

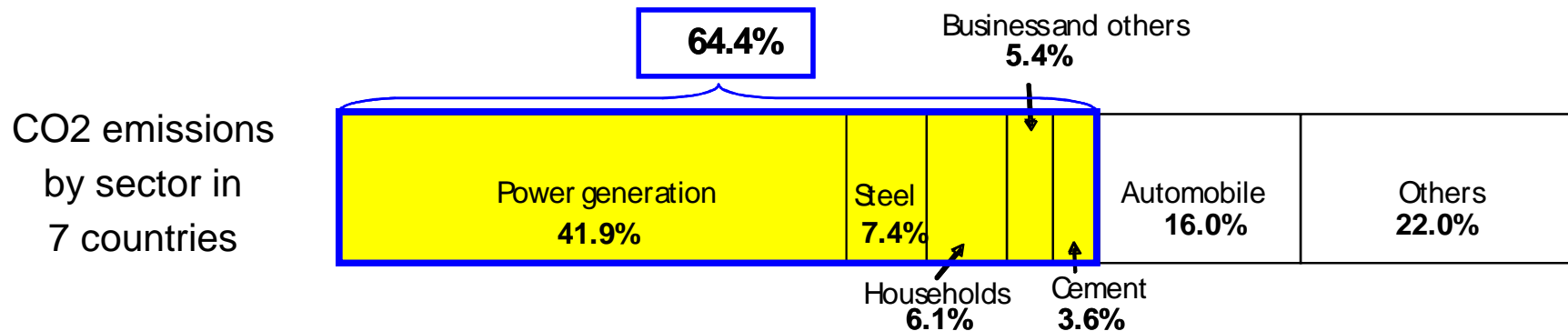
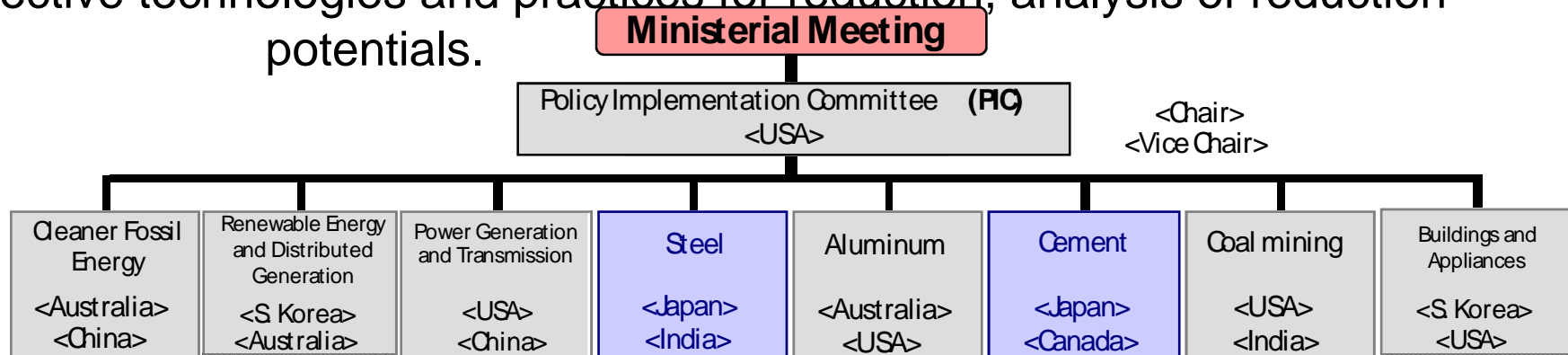
**Systems to promote  
technology transfer in  
sectoral approaches:  
-Experience from APP-**

**Shin Okamoto  
METI, JAPAN**

# Asia Pacific Partnership (APP)

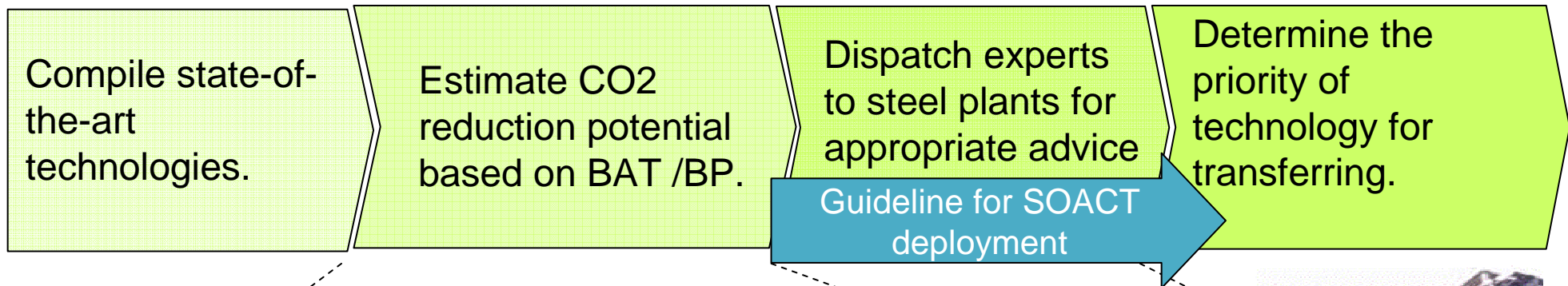


- Established in 2005 under the initiative of the U.S.
- 7 partners: Australia, Canada, China, India, Japan, South Korea, U.S.  
= 54% of the world's CO2 emission in 2005
- Private-public partnership
- Task Forces in 8 sectoral areas
- To promote practical technology cooperation for GHG reduction through sharing of effective technologies and practices for reduction, analysis of reduction potentials.

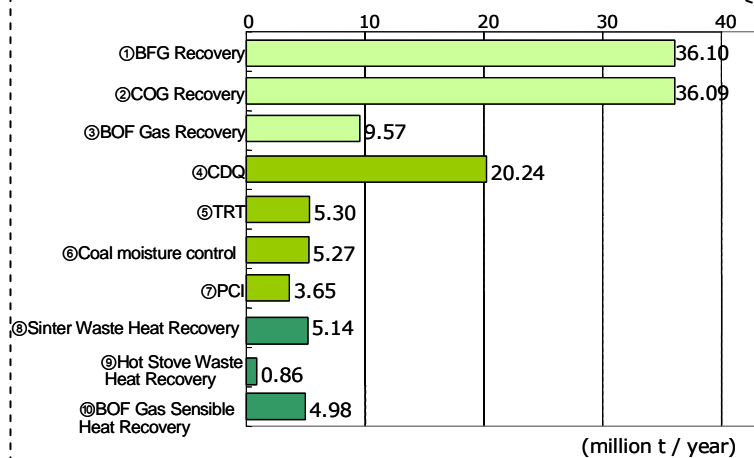


# Successful approach in iron and steel sector in APP

- Asia-Pacific Partnership promotes sector-specific cooperation among 7 countries.
- APP identifies and solves barriers for deployment and transfer of technologies in each sector



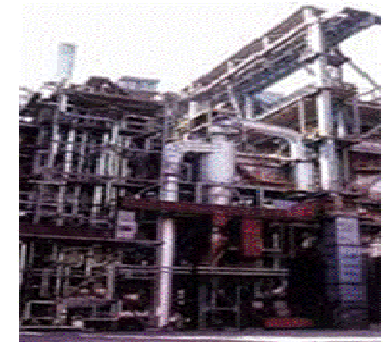
**64 technologies**



**CO2:127 M ton/year  
By 10 key technologies**



- Performance diagnosis in FY07&08
  - 3 plants in China
  - 3 plants in India
- Develop guideline to deploy SOACT



A Chinese steel plant adopted technology\* based on the performance diagnosis' advice.

\*Flue Gas Cleaning System for 3 sintering machinery exhaust cases

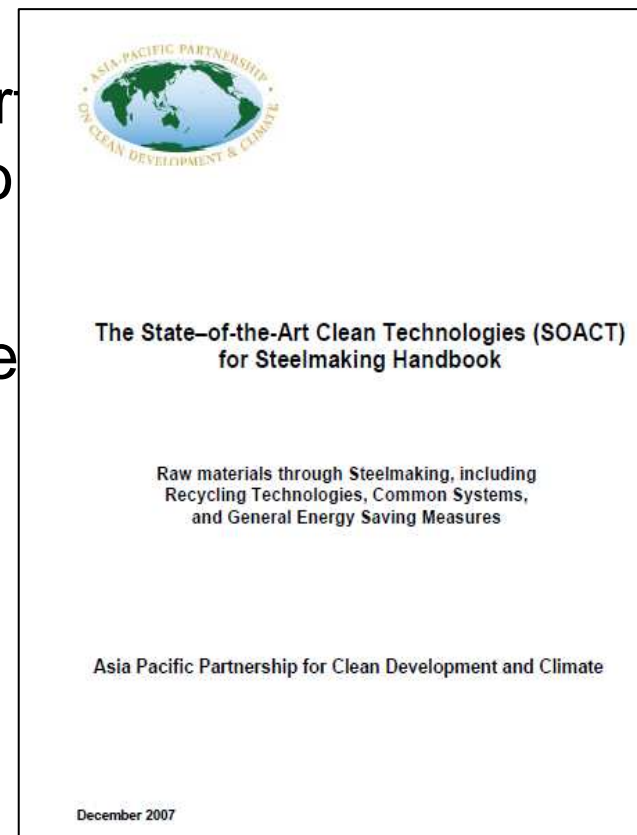
# SOACT Handbook in APP

- APP members shared The State-of-the-Art Clean Technologies ( SOACT ) relating to environmental protection and energy saving.
- The SOACT is posted on the APP website in January, 2008 and now available to the public.

64 technologies in SOACT handbook

-22 of environmental protection technologies

-42 of energy saving technologies

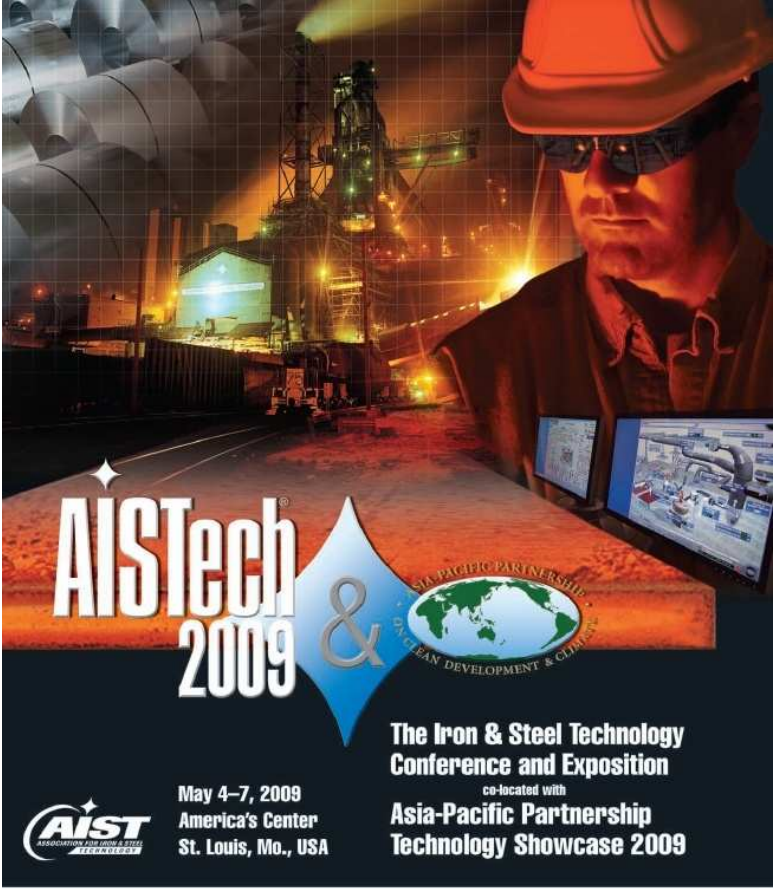


<http://www.asiapacificpartnership.org/>

Sintering	Coke making	Iron making	BOF Steelmaking	EAF Steelmaking	Casting	Recycling	Common System	General Measures	Total
11	6	11	9	6	1	4	11	5	64

# Technology Showcase in APP

- The US proposed Linkage to “Technology Showcase”
- Many vendors of environmental technology in one place
  - “Hands On” evaluation of equipment
  - Discussion with vendor experts
  - Seminars on equipment applications
- Coordinate with APP meeting
  - May 4-7, 2009: St. Louis, Missouri, USA
  - In Partnership with Association for Iron and Steel Technology “AISTech 2009”
  - AISTech includes international exhibitors and presenters
  - APP Task Force members could attend technical session also
  - APP countries can show their technologies to an international



The poster features a background image of an industrial steel mill at night with a worker in the foreground wearing a hard hat and safety glasses. The text on the poster includes:

**AISTech<sup>®</sup> 2009** & **ASIA-PACIFIC PARTNERSHIP**  
**THE IRON & STEEL TECHNOLOGY CONFERENCE AND EXPOSITION**  
co-located with **ASIA-PACIFIC PARTNERSHIP TECHNOLOGY SHOWCASE 2009**

May 4-7, 2009  
America's Center  
St. Louis, Mo., USA

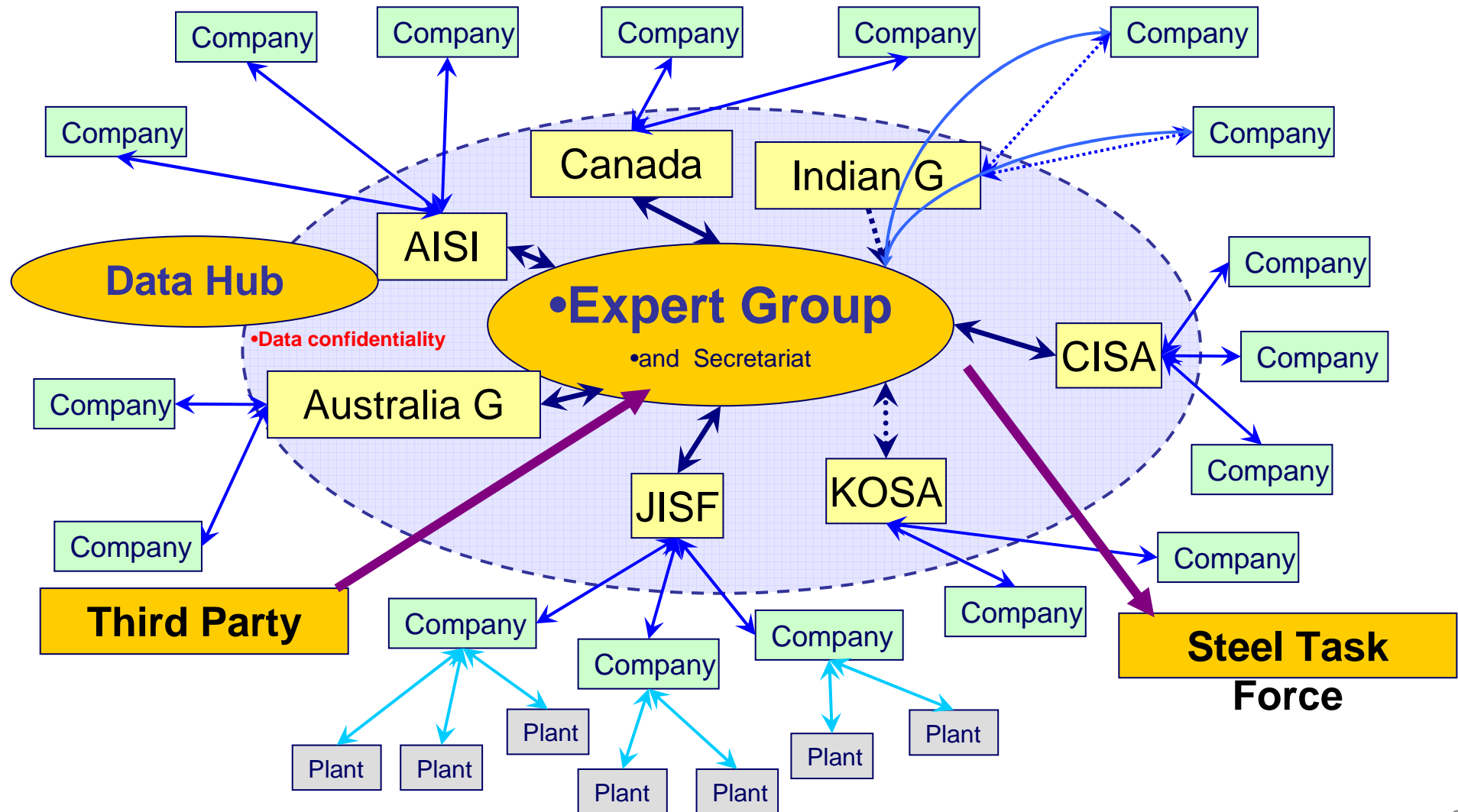
**AIST**  
ASSOCIATION FOR IRON & STEEL TECHNOLOGY

**2009 Exhibit Prospectus**

● <http://www.aist.org/aistech/index.htm>

# Data collection process in APP

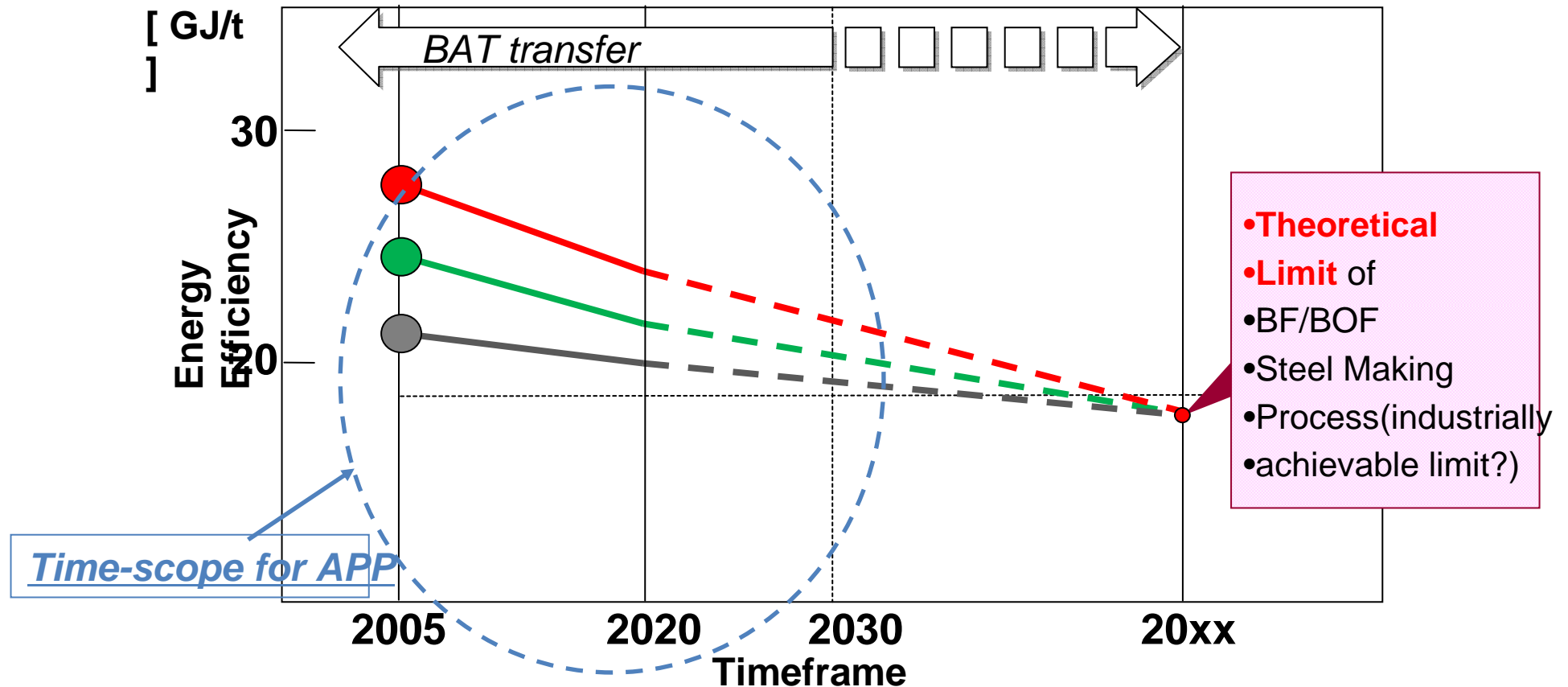
- Expert Group will promote data collection in close cooperation with industrial associations in each country.



# Target setting in APP

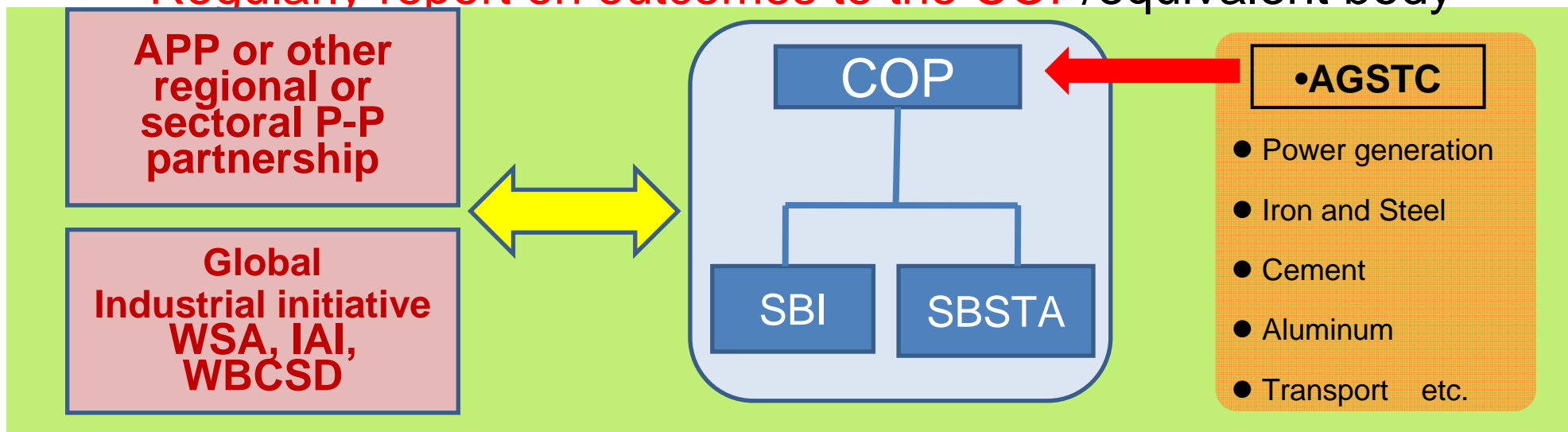
## Conceptual Image for Integrated Steel Plants

- Deploy existing technology
- Focused to the theoretical limit at the year of xx.
- Different milestone for each producer : **less efficient mills challenge more**

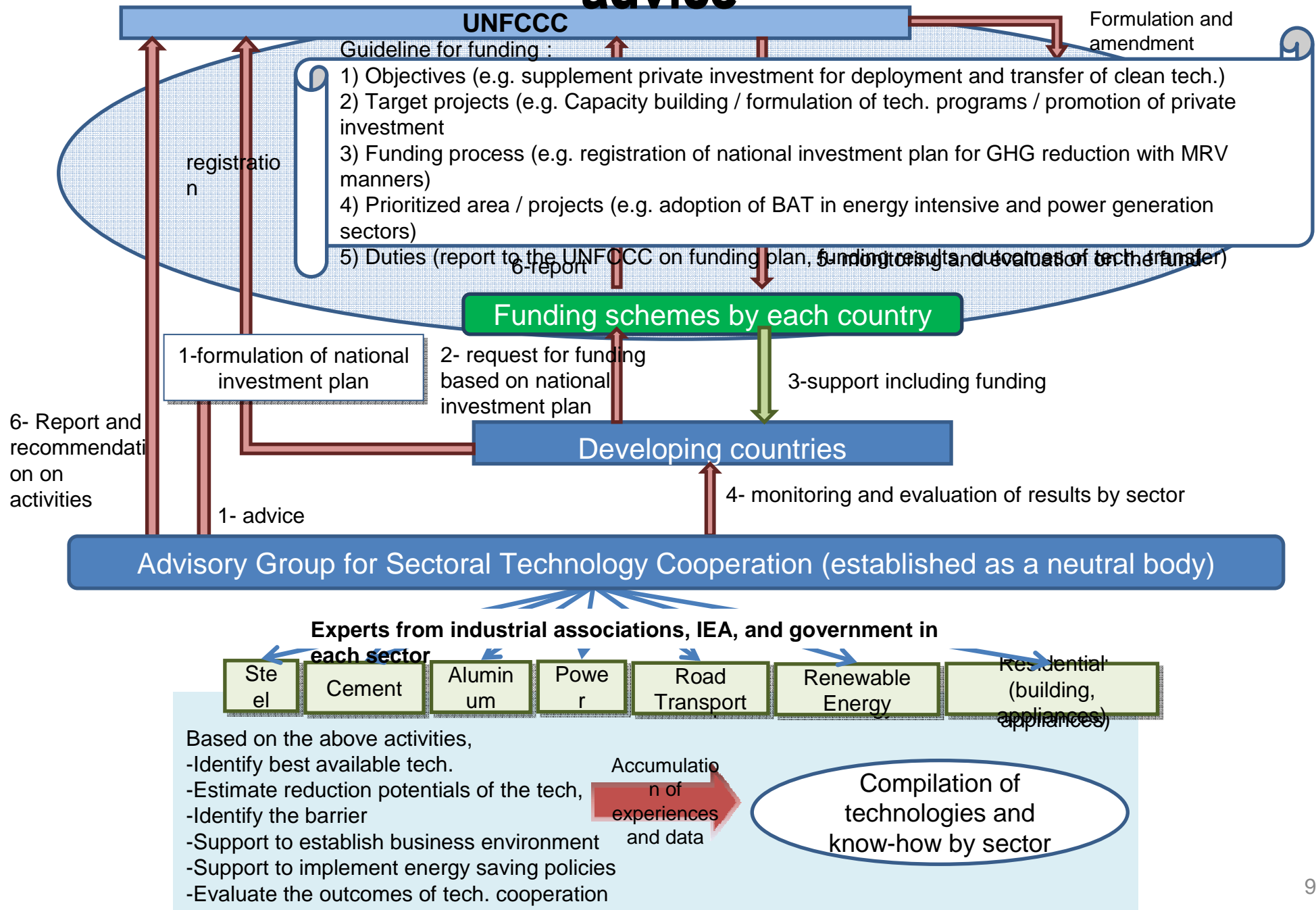


# Advisory Group for Sectoral Tech. Cooperation

- AGSTC can contribute to both transfer and development of **the key technologies**.
  - Consists of **representatives of industrial community and experts** (IEA, etc) **by each sector**
  - **Analyze the current situation** of development and transfer of the technologies **by each sector**.
    - For development: government R&D budget, international roadmaps for key tech., latest development outcomes, international cooperation activities
    - For transfer: the BAT, the BP, reduction potentials, barriers and solutions
  - **Formulate advice for further actions by each sector** based on the analysis
  - **Regularly report on outcomes to the COP/equivalent body**



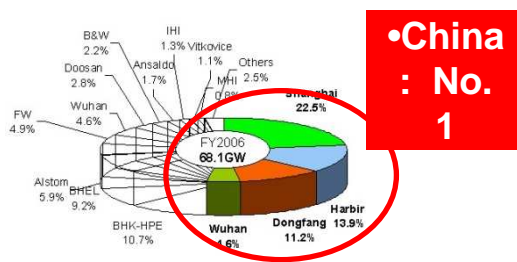
# Comprehensive approach of funding and technology advice



# Conclusions

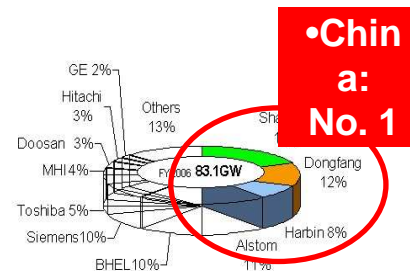
- Energy and environment technologies are very broad and differ by sector. Identifying and focusing on the key technologies is effective and efficient.
- The private sector is the main player. Competition is the major driving force of development.
- Government should expand its R&D budget, vitalize basic research, promote international cooperation, and ensure a sound business environment including IPR protection.
- Advisory group for sectoral technology cooperation is an idea to support UNFCCC activities on both development and transfer of the technologies.
- Comprehensive approach with funding and technological advice by sector will accelerate technology transfer.

**Conventional boiler**



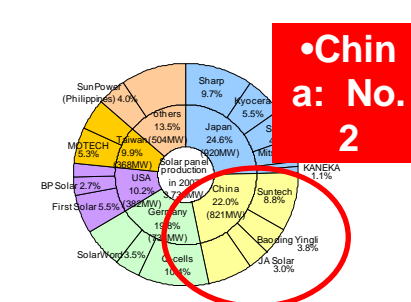
•Conventional boiler orders in world in 2006 (Mitsubishi Heavy Industries)

**Steam turbine**



•Steam turbine orders in world in 2006 (Mitsubishi Heavy Industries)

**Solar Panel**



•Solar panel production in world in 2007 (PV News 2008.3)



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