# 6. Participation in the World Bank & Prototype Carbon Fund (PCF)

## (1) Outline of the PCF

The World Bank established the Prototype Carbon Fund (PCF) in January 2000 to address greenhouse gas reductions internationally. Kyushu Electric Power became one of its proud participants. The PCF enables the World Bank to effectively invest funds from contributors (governments and companies) in greenhouse gas emission reduction projects that are implemented in developing countries and economies in transition. Greenhouse gas emission reductions achieved by applying the Kyoto Mechanism will be shared among contributors.

Operation period	January 2000 to December 2012
Fund amount	180 million dollars
Contribution by Kyushu Electric Power*	5 million dollars + an additional contribution of 3 million (scheduled to enter the contract in November 2002)
Contributors	6 countries, 17 companies including Kyushu Electric Power

\* The contribution is paid in annual installments until 2012, according to project investments for the year

#### PCF operation diagram



# (2) Status of PCF -

The PCF plans to invest in 30-35 greenhouse gas emission reduction projects in various countries throughout the world. By July 2002, the purchase of greenhouse gas reductions for 11 projects was agreed.

Overview of projects for which the purchase of emission reductions were agreed

Outline of projects
Methane recovery and power generation at waste disposal sites
Use of charcoal for pig iron production (alternative to coal and coke)
Construction of a small hydroelectric power station (alternative to coal and natural gas)
Construction of a small hydroelectric power station (alternative to diesel electric power generation)
Construction of a geothermal district heating plant (alternative to coal), improvement of heating system efficiency
Biomass heating for factories (alternative to coal)
Improvement of heating system efficiency for hospitals
Construction of gas district heating plant (alternative to coal), improvement of district heating system efficiency

# (3) Fostering personnel

Kyushu Electric Power sends a new employee to the World Bank to address CO2 measures for the future through fostering and training of personnel.

#### Message from the employee sent to the World Bank

" I have been sent to the World Bank headquarters in Washington, DC to join the PCF management team as a trainee. Even though it has been only five months, I have taken a part in advanced efforts for PCF greenhouse gas reduction projects. The staff at the PCF workplace tackles tough jobs vigorously, constantly traveling around the world because global warming is an important and timely issue throughout the world.

The Kyoto Mechanism still suffers ambiguity in its operation rules, and has not been actively implemented yet. However, it is a system from which developed countries can benefit by meeting Kyoto Protocol commitments at a low cost, while developing countries can enjoy the benefits of sustainable development through new investment and technological contributions offered by developed countries. The system seems quite effective from a global standpoint. Especially for Japan, it is important to study and utilize this system, since Japan has already made significant progress in energy conservation and will be required to make even more effort than other countries to reduce greenhouse gas emissions. In light of this, I have much to learn from the PCF, which is forging a path where there is none, and I am very much inspired by the forward-looking, energetic PCF team led by the reliable fund manager Ken."

Daisuke Tsuchiya, sent to the World Bank as a trainee from the Environmental Affairs Dept.



In front of the World Bank headquarters, Washington, DC

### 《Reference》Kyoto Protocol

The Kyoto Protocol was adopted in December 1997 at the Third Conference of Parties to the UN Convention on Climate Change (COP3) held in Kyoto, and set quantified targets of greenhouse gas reductions for developed countries including economies in transition. Different target values have been set for different countries, such as 6% for Japan, 7% for the USA and 8% for the EU. No targets have been set for developing countries.

Target gas	Carbon dioxide, methane, dinitrogen monoxide, three freon alternative gases (HFC, PFC, SF6)	
Base year	1990 (1995 may be the base year for HFC, PFC and SF6)	
Target period	First commitment period is from 2008 to 2012	
Reduction target	<ul> <li>Reduction of total emissions from developed countries by at least 5% from the 1990 value</li> <li>Target values are set for each developed country</li> </ul>	
Requirements to effectuate	<ol> <li>Ratification by 55 or more Parties to the UN Framework Convention on Climate Change</li> <li>Total CO<sub>2</sub> emissions from the developed countries that ratified the protocol amount to 55% or more of that from all developed countries</li> <li>This Protocol shall enter into force on the ninetieth day after both 1 and 2 above are met.</li> </ol>	

### **Kyoto Mechanism**

The Kyoto Mechanism refers to systems that are approved in the Kyoto Protocol and promote every country to achieve greenhouse gas reductions through international cooperation.

Emission Trading · · · · · · · ·	· developed countries trade assigned amounts
Joint Implementation	developed countries jointly implement emission reduction projects and share the reductions
Clean Development Mechanism	developed countries cooperate with emission reduction projects in developing countries and receive resulting reductions