

Objective and Overview of Global Superior Energy Performance Partnership

Ministry of Economy, Trade and Industry, Japan

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Executive Summary The Global Superior Energy Performance Partnership, or GSEP (comprising sector-by-sector working groups), was inaugurated as an international initiative for promoting the industrial sector's energy conservation and environmental responses under the leadership of the Japanese and U.S. governments in 2010, taking over achievements of the Asia-Pacific Partnership on Clean Development and Climate, or APP. At two GSEP meetings that took place in FY2011, although participants pointed to such challenges as a further expansion of participating countries in the GSEP and the materialization of specific GSEP measures, the meetings attracted many participants who shared expectations about progress in GSEP operations. As an organization to realize a bottom-up approach led by Japan, the GSEP is expected to develop its operations, including effective inputs into climate change negotiations, by taking advantage of government-private cooperation unique to the partnership.

1. Introduction

The Global Environment Affairs Office takes charge of external negotiations on and international cooperation in global environment conservation. In this respect, the office leads and manages operations of the Global Superior Energy Performance Partnership (GSEP), an international partnership for improving energy efficiency. The GSEP is an international framework to promote energy security and global warming measures, two sides of the same coin, through the development, diffusion and transfer of energy conservation and environmental technologies and through relevant technical cooperation under the public-private partnership. This paper outlines the Global Environment Affairs Office's present views about the background for the GSEP inauguration, future challenges and expectations, and the GSEP's relations in U.N. negotiations.

2. Body

2.1. GSEP taking over APP

In July 2005, the Asia-Pacific Partnership on Clean Development and Climate (APP) was created to respond to growing energy demand in the Asia-Pacific region and address environmental pollution, energy security and the global warming problem. The seven countries of Japan, Australia, Canada, China, India, the Republic of Korea and the United States participated in the APP to promote regional cooperation for the development, diffusion and transfer of cleaner and more efficient technologies under the public-private partnership. Establishing eight task forces on (1)

aluminum, (2) cement, (3) coal mining, (4) renewable energy and distributed generation, (5) buildings and electric appliances, (6) cleaner fossil energy, (7) power generation and transmission, and (8) iron/steel, the APP proceeded with specific cooperation projects.

The APP Policy Implementation Committee at its ninth meeting in April 2011 agreed to terminate APP operations for some reasons, including budgetary constraints at the U.S. Department of State. At the same time, it was explained that three task forces on iron/steel, cement, and power generation and transmission would be taken over by the GSEP (a framework that was proposed by Japan and the United States and approved as an initiative under the Clean Energy Ministerial (CEM) at the meeting in July 2010). At its meeting in Paris in September 2010, the Executive Committee of the International Partnership for Energy Efficiency Cooperation (IPEEC) agreed to position the GSEP under the IPEEC.

In addition, three more working groups were created: the Energy Management Working Group (led by the United States), the Combined Heat and Power (CHP) and Efficient District Heating and Cooling (DHC) Working Group (led by Finland) and the Cool Roofs and Pavements Working Group (led by the United States). The GSEP then started its operations officially with the six working groups under the CEM and IPEEC.

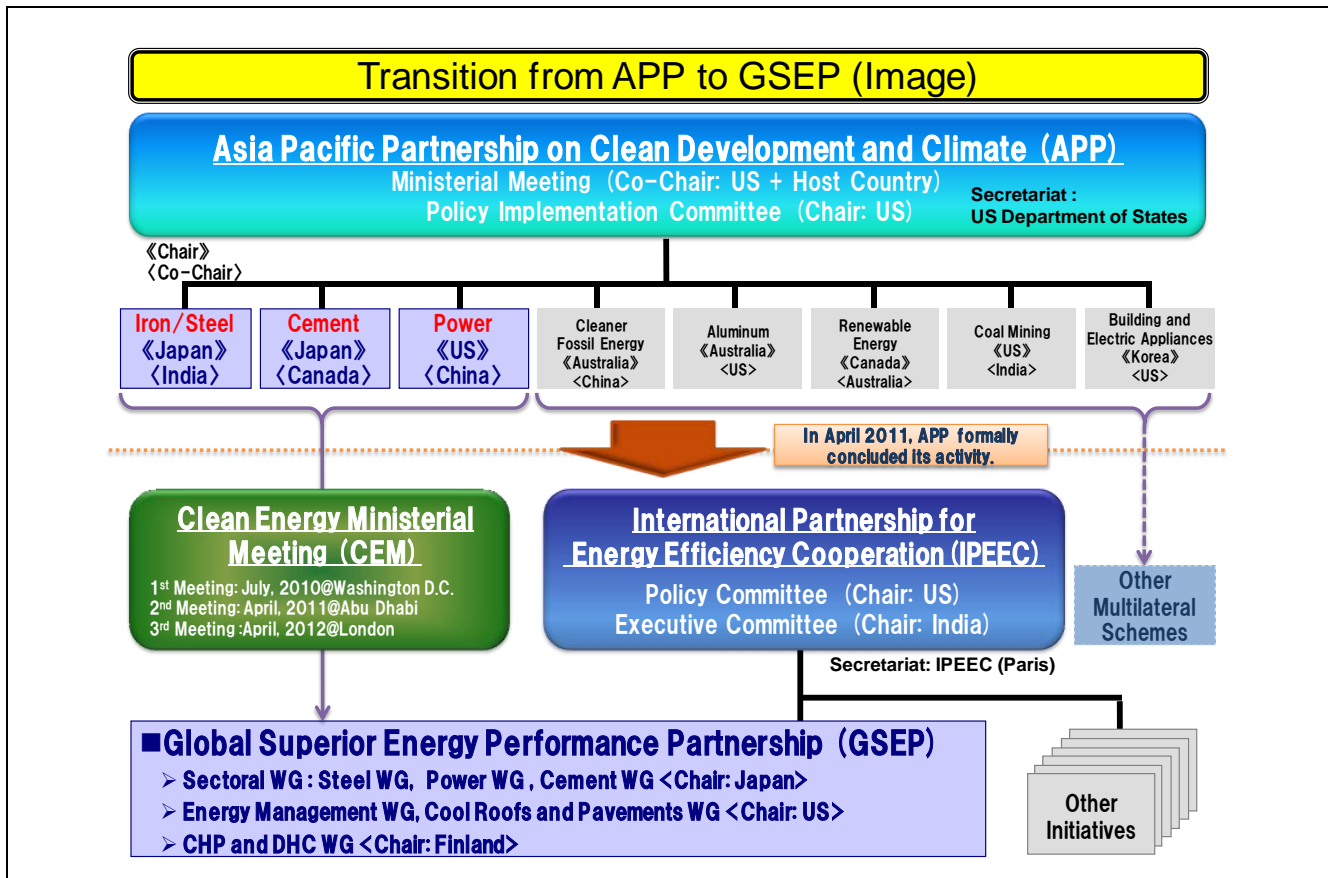


Fig. Transition from APP to GSEP (Image)

2.2. Specific APP achievements

The Steel Task Force prepared “State-of-the-Art Clean Technologies: SOACT,” allowing the partners to share 64 relevant technologies. The task force also conducted an energy conservation diagnosis for steel plants, estimating that the seven APP countries have a potential to reduce carbon dioxide emissions by 130 million tons per year. It also implemented an energy conservation and environmental diagnosis for three Chinese and as many Indian steel plants, finding that they could afford to reduce energy consumption by 30,000 terajoules per year.

The Cement Task Force created the “Cement Technologies Booklet,” a collection of best practices for energy conservation technologies. It also conducted an energy conservation and environmental diagnosis for four Chinese and as many Indian cement plants and made specific proposals on energy efficiency targets and the potential installation of waste heat power generation systems.

The Power Generation and Transmission Task Force held five peer reviews two years from 2007, with 50 to 100 people participating in each. The task force estimated that the APP countries could reduce CO₂ emissions by 120 million tons per year by diffusing operational improvements. It also compiled a handbook of good operation and maintenance practices, which was actually used for a performance diagnosis for power plants in China.

While the APP made these achievements, there were some indications that for example the APP lacked discussions on how to finance commercial projects.

2.3. GSEP operations in FY2011 and future challenges

In September 2011, the GSEP held the first workshop in the United States. In the workshop, participants expressed their expectations on future operations including APP task force operations being taken over by the GSEP. In response, the first sectoral working group meeting (cement, power and steel working groups) took place in Tokyo in March 2012. Participants, including new ones from the European Union, shared APP achievements and deepened discussions on future operation plans and specific themes to address. Participants numbered about 140 for the first workshop and about 70 for the working group meetings, conducting constructive discussions. These meetings indicated the high expectations placed on future GSEP operations.

Future challenges include the official, stable participation by both the public and private sectors of such major countries as China and India, the identification prioritized areas for the GSEP, and the materialization of how to mobilize finances.

2.4. Future expectations (including relations in U.N. negotiations)

As for U.N. climate change negotiations, the 17th Conference of Parties to the U.N. Framework Convention on Climate Change, or COP17, agreed to establish the Ad Hoc Working Group on the Durban Platform for Enhanced Action, agreeing on a path to a future framework. For the immediate future, the group is expected to hold brainstorming or workshops including experts inside and outside the United Nations. The GSEP, though being an initiative independent from U.N. negotiations, has the potential to input best practices for the development, diffusion and transfer of energy conservation and environmental technologies into such brainstorming or workshops as an organization to realize the bottom-up approach.

Industrial energy conservation and environmental response needs in the world have been persistently increasing. According to the International Energy Agency, the industrial sector accounted for 36% of

global energy consumption in 2009, the largest share among sectors¹. In addition, as long-term CO₂ emission reduction measures “energy conservation” is expected to account for 72% in 2020 and for 44% in 2035². According to an assessment reported by the Asian Development Bank, the ADB limited investment to \$10 million per year in the industrial sector’s energy conservation while investing nearly \$550 million per year in renewable energy under clean energy projects between 2006 and 2010³. Given this situation, the GSEP is required to creatively discuss the industrial sector’s global energy conservation and CO₂ emission reduction measures including finance.

The GSEP is expected to develop its operations while accumulating specific successful practices as an initiative to lead the materialization of the public-private partnership. The Global Environment Affairs Office is determined to strive to promote the GSEP toward the development, diffusion and transfer of energy conservation and environmental technologies.

¹ IEA Energy Balances of Non-OECD Countries, 2011

² IEA World Energy Outlook, 2011

³ Review of Energy Efficiency Interventions, Independent Evaluation Department, Asian Development Bank, October 2011