



European Union's 2010 greenhouse gas emissions rise of 2.4% blamed on cold winter and economic recovery in some areas.

Greenhouse gas emissions for the European Union increased in 2010, despite the economic recession and policies intended to tackle climate change.

The increase of 2.4% takes Europe further away from its international commitments to cut carbon dioxide by 2020, and runs counter to advice from climate scientists, who agree that global emissions must peak by 2020 if climate change is not to become catastrophic and irreversible.

The European Environment Agency, which compiled the statistics, said that the rise was owing to signs of economic recovery in some areas, and a colder winter.

But the agency, the EU's environmental watchdog, said emissions might have been higher still if it were not for a strong increase in the production of energy from renewable sources, such as solar and wind.

The rise, of 111m tonnes of carbon dioxide or its equivalents between 2009 and 2010, followed a sharp decline in emissions between 2008 and 2009. That extraordinary drop – of 7.3% or 365m tonnes – was largely attributed to the financial crisis and recession.

Despite the emissions rise, the EU will almost certainly meet its target to cut emissions under the 1997 Kyoto protocol, the only international agreement that stipulates cuts in greenhouse

gases. The EU is also still likely to meet its target, agreed at the Copenhagen climate summit in 2009, of cutting emissions by 20% by 2020, from 1990 levels.

Jacqueline McGlade, executive director of the EEA, said: "Emissions increased in 2010. This rebound effect was expected as most of Europe came out of recession. However, the increase could have been even higher without the fast expansion of renewable energy generation in the EU."

In 2010, the use of renewable energy expanded in the EU by 12.7%, according to the EEA, which helped to constrain the rise in emissions.

But along with the increased use of renewable, there was a marked increase in the use of gas. The total consumption of gas increased by 7.4% in 2010 – a result of the increased production of gas around the world. Although gas can reduce emissions when it is used in place of the higher carbon fuel coal, it is still a fossil fuel.

The Guardian has learnt that the EU is attempting to rebrand gas as a "low-carbon" fuel, allowing funds meant for renewables to be redirected to gas development, in a move that could endanger investment in renewable energy and jeopardise efforts to combat climate change.

One of the key factors behind the rise in EU emissions in 2020 was higher demand for heating owing to a particularly cold winter. Heating is a particularly difficult area for renewable energy, because it is easier to substitute large scale renewables – such as wind farms – for fossil fuels than it is to generate renewable energy for heating homes.

But the EEA said that emissions from road transport fell in 2010.

According to the EEA, Germany, Poland and the UK were responsible for more than half of the EU's increase in greenhouse gases. In part, this is likely to have been down to the temporary rebound from the financial crisis, but also reflects the energy mix of these countries.