

Credit scheme backfired, hiking greenhouse gases, study finds

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A global scheme meant to keep atmospheric greenhouse gas (GHG) levels in check instead caused some 600 million tonnes of excess emissions, researchers said Monday.

They blamed a loophole in the Kyoto Protocol's Joint Implementation

(JI) mechanism which allowed countries to earn and sell credits for emissions cuts which were "not real".

Russia and Ukraine were the main offenders, reported authors Lambert Schneider and Anja Kollmuss from the Stockholm Environment Institute (SEI).

These findings should serve as a warning to the 195 nations gathering in Paris later this year to forge a global climate treaty, they said.

"Overall, the use of JI may have enabled global GHG emissions to be about 600 million tCO₂e (tonnes of carbon dioxide equivalent) higher than they would have otherwise been," they wrote in a policy brief published by the SEI.

Such a figure represents most of the total 872 million credits issued by March 2015.

"About three-quarters of JI credits may not represent actual emission reductions" but "bogus carbon offsets", watchdog Carbon Market Watch said in a comment on the research.

The JI mechanism, under the Kyoto Protocol, gave countries credits for incinerating or otherwise "abating" waste gases generated by industry instead of venting them into the atmosphere.

Other countries, which needed to exceed their emissions quotas, could buy these credits to emit the equivalent volume of gas supposedly curbed elsewhere—the goal being a "zero-sum game" of constant global emissions.

But a flaw in the system created a "perverse incentive" for countries to create and incinerate more waste gases to earn more credits, said a study

by the same authors, published simultaneously in the journal *Nature Climate Change*.

This meant excess credits sold on the market, and a net increase in emissions.

The implications for the European Union's Emissions Trading System (EU ETS) the world's biggest carbon market, were "particularly serious", said the SEI brief.

"JI may... have undermined the EU ETS emission reduction target by about 400 million tCO₂e.

In Russia alone, four chemical plants issued 28-33 million "excess" credits since 2011, Schneider told AFP by email.

"Most Joint Implementation credits came from Ukraine, followed by Russia," he said.

"Most credits from both Ukraine and Russia are questionable and may not represent actual emission reductions."

Ukraine and Russia accounted for over 90 percent of JI credits issued.

Mistakes may be repeated

The price of the credits has varied from about 10 euros (\$11.6) in 2010/11, to a few cents today.

"A key concern for us is that there is considerable risk that the same mistakes may be repeated in the new international climate treaty which is currently under negotiation and will be adopted in December this year in Paris," said Schneider.

Many countries do not want oversight of international credit transfers, and several of the carbon-cutting pledges nations have tabled so far to underpin the new pact, were "not very ambitious".

This could create a scenario in which countries continue to sell credits which did not correspond with actual emissions reductions, Schneider said.

The Kyoto Protocol, adopted in 1997, entered into force in 2005, and bound developed countries to an average five-percent cut in emissions from 1990 levels in the period 2008-2012. The target was largely met.

The United States did not sign up, and the pact excluded developing giants like China and India—now the first- and fourth-biggest polluters.

All the world's nations have undertaken to be party to a new, global pact that will officially replace the Kyoto Protocol from 2020.

Since 2012, the protocol exists in a watered down form known as a "second commitment period", imposing [emissions](#) targets only on the 28-member European Union and a dozen other developed nations.

Russia, Japan, Canada and New Zealand have withdrawn from the pact.

More information: *Nature Climate Change*, [DOI: 10.1038/nclimate2772](#)

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