

Let's cut to the chase. We have to be serious about changing (drastically) the way the world generates and uses its energy. Even after 'decarbonization', the rich world has done precious little to reinvent its energy system or wean itself from its fossil fuel addiction. The only reductions, marginal at that, have been in the manufacturing and construction sectors, which many would say is only because production has moved to China and other countries.

Even as the world works overtime to shift the burden of reducing emissions to countries like China and India, it is forgetting this core mission. Clearly, it is time we took the lead to put forward the framework for an effective climate agreement for the entire world.

The framework must be based on the two climate imperatives. One, to share the global commons equitably, because we know that cooperation is not possible without justice. Two, to create conditions so that the world, particularly the energy-deprived world, can make the transition to a low-carbon economy. It is here that the opportunity lies. The tragedy of the atmospheric common has been the lack of rights to this global ecological space. Some countries have borrowed or drawn heavily and without control, emitting greenhouse gases far in excess of what the earth can withstand. They could emit without limits or quotas and enjoyed 'free riding' on this natural capital. Some researchers have called this the natural debt of the North as against the financial debt of the South. In this situation, curtailing emissions can only be through creation of rights and entitlements of each nation to the atmosphere, so that future responsibilities are clearly demarcated. The world needs to adopt the concept of equal per capita entitlements to greenhouse gas emissions.

The entitlements can be based on the

apportionment of the world's natural sinks—its oceans, which absorb and clean emissions—to every individual. The other option is to distribute the global emissions budget among nations in the form of equal per capita entitlements. For instance, if we assume a target of 450 ppm of CO<sub>2</sub> equivalent, each person is entitled to 2 tonne per year. In 2005, the average emissions of the world already crossed 4 tonne per person per year, with the us and Australia leading with 20 tonne per person per year. The entitlements taken together will be the 'permissible' level of emissions of each country, which can then be the basis for trading between nations. The country exceeding its annual quota of carbon dioxide can trade with those countries with 'permissible' emissions. The latter have the financial incentive to keep their emissions as low as possible and to invest in low-carbon trajectories. The equal per capita entitlements framework is then the tool to make the much-needed energy transformation.

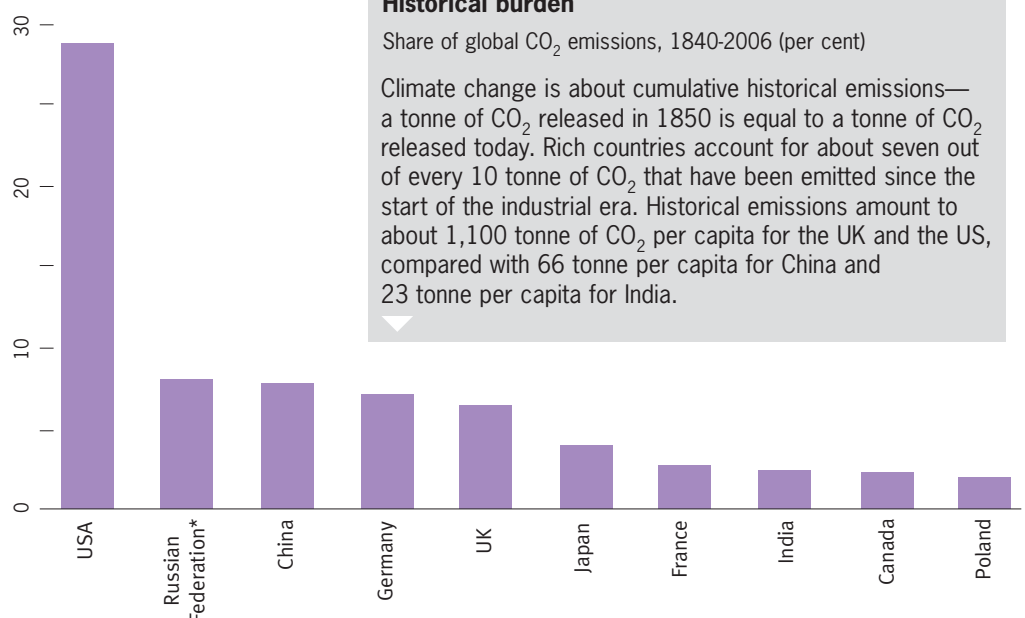
As much as the world needs to design a system of equity between nations, the nations of the world need to design a system of equity within. It is not the rich in India who emit less than their share of the global quota. It is the poor in India, who do not have access to energy, who provide the rest the breathing space. Currently, an estimated 31 per cent of rural households use electricity. Connecting all of India's villages to grid-based electricity will be expensive and difficult. It is here that leapfrogging to off-grid solutions, based on renewable energy technologies, becomes most economically viable. If India was to assign its national entitlements on an equal per capita basis, it would provide both the resources and the incentives for current low energy users to adopt zero-emission technologies. In this way, too, a rights-based framework will stimulate powerful demand for investments in new renewable energy technologies.

Let us be clear. Climate change is a make-or-break challenge before the world. It forces us, perhaps for the first time in our history, to realise that we exist as one, on one Earth. It tells us that there are limits to growth and more importantly, that growth will have to be shared among all. The big question is whether we will prove to be equal to the challenge. We have no choice. There is no other way.

# 05 WHAT THE RICH DID

Centre for Science and Environment  
 41, Tughlakabad Institutional Area, New Delhi 110 062, INDIA  
 Ph: +91-11-29956110 - 5124 - 6394- 6399 Fax: +91-11-29955879  
 E-mail: cse@cseindia.org Website: www.cseindia.org  
[www.cseindia.org/equitywatch.htm](http://www.cseindia.org/equitywatch.htm) / [climatenoise.wordpress.org](http://climatenoise.wordpress.org)

**CoP14 UNFCCC**  
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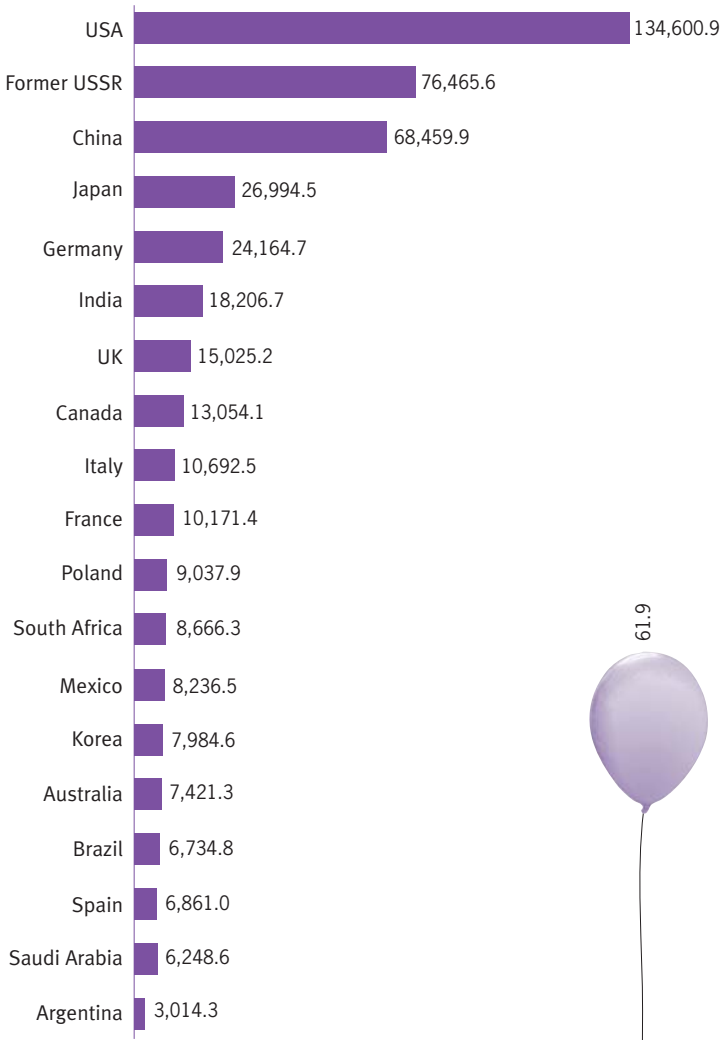


\*Includes a share of USSR emissions proportional to the Russian Federation's current share of former Soviet bloc emissions  
 Source: Carbon Dioxide Information Analysis Centre, 2007

**Cumulative emissions: 1980-2005**  
 (million tonne of CO<sub>2</sub>)

Rich countries are still the major emitters of total CO<sub>2</sub>. Between 1980 and 2005, the total emissions of the US were almost double that of China and more than seven times that of India.

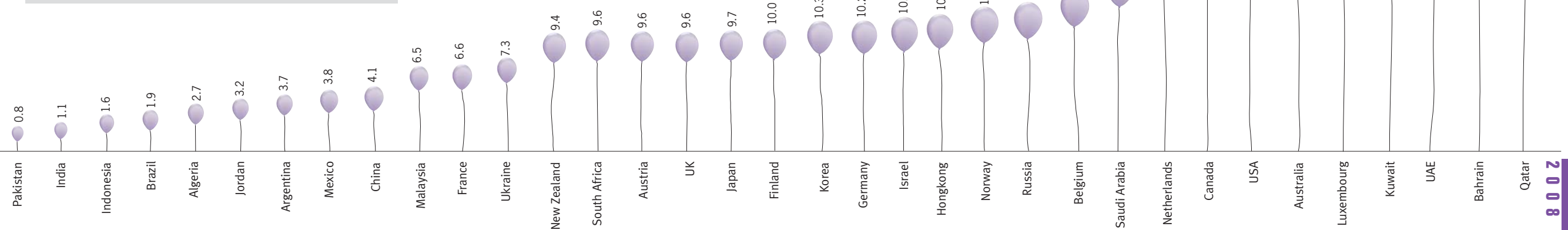
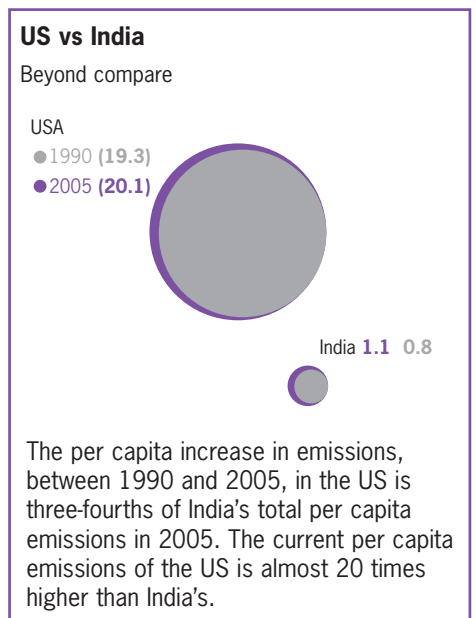
The current emissions from developed countries are still very high: with just 15 per cent of the world's population, they account for 45 per cent of CO<sub>2</sub> emissions.



**Per capita CO<sub>2</sub> emissions, 2005**

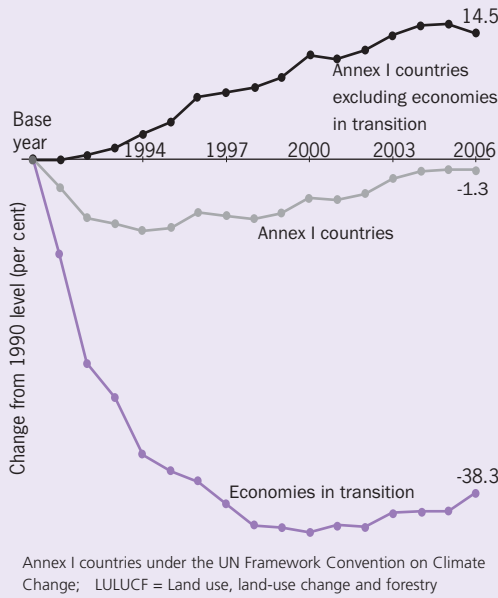
While China may be about to overtake the US as the world's largest emitter of CO<sub>2</sub>, its per capita emissions are just one-fifth that of the US.

Emissions from India are increasing. Even so, its per capita carbon footprint is less than one-tenth of that in high-income countries. The per capita increase for Canada since 1990 (five tonne) is higher than per capita emissions of China in 2005 (4.1 tonne).

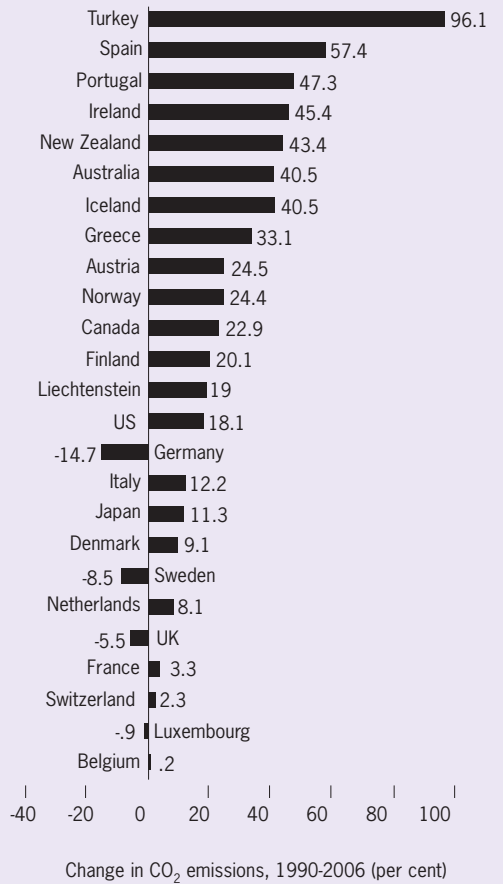


Source: US Department of Energy, 2007

**Graph 1: Annex I CO<sub>2</sub> emissions without LULUCF**



**Graph 2: Annex I countries excluding economies in transition**



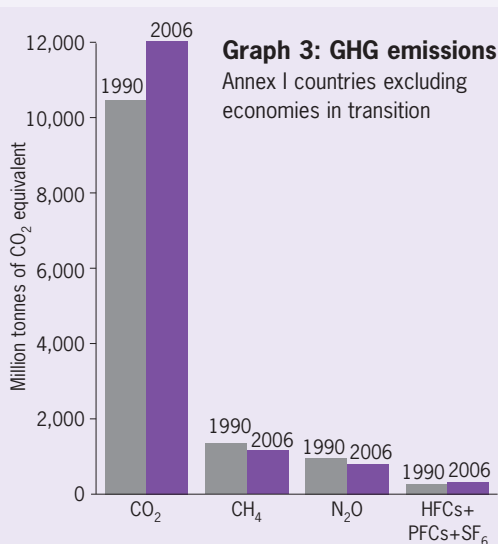
## REPORT CARD

**Graphs 1 & 2:** The CO<sub>2</sub> emissions from industrialized countries excluding economies in transition (non-EIT) have increased by 14.5 per cent since 1990. These countries can only meet the Kyoto targets by hiding behind the massive emissions reduction in the former Soviet bloc.

**Graph 3:** Non-EIT countries have increased their annual CO<sub>2</sub> emissions by almost 1.5 billion tonne between 1990 and 2006.

**Graph 4:** The total GHG emissions from non-EIT countries have increased by almost 14 per cent in the energy sector, though the emissions from other sectors have reduced.

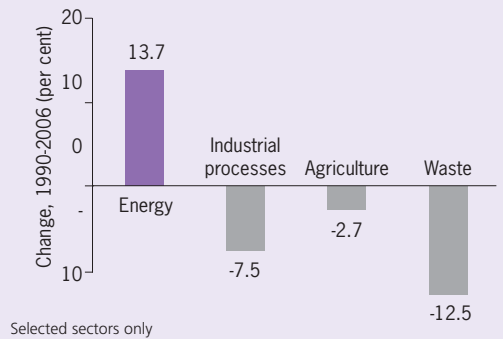
**Graph 5:** Under the energy sector, the emissions have increased massively in energy industries and the transport sectors.



Source: UN Framework Convention on Climate Change, 2008

**Graph 4: Sectors**

Annex I countries excluding economies in transition



**Graph 5: Energy sector**

Annex I countries excluding economies in transition

