

Potential of Japan's Technology to Solve Climate Change Issues

July 10th, 2012

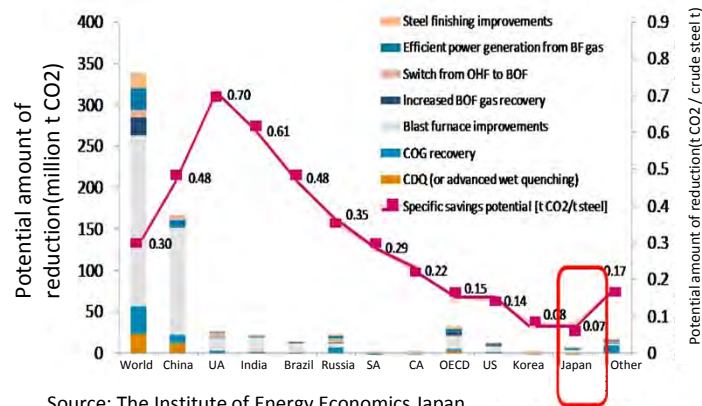
Ministry of Economy, Trade and Industry

Japan's Low-Carbon Technology and Potential Contribution

Iron and Steel

- By applying the best practice of iron and steel plants in Japan to that of the world's plants, it is estimated to be reduced **130 million tons** of CO2 which is equivalent to Japan's 20% emission.

Potential reduction of CO2 by applying BAT (Best Available Technology)

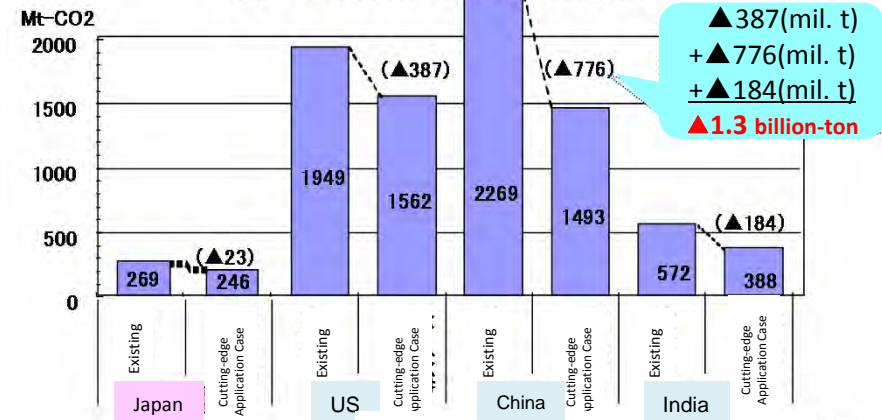


Source: The Institute of Energy Economics Japan

Coal Power Generation

- By applying the best practice of coal-fired power plants in Japan to that of the US, China and India, it is estimated to be reduced **1.3 billion tons** of CO2 which is equivalent to Japan's total emission.

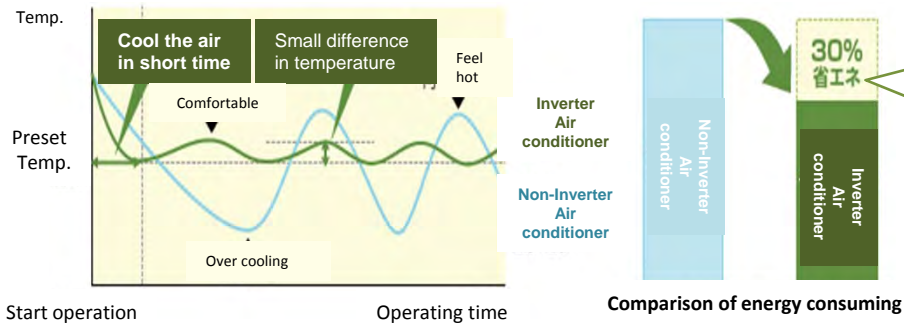
CO2 Emission from Coal Power Plant in 2004



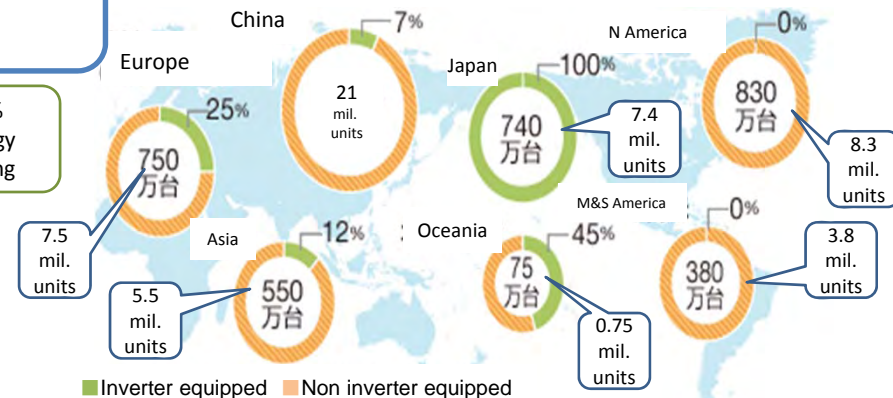
Source: The Institute of Energy Economics Japan 試算

Home Electrical Appliance (Air Conditioner)

- By improving efficiency of all air-conditioners' in the world as efficient as Japan's air-conditioners which is equipped with inverter controller, it is estimated to be reduced **100 million tons** of CO2.



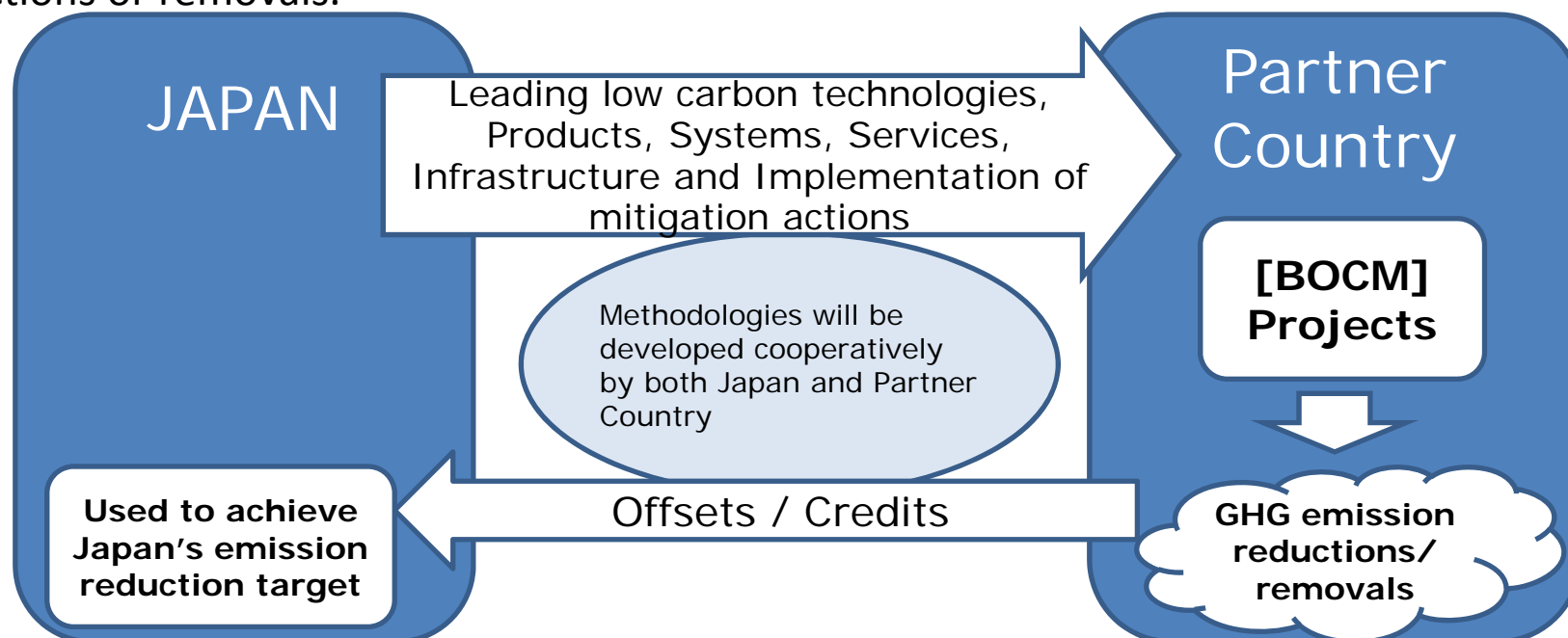
【Market Share for inverter air-conditioner】



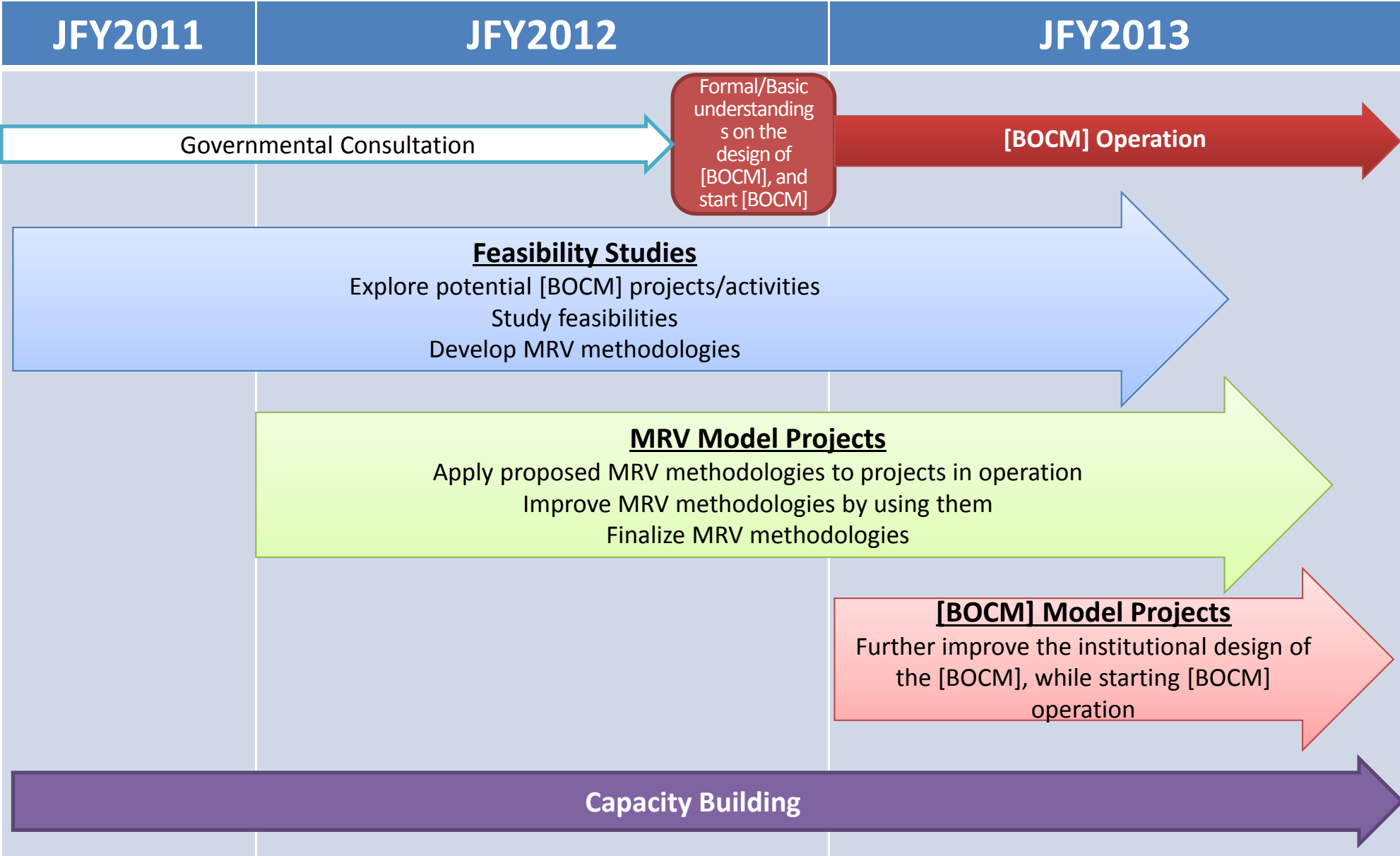
Bilateral Offset Credit Mechanism[BOCM]

Purpose of the BOCM

- ◆ To facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- ◆ To appropriately evaluate contributions to GHG emission reductions or removals from developed countries in a quantitative manner, through mitigation actions implemented in developing countries and use those emission reductions or removals to achieve emission reduction targets of the developed countries.
- ◆ To contribute to the ultimate objective of the UNFCCC by facilitating global actions for emission reductions or removals.



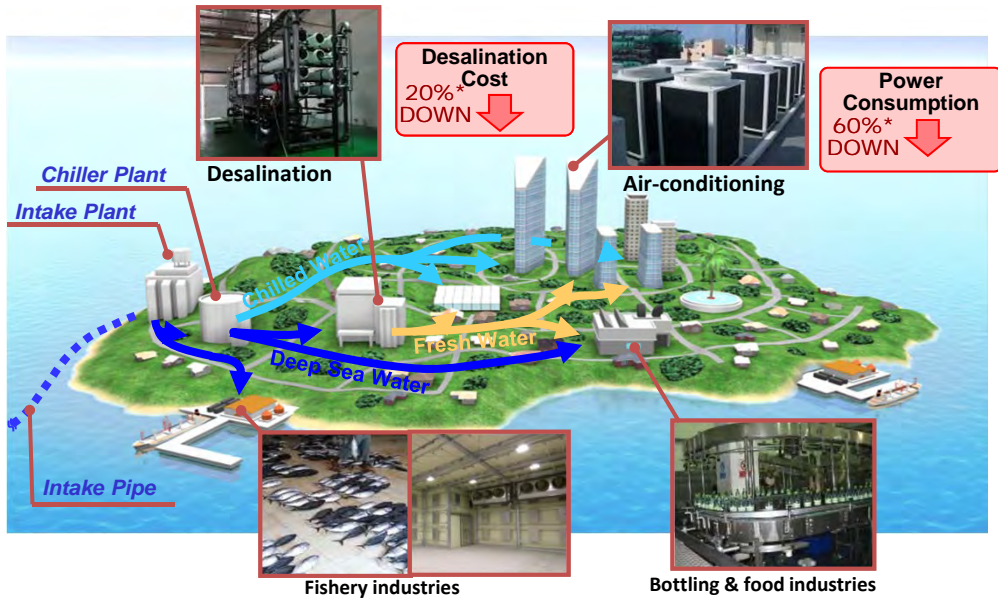
Roadmap & MRV/[BOCM] Model Project



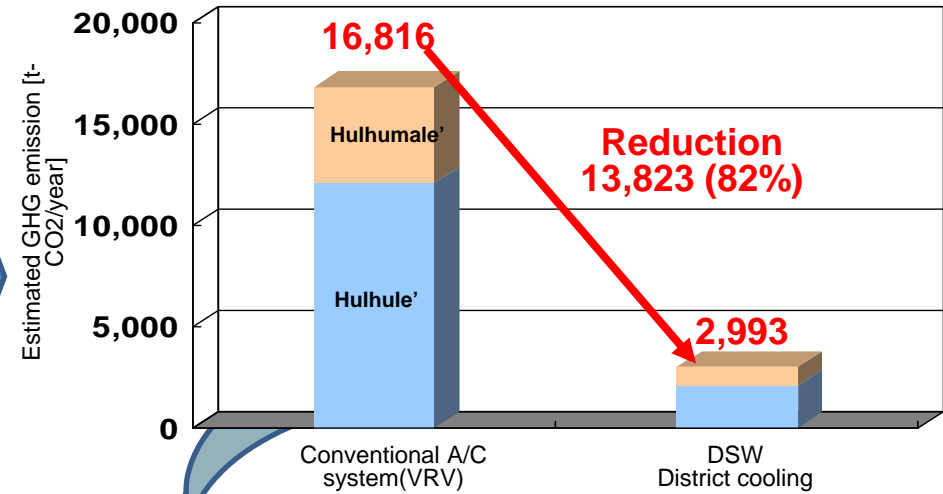
Feasibility Study In the Republic of Maldives (Deep seawater utilization system)

Reference : Hitachi Plant Technologies, Ltd.

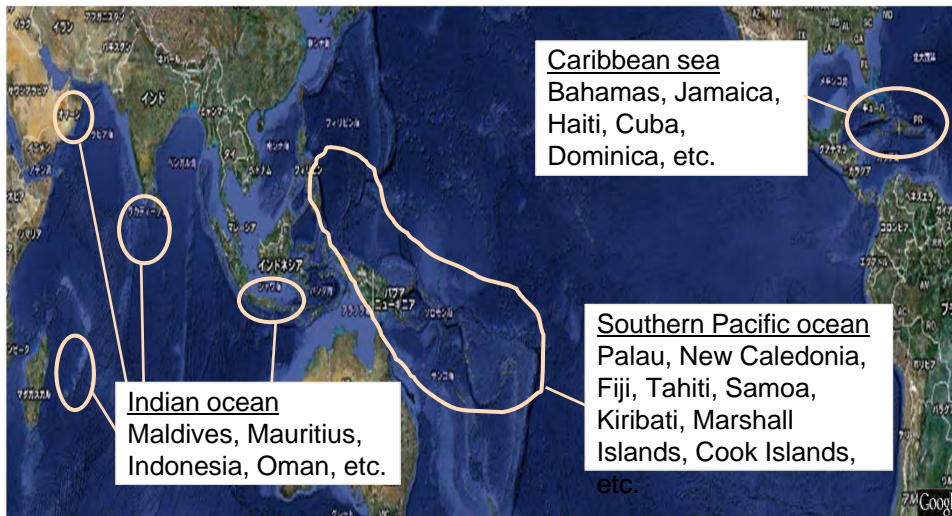
Concept of Multistage Deep Seawater Utilization



Estimated GHG reduction at 2 FS sites



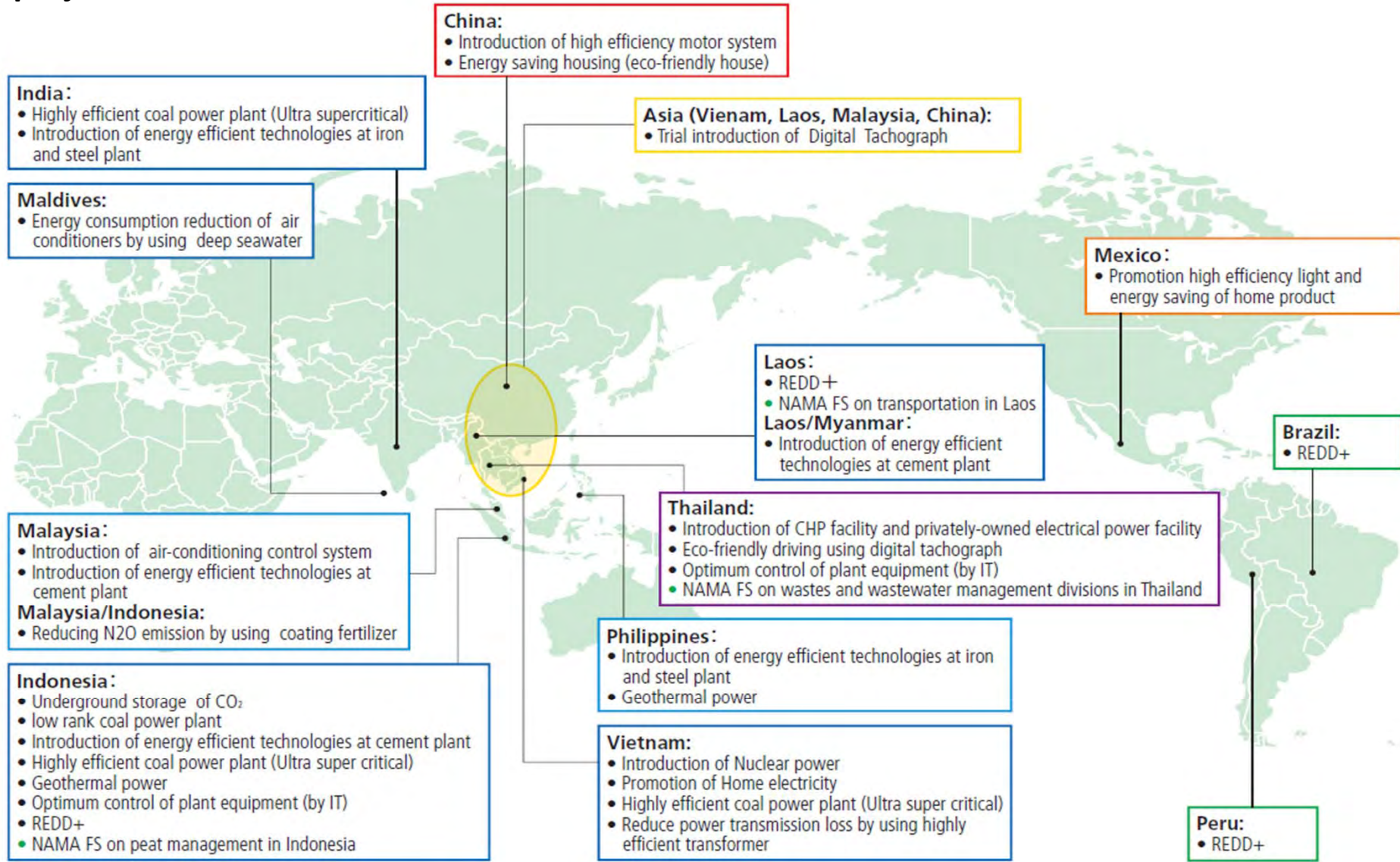
Potential areas for deep seawater cooling



- More than 100 cities in 20 countries are expected as potential sites for deep seawater cooling system.
- Up to 1 million t-CO₂/year of total GHG emission reduction is expected at those potential sites.

Feasibility Study for Joint GHG Reduction Projects FY2010

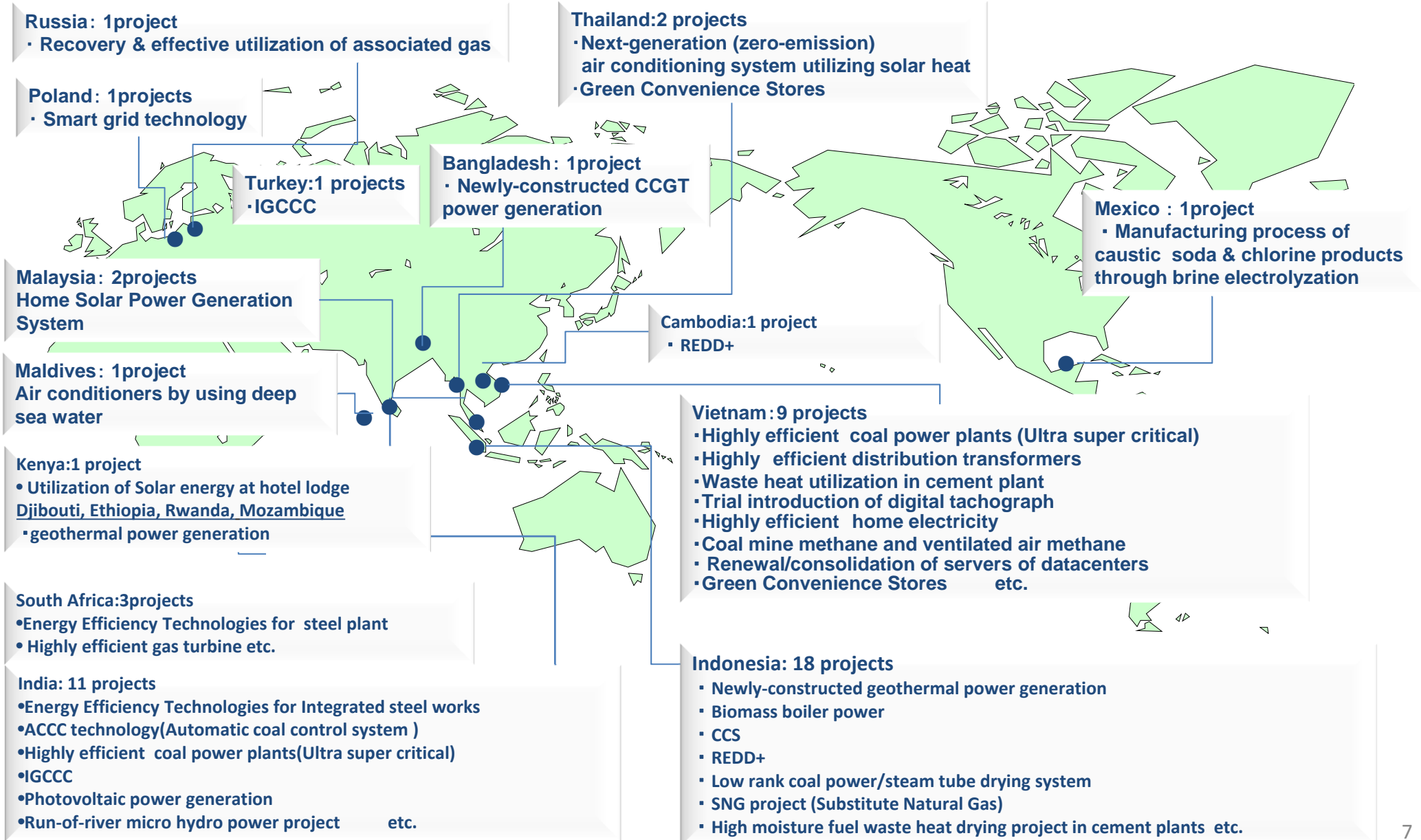
➤ 30 projects in 13 countries



- → Ministry of the Environment
- → Ministry of Economy, Trade and Industry

Feasibility Study for Joint GHG Reduction Projects FY2011

METI FS : 50 projects were selected for FY2011(18 countries)



[BOCM] Feasibility Study by METI in FY2012

METI FS : 36 projects were selected for FY2012 (15 countries)

※ As of June, 2012

