

the independent platform for the energy sector

EUROPEAN ENERGY REVIEW

Report EU Energy Policy 6 June 2011   

Interview: Robert Jan Jeekel, Eurometaux

'EU climate policies are driving smelters out of Europe'

By Karel Beckman

The EU's climate and energy policies are threatening the survival of the European producers of non-ferrous metals like aluminium, copper, zinc and nickel, says Robert Jan Jeekel, Director Energy & Climate Change of Eurometaux, the European Metals Association. According to Jeekel, the models the European Commission uses to calculate the effects of climate policies on the industry are deeply flawed. The EU's 'unilateral policies' are driving up electricity prices for European producers compared to their international competitors, he says. 'As a result, factories are closing. This could spell the end of the production of aluminium and other non-ferrous metals in the EU.'

'The EU's inward-looking unilateral climate policy is endangering our industry. Many of our factories are closing, and investments in the EU have come to a standstill. Yet the European Commission is continuing to use its artificial and flawed macro-economic models as a basis for decision-making. Even our global competitors are asking what on earth the EU is doing.'

Robert Jan Jeekel, Director Energy & Climate Change of Eurometaux, the European Metals Association, has a crystal-clear and alarming message for European policymakers. The EU's ambitious climate policies – in particular the [EU's Emissions Trading Scheme \(ETS\)](#) that was started in 2005 and the ["Roadmap for moving to a competitive low-carbon economy in 2050"](#) that was announced by the European Commission in March of this year – are gradually driving the production of non-ferrous metals out of the EU, says Jeekel. And this, he adds, at a time demand for these metals is increasing.



The main reason for the dire situation in which the industry finds itself are the high electricity prices that, according to Jeekel, are the result of the EU's policies. The production processes of products like aluminium and zinc are highly electro-intensive. 'What we are seeing is a slow process of delayed or cancelled investments, and even factories being closed and production, or parts of it, transferred out of the EU, e.g. to Qatar and other countries in the Middle East. This is starting to occur in other industries as well. As to the idea of new production facilities being built in the EU – that's out of the question. Electricity costs are just too burdensome and regulatory uncertainty too great to make long-term investments possible in the EU.'

Jeekel points out that not only does the non-ferrous metals industry employ 400,000 people, it is also a strategic sector that ought to have a strong domestic presence in Europe. 'When EU policies force investments to be halted and production to be closed down at a time of increasing consumption and demand, this inevitably makes the EU more dependent on other regions. We already import over one-third of our non-ferrous metals, ironically often from countries that produce on the basis of much lower environmental standards.'

Global prices

The major problem for European producers is that they are confronted with much higher electricity prices than their international competitors. Jeekel: 'Until recently, most producers in the EU had long-term electricity contracts, often on favourable terms from mostly state-owned electricity suppliers, just like in all other regions of the world. But those days are over in the EU. The EU energy market has been deregulated and liberalised. We pay market prices based on short-term spot markets and the most expensive operational marginal power plant. But our competitors in the world do not. They all get electricity at cost-based long-term prices.'

To make matters worse, European electricity prices are then further pushed up by the EU's climate policies,

particularly the EU Emission Trading Scheme (ETS). The electricity producers that have to reduce their CO2 emissions under this scheme, pass on their costs to their customers, including the

'Even our global competitors are asking what on earth the EU is doing'

competitors. 'The world average power price expected by aluminium smelters in 2011 is \$43.10 per MWh (Megawatt-hour) or about \$645 per tonne of aluminium. By comparison, German smelters paid \$79.60 per MWh, or about \$1195 per tonne aluminium, based on the average 2011 spot price at the German power exchange EEX.'

industry. As a result, says Jeekel, energy costs for the EU's non-ferrous metal producers are now roughly twice as high as those of their main international

High electricity prices would not in itself be a problem, if the extra costs could be passed on to the buyers. But that, says Jeekel, is not possible in the non-ferrous metal market. 'Our sector works with global prices that are set at the London Metals Exchange. There is a world price for aluminium, zinc, copper, as there is for oil, and it is basically set by demand from China. These international commodity markets are the universal reference for the selling prices of our products worldwide. They prevent us from passing on any locally incurred operational costs. Our customers will not pay more than the market price.'

Physical limits

The situation for the industry producers is not likely to get any better in the future. On the contrary. For one thing, the non-ferrous metal producers will be included in the ETS from 2013 on. At this moment, they do not have reduction obligations under the ETS, but that will change once they are included in the system. Problem is, says Jeekel, at this moment there is still a surplus of CO2-credits in the system, [which companies are allowed to "bank"](#). This means companies can take the credits with them to the post-2013 phase, when the targets are expected to become tightened. 'But we can't profit from this over-allocation', says Jeekel, 'because we don't have any credits now. By the time we are subject to the scheme, the allocations will be much tighter.' And if Climate Commissioner Connie Hedegaard succeeds in her goal of having the ETS target raised from 20% to 30% emission reductions in 2020, CO2 and electricity prices will become even higher.

In theory, the industry could respond to this by improving energy efficiency and lowering emissions of course. But according to Jeekel, the European producers have already made great efforts to reduce greenhouse gas emissions as much as possible and cannot do much anymore. 'We have already implemented our own low-carbon roadmap without waiting for policy measures to be imposed upon us. For instance, the aluminium industry has carried out a global sector approach under the auspices of the International Aluminium Institute. Global reductions have been impressive, and the European industry's performance is even somewhat better than the global average. For example, it has achieved an 83% reduction in emissions of the greenhouse gas PFC (perfluorocarbon) relative to the 1990 baseline in Europe. European zinc producers and copper smelters are also among the cleanest and most energy-efficient in the world. Energy consumption in the copper sector has been reduced by 54% since 1990. Currently all metals producers are discussing further stretch targets for process emissions and energy efficiency, but they are close to the physical limits thanks to the huge improvements they have made. They cannot make these same improvements again.'

Another threat on the horizon for the metal industry is the so-called Low Carbon Roadmap which the Climate department of the European Commission came out with in March. Jeekel: 'The intention of this plan is good, but the way it is designed, will be damaging for the EU economy. If this unilateral plan is adopted as proposed, it could lead to even costlier unilateral emission reduction targets. This would mean an even greater competitive disadvantage for European industry.' At the same time, he says, the Commission has openly ceased its efforts to induce other, faster-growing economies to adopt similarly

ambitious climate targets. 'The EU's share of emissions in the world is dropping to about 10%, whilst these other economies are offering a healthy

'What we are seeing is a slow process of delayed or cancelled investments, and even factories being closed'

investment climate and are growing. The EU is doing exactly the opposite, in order to stimulate green technologies that are already subsidized in most cases.' He adds that, 'as I see it, the fact that EU emissions were reduced because smelters have already been closed and investments put on hold, can hardly be called a success for EU policy. Or are we following a policy of de-industrialisation in the EU?'

Flawed assumptions

When designing the ETS, the European Commission was of course not blind to the danger of what is called in Brussels jargon 'carbon leakage', i.e. the risk of producers that are subject to international competition moving their production out of the EU (and thereby 'leaking carbon'). For this reason, financial compensation was promised to companies with the highest CO2-impact on their electricity prices. 'However', Jeekel argues, 'the Commission's sector assessments do not adequately recognize the fact that the non-ferrous metals sector cannot pass on regionally imposed costs to its customers. In addition, they fail to include the real CO2 cost that the electricity producers pass on in the price of electricity that they charge to the industry.'

According to Jeekel, the econometric models (for example, the E3MG or PRIMES model) that the Commission uses for the ETS and for the 2050 Low-Carbon Roadmap as well as in Connie Hedegaard's "Beyond 20% greenhouse gas target" exercise, are based on the average CO₂-factor of the various power production methods that are used in Europe (gas-fired, coal-fired, nuclear, renewables, hydropower). But the real CO₂-effect on the price is much higher, he says – about twice as high. 'This is because the price is set by what is called the [marginal power plant](#). In practice, this means that coal- and gas-fired power plants set the prices, and not nuclear, hydropower or wind power. Since coal-fired and gas-fired power are strongly affected by CO₂-prices, the CO₂-impact on the real power price is much higher than what is assumed in the model.'

Jeekel notes that the models failed to predict the notorious CO₂ windfall profits the power producers made in the first phase of the ETS, which are now generally recognized. 'So they have a proven inadequate track record.' Yet, he adds, 'despite all these deficiencies, the same models with the same flawed assumptions have been used again in the "Beyond 20% greenhouse gas target" exercise as well as in the Low Carbon 2050 Roadmap.'

Removed from reality



Energy costs for the EU's non-ferrous metal producers are now roughly twice as high as those of their main international competitors

According to Jeekel, the process by which the 2050 Roadmap was put together, was totally non-transparent and inadequate as a basis for decision-making. He notes that the Roadmap comes with an impact assessment 'which is not really an impact assessment at all, but rather a collection of scenarios'. The assessment, which forms the basis of the Commission's decisions, is 'simply wrong', he says. 'Everyone knows this, and it has been pointed out to the Commission, but they have simply ignored all protests.'

EU policymakers, says Jeekel, should take reality into account and improve their assessments. 'For example, although companies are closing, we have received letters from the Commission stating that our companies should not complain about cost impacts,

because they are negligible. This was the case when they discussed the plan to increase emission reduction targets from 20% to 30% last year. But this conclusion is of course wrong. As I said, the Commission's study did not make a proper assessment of the real impact of the higher electricity prices on our installations and it did not take into account our inability to pass on local costs. It also assumed that the money generated by the auctioning of CO₂ credits, which will start from 2013 on, would be returned by member state governments to the industry. All of this is far removed from reality.'

Jeekel recounts that at the most recent high-level stakeholder meeting on the low carbon economy plans, there was a lot of criticism on the macro-economic impact assessments, from a wide range of stakeholders. Nevertheless, he adds, 'we learned that the Commission is using the same erroneous assumptions again in their plans. More and more people are saying that these inadequate assessments are being carried out deliberately to hide the real impacts of their policies.'

Standstill

The upshot of all this, says Jeekel, is that most European smelters now find themselves in a critical situation, and investments have come to a standstill. 'Smelters in Poland, Wales, Hungary, France, Italy

and Germany have already closed. Germany's biggest aluminium smelter has curtailed its production. Most of the remaining smelters urgently need the financial compensation which the ETS law was to provide them.'

'We have already implemented our own low-carbon roadmap without waiting for policy measures to be imposed upon us'

What should be done now, Jeekel argues, is to take proper account of the real costs and competitive disadvantages with which the industry is confronted and enact policies that deal with these impacts. 'The theoretical models', he says, 'should be checked against bottom-up assessments that look at real electricity prices and real CO₂ costs.'

In addition, the Directorate-General of Competition, which is currently designing the implementation rules for financial compensation of CO₂ costs in electricity prices, should take steps to save the non-ferrous metal industry, says Jeekel. 'We urge DG Competition to encourage the Member States to pay the full amount of permitted

compensation to the industry, as provided for under these to-be-revised Environmental State Aid Guidelines, to avoid further carbon leakage.'

But he realises that governments have many other worries to attend to. 'Many government budgets have already been spent. They saved the banks with that money, so there may be little left for us.' If support does not come, concludes Jeekel, it could spell the end of the EU's production of aluminium and other non-ferrous metals. 'Once a smelter closes, it never comes back. The process is irreversible given the current investment climate in the EU.'

All rights reserved. No part of this publication may be reproduced in any form without written consent from the publisher. For inquiries please contact info@europeanenergyreview.eu.

Contributions Of course these points need to be taken seriously - if climate policy drives industry overseas then the global climate problem is not helped.

But the interview fails to address the reality of climate change.

What does Robert Jan Jeekel want? The EU to give up on climate change until the rest of the world moves? Undoubtedly this would lead to a global temperature increase way beyond 4 degrees. The EU is right to demonstrate some leadership (although its leadership is pretty weak at the moment).

The answer is not to abandon action on climate change but instead look hard at what sectors are truly damaged by climate policy and assess the potential for carbon leakage. If extra help is needed then provide it. In the UK a task force has been set-up to do this as part of a package of measures including cutting carbon emissions by 50% by 2025 under the Climate Change Act.

Mike Childs, Friends of the Earth

Mike Childs

climate alarmists vs. industry alarmists. The truth will probably be somewhere in the middle.

entran.org

This is a very interesting analysis and raises some important questions both on the structure of European heavy industry and effectiveness of unilateral climate strategies. In contrast, there are two (contradictory?) trends now taking place in the U.S. The first, is the attempt at a low carbon fuel standard and related climate control policies in individual states, e.g., California, and what if anything it will do the competitiveness of states that chose to go it alone in the absence of a national policy. I suspect the sustainability of such strategies are limited given the political forces underway which are concerned over the lack of economic growth in the U.S.

The second development is the low price of natural gas, and the growing and genuine expectation that the U.S. is likely to realize expanding supplies without much price escalation. The U.S. which is now seeing a renaissance in the petrochemical and lower effective costs for substituting natural gas for coal in electricity generation, may also be in a position to draw investment from European industry fleeing high costs on the continent. This may be worth a careful look and an unintended consequence of Europe's go it alone climate policy.

Lucian Pugliaresi
Energy Policy Research Foundation, Inc.
Washington, DC

Lucian Pugliaresi