

Half of greenhouse gases 'emitted by five nations'

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The first 10 countries on the list, made available during UN [climate talks](#)

in Durban, South Africa, account for two-thirds of [global emissions](#), said the report, compiled by British-based firm Maplecroft, specialists in risk analysis.

China, the United States, India, Russia and Japan top the ranking, with Brazil, Germany, Canada, Mexico and Iran just behind.

Three of the top six nations are energy-hungry emerging giants developing their economies at breakneck speed.

China, which eclipsed the United States several years ago to head the list, produced 9,441 megatons of CO₂ equivalent (CO₂e), a measure that combines CO₂ with other heat-trapping gases such as methane and nitrous oxide.

The method of calculation used combines 2009 figures for [energy consumption](#) with estimated numbers for 2010.

The majority of the countries' emissions are carbon dioxide, thanks to massive [energy demand](#). Renewable energy use is increasing, but remains dwarfed by fossil fuel use.

India produced 2272.45 megatons of CO₂e, a significant portion from methane generated by agriculture.

"Although per capita energy use in China and India is relatively low, overall energy demand is very large," said Maplecroft Analyst, Chris Laws.

"When combined with high use of coal and other fossil fuels, this results in large emissions in both countries."

Brazil's output of 1,144 megatons from energy use would be

significantly higher if deforestation were taken into account.

Among advanced economies, the United States -- No. 1 among large nations for per capita emissions -- produced 6,539 megatons of CO₂e.

Russia, at 1,963 megatons, ranked fourth. Its emissions dropped after the collapse of the Soviet Union, but are expected to rise.

In Japan, where output was at 1,203 megatonnes of CO₂e, safety fears over nuclear power could lead to a greater reliance on [fossil fuels](#) -- and a spike in carbon emissions, Laws said.

He noted, however, that the Japanese government has announced their intention to fill the energy gap with renewable energy sources.

"The trend of increasing global [greenhouse gas emissions](#) is unlikely to be abated in the short-to-medium term," he said by e-mail.

The index of 176 nations ranks countries based on the total annual level of greenhouse gas emissions, combining data on CO₂ emissions from [energy use](#) and non-CO₂ emissions.

Data comes from several sources, including the US Energy Information Administration and the US Environmental Protection Agency.

The 194-nation negotiations in Durban, under the UN Framework Convention on Climate Change (UNFCCC), run until December 9.

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