



# Decarbonizing the energy intensive industry and associated supply chains

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Paris: Greenhouse gas emissions must be reduced significantly and fast

Sweden, 2045:

- Net zero emissions
- Territorial emissions: At least 85%





Cement and Steel production account for 20% of Sweden's emissions Share is increasing

# High costs for producers, low costs for consumers:

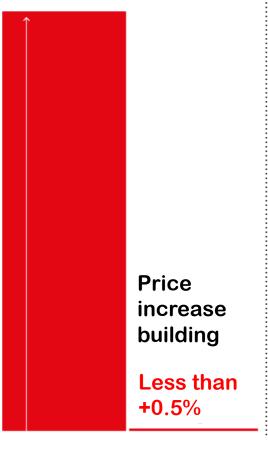
Measures to comply with Year 2050 targets: ~100€/ton CO<sub>2</sub>

EU-ETS 20-25€/ton CO<sub>2</sub>

#### **Cement industry**

Price increase cement

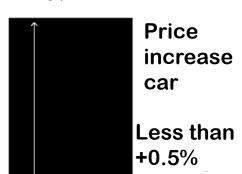
+70%



**Steel industry** 

Price increase steel

+25%

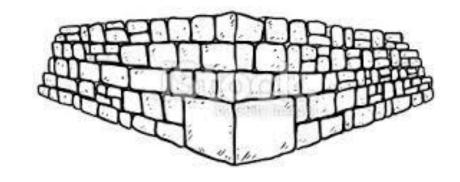


Rootzén and Johnsson, *Energy Policy* 98 (2016) 459–469, *Climate Policy* 17, 6, (2017) 781-800 <a href="http://www.dn.se/debatt/plan-saknas-for-att-minska-basindustrins-klimatpaverkan/">http://www.dn.se/debatt/plan-saknas-for-att-minska-basindustrins-klimatpaverkan/</a>

#### The role of the EU ETS

EU Com: "The EU emissions trading system (EU ETS) is a cornerstone of the EU's policy to combat climate change"

- Largest ETS in the world
- Has put a price on carbon covering 50% of EU's emissions
- Recent reform has increased C-price from 5€ to €20-25 per ton CO<sub>2</sub>
- EU ETS is not likely to drive a transformation in industry in near term



### **Need for policy innovation**

- Simply increasing EU ETS carbon price is probably not a solution. This
  may result in carbon leakage. Need to address this challenge.
- Need for complementary policies that incentivize decarbonization while mitigating carbon leakage. There are some interesting options.
- Need a carbon price at consumer level to enable climate smart choices
- Industry can, in many cases, provide technical solutions. But this won't happen spontaneously. Firms need a business case.
- EU ETS will have an increased role in the future for cost effectiveness

## Why should EU be a frontrunner?

- The Paris agreement requires the whole world to transform. There will be an enormous market for low carbon products and services. Those developing these products will be winners on these new markets
- Firms that don't transform will be out of business.
- The Greta Thunberg generation will be the tomorrow's clients and consumers. They will work in low carbon companies, live in low carbon areas and consume low carbon products and services. This group will grow over time.

# Thank you!

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