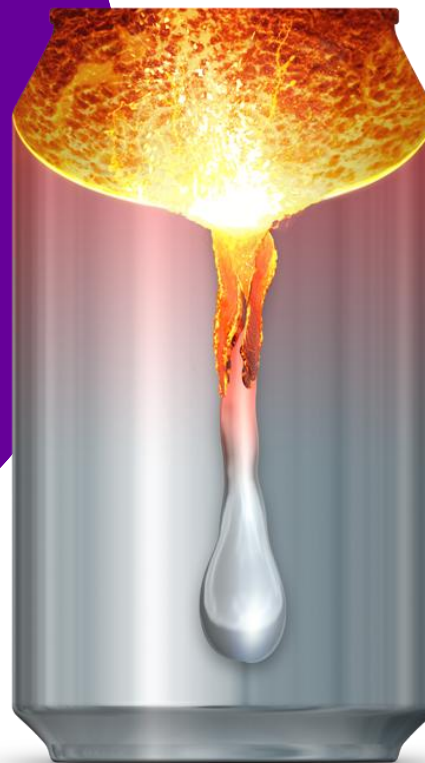




HYDRO

# The alumina market outlook – 2013 -15

Simon Storesund, SVP Commercial, B&A  
Miami, March 14, 2013



# Key messages – 2013-2015

## Demand

- Primary demand 2012-2015 CAGR:  
ROW 3%, China 8.5%, (World: 5.5%)

## Bauxite

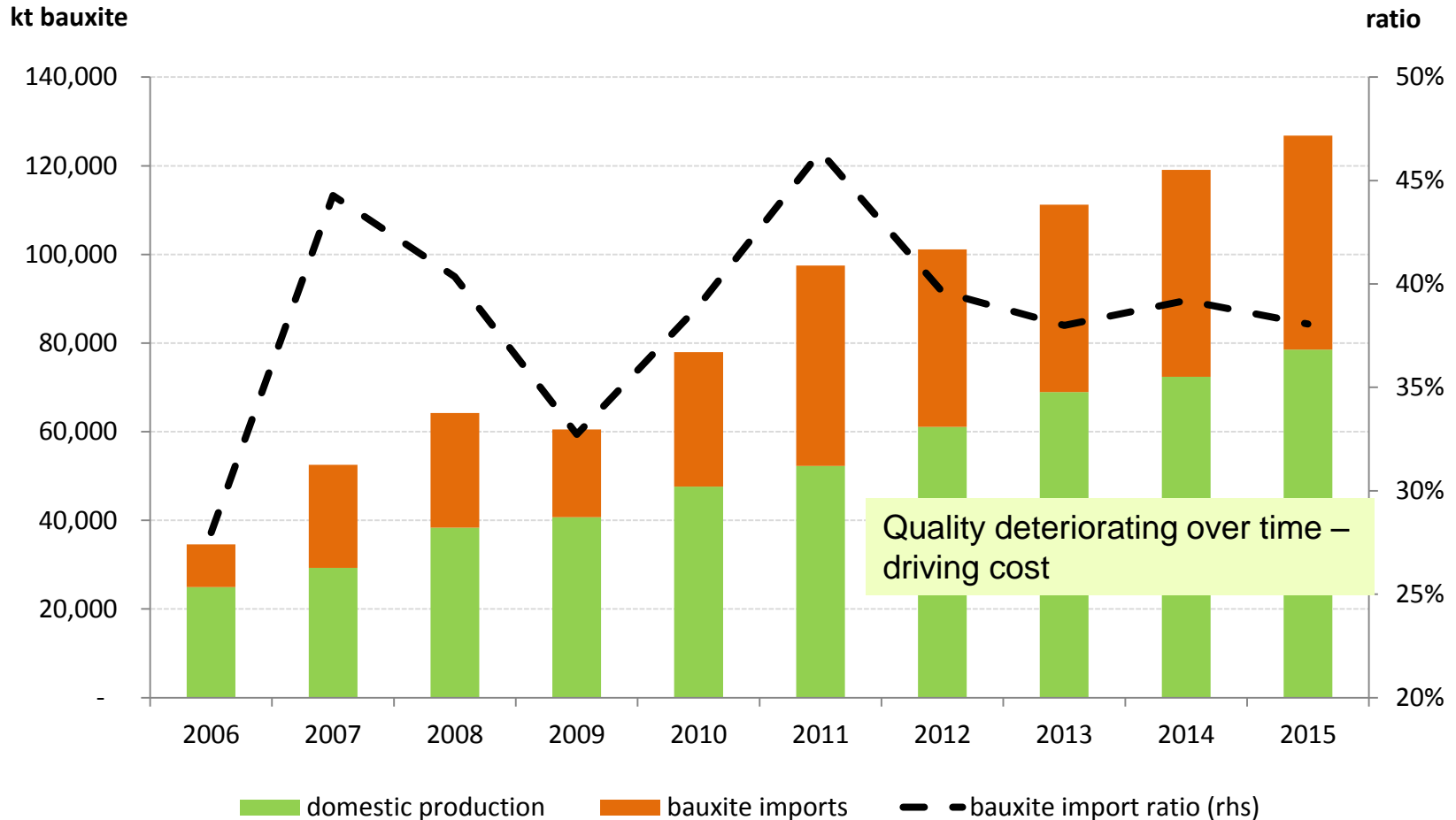
- China to be dependent on Atlantic import
- Tightening global bauxite balance

## Alumina

- Expect a balanced market
- Potential for tighter market 2014-15, if China is not able to source the bauxite required



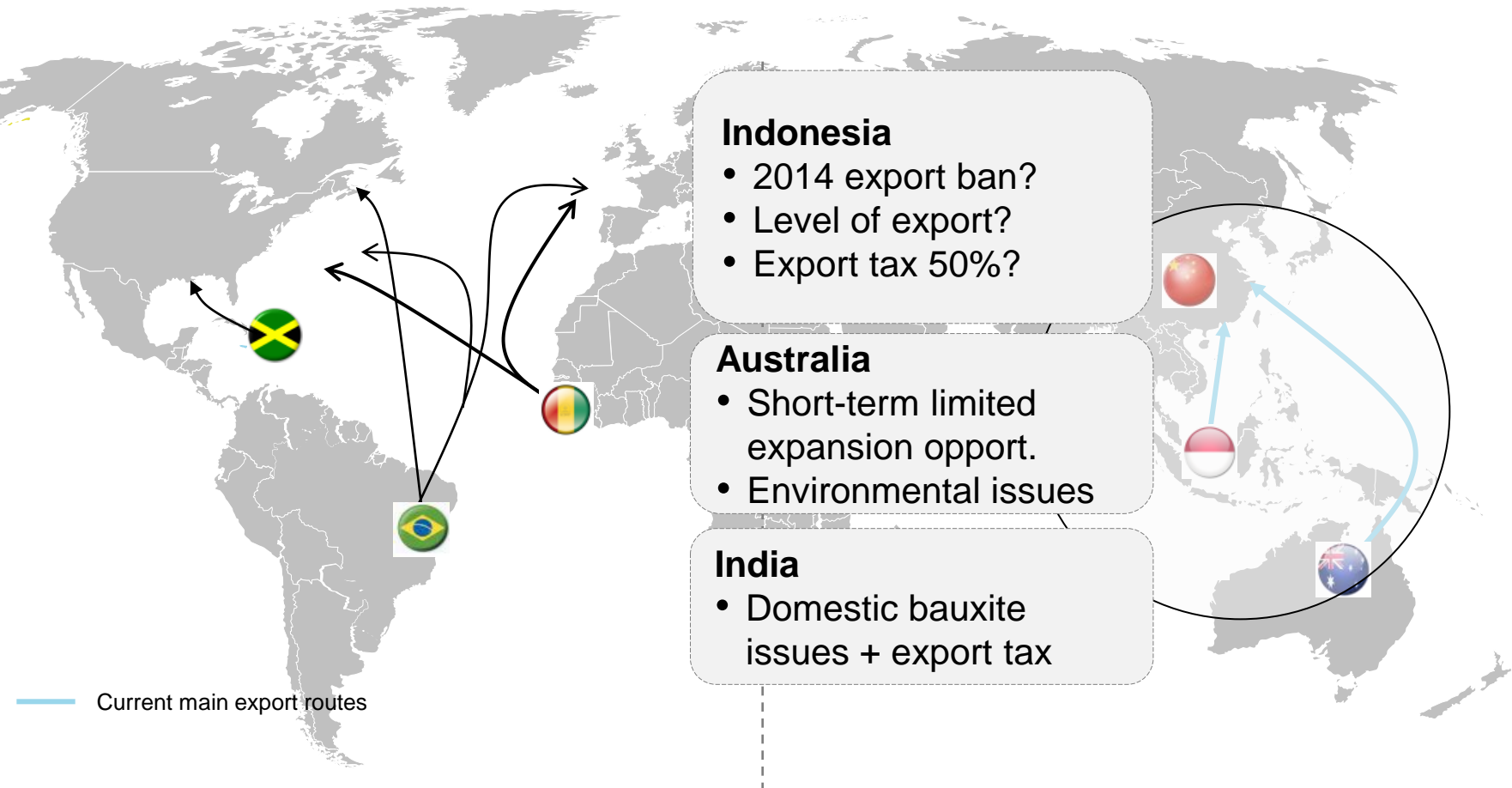
# Chinese bauxite production not able to grow in line with demand



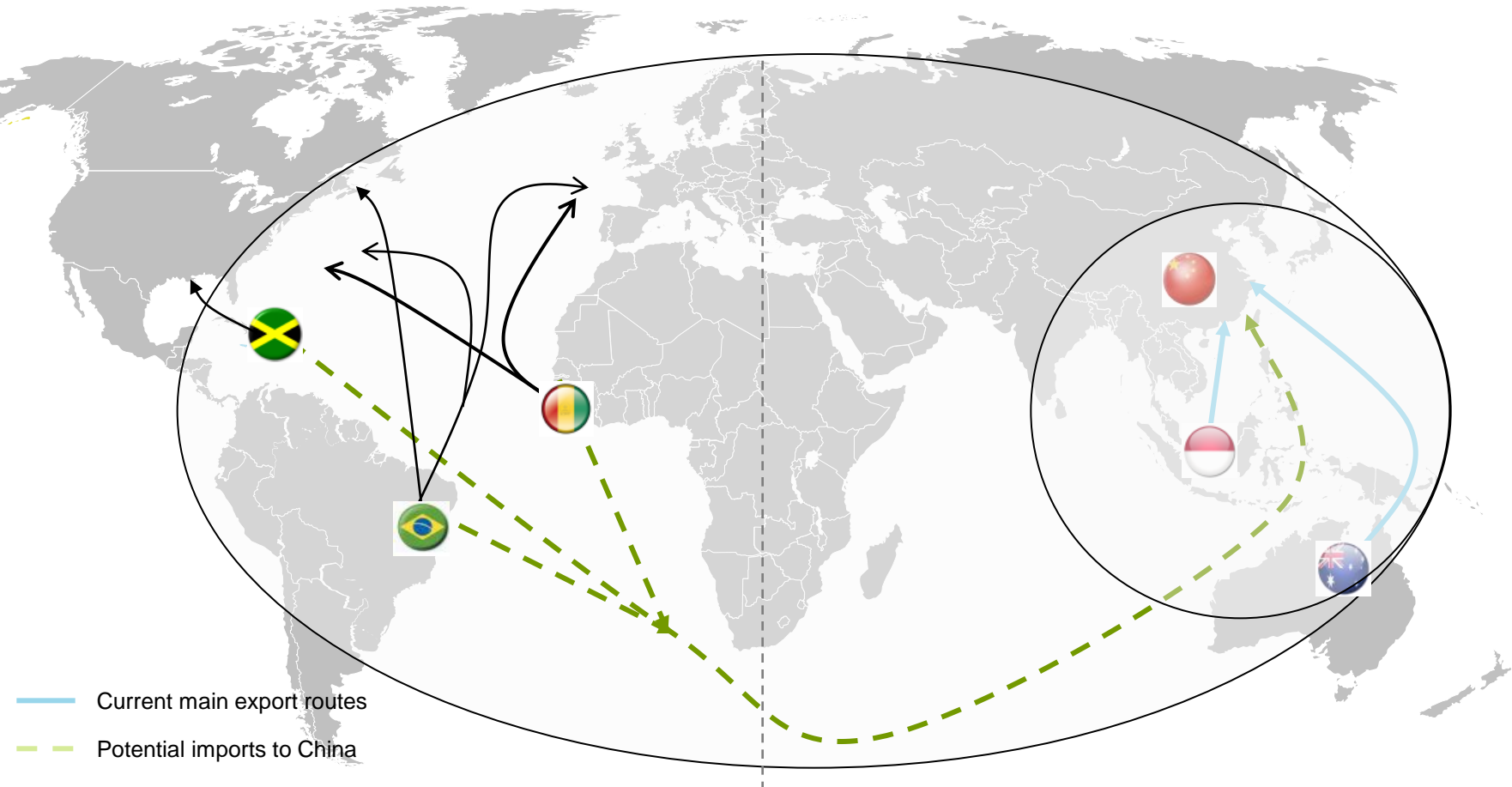
Source: CRU, Hydro analysis

# China is facing bauxite supply risks

## Potential drastic reduction in export from Indonesia

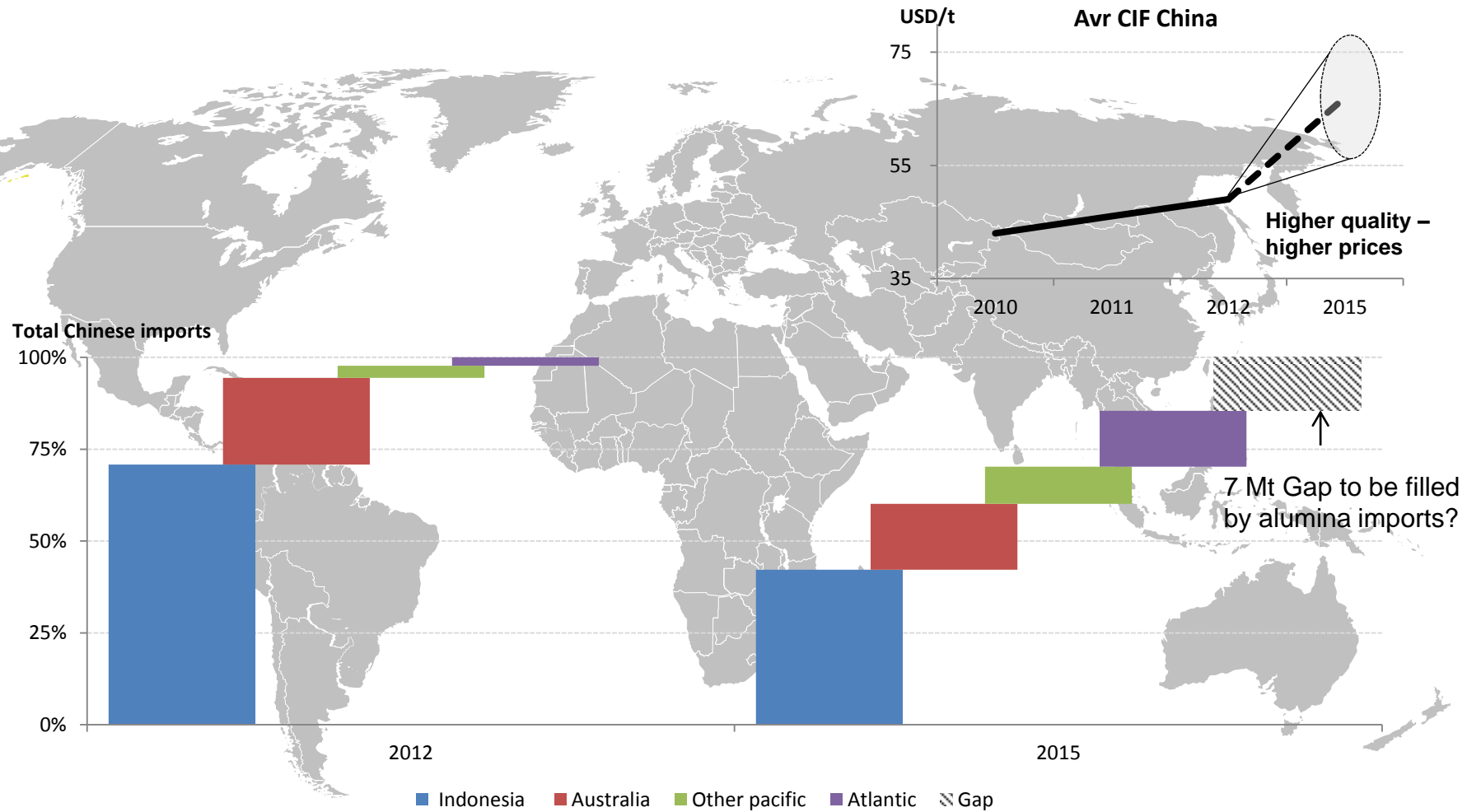


# ...and must likely expand its horizon in search for bauxite imports



# ...which is likely to increase bauxite prices CIF China

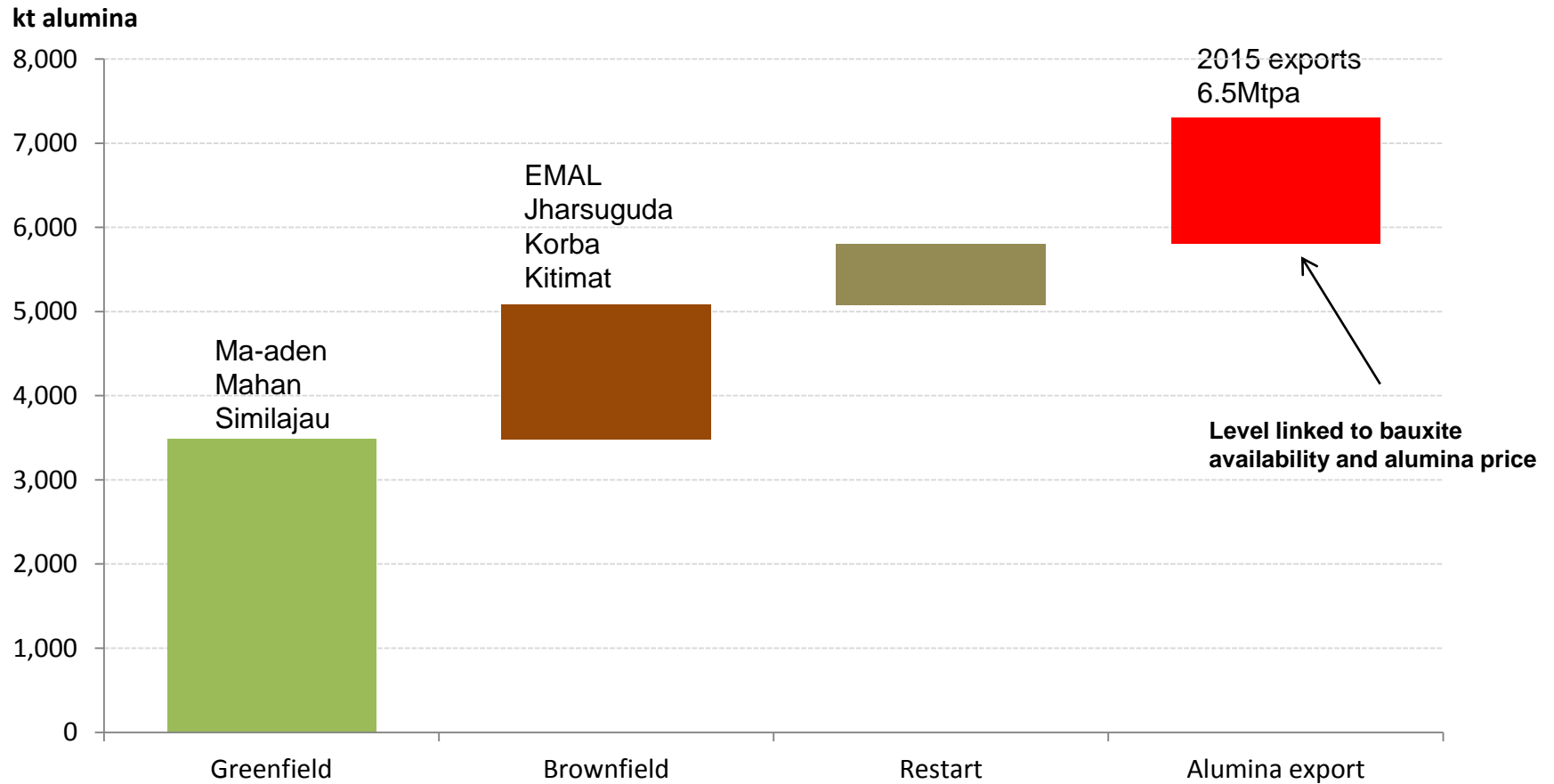
2015 scenario, assumed Indonesia export at 20 mill. tons per year



Source: Hydro analysis

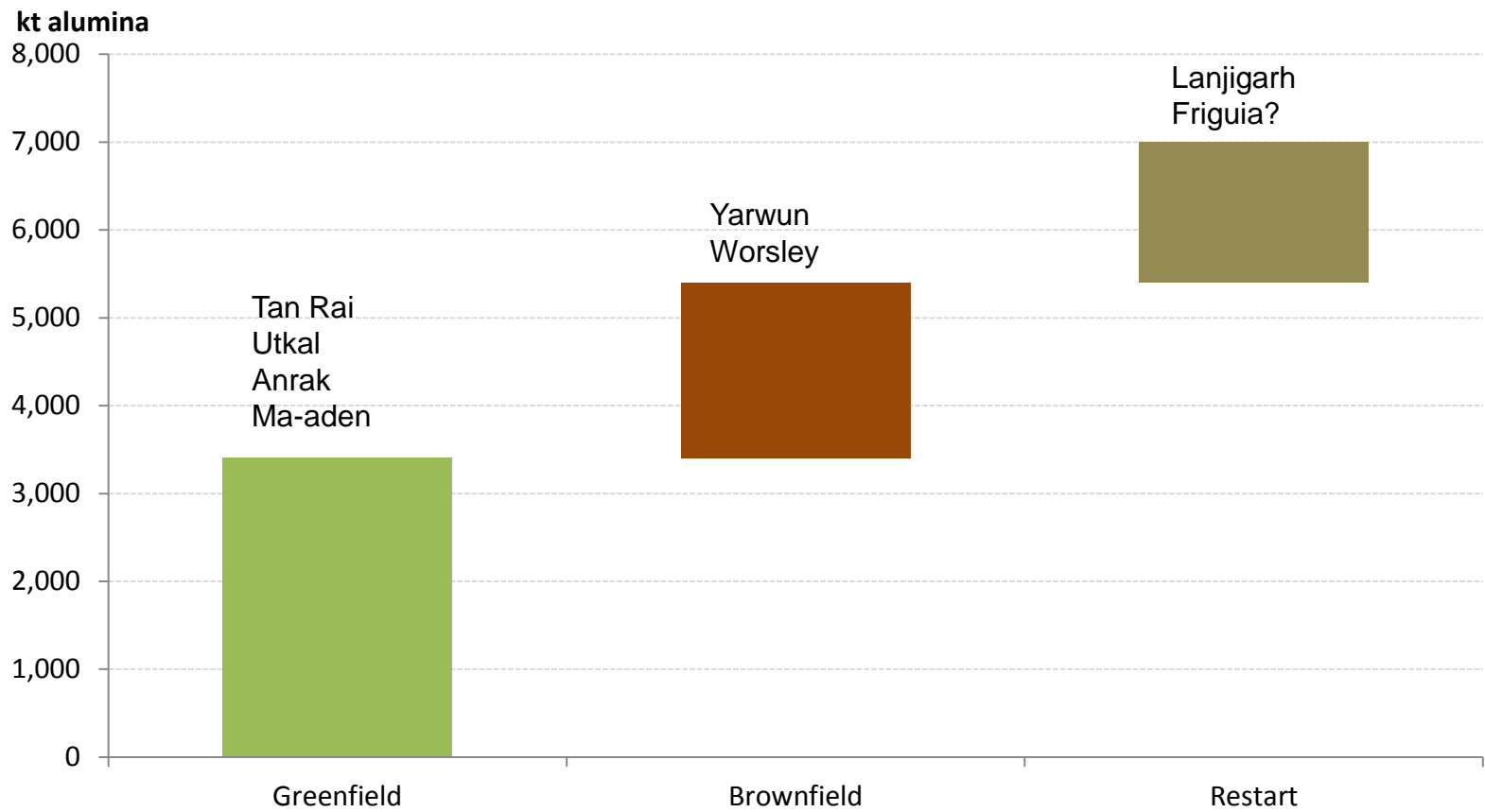
# ROW alumina demand increase – From 2012 to 2015

Primary demand 2012-2015 CAGR: ROW 3%, China 8.5%



Source: Hydro analysis

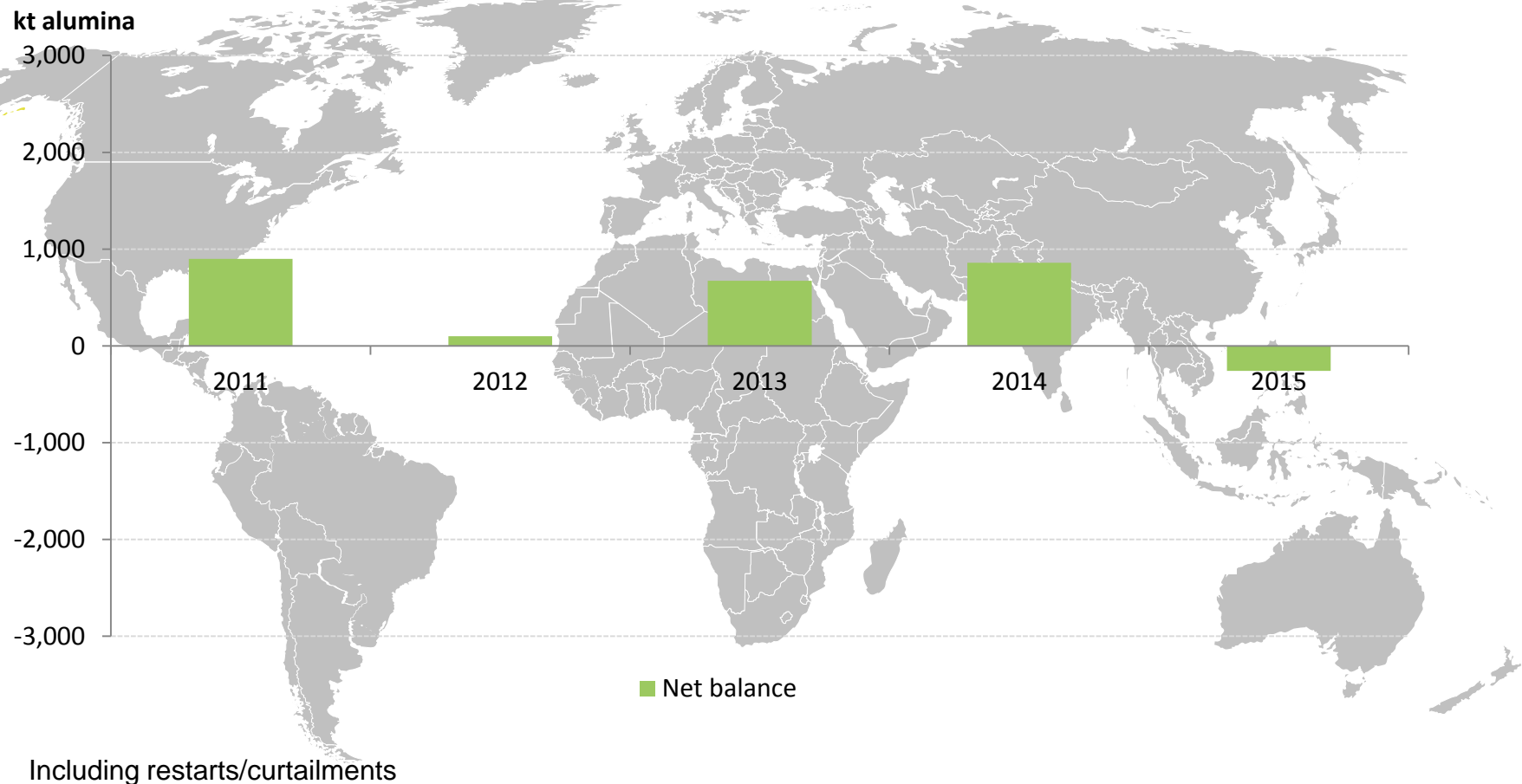
# ROW alumina supply increase from 2012 to 2015



Source: CRU, Hydro analysis



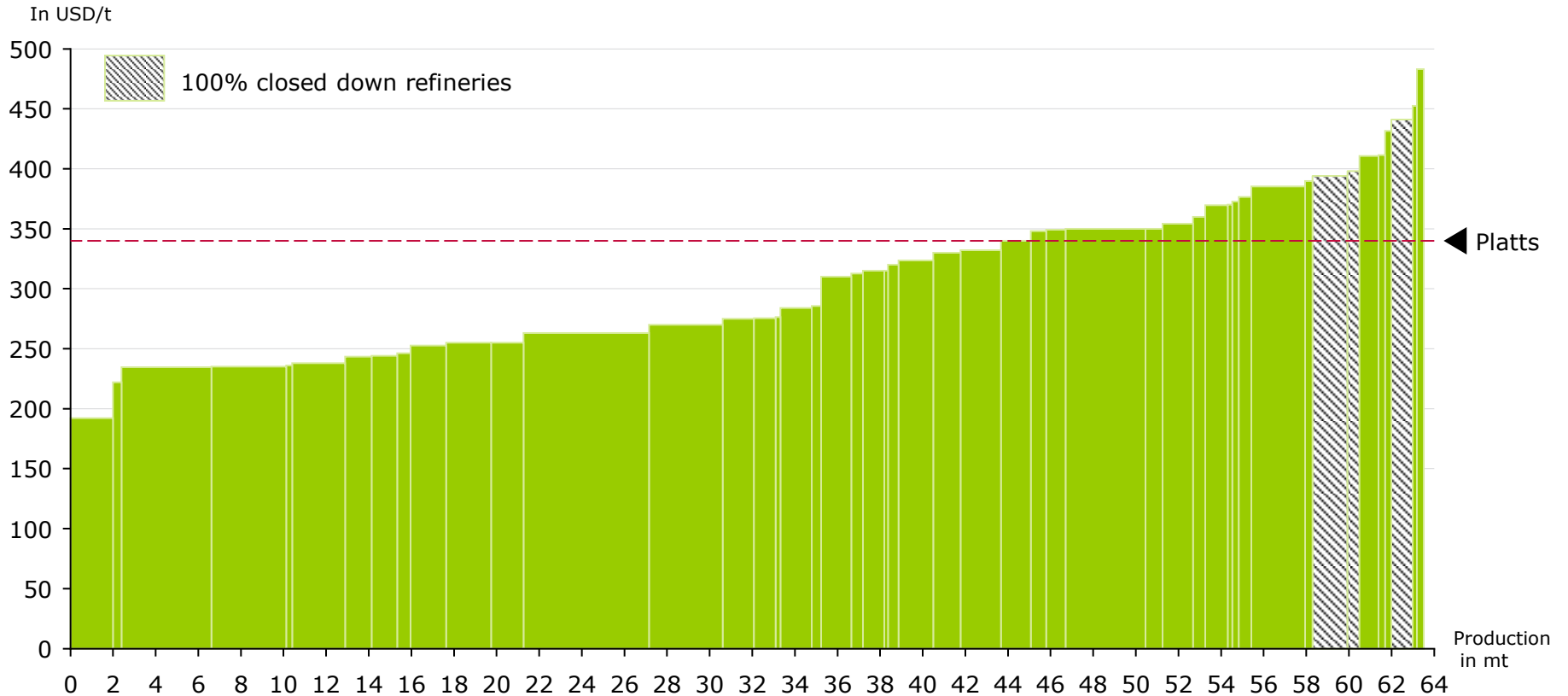
# Due to Chinese imports, the alumina market in the world ex. China expected to be broadly balanced for 2013-2015



Source: Hydro analysis

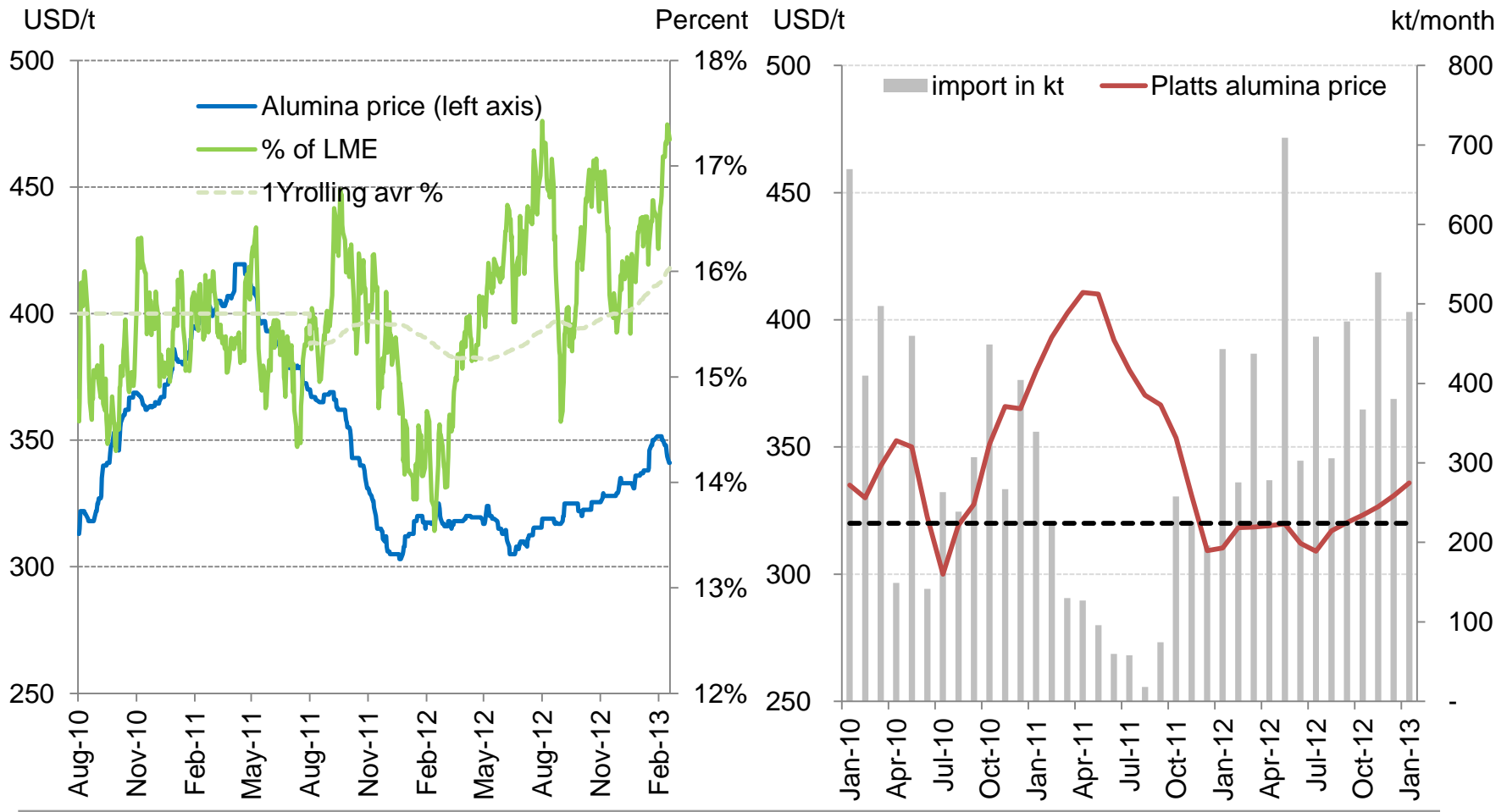
# ROW cash cost curve – several refineries cash negative

## ROW Business operating cost 2012



Source: CRU, Hydro analysis

# China: The World's swing producer – stabilizing the market



Source: Platts

# Concluding remarks

## Demand

- Primary demand 2012-2015 CAGR: ROW 3%, China 8.5%

## Bauxite

- China to increase import from the Atlantic
- Tightening global bauxite balance

## Alumina

- Expect a fairly balanced market
- Potential for tighter market 2014-15

## Key factors to watch

- China domestic bx production and quality
- Indonesia export policy
- India – access to domestic bauxite
- Potential supply disruptions

