



The aluminum project

Seminar in Maniitsoq, September 6-7 2011
Alcoa Inc.

Kristján Halldórsson

- Thanks to the Municipality of Qeqqata and Greenland development for to invite Alcoa to the seminar.
- Kristján is representing Alcoa this time. The other team members send their regards. They could not attend due to limited time for scheduling with a holiday in USA this week “Labor day”

- Alcoa is the oldest and the world's leading producer of primary aluminum and fabricated aluminum in the world
- Approximately 59,000 employees in 31 country
- Alcoa operates 23 smelters in five continents.
 - A few smelters are not operating at full capacity temporarily.
- Total production capacity is over 4 million tons aluminum per year
- Sales 2010 were 21 billion USD (≈ 107 milliarder DKK)
- Alcoa's customer base includes the world's leading producers of: aeroplanes, automotives, construction, turbines and packaging.





Solid basis for aluminium i mellemvarig og langvarig tidshorisont Strong Mid- and Long-Term Aluminum Fundamentals

Udsigt for aluminium

De store faktorer

Demografi

Vækst i antal folk i verdenen

- 2006: 6,6 milliarder
- 2025: 7,9 milliarder
- 2050: 9,1 milliarder

Vækst i storbyer

Procent af folk i storbyer

- 2006: > 50%
- 2030: > 60%

Miljø

Vækst i forbrug af energi

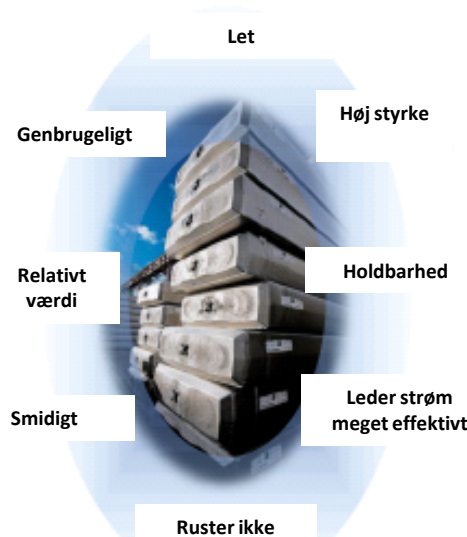
- vækst med 54% i 2025
- mest i udviklingslande

Forøgelse i privat transport

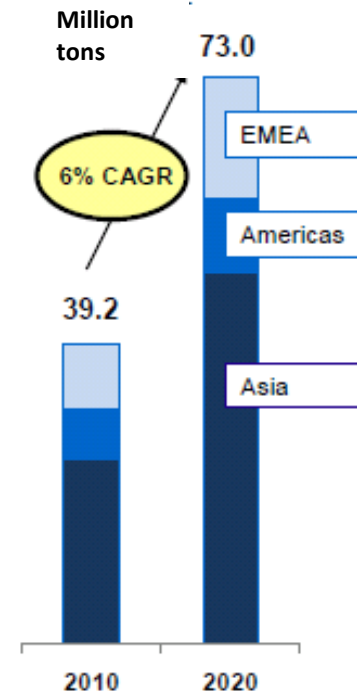
- vækst med 40% i 2030

Drivhus gas regleværk

Hvad aluminium tilbyder



Efterspørgsel efter aluminium



- Alcoa is investing in a Joint Venture with Ma'aden, the Saudi-Arabian mining company
 - Owned 74,9% by Ma'aden and 25,1% by Alcoa
 - Anticipated to be the lowest cost, most efficient aluminum complex in the world
 - Smelting at initial capacity of 740,000 tpy
 - Project also includes mine, refinery and a rolling mill
 - World class infrastructure (railway, port, power generation) provided by government as enabler for development
 - Competitive energy
 - Smelter is scheduled to be on-line 2013



- Modernisation of US and Canadian smelters
- Ongoing feasibility studies in cooperation with GSR here in Maniitsoq, Greenland
- MOU with government of Brunei for studying smelter options
- Unformal discussions in Iceland



- Alcoa remains positive on continue working on the project studies in cooperation with GSR.
- No insurmountable obstacles identified so far in the studies, however
 - Construction cost identified to be a critical issue, while project needs to be competitive on global basis
 - Alcoa believes in benefits for both parties of a joint venture investment with Greenland
 - Archeological remains have been identified near lakes where water level needs to be raised for hydro power plants
- Framework for further defining the project scope is expected to develop in spring session in Inatsisartut 2012



- Program in coordination with GSR to continue the open discussion on the project through the fall.
- Further development of the project, depending on the Inatsisartut spring session would include:
 - Determining the the financial feasibility based on, amongst other things:
 - review of the impact of legislation for use of international labor
 - continuing studies on hydros-/smelter design
 - continue gathering field data (Meterological, transmission test spans)
 - commence work on site specific ESHIA
- After evaluations and discussions with GSR past spring session of Intatsisartut, project schedule will be revised. However it is premature now to re-visit dates for construction start and FHM.



■ Thank you for your attention