

Review Article

Global Warming: Opportunism and Defection

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Abstract - Advances in the most general theory of action are helpful in understanding all current activities around climate change, including UN efforts at global coordination or international governance. Despite 30 years of big meetings within the IPCC process, global emissions of carbon dioxide increased by 2 % in 2018 (BP). The set of COP reunions are used by the 20 largest polluters to delay policy implementation. The United States has already defected from the 2015 Paris Agreement, which is considered to be the chief achievement of this Ocean PD game.

Keywords - Dead alley, Stern Review, Externalities, Economic approach, Coal Power, Hawking irreversibility.

I. INTRODUCTION

In so far as economists participate in the debate on global warming, they tend to approach climate change in terms of the associated costs. Various models (Nordhaus, 2016) have been launched since Nicolas Stern offered his review (Stern 2006). We are very skeptical about these economic models, as they are overly sensitive to assumptions. If worse comes to worst and there are many human casualties from the effects of climate change, e.g., from floods or malnutrition, how can the cost of a life be assessed?

Stern suggested the few key quantities that have figured prominently in the United Nations Framework Convention on Climate Change (UNFCCC):

“The current level of stock of greenhouse gases in the atmosphere is equivalent to around 430 parts per million (ppm) CO₂, compared with only 280 ppm before the Industrial Revolution. These concentrations have already caused the world to warm by more than half a degree Celsius and will lead to at least a further half degree warming over the next few decades, because of the inertia in the climate system.

Even if the annual flow of emissions did not increase beyond today’s rate, the stock of greenhouse gases in the atmosphere would reach double pre-industrial levels by 2050 – that is 550 ppm CO₂ equivalents – and would continue growing thereafter. But the annual flow of emissions is accelerating, as fast-growing economies invest in high-carbon infrastructure and as demand for energy and transport increases around the world. The level of 550 ppm CO₂ could be reached as early as 2035. At this level, there is at least a 77 % chance – and perhaps up to a 99 % chance, depending on the climate model used – of a global average temperature rise exceeding 2 degrees centigrade. “ (Stern 2006)

Stern speculated a lot on the conversion from CO₂ emissions to rises in temperature.

“Developed countries in lower altitudes will be more vulnerable – for example, water availability and crop yields in Southern Europe are expected to decline by 20 % with a 2 degrees increase in global temperatures. Regions, where water is already scarce, will face serious difficulties and growing costs.” (Stern 2006)

What are the fundamentals of these speculations in numbers? Many people around the world are of the belief that the United Nations are going to succeed in limiting temperature rise to 1.5 / 2 degrees centigrade. This was the stated goal in the Paris agreement from 2015, where Machiavellian French Minister Laurent Fabius managed to reach a consensus among more than 190 countries by promising an energy transformation fund of 100 billion USD annually. Although some money has been invested in new technology, the resources have not been forthcoming. In reality, there is a dire need for a new energy supply structure among the heaviest polluters.

Table 1. Top 20 Energy consuming, CO₂ emitting, and coal power producing nations of the world (Enerdata 2019, Crippa et al. 2019, Global Energy Monitor 2020)

Top 20 Energy-Consuming Countries 2018	Top 20 CO ₂ Emitting Countries 2018	Top 20 producers of coal energy 2019
China	China	China
United States	United States	United States
India	India	India
Russia	Russia	Russia
Japan	Japan	Japan



South Korea	Germany	Germany
Germany	Iran	South Africa
Canada	South Korea	South Korea
Brazil	Saudi Arabia	Indonesia
Iran	Canada	Poland
Indonesia	Indonesia	Australia
France	Brazil	Ukraine
Saudi Arabia	Mexico	Turkey
Mexico	South Africa	Vietnam
United Kingdom	Turkey	Taiwan
Nigeria	Australia	Malaysia
Italy	United Kingdom	Kazakhstan
Turkey	Italy	Spain
Thailand	Poland	United Kingdom
South Africa	France	Philippines
Share of World: 75.2 %	Share of World: 78.5 %	Share of World: 93,8 %

II. FUNDAMENTALS OF THE NUMBER EXERCISE

Let us look at present trends, not likely to change very much in the near future. Regression line for the experimental relationship Energy consumption and CO2:

$$CO2\ concentration / ppm = 267.5 + 10*(World\ Energy\ Consumption / be) \tag{1}$$

And moreover, CO2 emissions have been estimated to raise temperatures as follows:

$$Temperature\ Increase/(degrees\ centigrade) = -3.4 + 0.0106*(CO2\ conc. / ppm) \tag{2}$$

Employing these two regression equations, Planet Earth would be in the situation in Table 3.

Table 2. Temperature Increase Scenarios based on Global Energy Projections.

Global Energy / btoe	CO2 concentration / PPM	Temperature rise / degrees C
16	430	1.1
18	450	1.3
20	470	1.5
22	490	1.7
24	510	2.0

According to Stern, the age of global warming would evolve around levels between 410 and 550 ppm. In terms of temperature rise, this would mean a span of 0.9 to 2.4 degrees. When emissions from methane and other gases are included, the World will be close to 3 degrees warmer. How could the Paris agreement limit the employment of fossil fuels in countries around the World? A great philosopher, Hobbes, said: “Covenants, without the sword, are but words and of no strength to secure a man at all” (Hobbes 2012)

Economist George Tyler recently informed about gigantic plans for new coal-fired power stations:

“.... 16 nations – including Egypt, Mozambique, Papua New Guinea, the United Arab Emirates, and Nigeria – are planning their first installations Japan has plans for as many as 22 new coal-fired power plants over the next five years”. (Tyler 2020)

III. WAR

One sometimes meets the accusation that CLIMATE AFFIRMERS claim that global warming leads to war between states. In fact, global warming is conducive to social unrest and political chaos when the effects are widely felt from worsening living conditions.

States may come to oppose each on open access resources like water from rivers that cross multiple nations. Water scarcity looms ahead, leading to drought, less hydroelectric power, and starvation.

If some of the Great Powers would somehow collide in war, then it would quickly escalate to atomic warfare with the destruction of mankind. However, climate change poses a severe threat to human beings by itself.

Climate change conflicts could occur between minor powers concerning flows of migration or water access. Examples include the struggle about clashes regarding water from the Nile, the Euphrates and Tigris, the Indus and the Mekong, respectively. Climate change migrants will certainly appear in Bangladesh and in countries

around the Sahara. A nuclear war is completely different, characterized by first-mover advantage.

IV.CONCLUSION

There is no support for a theory of global warming implying a definite span or a fixed carbon budget. Climate change is irreversible given the insatiable human demand for energy offered by fossil fuels and cement. For example, the United States plans to be the largest exporter of oil and gas by 2025 by means of the destructive technology of fracking. Renewables will grow, but neither match the speed of population growth nor are in line with the requirements of developing nations for a much bigger share of global affluence.

Future demand for energy has been projected to evolve to 2035, according to Figure 1.

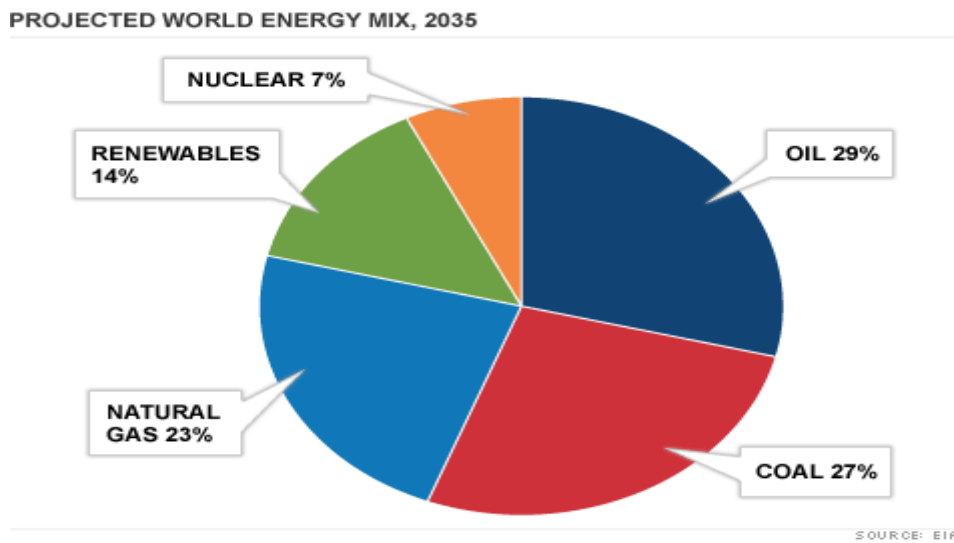


Fig. 1 Projected Energy Mix (EIA 2011).

It can be noted that both renewables and fossil fuels are expected to grow far beyond current levels. Further, if the leading powers of the world retain their hitherto business as usual position, fossil fuel will still supply the vast majority of energy for the planet. When each and every country in the mentioned set of great powers maximize their intake of energy, all of them will fall into the energy trap of global warming with horrible consequences for mankind.

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