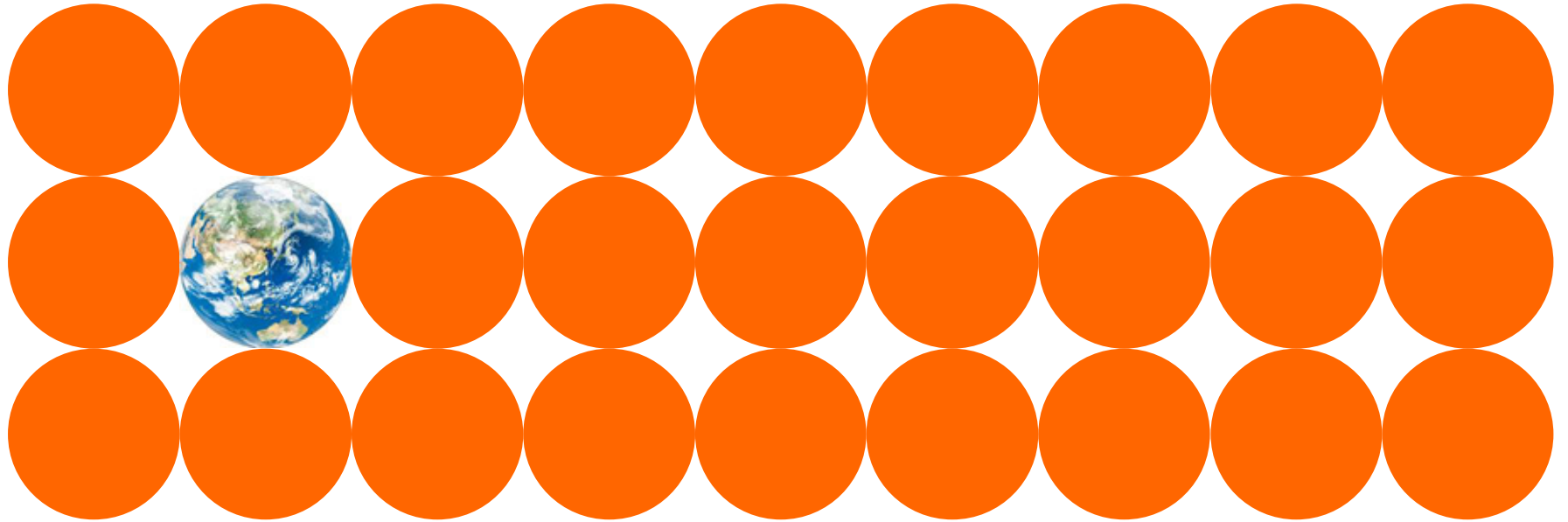
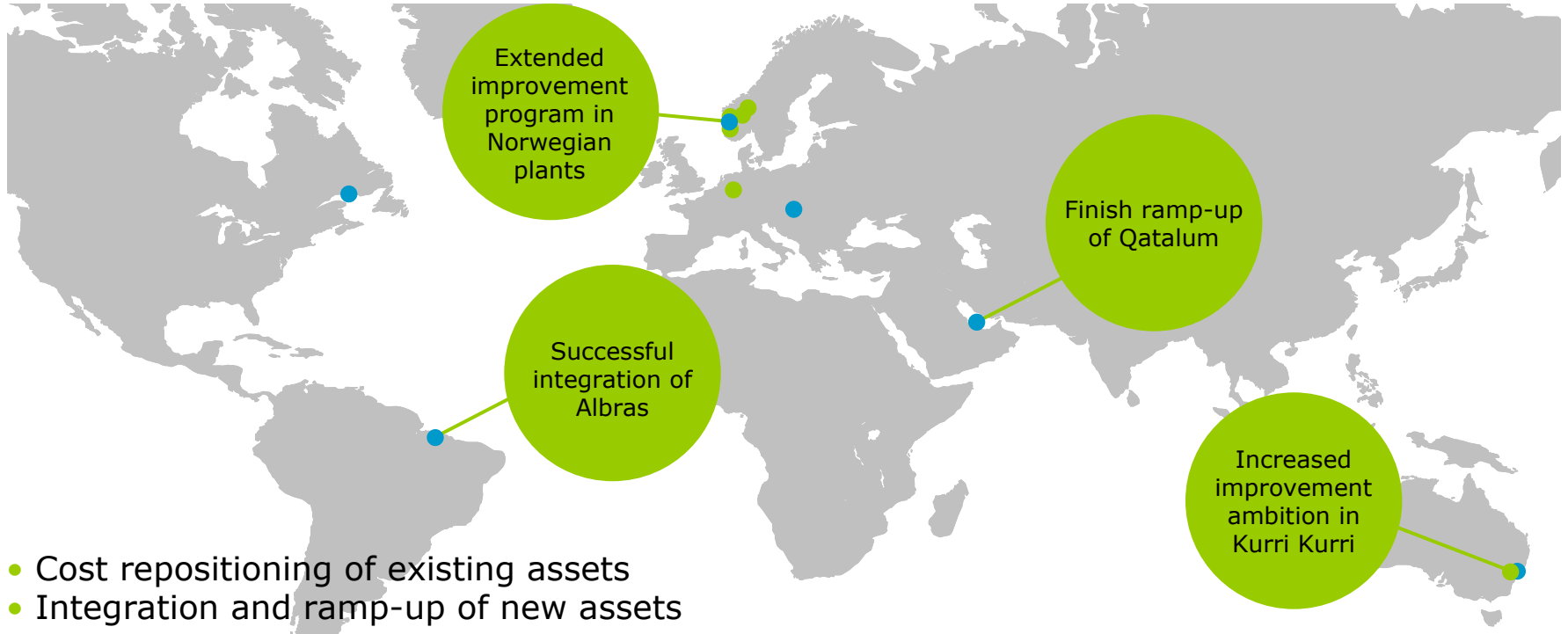


Repositioning Primary Metal



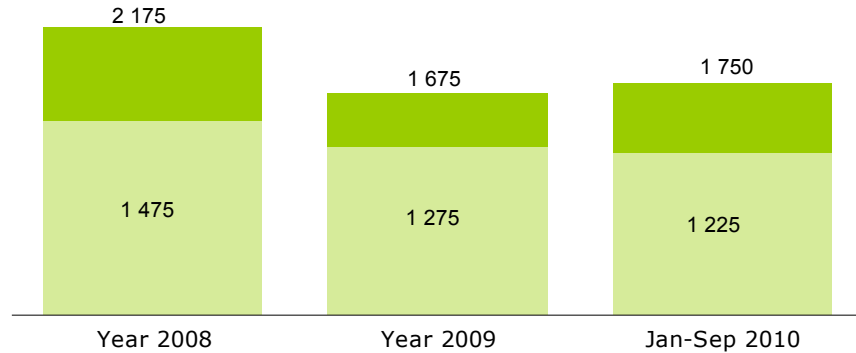
Hilde Merete Aasheim, Executive Vice President and Head of Primary Metal
January 13, 2011

Continued focus on repositioning



Improvement efforts give results

Estimated primary aluminium production cash costs
USD/tonne¹

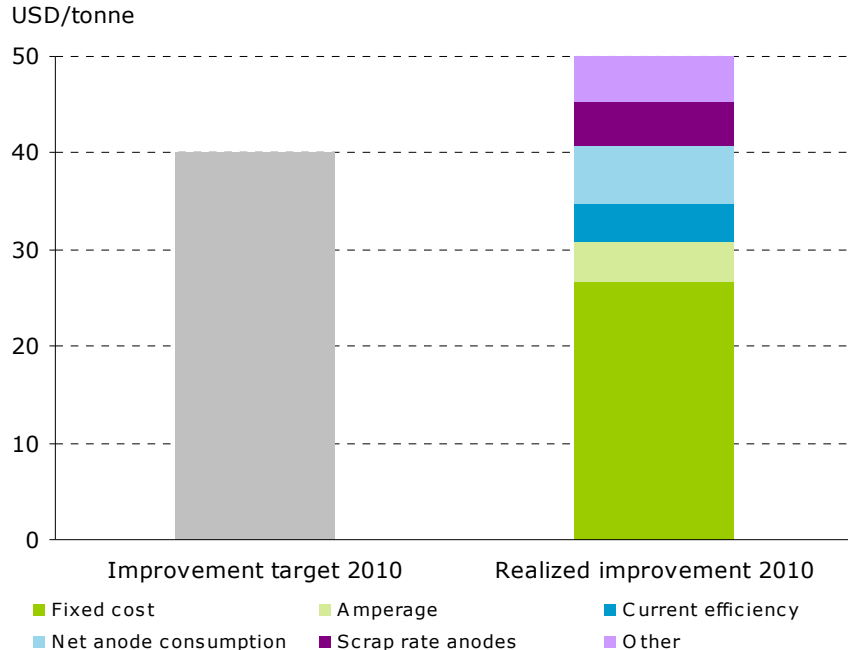


■ Estimated cash cost excluding LME-linked alumina cost²
■ Estimated LME-linked alumina cost²

- 1) Estimated cash cost: realized aluminium price minus EBITDA margin per tonne primary aluminium. EBITDA margin excludes bauxite, alumina and Qatalum-related earnings, but includes net earnings from primary casthouses.
- 2) 13% of LME 3 month price with 2.5 months delay. 1.9 tonnes of alumina is required to produce one tonne of aluminium.

- ~25% decrease in cash cost from 2008 to 2009
 - Mainly reduction in input cost driven by market and closure of high-cost capacity
- Benefit of cost reduction program
 - USD 50 decrease in cash cost excluding LME linked alumina cost from 2009 to Jan-Sep 2010
- Improvements expected to be somewhat offset by higher energy costs and may be influenced by fluctuations in raw material prices and currencies

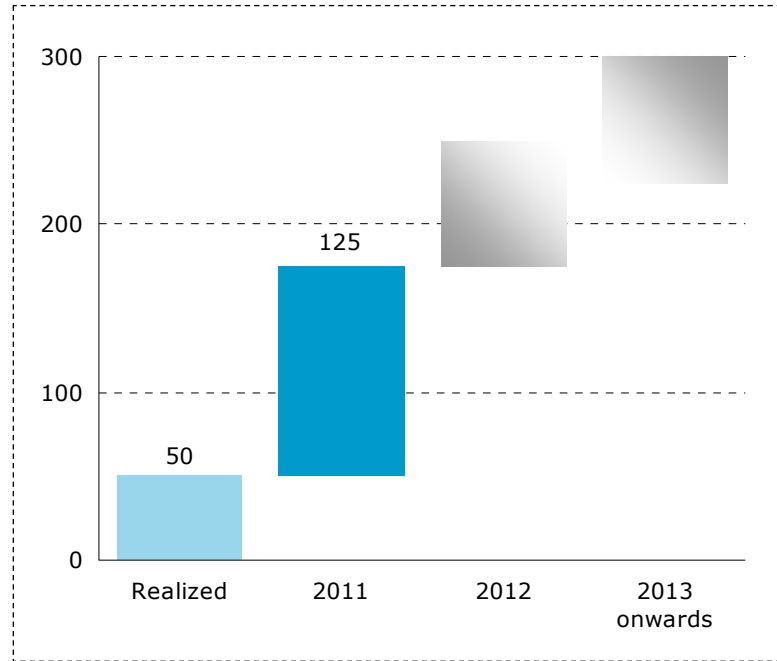
Operational excellence and fixed cost focus – delivering better than plan in 2010



- Realized improvement USD 50/tonne vs. target USD 40/tonne by end-2010
- Fixed cost and process improvements contributing equally
- Solid operational performance

Improvement program lifted to USD 300 per tonne

- Operational improvements
 - Improved current efficiency
 - Reduced power consumption
 - Reduced anode consumption
- Fixed cost reductions and lean operations
- Further operational improvements
- Technology costs/spin-offs
- Investments
- Maintenance and relining
- Procurement
- Logistics
- Organization and manning
- Casthouse product margin



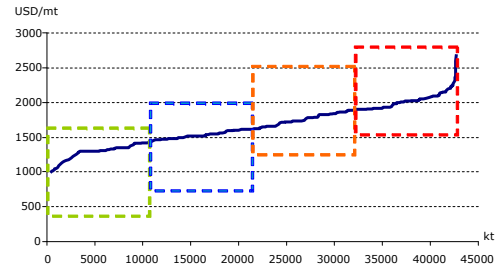
USD
300/tonne

Compared to 2009
cost level¹

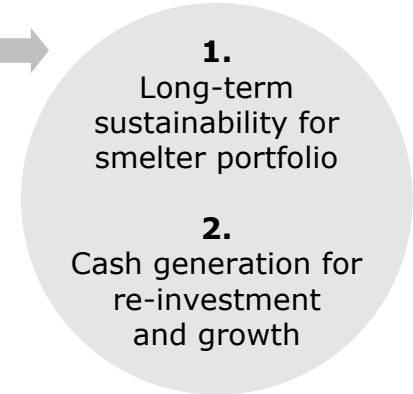
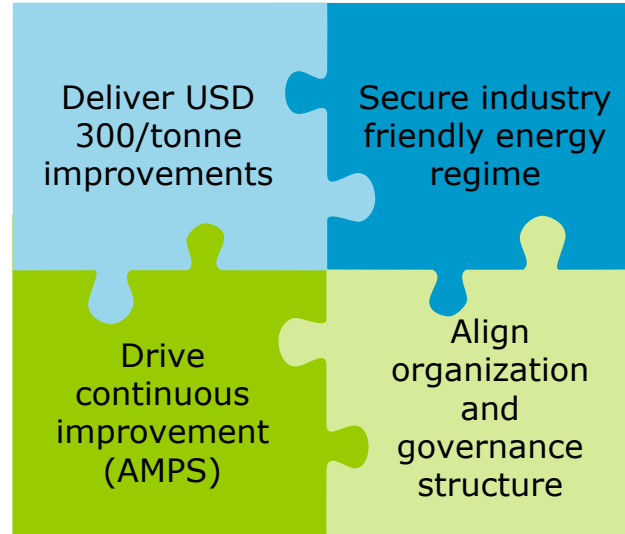
1) USD 300 real target relates to wholly-owned smelters excluding Neuss. The scope of the improvement program is broadened starting from 2011, compared to original 100 USD program. Accumulated nominal target (2011 vs 2009) 175 USD/tonne.

Roadmap to competitiveness

Business operating cost 2010



Source: CRU 2010



AMPS: Aluminium Metal Production System

Attractive Qatalum fundamentals



- Integrated power plant with long-term and low-cost gas sourcing
- Low cash cost smelter
- Potential for future expansion
- Serving markets on 3 continents

Successful handling of Qatalum outage



- Power outage and mitigating actions
 - Black-out following short circuit in external transformer on August 9, 2010
 - Studies, review of routines, tests and training part of mitigating actions
 - Qatalum has taken necessary steps to minimize future risk
- Market and customer actions
 - Prompt support from Qatalum to mitigate customer impact through remelting
 - Hydro's flexible production and marketing system key in minimizing customer impact

Status of Qatalum ramp-up

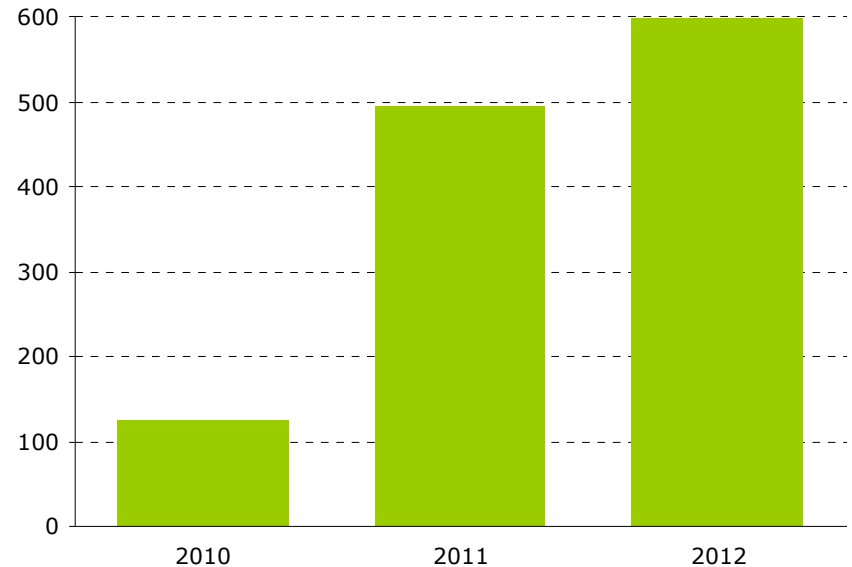


- Restart after power outage commenced on September 15, 2010 with ambition to finish ramp-up by end-Q1 2011
- By January 13 ~50% of ramp-up has been completed
- Ramp-up is currently being hampered by technical challenges related to the cooling water system for the steam turbines under the power plant contract with General Electric/Doosan
 - These challenges are unrelated to August outage
- Possible delay of 8 weeks with full production from June 2011

From ramp-up to stable operations in 2011

- Current focus on further ramp-up
- 2011 estimated production ~100 000 tonnes below capacity, dependent on timing of final ramp-up
 - 2012 production ~600 000 tonnes
- Following ramp-up: Transition phase into stable operations
 - Operational excellence
 - Cost optimization
- 2011 cash cost influenced by ramp-up
- First quartile position on cash cost curve when in full operation

Qatalum primary aluminium production, 1 000 tonnes



New presence in Brazil with Albras



- Among the largest smelters in the Americas and established in 1985-86
- Hydro is a majority owner
 - Owned 51% by Hydro and 49% by Nippon Amazon Aluminium Company
- Long-term energy coverage with hydropower based LME-indexed contract until end-2024
- Alumina sourced from Alunorte located next to Albras
- Key operational facts
 - Capacity 100%: 460 000 tonnes
 - Production 2009: 450 000 tonnes
 - Technology: AP 13
 - Product mix: Standard ingot

Integration planning well under way



- Work program defined to assess improvement opportunities
- Hydro has had a technical service agreement with Albras over several years
- Hydro has had a long-term metal purchase contract with Vale for ~1 million tonnes primary aluminium

Ambition to remain leader in primary technology



HAL 300
In operation



HAL4e
Pilot plant



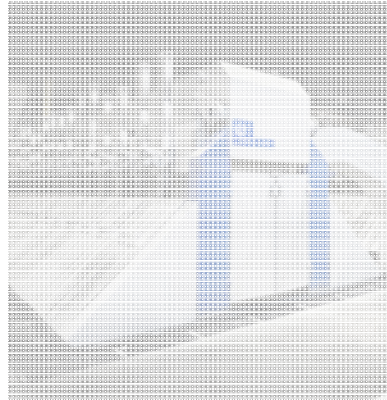
R&D portfolio
Future vision

HAL 300 – current top standard



HAL 300

- Operating for several years in Sunndal
- Ramping up in Qatar
- Qatalum power outage verified the robustness of the cells
- Operating at:
 - 13.3 kWh/kg
 - 313 kA
 - 1.6 tonne CO₂/tonne aluminium



HAL4e
Pilot plant



R&D portfolio
Future vision

HAL4e – delivering impressive results



HAL 300
In operation



HAL4e

- Benchmark technology – process parameters and environment
- 30 months of operations in Årdal
- First verification period delivered better result than target

- Currently operating at:
 - 12.5 kWh/kg
 - 424 kA
 - 1.5 tonne CO₂/tonne aluminium

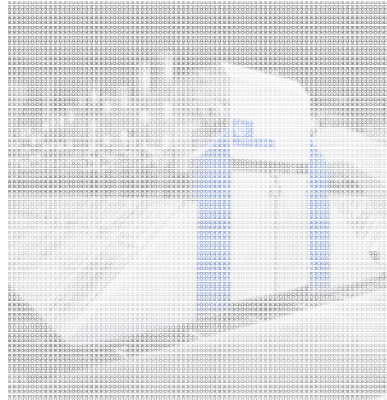


R&D portfolio
Future vision

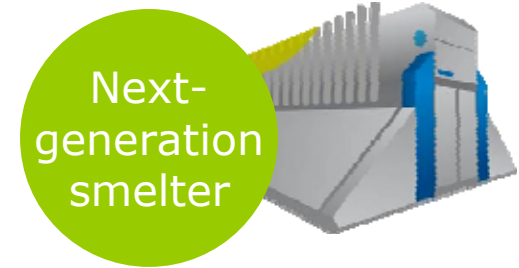
R&D portfolio – preparing for future projects



HAL 300
In operation



HAL4e
Pilot plant



R&D portfolio

- HAL4e optimization – to be ready for next project
- HAL Ultra – future vision
 - Significantly lower kWh/kg
 - Carbon capture-ready cell
 - New materials and cell design
 - Reduced investment costs

Primary Metal priorities



- Deliver improvements according to extended program to enhance competitiveness
- Complete ramp-up of Qatalum and realize full potential of low-cost smelter
- Successful integration of Albras – providing smelting capacity in fast-growing region
- Leader in primary technology – optimizing HAL4e for next project



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