

INTERNATIONAL  
**Herald Tribune**  
THE GLOBAL EDITION OF THE NEW YORK TIMES



An RWE power plant near Düsseldorf. The company was accused in 2006 of engaging in "abusive pricing" in charges to customers for the cost of emission credits. RWE is the biggest carbon dioxide emitter in Europe. (Frank Augstein/The Associated Press)

[\[Enlarge this image\]](#)

# EU carbon trading system brings windfalls for some, with little benefit to climate

By James Kanter

Published: December 9, 2008

**BRUSSELS:** The European Union started with the most high-minded of ecological goals: to create a market that would encourage companies to reduce greenhouse gases by making them pay for each ton emitted into the atmosphere.

Four years later, the carbon trading system has created a multibillion-euro windfall for some of the continent's biggest polluters, with little or no noticeable benefit to the environment so far.

The lessons learned are coming under fresh scrutiny now, both in Europe and abroad. EU leaders will meet Thursday and Friday to work on the next phase of their system, seeking, they say, both to extend its scope and correct its flaws. And in the United States, President-elect Barack Obama has pledged to move quickly on a similar program.

As originally envisioned in Europe, companies would buy most if not all of the permits needed to cover their projected carbon dioxide emissions for a year, one permit good for each metric ton of CO<sub>2</sub>, the main greenhouse gas. If they produced more gases than expected, they would have to buy more permits; if they came in below target, they would be able to profit by selling their extra permits to companies that were polluting over their limit.

The initiative also included another, quieter goal: to raise the price of electricity by letting utilities pass along permit costs, thereby encouraging energy efficiency and innovation among customers as well.

But the system that emerged was far from that model.

After heavy lobbying by giant utilities and smokestack industries, who argued their competitiveness could be impaired, the EU all but scrapped the idea of selling permits. It gave them out for free, in such quantities that the market came close to collapsing because of a glut.

But in line with the original strategy, utilities in countries from Spain to Britain to Poland still put a "market value" on their books for the permits and added some of that putative cost to the prices they charged industrial customers for electricity. And they did not stop there. In one particularly contentious case, regulators in Germany accused utilities of charging customers for far more permits than they were entitled to.

Nowhere was this behavior more evident than at RWE, a major German power company, which has acknowledged that it is the biggest carbon dioxide emitter in Europe. Bank analysts and environmental advocates estimate RWE had received a windfall of roughly €5 billion, or \$6.5 billion at current exchange rates, in the first three years of the system, concluding in 2007 - more than any other company in Europe.

In a confidential summary of its findings, obtained by the International Herald Tribune, the German cartel office in late 2006 accused RWE of engaging in "abusive pricing," piling on costs for industrial clients that were "completely out of proportion" with its own costs. It called for cuts of up to 75 percent.

RWE settled the case last year while denying any wrongdoing. It says price increases from 2005 to 2007 predominantly reflected higher costs for hard coal and natural gas.

Europe's overall experience with carbon trading has been a sobering one.

Its implementation has been marked by maneuvers and adjustments to the original framework that have yielded significant cost benefits to many of the continent's biggest polluting industries. Meanwhile, the amount of CO<sub>2</sub> emitted by plants and factories participating in the system rose 0.4 percent in 2006 and an additional 0.7 percent in 2007.

The United States is now considering a system of its own, with Obama proposing to make industries buy all of their permits. He has said he would devote \$150 billion from the sale of those permits over 10 years to energy efficiency and alternative energy projects.

Many of the framers of the European plan, meanwhile, have thought hard about the way the legislation evolved as they prepare to take up the next phase. But they face the prospect of trying to close numerous lucrative loopholes while confronting the same tug of war between lofty environmental goals and their immediate economic costs - a challenge made even more difficult by the onset of recession.

### **Lofty goals at the outset for curbing CO2 emissions**

During long negotiations on the landmark Kyoto climate treaty more than a decade ago, the United States, through the administration of Bill Clinton, was the loudest in insisting on including a reference to "emissions trading" in the treaty.

Americans had pioneered such markets in the 1970s and used them on a broader scale during the 1990s to reduce emissions from power plants blamed for acid rain.

U.S. officials argued that markets were the most effective way of encouraging innovative, emission-reducing technologies.

The European Union initially opposed emissions trading in favor of direct taxes on polluting industries, but later agreed to trading as the price for ratification.

The United States, however, ended up failing to either ratify Kyoto or to require U.S. companies to enter a carbon trading market outside of the Kyoto accord. But the European Commission, the EU executive body, began working on plans to start such a system in Europe.

"We ourselves had invested so much in the Kyoto Protocol in choosing a global deal," Margot Wallstrom, who was the European Union environment commissioner at the time, said during a recent interview. "I was eager to put it in place as soon as possible."

Today, the EU system represents about 75 percent of global carbon trading - a market worth about €60 billion in 2008, according to Andreas Arvanitakis, an analyst with Point Carbon, a research company.

Yet from the start, Wallstrom, who is now a vice president of the European Commission, said she was lobbied heavily by governments and by companies, seeking to limit the financial burden. She would not comment on any specific contacts. But Eurelectric, the main electricity industry lobby group, and its German affiliate met often with EU environment officials to discuss the shape of the emissions trading system..

A decision was made to limit the initial scope to some of the most energy-intensive sectors of the economy: electricity, glass, steel, cement, and pulp and paper. They were chosen primarily because their stationary factories were easier to regulate quickly than moving targets like transport or aviation.

The original idea of charging for all or even most of the permits never gained traction.

Many politicians said they feared that burdening European industries would undercut their global competitiveness, since rivals in Asia or the United States would not have such extra costs imposed on them.

In addition, Europe's energy market for industrial customers was opening to cross-border competition almost simultaneously.

Wallstrom and others at the commission describe the decision to give away the vast majority of permits as having been a necessary concession to get all the players in Europe on board - especially at a time when the Kyoto climate treaty was under attack from the administration of President George W. Bush.

Still, lawmakers at the European Parliament initially sought to require industry to pay for at least 30 percent of its permits, then 15 percent. (The actual trading price on the futures market at the time ranged from €5 to €13.)

But after long negotiations with EU governments, the Parliament enacted a law on July 2, 2003, allowing up to 100 percent of permits to be given away until 2013. Governments could sell some of the permits, up to 5 percent, but only Denmark, Ireland, Lithuania and Hungary did.

Denmark sold the full 5 percent, earning 226 million Danish kroner, or more than €30 million at current exchange rates. Had all the Danish permits been sold at the same price, the government could have reaped more than €600 million for the national budget.

### **Debate turns to arguments of jobs vs. the environment**

The EU system is highly decentralized, reflecting the political reality of a bloc that now numbers 27 countries. Thus, the lobbying did not stop in Brussels, but moved on to national capitals, where governments were left in charge of setting emissions levels and distributing the permits to companies within their borders, often with deep political connections.

Germany provided a stark example of what happened next. The cross-fire between environmental advocates and politicians who expressed concern about German competitiveness - and jobs - only intensified. The Greens, a political party, was in the federal government for the first time, as junior partner with the Social Democrats of Chancellor Gerhard Schröder. But the issues were resolved in an arena where energy companies have long wielded enormous political clout, and here they benefited greatly.

After World War II, German energy companies were largely state-controlled. Today, following years of privatization and consolidation, the four energy giants, E.ON, RWE, Energie Baden-Württemberg and Vattenfall, own 70 percent of German capacity and produce an even greater share of the electricity.

Jürgen Trittin, a former Greens leader who was environment minister from 1998 to 2005, recalled being heavily lobbied by executives from power companies, and by politicians from

eastern Germany seeking special treatment for burning lignite, a soft brown coal that is common around central Europe and which is highly polluting.

The EU system put the government in the position of behaving like "a grandfather with a large family deciding what to give his favorite grandchildren for Christmas," Trittin said by telephone.

RWE was a special case, he said. The company was "perfectly integrated into the Ministry of Economy, with no clear border," Trittin said.

Wolfgang Clement, the economics minister from 2002 to 2005, had, since 1998, been premier of North Rhine-Westphalia state, where RWE is based. He joined the supervisory board of RWE Power in 2006.

His deputy, Georg Wilhelm Adamowitsch, was, from 1996 to 1999, the representative for federal and European affairs at another energy company, VEW, which in 2000 merged with RWE. At least three other top government officials, including Schröder himself, went to work for energy companies after leaving office.

Trittin recalled a five-hour "showdown" with Clement on the night of March 29, 2004, in which he lost a battle to lower the overall limit on emissions from plants and factories to 488 million tons of CO<sub>2</sub> each year, from the level then in force of 501 million tons. Trittin said he was overruled by Clement, who, with Schröder's backing, secured a reduction of just two million tons, to 499 million.

Trittin said Clement accused him of "wanting to de-industrialize Germany."

Environmental groups were disappointed, but industry leaders were relieved. "With this compromise, steel makers can apparently now continue to sustainably produce steel in Germany," Dieter Ameling, the president of the German steel makers' association WV Stahl, was quoted at the time as saying. "The steel industry thanks minister Clement for his input."

The Federation of German Electricity Companies, representing utilities like RWE, expressed its "relief" as well. "Good sense triumphed in the end," the federation chief, Eberhard Meller, was quoted as saying.

In a recent e-mail message, Clement did not challenge Trittin's account of the meeting, but called his claims of industry influence on the ministry "just nonsense."

Clement said that, during his time in government, he had "many very serious and complicated discussions" with Trittin and other Greens politicians about climate change and the economic costs of fighting it. "I reproached them - and I'm doing this still today - that at the end of their policy there is the de-industrialization of Germany," Clement reiterated. "That's our conflict."

Adamowitsch said by phone that he was not an "ambassador for the German energy industry" while in government or at VEW.

Now an independent consultant working with the Austrian government and the European Commission, Adamowitsch said that the EU emissions system had meant much greater burden for industrial companies making products like cement, where up to one-fifth of the final cost is for energy.

"We are in an industrial battle in the middle of a period of globalization and high energy prices mean we have a real problem in Germany," he said.

Schröder declined to comment for this article.

### **Big winners emerge in ranks of German power companies**

The benefits won by German industry were substantial. Under the German national plan, electricity companies were supposed to receive 3 percent fewer permits than they needed to cover their total emissions from 2005 to 2007. The aim was to encourage them to make technical improvements that would reduce emissions and help the country meet its commitment under the Kyoto treaty.

Instead, the companies got about 103 percent of their annual needs, according to the German Emissions Trading Authority, which oversees the system in Germany. That surplus could have been sold for about €290 million at the peak of the market.

German lawmakers also approved scores of combinations of exemptions and bonuses allowing companies to gain additional free permits for things they had done years earlier, or that might only be done in the future. Among them:

Utilities could base their claim for permits at coal and gas-fired plants on emissions levels from as far back as 1994, even if improvements had been made to the plants since then.

Utilities were guaranteed free permits for 18 years to cover any newly built coal or gas plants (a perk that provoked such a reproach from Brussels that it was later revoked).

Utilities could forecast how many permits they needed for each of their plants, despite a history of conflict with regulators over projections used to set tariffs.

"It was lobbying by industry, including the electricity companies, that was to blame for all these exceptional rules," said Hans-Jürgen Nantke, the director of the German trading authority, which is part of the Federal Environment Agency. The exemptions "enabled companies to get allowances that did not reflect the real situation of their emissions."

Jürgen Frech, chief spokesman for RWE, said that policy makers had sought input from all parties affected in creating what was an unprecedented system, and that all the national plans had to be subsequently approved by the European Commission in Brussels. "For industries like electricity production with long investment cycles, it is crucial to have a stable regulatory environment," he added.

RWE received 30 percent of all the permits given out, more than any other company in Germany.

The company said it transferred some of them among its plants - including those in other EU countries - but still found itself running short, and thus did not sell any.

But there was even greater revenue to be found elsewhere.

### **Outrage from customers as electrical bills shot up**

Major power consumers in Germany began receiving bigger electricity bills shortly after the system officially started in 2005, amounting to increases of about 5 percent each year. The biggest effect was on heavy users of power in industries like steel that - unlike households - buy power wholesale at prices that are less regulated.

Those customers were enraged, and they asked the German cartel office to investigate..

RWE justified its prices to the cartel office by saying the permits, although received for free, had a value in the marketplace. By not selling them and producing electricity instead, the argument went, it was losing an opportunity for revenue that should be charged to its customers.

In a summary of its preliminary findings, sent to RWE lawyers in December 2006, the cartel office agreed that the company was justified in passing through genuine "opportunity costs." But it accused RWE of charging for more permits than it should have - and suggested that this had been done at a third of all power plants in Germany.

This was what led the cartel office to accuse RWE of "abusive pricing." Investigators said RWE lacked any real opportunity to sell many of its permits because it already had committed to providing substantial amounts of electricity. And they said RWE admitted as much at a closed-door hearing.

Frech, at RWE, said that putting a price on the carbon permits - thereby encouraging everyone to be more efficient - was "beyond reproach."

The company said it was "unable to quantitatively estimate what proportion of the end customer price" was attributable to the carbon permits, mainly because the final price was determined in part by supply and demand.

But the cartel office said RWE should reduce the amount it charged for the permits by 75 percent. At this point the case could have moved toward litigation. The company, however, agreed to a settlement involving auctions that should provide industrial customers in Germany with lower electricity costs from 2009 through 2012.

"Customers will have the CO2 allowances RWE receives for the auctioned product credited to them free of charge," the company said, referring to its permits. "This newfound understanding is preferable to protracted legal battles through several courts."



Selling power without the cost of the CO2 permits also has a downside, however. It undermines the EU goal of curbing emissions and encouraging conservation by raising the cost of electricity to consumers.

### **No smooth path for overhaul as EU economies deteriorate**

RWE's net profit jumped 73 percent, to €3.85 billion, in 2005, the first year of the system. RWE does not detail in its financial statements what percentage of net profits is attributable to the carbon system, and the company said it was not able to do so.

Seb Walhain, the global head of environmental markets at Fortis, said that RWE earned up to €5 billion from 2005 to 2007 from the EU system. Felix Matthes at the Institute for Applied Ecology, a German environmental research group, estimated that RWE benefited from windfall profits of €2.2 billion to €3.3 billion annually in 2005 and 2006. Matthes and Walhain said very little, or no, windfall profits occurred in 2007 as a result of the EU system because the price of CO2 permits had fallen virtually to zero.

But emissions have risen steadily at the German operations of RWE since the trading system began. RWE was responsible for nearly 158 million tons of CO2 in 2007, compared with about 147 million tons in 2006 and 120 million tons in 2005, according to its annual reports.

Frech said emissions rose "slightly" in 2007 in part because one of its nuclear power stations "was off line for quite a while." Nuclear-fueled power plants emit no carbon dioxide.

The company also said it was investing €32 billion over the next five years in projects including renewable energy and developing cleaner techniques for generating electricity from hard coal and lignite, which RWE mines in Germany.

"Every investment we make is linked to climate protection," Frech said.

Yet so far there are few signs the system is cutting emissions. The amount of CO2 emitted by plants and factories participating in the system rose marginally in 2006 and 2007, according to the European Environment Agency. (Neither it nor the European Commission made any forecast before the system started about how it would perform.)

Even so, the EU environment commissioner, Stavros Dimas, said in May that emissions would "most likely have been significantly higher" without the carbon trading system.

He called the 2005 to 2007 period a "learning by doing" phase, and noted that limits on emissions have been tightened for the 2008 to 2012 trading period, and the glut of free permits lessened, meaning the price should rise.

But negotiations on how to meet even more ambitious targets after 2012 are in danger of coming undone as the economy worsens.



Prime Minister Silvio Berlusconi of Italy has led the assault on the package, saying that he was not in office last year when it was agreed on. "We don't think this is the moment to push forward on our own like Don Quixote," he said at a summit meeting in October. "We have time."

Poland - which depends on coal-fired plants for 95 percent of its electricity - has threatened to block the package at another summit meeting Thursday and Friday if a compromise is not found to lessen the burden on its energy sector.

RWE, meanwhile, insists that having to pay for all its permits, starting in 2013, with no phase-in period, would distort competition across Europe, which has recently opened up to cross-border energy sales. "Companies such as ours that are giving coal a future and rely on coal-powered generation will find themselves at a distinct disadvantage vis-à-vis companies like Électricité de France, which rely solely on nuclear and have virtually no CO2 to deal with," Frech said.

Industrial customers in Germany are issuing dire warnings of ballooning electricity prices they say are sure to come if utilities try to maintain their profit margins while complying with costly new rules.

The French president, Nicolas Sarkozy, who is leading the political horse trading, continues to push for an agreement. "Europe must be an example for others," he was quoted as saying Saturday in Poznan, Poland.

Nicholas Stern, one of the world's foremost authorities on the economics of climate change since presenting a report for the British government in 2006, said during a recent interview that the United States should draw lessons from Europe's example. He recommended that Obama move quickly toward charging industry for the permits, to avoid such repeated, drawn-out battles.

"Everybody will fight their own corner," he said. "That's why it's so important to have a clear conception from the start."

*Paul Geitner contributed reporting from Paris.*