

# **1. Overview of the Project**

## Message from the President

Nowadays, a once unfamiliar expression, Low-Carbon Society, is often used in newspapers or other mass media. This Japanese expression was coined in March 2005. The expression, Low-Carbon Economy, which originated in England, was changed into the expression, Low-Carbon Society, by Japan. Currently, even at the G8 Summit, this expression is used for the declaration by the leaders. Considering that this is only five years old, it is quite impressive how influential it has become.



Hokkaido University started this educational research project, working toward a Sustainable Low-Carbon Society in 2008, when the G8 Toyako Summit was held in Hokkaido. The G8 University Summit was held in Sapporo for the first time in the world ahead of the G8 Toyako Summit and at that time the Sapporo Sustainability declaration was adopted.

\*Policies, societies, and academia are pulled together to realize a Sustainable Society. Universities fulfill this new mission as the driving force.

\*Through collaborative research and educational programs, universities in the G8 countries cooperate with universities and research institutions in developing countries and provide necessary aid.

Hokkaido University started the Low-Carbon Society educational research program to realize this declaration. We have also organized the Sustainability Weeks that many researchers, professionals, and citizens participate in every year. During those Weeks, educational research activities to realize a sustainable, low-carbon society are implemented.

Our basic philosophies are frontier spirit, global perspectives, all-round education, and practical learning. To reform the actual social economy into a low-carbon society completely in the world, there is no question that persons with various abilities embodying these four philosophies are necessary. We think this low-carbon educational research

project is one of the most vital because it embodies our fundamental philosophies. In this project, impressive outcomes are not expected if activities are limited only to Hokkaido University. Through cogent communication and information exchange with people abroad as well as in Japan, and moreover, by mutually inspiring each other, the path to the low-carbon society will be opened. We really hope that many of you who are reading this will participate in this project by freely exchanging constructive ideas and opinions.

SAEKI Hiroshi  
President of Hokkaido University

March 2010

## Sustainable Low-Carbon Society Project

### Our Goal

Constructing a Sustainable Low-Carbon Society is an urgent global issue. Especially, internationally-common educational programs to foster young researchers and professionals are necessary in Asia.

Therefore, all the research performed in Hokkaido University regarding the low-carbon society is integrated into a cross-cutting format and the research results are readily available to the public. Researchers or professionals who are capable to construct an international framework are nurtured.

### Our Approaches

In this project, three main approaches are used to work toward becoming a Sustainable Low-Carbon Society.



## Members of the Project

### Fumikazu Yoshida



#### 【Department】

Professor, Graduate School of Economics and Business  
Administration, Hokkaido University  
Ph. D., Economics

#### 【Research Theme】

- Environmental Economics
- Social Scientific Research of material-cycle society and sustainable Low-Carbon Society

#### 【Message】

Japan is standing at a crucial turning point not only economically but also environmentally. I would like to offer more opportunities for people to think about and consider measures for the challenges in the future.

### Masahito Fukami



#### 【Department】

Public Policy School, Hokkaido University

#### 【Research Theme】

- Environmental Policy
- Relations between the environment and economy
- Environmental conservation and regional independence

#### 【Message】

My aim is to build a society in which people can lead a peaceful life with all living creatures on earth that surround us in this beautiful environment. For that purpose I will dedicate myself to research on environmental policy.

## Shinichi Arai



### 【Research Theme】

- Development of an original low-carbon society in Hokkaido utilizing the characteristics of the region, preventive measures of climate change and establishment of the material-cycle society and strategy; Policy for achieving a sustainable society with integration and conservation of biodiversity
  - Risk evaluation and management, of which, such as biomass fuel and persistent organic pollutions (POPs), to achieve sustainability
  - Development of environmental leadership with expertly and interdisciplinary perspective

### 【Message】

Following the frontier spirit of Hokkaido University and the tradition of practical learning, I would like to dedicate myself to education and problem-solving research from a bird's eye perspective to achieve a sustainable society.

URL :

<http://www.ees.hokudai.ac.jp/carbon/shinarai/>

## Masahiko Fujii



### 【Department】

Graduate School of Environmental Science, Hokkaido University

### 【Research Theme】

- Conservation and sustainable utilization of living marine resources (especially coral reef and seaweed bed)
- Utilization of organic materials in Hokkaido
- Sustainable campus project

### 【Message】

Since most of the subjects of our research are extremely interdisciplinary, we need to maintain a sense of balance and enthusiasm and communicate with various experts and professionals both inside and outside of campus. Why don't you grab a book and join us and go out to town and fields? *Experientia docet* (Experience teaches)!

URL: <http://www.ees.hokudai.ac.jp/carbon/mfujii>.

## Aiko Azuma

### 【Department】

Postdoctoral Researcher, Graduate School of Public Policy, Hokkaido University

### 【Research Theme】

- Analyzing environmental policy by means of economic instruments
- Interaction between environmental policy and energy policy
- Influence of policy of environment and energy on the action of electric power companies

### 【Message】

I am studying on what kind of policy we need and what we should share in order to achieve wide-spread low-carbon society with clean energy from the perspective of economics.

## Yoko Yabe

### 【Department】

Graduate School of Environmental Science, Hokkaido University  
Section of Integrated Environmental Science, Field of Multi-Disciplinary Science

### 【Research Theme】

Life Cycle Assessment (LCA) related to the introduction of biogas plants in Hokkaido

### 【Message】

My current research is completely different from what I have been doing before. For example, raising dairy cattle is a completely new world for me. Since there are plenty of things which we can do for the development of a low-carbon society in Hokkaido other than my current research, I have been engaging myself in research by recognizing the vast potential of this region.