

# ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT & CLIMATE

## ALUMINIUM TASKFORCE UPDATE



Australian Government

PIC meeting  
19-20 May 2009  
Gold Coast, Australia





## **Aluminium Task Force Action Plan Projects:**

Aluminium Measuring and Benchmarking

Management of PFC Emissions

Management of Bauxite Residues

High Silica Bauxites Processing

Fluoride Emissions Management

Aluminium Recycling

Linkages to Technology Providers

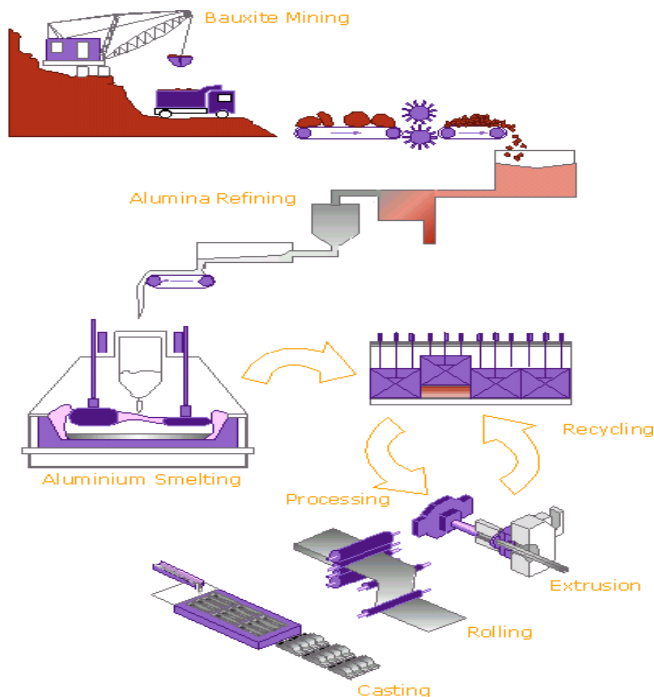
Development of Generic Computer Software for Automated Anode Effect Control



# Aluminium Measuring and Benchmarking



- Develop sustainability indices for measuring and benchmarking the industry's performance
- Reporting consistency and efficiency gained by the use of the IAI data reporting format



- A set of eight indices covering areas of importance across the aluminium sector
- IAI conducted training on provision of data
- Data collection completed and analysis underway

**Lead Partner: USA**

**Participating Partners: All**

**Locations: Nil**



Australian Government

# Management of PFC emissions Flagship Project



- Enable identification and implementation of cost-effective technically feasible alternatives to minimise PFC emissions
- 2 components – PFC emission reduction system workshops and demonstration study tours
- Develop PFC Emissions Management guide to supplement workshops and study tours
- Next workshop planned for 2009 and study tour after guide developed



**Lead Partner:** USA

**Participating Partners:**  
Australia, China

**Locations:** USA,  
Australia, China,



Australian Government

# Management of Bauxite Residue Flagship Project



**Lead Partner:** Australia  
**Participating Partners:**  
China and India  
**Locations:** Australia,  
China, India

- Develop technology, practices and alternative uses for bauxite residue (Red Mud) to reduce the reliance on stockpiling and storage
- Identify, develop and deploy technologies and practices for alternative use or improved storage
- Literature review and ongoing database to be released shortly covering current technology, practices, re-use options and related chemistry



# High Silica Bauxite Processing



- Develop new technologies and processing options that are environmentally and economically viable for processing
- Review current practices, develop processing options and conduct pilot studies to test the most promising options
- Literature review published and ongoing database to be released shortly
- Assessing options to prioritise and determine focus of further research and development work



**Lead Partner:** Australia

**Participating Partners:**  
China and India

**Locations:** Australia,  
China, India





Australian Government

# Fluoride Emissions Management



- To address the high level of fluoride emissions from aluminium smelters by promoting technology and practices to reduce
- Provide smelter operators with the necessary information to assess emission performance
- Fluoride Emissions Management Guide launch expected for November 2009



**Lead Partner:** Australia  
**Participating Partners:**  
China and India  
**Locations:** Australia,  
China, India



# Aluminium Recycling



- Develop a mechanism for establishing baseline recycling rates for aluminium
- Collect and collate data on recycling rates and develop a database of best practices
- Data component now part of the Measuring and Benchmarking project
- Best practice component addressed through knowledge sharing and Task Force outreach



**Lead Partner:** USA/Japan

**Participating Partners:**  
Australia and China

**Locations:** Nil



# Linkages to technology providers



An essential resource of aluminium industry technologies and providers

## Aluminium Industry Technology Directory

Asia-Pacific Partnership on Clean Development and Climate



Australia | Canada | China | India | Japan | Republic of Korea | United States of America



SEARCH NOW

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## About this site

Developed for the APP Aluminium Task Force, the purpose of this register is to provide a central database of technology providers from around the globe.

Through this website, you will be able to:

- **Include your business** on the register, or
- **Search the directory** for technology providers that will be able to assist you in improving the efficiency of your business.

Technology providers can assist business and industry to adapt technologies that will improve energy efficiency, reducing the impact of the industry's operations on the environment.

### Further information

If you have any questions or enquiries, please send us an email at [APPAluminiumTF@ret.gov.au](mailto:APPAluminiumTF@ret.gov.au)



# Development of Generic Computer Software for Automated Anode Effect Control



- To upgrade aluminium smelters in China from manual anode effect kill sequence to an automated kill sequence
- Build capacity within industry, academia, government and the national aluminium trade association in China to speed transition
- Provide training in the importance of PFC emissions management and other cost-effective methods to reduce PFC emissions

**Lead Partner:** USA

**Participating Partners:**  
China

**Locations:** China



# Aluminium Task Force Activities



- Six Task Force Meetings
  - Berkley, California – April 2006
  - Beijing, China – May 2006
  - Beijing, China – March 2007
  - Hyderabad, India – November 2007
  - Cape Town, South Africa – May 2008
  - Sanya, China – December 2008



- Task Force meetings linked to events for industry outreach
- Next Task Force meeting
  - India – September-October (proposed)



## Next Steps



- Increase industry outreach activities through closer links with other relevant organisations
- Updating Aluminium Task Force Action Plan to better reflect actual project implementation and to include the new project
- Commence review of gaps in Aluminium Task Force activities to determine areas for further work