?
- What is the relationship between carbon offsetting and emission trading?