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A note on the effectiveness of the decline of the carbon intensity on carbon emissions

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ABSTRACT

The decline of the carbon intensity (CO2/GDP) in the last few decades in countries around the world is well established but it has been argued that such decline didn't lead to the reduction of global CO2 emissions because it's effect has been offset by GDP growth. We quantified the reduction of CO2 emissions in the period 2000–2018 in 14 countries and the European Union (EU) due to the effectiveness of the carbon intensity changes. In the US, Japan and the EU they led to a strong decline of CO2 emissions and in other countries to reductions of 10–40%. In Iran and Saudi Arabia emissions increased.