

GENERAL OVERVIEW AND SPECIFIC ACTIVITIES OF THE ALUMINIUM TASK FORCE

Presented by: John Hartwell

Aluminium Taskforce Chair

Head of Division, Resources Division

Australian Government Department of Industry, Tourism and Resources

**International Conference on Aluminium – INCAL 07
21 November 2007 Hyderabad, India**



PRESENTATION OVERVIEW

- General outline of the Asia-Pacific Partnership on Clean Development and Climate (APP)
 - Formation and Objectives
 - Work Plan and Action Plan Development
 - Overall progress to date
- Description of the activities of the Aluminium Task Force
 - Meetings and Participation
 - Objectives and Sectoral Review
 - Projects being implemented



PARTNERSHIP FORMATION

- Asia-Pacific Partnership on Clean Development and Climate (APP) formed on 28 July 2005 at the 12th ASEAN Forum meeting
- Brings together key emerging and developed countries of the region
 - Australia, Canada, China, India, Republic of Korea, Japan and the USA
 - Canada joined in October 2007
- Together the Partner countries account for about half of the world's population, GDP, energy use and GHG emissions
- APP formally launched at the Inaugural Ministerial meeting in Sydney, Australia on 12 January 2006



Objectives and Purpose

- Consistent with and contribute to efforts under UNFCCC and complement Kyoto Protocol
- Develop, diffuse, deploy and transfer longer-term transformational energy technologies that will promote economic growth while enabling significant reductions in greenhouse gas intensities
- Share experiences in developing national sustainable development and energy strategies
- Build capacity to strengthen cooperative efforts
- Engage the private sector in developing and deploying technology solutions



Work Plan and Action Plan Development

- Ministers established eight Task Forces at their inaugural meeting
 - Cleaner Fossil Energy, Renewable Energy and Distributed Generation, Power Generation and Transmission, Aluminium, Buildings and Appliances, Cement, Coal Mining and Steel
- The Task Forces were required to develop Action Plans with ambitious but realistic goals and identify cost and performance objectives
- All Task Force Action Plans were completed by and approved in October 2006



Progress To Date

- The second APP Ministerial Meeting was held on 15 October 2007 in New Delhi, India to review progress which includes:
 - Endorsed 110 collaborative projects across the Partnership
 - Announce the addition of Canada as the seventh partner
 - Recognised 18 projects as flagship projects
 - Launched the Asia- Pacific Energy Technology Co-operation Centre



Aluminium Task Force Meetings and Participation

- Berkley, California – 18-21 April 2006 (Meeting 1)
 - Commenced developing Action Plan
- Beijing, China – 18 May 2006 (Informal)
 - Industry signed an MoU to underpin many of the APP Initiatives
- Beijing, China – 21 March 2007 (Meeting 2)
 - Perfluorocarbons (PFCs) and Bauxite related project technical workshops attended by over 200 participants
- Hyderabad, India – 20 November 2007 (Meeting 3)
 - In conjunction with INCAL '07



Aluminium Task Force Objectives and Sector Review

- Task Force Objectives

- Enhance current aluminium production processes through uptake of best - practice use of existing equipment.
 - Advance the development and deployment of new best practice aluminium production process and technologies across Partnership economies.
 - Enhance sector-related data, including recycling and performance.
 - Facilitate increased aluminium recycling rates across the Partnership.
- APP Partners account for 52 per cent of the world's aluminium production



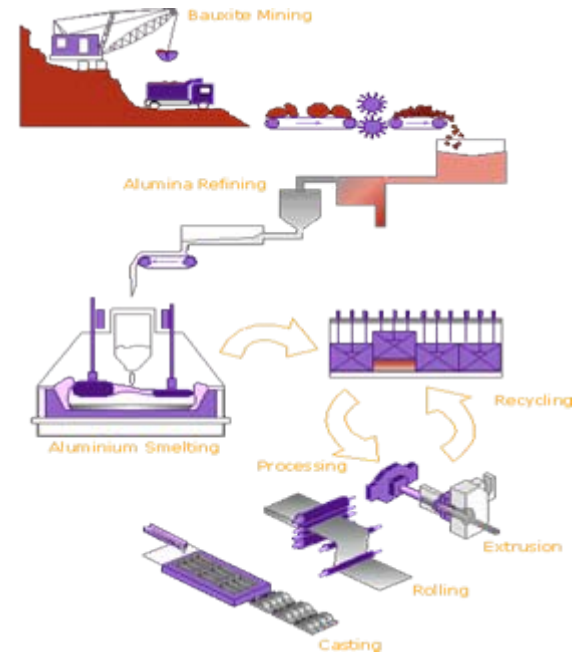
Aluminium Task Force Projects

- Seven project proposals are included in the Aluminium Task Force Action Plan
 - Benchmarking the Aluminium Industry
 - Management of PFC Emissions
 - Management of Bauxite Residues
 - Processing of High Silica Bauxite
 - Fluoride Emissions Management
 - Aluminium Recycling
 - Linkages to Technology Providers



Project 1: Aluminium Benchmarking and Measuring

- **AIM:** To establish baseline data that can be used for measuring the aluminium sector's relative performance
- Common understanding to use IAI data reporting format and further training to improve data format consistency
- First report indicates project on track to develop a set of indices by 2009



Lead Partner: USA

Participating Partners: Australia and China

Locations: Nil



Project 2: Management of PFC emissions

Flagship Project

- PFCs have global warming potential several thousand times stronger than CO₂
- **AIM:** To enable all primary production facilities to identify and implement cost-effective and technically feasible opportunities to minimise PFC emission during smelting
- Develop a comprehensive PFC emission reduction system, conduct a study tour of a facility that utilises appropriate PFC management systems and undertake pilot demonstrations



Lead Partner: USA

Participating Partners: Australia, China

Locations: USA, Australia, China,

Project 3: Management of Bauxite Residue (Red Mud) Flagship Project

- Bauxite residue poses environmental risks because of its highly alkaline nature and trace amounts of radionuclides
- **AIM:** To identify and develop viable technologies and practices for managing bauxite residues to reduce the reliance on stockpiling and storage
- Review current practices, develop best practice residue management technologies and conduct pilot trials



Lead Partner: Australia

Participating Partners: China and India

Locations: Australia, China, India

Project 4: High Silica Bauxite Processing

- Growing bauxite consumption is increasingly leading to a dependence on lower grade bauxite
- **AIM:** To develop environmentally and economically viable ways of processing high silica bauxites to reduce energy and caustic soda consumption
- Review current practices to limit reactive silica and lower soda forms of desilica product, develop processing options and conduct pilot trials



Lead Partner: Australia

Participating Partners: China and India

Locations: Australia, China, India



Project 5: Fluoride Emissions Management

- Fluorides can have a serious environmental impact on local flora and fauna – accumulating in vegetation
- **AIM:** To provide smelter operators with the ability to compare their fluoride emissions performance to the global average and implement best practice fluoride emission management
- This project had a delayed commencement due to the overlap with the PFC project as both relate to 'pot room' operations



Lead Partner: Australia

Participating Partners: China and India

Locations: Australia, China, India

Project 6: Aluminium Recycling

- Aluminium recycling uses only 5 percent of the energy required to produce aluminium from raw materials
- **AIM:** To develop a mechanism for establishing baseline recycling rates for aluminium and an annual reporting mechanism
- First report considered and benchmarks with a standard set of indices identified



Lead Partner: USA/Japan

Participating Partners: Australia and China

Locations: Nil

Project 7: Linkages to technology providers

- Much of the work of the Task Force relies on the application of technology
- **AIM:** To develop a register of technology providers which is accessible to industry

An essential resource of aluminium industry technologies and providers



Aluminium Industry Technology Directory

Asia-Pacific Partnership on Clean Development and Climate

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

Search [SEARCH NOW](#) [ADVANCED SEARCH](#) [USER LOGIN](#) [REGISTER YOUR BUSINESS](#)

About this site

Developed for the AP6 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 emailaddress@domain.com.au

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Conclusion

- The APP represents a new way of approaching global environmental challenges
- Unprecedented approach involving business, government & researchers is the key to the success of the APP
- Important for the industry to be involved through Industry Associations
- Thank you for your attention

