

THE BIG READ

Europe moves to prop security of carbon trading after heist

Theft in Czech Republic of emissions allowances underscores the need for Brussels clearinghouse

THE European Union ordered its 27 members to shore up security in its Emissions Trading Scheme following a spectacular digital heist in the Czech Republic by computer hackers that temporarily shut down trading in the European Union's \$100-billion-a-year market in car-

By John W. Miller and Alessandro Torello in Brussels and Sean Carney in Prague

bon permits. The ETS will be closed until at least Wednesday, said regulators for the European Commission, the EU's executive arm.

The commission said it would use that time to conduct an in-depth investigation and pressure regulators in the EU's member nations to shore up their cyber defenses. It also said the theft had exposed cracks in the ETS's functioning, underscoring the need for a planned central clearinghouse in Brussels, which will begin operations in 2013.

Representatives from EU member nations and the commission will meet Friday to assess which security measures must be taken to ensure trading can safely resume. "We expect member states to notify the commission about security measures they intend to take," said Maria Kokkonen, a commission spokeswoman.

The shutdown, the first ever in the six-

year history of the scheme, will affect only the two-million-ton-per-day spot market, which accounts for between 10% and 20% of total volume, traders said. The 20-million-ton-per-day market in trading carbon futures will remain unhindered.

The Czech Republic heist is the third such theft in Central and Eastern Europe in as many months. The latest theft means that some two million allowances to emit carbon dioxide, currently worth €28 million (\$37.7 million), are unaccounted for, said Jos Delbeke, the commission's director general for climate action. Mr. Delbeke said that represents only 0.02% of the total allowances on the market.

However, traders and analysts said the theft risked damaging the credibility of the European system, which has often been called a model for a possible cap and trade scheme in the U.S., Japan and Australia.

The ETS, inaugurated in 2005, covers some 12,000 installations, accounting for half of all of Europe's greenhouse-gas emissions. In the first phase, until 2007, the credits were allocated free of charge to companies. Since then, they have been sold. A third reform, starting in 2013, will place them at auction.

An estimated five billion tons of carbon emissions were traded in 2010. The market remains somewhat stagnant, with prices remaining flat, around €15 per ton.

ETS credits are freely traded. The EU's 27 member nations, as well as Norway, Liechtenstein and Iceland, track all ETS transactions on electronic registries.

"Member states have wanted to make the registries part of their national enforcement policies," said Ms. Kokkonen, the commission spokeswoman. "But the problem is there have been varying levels of se-



curity.”

Only 13 of the EU's 27 members have national registries with adequate levels of security, Ms. Kokkonen said.

While the ETS has been effective in reducing carbon emissions, it has also been subject to a litany of problems. The leaking of confidential trading data has caused volatile swings in the market. Companies have lied about their emissions to cheat on their taxes. Traders have played off differences in value-added tax rates in different EU member nations to make millions, according to Europol, the continental union of police forces.

Last year, hackers in Denmark and Britain stole millions of dollars worth of certificates they had gained access to by obtaining security codes from traders. They had stolen the codes by persuading traders to submit confidential data, a classic Internet scam known as “phishing.”

Some companies in the developing world have also made a business of generating greenhouse gases for the sole purpose of destroying them and then selling the credits at a bargain price to European companies.

The thefts and other issues “go straight to the heart of the confidence of the market,” said Sanjeev Kumar, an analyst for E3G, an environmental consultancy. The problem, Mr. Kumar said, is that “this is like stealing candy from a child. Nobody's sat down and figured out you need a penalty for the operators of the registry if they allow this to happen.”

That could change. The commission has been embarrassed by the recent thefts, which include credits stolen from the Austrian registry in early January and €24 million worth of allowances stolen from the account of Holcim Ltd., the Swiss cement maker, at the Romanian National Registry for Greenhouse Gases in November. In particular, the hacking in the Czech Republic this week was strikingly bold and served to highlight the system's vulnerability.

It started when an anonymous caller on Tuesday morning told Czech State Police that explosives had been placed at the of-

fices of OTE AS, a private company that manages the Czech Republic's national registry. The police evacuated the registry for five hours.

During that time, the computer network wasn't monitored, OTE officials said. Hackers stole 475,000 allowances, worth €7 million, from a company called Blackstone Global Ventures, an environmental consultancy that trades carbon credits for industrial companies.

The thieves changed account-ownership information and executed illegal trades, said Nikos Tornikidis, a portfolio manager at Blackstone Global Ventures.

The theft was discovered Wednesday morning when Blackstone Global Ventures logged into its account at OTE, Mr. Tornikidis said.

Mr. Tornikidis said he alerted OTE and was sent a list of the stolen allowances. “But then they shut down the system and others couldn't” access their accounts to determine whether further allowances had been stolen, he said. “I would be surprised if it was only us.”

The credits were immediately transferred to Estonian registry accounts, according to Czech media reports.

Zuzana Zahorovska, OTE's registry administrator, said it wasn't clear if allowances were stolen from other accounts. The registry has suspended trading indefinitely until the cause of the theft has been identified, she said.

The threat of further attacks caused Greece, Estonia, Poland and Austria to also shut down their registries on Wednesday.

The shutdowns “shatter confidence on two levels, for political decision makers and traders,” said Emmanuel Fages, head of power, gas, carbon and coal research at Société Générale Commodities in Paris. However, “guys who trade in the market will have to trade in the market and manage their risk,” Mr. Fages said.

Trading in futures will continue. “As long as the shutdown doesn't drag on and on, we'll be OK,” he said.

However, on Thursday, the volume of futures trade was around half of what is nor-

mally seen, traders said. Prices closed flat, with EU permits for December 2011 delivery trading on the ICE Futures Europe Exchange at €14.38 per metric ton.

Operators don't understand why the markets in each European country had to be shut down, said Alessandro Vitelli, director of strategy and intelligence at IDE-Acarbon, a carbon strategy and research consultancy in London. "It's a bit of an overreaction," he said.

The big companies in the trading have already made sure their transactions are safe, independently from government decisions, Mr. Vitelli said.

Environmentalists said that, despite the problems, the EU system remains a model for the rest of the world.

"The EU's common market has success-
Jos Delbeke, the European Commission's director general for climate action, said the theft in the Czech Republic represents only 0.02% of the total allowances on the market. But traders and analysts said the theft risked damaging the credibility of the European system.

fully put a price on carbon," said Joris den Blanken, Greenpeace's director for EU climate and energy policy. "And companies take these markets seriously, and now make investment decisions based on the carbon markets."

EU regulators insisted that the new model, which takes effect in 2013 and will run until 2020, will be clean of the issues that have dogged the current model. The overhaul will include new sectors, such as aviation, which will be added next year. It will also limit the number of allowances handed out for free.

The European Commission said it would take pains to reopen ETS trading gradually. The Czech registry will remain closed indefinitely for now.

Re-opening "will depend on the action and the speed of reaction of the member states," Ms. Kokkonen said. "The sooner they increase the security measures, the sooner we can reopen the systems."

EU governments "have been compla-

cent," said Simone Ruiz, European policy director for the International Emissions Trading Association. "It's alarming if you can't trade for an undetermined amount of time."

"This is a hiccup, but it's one you should know how to fix. Policing security will be much easier if you have a single registry," Ms. Ruiz said.

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