



FINAL PROJECT STATUS REPORT FORM

Project Number: ATF-06-02	Task Force: Aluminium	Date of Project Status Update: January 2011
Title of Project: Management of Perfluorocarbon Emissions		
Lead Partner Country: USA and China		
Participating Partner Countries and Organizations: Australia, Canada, China, USA Australia Department of Resources, Energy and Tourism; Australian Aluminium Council (AAC); Environment Canada; Aluminium Association of Canada (AAC) China Non-Ferrous Metals Industry Association (CNIA); US Environmental Protection Agency; US Aluminum Association; International Aluminium Institute		
Location of Project: <i>Country, State/Province/City</i> USA – Washington, D.C. Australia – Tasmania, Bell Bay - Australian Capital Territory (ACT), Canberra Canada – Quebec, Montreal China – Shanxi, Yongji City Henan, Luoyang, Zhengzhou, & Gongyi Shandong, Longkou Hunan, Chuangyanan Hubei, Danjiangkuo City Qinghai, Xining City Ningxia, Qingtongxia		
Project Manager Information: Name: Sally Rand Organization: U.S. EPA Climate Change Division Phone : 1-202-343-9739 Address: 1200 Pennsylvania Avenue, NW (6207J) Fax: 1-202-343-2202 Washington, DC 20460 Email: rand.sally@epa.gov		
Actions Since Last Update: <i>Please provide a brief description of the Activity undertaken.</i> Second Study Tour by Chinese pot room operators to Australia, June 2010 Project to Characterize Non-Anode Effect PFC Emissions from Chinese smelters completed using data from nine smelter measurements including collaboration with Chalco's Zhongzhou Research Institute, November 2010		



Deliverables Since Last Update: *Please list the outputs delivered by this project.*

FTIR Equipment transfer to China completed, Summer 2010.
 Interim Report on Study to Characterize Non-Anode Effect Related PFC Emissions from Chinese Aluminum Electrolysis Cells, August 2010.
 Final Report on Study to Characterize Non-Anode Effect Related PFC Emissions from Chinese Aluminum Electrolysis Cells, December 2010.

Milestones Reached Over Lifetime of Project: *Please list the major milestones attained with timing (month/year)*

PFC Management Workshop, Beijing, China, March 2007
 Study Tour by Chinese pot room operators to the Rio Tinto Alcan Bell Bay smelter in Tasmania, February 2008
 Completed Anode effect prevention and response training for managers and senior engineers at PFC Demonstration Pilot Project facilities in Shanxi and Henan Provinces (Shanxi Huasheng Aluminum Co, and Yichuan Power Yuganglongquan Aluminum Co.,) April 2008
 Memorandum of Understanding Signed with China Nonferrous Industry Association for the implementation of PFC Management Project in China, August 2008
 Completed PFC emissions measurements at four smelters in China, and trained Chinese experts on EPA/IAI PFC Emissions Standard Measurement Protocol, August-December 2008
 US State Department Awards grant for Automated Anode Effect Termination Project, September 2009
 PFC Measurement Training and Canadian FITR equipment initiative launched, Fall 2009.
 Evaluation of continuous non-anode effect PFC emissions initiated, October 2009
 Chinese and English version of the PFC Management Guide completed, December 2009.
 Technical evaluation completed at one smelter of 'continuous' (non-anode effect) PFC emissions observed during smelter-specific PFC measurements in China, January 2010.
 Based on 13 smelter measurements, technical evaluation completed for non-anode effect continuous PFC emissions, December 2010.

Expected Project End Date:

Project Already Complete: Yes No

Please provide url address for where activity can currently be found along with new name and/or identification number of project (if applicable).

Additional Contact Information: (If different from above) *Please provide point of contact to find more information.*

Bian Gang, Chinese Nonferrous Metals Industry Association, Beijing, China.
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Other Information:

Pursuing PFC reductions in the aluminum sector is strategically important for climate protection. In addition to very high global warming potentials, PFCs have extremely long atmospheric lifetimes – 10,000-50,000 years. Consequently, these gases only accumulate in the atmosphere and the climate impact is irreversible. Additional compensating GHG reductions will have to be



achieved to mitigate the permanent radiative forcing of PFCs, raising the cost of achieving any target for stabilizing atmospheric concentrations of greenhouse gases. Second, aluminum is a very valuable climate protection material. Light weighting vehicles is a technically proven and yet enormously underutilized opportunity for lowering the greenhouse gas emissions trajectory of the transportation sector.

In the past decade, China has gone from being a minor to the largest global producer of primary aluminum. China's estimated production capacity is now nearly double the second (Russia) and third (Canada) largest producing countries combined.

In addition to being the largest producer of primary aluminum, China uses state-of-the-art domestically designed and produced technology which is being exported. However, current designs do not incorporate PFC minimizing design features such as computer-controlled automated anode effect termination.

Please attach any supplemental project information to this form.