OPINION

The key to a successful emissions trading policy is preservation of competitiveness, says MARKUS WEBER

Stoking the debate

hyssenKrupp has already successfully implemented extensive measures to increase energy efficiency and decrease its greenhouse gas (GHG) emissions. The company's steel segment has nearly halved the specific carbon dioxide (CO_2) emissions per tonne of hot metal over the last 50 years. Today, specific CO_2 emissions are near their theoretically-possible, physically- and chemically-defined minimum limits as shown in the graph, which displays the consumption of reducing agents (mainly carbon in the form of metallurgical coke) at blast furnaces in Germany.

Above that, ThyssenKrupp has developed a respectable number of state-of-the-art solutions to address climate change in other technical areas. The EnviNOx process allows nitrous oxide (N₂O) to be removed almost completely from the tail gases of nitric acid plants, thus neutralising a GHG that is 310 times more potent than CO₂. The installations currently in operation or under construction will reduce emissions by 8.5 million tonnes (Mt) CO₂ equivalent per year. Operating all the world's nitric acid plants with this process would reduce global emissions by the equivalent of 120 Mt of CO₂ per year.

ThyssenKrupp's technology division has also established itself as a key technology provider for carbon capture and storage (CCS), and steel will continue to be a key material to improve energy efficiency and GHG intensity in many industries, as a high-strength material that allows lightweight construction in the automobile industry or highly efficient power plants.

However, policy-makers have to be aware that effective and efficient emissions trading and climate change policies can only be achieved in a global consensus that involves all major emitters, including the US and China, which are responsible for one-third of global $\rm CO_2$ emissions and nearly half of global steel production. There are concerns that climate change policies could lead to competitive distortions that will endanger energy-intensive industries that are competing on a global market and cannot pass on higher costs to customers in the way that electricity producers can, which has brought them huge windfall profits since the EU Emissions Trading Scheme began in 2005.

t must be key to policy-makers to re-establish neutrality in respect of competition. To avoid competitive distortions, climate change and emissions trading policies have to make sure that there are no competitive advantages and disadvantages in respect to energy-intensive industries operating in different countries and in respect to different materials if the costs of GHG emissions were to be increasingly included in product prices. A steel mill in China must face the same CO_2 costs as a steel mill in the US or Europe if emissions trading is to be a successful instrument in combating climate change.

In addition, policy-makers have to address the unjustified windfall profits of electricity producers and to establish true competition in Europe's power and gas markets. Otherwise the relocation of production facilities with their associated negative consequences including the loss of jobs and know-how and the so-called 'carbon leakage', is inevitable. A policy leading to carbon leakage, where companies move their operations to countries without carbon constraints, is neither effective nor efficient.

In January, both Ekkehard Schulz, ThyssenKrupp's CEO, and ThyssenKrupp Steel's CEO Karl-Ulrich Köhler criticised the European Commission's climate protection proposals for 2013–20,



which include plans to phase out free carbon allowance allocations and also for a study on carbon leakage to be concluded in 2010 — too late for energy intensive industries. The consequences of these plans are a lack of planning certainty for investments, drastic increases in energy prices and a massive threat to jobs. ThyssenKrupp therefore urges the Commission to grant the necessary exemptions for the steel industry bindingly and quickly and at least for a full trading period. Schulz stressed: "Climate protection is an important issue at ThyssenKrupp. But climate protection and competitiveness must be in harmony."

The company supports a mid-term policy that includes the following in order to re-establish neutrality in respect of competition:

a global sectoral approach for energy-intensive industries;

□ no limitations on the import and export of EU allowances (EUAs), certified emission reductions, and emission reduction units. The acceptance of emissions certificates from countries with similar emissions trading schemes as the EU should not be limited;

 \Box no auctioning of EUAs to energy-intensive industries that are competing globally and cannot pass on $\rm CO_2$ costs;

□ no change in the base year from 1990 to 2005, which would effectively cancel out early action by energy-intensive industries;

□ establishment of a regulatory framework for CCS, without binding rules to install it – the decision should be based on market principles and remain with the operators;

□ no political selection of 'best technologies', but rather comprehensive efficiency benchmarks (a 'front-runner approach');

□ alignment of policies to increase the use of renewable energies with policies to address climate change, eg by establishing a Europewide 'green certificate' scheme for renewable energies, and the phasing out of all national renewable energy support schemes;

□ prevention of windfall profits through ex-post adjustments to allowance allocations to electricity producers;

 \Box increased competition in the European power and gas market through the increase of cross-border transfer capacities in the European power and gas grids;

 \Box inclusion of the prohibition of the generation of windfall profits from CO_2 by electricity generators in competition laws;

□ maintaining a balanced energy mix in Europe; and

 \Box increased public research funding to industry to help develop products and processes to address climate change. $\ensuremath{\textit{CF}}$

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