

Chaos in Global Coordination: Climate Change and Covid

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ABSTRACT

The Covid disaster keeps ravaging Planet Earth. It is hardly a turning point for global environmental policy coordination. The economic costs of the coronavirus are now arriving in the form of unemployment, lower production and steeply increasing deficits and public debt. How to manage the much needed climate change policies? The big polluters are governed by leaders who fail to take global warming seriously.

Keywords: Paris agreement, public international law, realpolitik, moralism, Big Polluters, COVID

INTRODUCTION

The IEA predicts that the demand for energy and fossil fuels is not going to subside in the coming decade, despite the rapid rate of innovation around the world. The need for energy is growing in developing countries providing more electric power to poor people.

It is true that the Covid lockdown has reduced energy supply by some 10 percent but this is temporary. Moreover, some of the big polluters use the slow process of international negotiations to avoid a radical climate change policy. Transaction costs skyrocket and promises made are reneged upon.

Now, global coordination is voluntary except for matters of war and peace and the IPCC has no

Table1. 10 World Leading Emitters of CO₂

| Country | Emissions / billion tonnes | Share / % |
|---------------|----------------------------|-----------|
| China | 9.4 | 27.8 |
| United States | 5.2 | 15.2 |
| India | 2.5 | 7.3 |
| Russia | 1.5 | 4.6 |
| Japan | 1.1 | 3.4 |
| Germany | 0.7 | 2.1 |
| South Korea | 0.7 | 2.1 |
| Iran | 0.7 | 1.9 |
| Saudi Arabia | 0.6 | 1.7 |
| Canada | 0.6 | 1.6 |
| Total | 23 | 67.7 |

Table2. 10 Leading Emitters of CH₄

| Country | Emissions / gt CO ₂ equivalent | Share / % |
|---------------|---|-----------|
| China | 1.75 | 21.87 |
| India | 0.64 | 7.94 |
| Russia | 0.55 | 6.81 |
| United States | 0.50 | 6.24 |

control authority. International policy making suffers from much rivalry among Big Powers.

THE LOGIC OF STATE ACTION

The governments of the nations of the world have delayed action on climate change for more than 30 years. The next IPCC conference has now been postponed until late 2021. What interests do governments pursue in climate change policy making?

First, one needs to focus on which states are responsible for the most emissions. Table 1, Table 2 and Table 3 present the 10 biggest polluters of CO₂, CH₄, and N₂O, respectively, the “Mega Polluters”.

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| | | |
|-----------|------|-------|
| Brazil | 0.48 | 5.95 |
| Indonesia | 0.22 | 2.79 |
| Pakistan | 0.16 | 1.98 |
| Australia | 0.13 | 1.57 |
| Iran | 0.12 | 1.51 |
| Mexico | 0.12 | 1.46 |
| Total | 4.66 | 58.11 |

Table3. 10 Leading Emitters of N2O

| Country | Emissions / mt CO2 equivalent | Share / % |
|--------------------|-------------------------------|-----------|
| China | 587.2 | 18.6 |
| United States | 288.9 | 9.2 |
| India | 239.8 | 7.6 |
| Brazil | 214.5 | 6.8 |
| Indonesia | 93.1 | 3.0 |
| Sudan | 85.0 | 2.7 |
| Congo, Dem. Rep. | 68.0 | 2.2 |
| Russian Federation | 65.2 | 2.1 |
| Australia | 54.2 | 1.7 |
| Argentina | 53.1 | 1.7 |
| Total | 1750 | 55.5 |

Given that only 10 countries produce more than half of the world's greenhouse gases, it is a remarkable fact that small countries aiming at zero emissions don't matter at all.

THE COSTS OF CO2 REDUCTION

CO2 molecules stay in the atmosphere for very long time periods, so they must be removed very

soon. Dreaming about negative carbon emissions would require the construction of enormous numbers of carbon-capture plants, or the replacement of coal-fired electricity by solar energy. Table 3 provides an estimate of how many World-class solar plants each of the leading polluters would have to introduce to replace all of their coal-fired capacity.

Table4. Number of Bhadla Solar Park plants required to replace coal power by country (Global Energy Monitor).

| Asia | Number of plants |
|---------------|------------------|
| China | 475 |
| India | 100 |
| Japan | 28 |
| South Korea | 18 |
| Turkey | 9 |
| Americas | |
| United States | 106 |
| Colombia | 1 |
| Europe: | |
| Germany | 32 |
| Russia | 30 |
| Africa: | |
| South Africa | 14 |

INTERGOVERNMENTAL COORDINATION

For 30 years the UN has attempted global warming policy. The system of state interaction is much tilted toward national interests and power politics. There is a constant augmentation of military expenses year in and year out among the Big Powers, as if war was imminent. Some of the Big Polluters are engaged in proxy wars. Conflict is typical of the anarchical international interaction (Bull 1979).

Yet there is also norms and normativity. An international society exists for cooperation on

economics and trade, on the use of oceans and atmosphere etc, but there is no consensus on climate change so far. On the contrary, the poor countries want the rich countries to pay for energy transformation.

Public international law consists of three parts;

- 1) the acknowledgement and protection of states' rights in a reciprocal fashion;
- 2) the protection of the Planet Earth;
- 3) the protection of individual persons. 1) is strong whereas 2) and 3) is weak. Governments

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may appeal to the principle of non-interventions in internal affairs to avoid environmental attack. Yet, among the mega-polluters climate change has low priority. Somehow global warming is not very dangerous, at least not in the short term.

Moreover, some of the big polluters use the slow process of international negotiations to avoid a radical climate change policy. Transaction costs skyrocket and promises made are reneged upon.

The IPCC has suffered from the lack of implementing agreements typical of international governance as well as the lukewarm participation of big polluters. Energy is vital for all countries, especially Big Powers even if derived from fossil fuels.

Now, global coordination is voluntary except for matters of war and peace and the IPCC has no control competence. International policy making suffers from much rivalry among Big Powers.

INTERNATIONAL SYSTEM OR SOCIETY

The system of states is much tilted toward national interests and power politics. There is a constant augmentation of military expenses year in and year out among the Big Powers, as if war was imminent. Some of the Big Polluters are engaged in proxy wars. Conflict is typical of the anarchical international interaction (Bull 1979).

Furthermore, the basic interests of states have been theorized in two contrary approaches: on the one hand, *realpolitik* versus *moralism*. The first of these focuses on state power and its

Table5. Outcomes of COVID 19 as of July 18, 2020 (Worldometers)

| Country | Total Cases | Total Deaths | Tot Cases/ 1M pop | Deaths/ 1M pop | Total Tests | Tests/ 1M pop |
|-----------|-------------|--------------|----------------------|-------------------|-------------|------------------|
| USA | 3,775,280 | 142,127 | 11,403 | 429 | 46,634,931 | 140,852 |
| Brazil | 2,049,140 | 77,964 | 9,637 | 367 | 4,911,063 | 23,097 |
| India | 1,055,932 | 26,508 | 765 | 19 | 13,433,742 | 9,730 |
| Russia | 765,437 | 12,247 | 5,245 | 84 | 24,676,930 | 169,092 |
| Spain | 307,335 | 28,420 | 6,573 | 608 | 6,026,446 | 128,892 |
| UK | 294,066 | 45,273 | 4,331 | 667 | 13,112,764 | 193,111 |
| Italy | 243,967 | 35,028 | 4,035 | 579 | 6,154,259 | 101,795 |
| Germany | 202,416 | 9,162 | 2,416 | 109 | 6,884,614 | 82,159 |
| France | 174,674 | 30,152 | 2,676 | 462 | 2,618,722 | 40,115 |
| China | 83,644 | 4,634 | 58 | 3 | 90,410,000 | 62,814 |
| Sweden | 77,281 | 5,619 | 7,650 | 556 | 681,820 | 67,492 |
| S. Korea | 13,711 | 294 | 267 | 6 | 1,460,204 | 28,480 |
| Denmark | 13,173 | 611 | 2,274 | 105 | 1,306,743 | 225,566 |
| Australia | 11,441 | 118 | 448 | 5 | 3,413,831 | 133,809 |

The US numbers are shocking. The lack of a proper uniform response due to the Federal diversity of health care is significant.

maximization in an environment of anarchy, while the second rejects state egoism, especially denouncing war, arguing that states are bound by basic model principles of humanity: *pacta sunt servanda*, speak the truth, never attack unless attacked, and pay compensation for damages.

The environmental movement would like to add *sustainability* to these basic norms. Recently, moralism has made advances in public international law, e.g., the International Court of Justice, but *realpolitik* remains dominant in international relations. Thus, governments can sign declarations for environmental policy purely for tactical reasons without ever implementing them.

When looking at the lists of mega-polluters in the global climate change game with prisoners dilemma (PD) theory, one understands why climate policy making has failed. There is no organization or body with the authority to force China, India and the United States to leave the path of fossil fuels.

The weakness of moralism in public international law is the lack of enforceability. The EU promising carbon neutrality by 2050 can not force Germany to stop its huge consumption of coal.

COVID AND GLOBAL COORDINATION

Mankind is ravaged by a coronavirus - COVID 19 - weakening social systems and states. Covid-19 has caused chaos in several countries - see Table 5.

At the same time, biologists and Earth Scientists emphasize that global warming is spinning out of control, fueled by the set of tipping points.

Why has it come to this? A number of explanations have been put forward, such as e.g. capitalism; inequalities, fossil fuels, the rise of China, etc. I suggest they are somewhat deficient for the following reasons.

Capitalism

Several if the media "gurus" call for a reform of a broken economic system called "capitalism" in order for mankind o change direction: not only radicals like Chomsky and Klein but also professionals like Piketty, Stieglitz and Krugman.

Speaking of "capitalism", one must underline that it is a value loaded concept. Negatives include exploitation, starvation salary, CEO luring, corruption of politicians and bureaucrats. Positives comprise efficiency, individual responsibility, fairness as merit, jobs and effective wages. Given such contrary evaluations, it is little wonder that predictions about its longevity differ much. Marx and Schumpeter spoke of its demise whereas Tocqueville and Freeman praised capitalism.

The global market economy is the real economists system except in China and North Korea. It can very well be combined with a public sector benefiting the poor. The larger the economy, the more welfare is possible. Welfare states and development states are market economies.

The market economy adheres to the following institutions:

- A) free labour or wage earners
- B) joint - stock company
- C) stock exchanges
- D) contract validity

The market economy fulfills theoretically the efficiency conditions but leads to several negatives that require public expenditures. Other economic systems have different institutions. North Korea practices the command model whereas China has a market economy with much state ownership as well as state control.

A market economy produces external effects like pollution. The global economy comes with the biggest externality ever, namely global warming (Stern 2006). It can only be counteracted by means of a global common pool regime.

Inequalities

The focus here is upon growing economic inequality between rich and poor including racial discrimination. The leading scholar on capitalism and economic inequalities is Piketty arguing:

a) that the share of capital in the GNO goes up at the expense of wages;

b) that only government can correct this market failure by very high taxation on high incomes.

To simplify, the GDP is divided between capital income and wages in a span 50 - 65 per cent for wages. Inequality arises not from this buy from the incredible high salaries for CEO:S. Together with capital income they own about 90 per cent of wealth of a nation. Piketty recommended up to 95% taxation but it is politically unfeasible due to tax resistance and country competition. Progressive taxation can reduce inequalities though.

Fossil Fuels

The extreme growth in the burning of fossil fuels during the 20th century has been conducive to much higher living standard in the world. They lead over the greenhouse effect, which in turn lead to the tipping points that threaten mankind in the form of positive feedback loops. Can governments decide on a "common pool regime" in order to arrive at carbon neutrality or negativity in time?

Despite all new policies and promising innovations at country level, there is no common pool regime. Figure 1 shows a stylised projection of energy consumption through 2040.

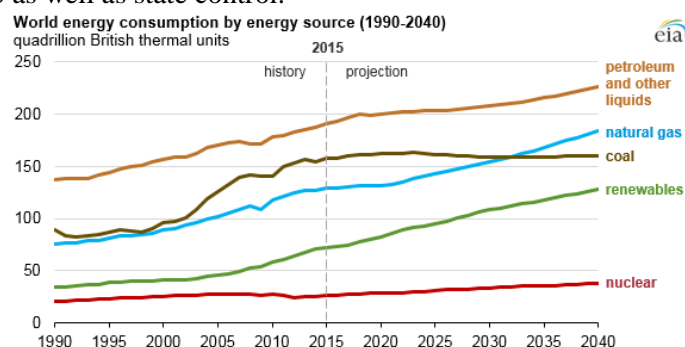


Figure1. Projected world energy consumption by source (EIA)

Although Figure 1 does not take the COVID-19 into account, it predicts a carbon dependency in the 21st century that leads to some 5 degrees Celsius warming that only international cooperation could stem.

One theory of externalities argues that spontaneous cooperation is forthcoming in common pool regimes to reduce the external effect - here carbon emissions. It is too optimistic when it comes to sovereign states. Reason: the insatiable drive for energy.

MORGENTHAU Vs. KELSEN

We live on Morgenthau's planet where states interact in an international anarchy. Morgenthau formulated the theory that states pursue egoism like individuals, always being prepared to defend against any threat. The International System. Is a Hobbesian jungle with little normativity, which is why intergenerational coordination fails.

A curiosity is that young Morgenthau ran in to none other than Adolf Hitler in the twenties and he was deeply impressed by the demagogue. As a Jew he had foresightedness enough to leave Germany in time. Before becoming a great US

scholar, he spent some years in Geneva to which also Kelsen had fled. Morgenthau versus Kelsen - realism against normativity. In Kelsen's world, global environment policy and implementation would be feasible, but Morgenthau's world is REALPOLITIK. His realist theory has been refined and augmented, but it remains the classic model of international relations. Adopting realist theory, the work of the IPCC is nothing but a PD game.

Realpolitik may, however be conducive to NEMESIS. Consider Hitler's successful period up to summer 1940 with the slow perdition of Germany from 1941, although it was hardly in German interests to take on Mussolini's foreign policy and launch a gruesomely vicious attack on the USSR. The Shoa was crime against humanity, stemming from Hitler's early acquired bizarre misconception that both capitalism as well as Bolshevism were "Jewish".

UNLIMITED ENERGY SUPPLY?

The transition to the EV looks to be quick as now the comparative prices favour electric transport. But how will the price of electricity develop?

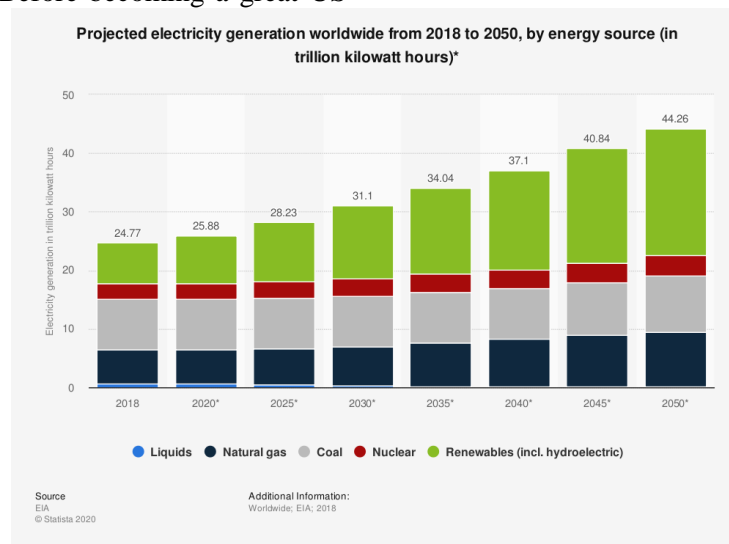


Figure 2. Projected world production of electricity through 2050 (EIA).

If renewables are to replace fossil fuels in the production of electricity, how can so much more electric power be generated that all EV transportS are also covered? Using fossil fuel to get electric power would not do in a global ICCP regime. The difficulties with energy storage will be enormous.

CONCLUSION

The fear of abrupt climate change is exaggerated, as global warming involves a low but steady temperature increase. It will hit

mankind through multiple positive feedback loops, but they all require time before their impact reaches their maximum. So many of the human-experienced consequences of climate change, including possible changes through global ocean currents, the melting of the North Pole, Greenland and Antarctica, will be slow. On the other hand, nobody knows what temperature rises mankind can support. How soon global warming will be lethal for humans depends also on what responses Governments take in the form of reducing coal power in

particular, subsidizing electrical vehicles, protecting all kinds of forests and setting up large carbon capture facilities.

Apparently, increases in temperature in the Anthropocenic period have reached a value of 1 degree Celsius, caused by emissions of both CO₂ and CH₄. Carbon dioxide seem to be more important than CH₄ as of now, but that may change in the coming decade. When global warming passes 2 degrees, a number of tipping points will be triggered. Nobody knows how large temperature increase mankind can support in different parts of the world. People will migrate.

When administrations really start to reduce their Mount Everest of carbon dioxide emissions, they have a long way to go before carbon neutrality or even carbon negativity can be accomplished, but what to do if methane emissions start increasing rapidly?

In reality, international politics makes effective climate change policy making and implementation impossible, which makes the civilisations of the Earth extremely vulnerable.

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