

Struggle for Global Climate Justice, i.e. for the Acceptance of Concrete Climate Debts

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CO2-budget approach: A Just Basis for UN-Global Climate Summits, Update of an article in transform! European journal... No. 07/2010

Global climate justice is a common demand in many well-intentioned speeches. But it's rarely said how to implement global climate justice concretely in global governance. After the negotiations at the last Climate Summits failed so spectacularly, even well-meaning and sensible climate politicians are saying that global climate negotiations within the UN-framework cannot be successful. Critics say that such a complex issue cannot be tackled within the framework of the UN.

However, this is not true.

A precondition for successful negotiations is the formulation of absolutely transparent, adequate, comprehensible, clear and just principles. Only if these preconditions are fulfilled and no party can feel overreached, is it realistic and attainable at all to come to an understanding about a comprehensive climate agreement which can meet the danger of disastrous global climate change.

Since contrary to their own better knowledge the governments of the highly developed industrial countries have not faced this issue there is no time to lose for progressive and internationalist forces to introduce it into the global climate debate so that it can be adopted in global climate negotiations as a basis. The global and progressive forces (including the left parties worldwide) could propagate this approach in such a way that governments, for example, in Latin America (Brazil, Venezuela, Bolivia) but also in Asia (China, India), adopt it and push it through before and in the next climate summits as a proposal from the group of G77 as the basis of negotiations which will perhaps also be supported by some European states.

The two-degree centigrade goal

With ever greater precision, scientific findings tell us that emissions of greenhouse gases have to be reduced on a global scale at once and with utmost intensity. From an objective point of view the situation is dramatic. Since 1990, the development of greenhouse gas emission has neither been halted nor reduced, but energy consumption and thus the emissions of greenhouse gases, of carbon dioxide in particular, has been continuously increasing. All scientific findings show that since 1990 much too much time has been lost and that the situation will drastically worsen with every further delay.

So as not to put forward utterly unrealistic demands, science has formulated the "Two Degree Centigrade Goal", that is, the majority of scientists share the opinion that in the long run mankind could just about cope with an increase of the median global average earth temperature by two degrees higher than the respective temperature

level of pre-industrial times. We have already reached an increase of 0.8 % today. At least the international community of states has in the Climate Conference in Bali in 2007 agreed upon adopting as a general goal of global climate protection this two-degree centigrade limit as a basic guideline for future political action on a global scale. But this was not followed by deeds. Which concrete measures are required and feasible to still achieve this two-degree centigrade goal?

Binding plans

Immediate and binding plans and obligations to reduce emissions for the industrialised countries: first and foremost, the rich industrialised countries which are mostly responsible for the present climate crisis - with the USA at the forefront but closely followed by Europe, Russia, Japan and Canada- are required immediately and radically to reduce their greenhouse gas-emissions with the long-term goal of reducing them to a maximum level of only one ton carbon dioxide equivalents, per capita per year. In order to prevent mere lipservice from being paid to a long-term goal, it is necessary to arrive at binding agreements and obligations to have reduced the emissions by 40% by the year 2020 as compared to the emissions of the year 1990.

Global budget approach

World climate agreement on the basis of a global carbon dioxide budget approach: Since the carbon dioxide emissions have to be the focus of all efforts concerning climate protection due to the great quantity of gases released and the long period in which they will remain in the atmosphere, the budget approach presented here focuses on the dominant carbon dioxide emissions, in particular from the burning of fossil raw materials. This budget approach, which goes back to a study carried out by the German Scientific Advisory Council on Global Change (WBGU), can be understood as follows: If a 75 % probability of compliance with the two degree centigrade temperature goal is to be achieved, the cumulative carbon dioxide emissions for the entire globe may not exceed the value of 1100 billion tons (=Gt) of carbon dioxide for the period 1990 2050. According to current scientific findings, this global carbon dioxide budget represents the absolute uppermost limit for the carbon dioxide emissions the atmosphere is able to absorb.

Per capita key

To distribute this global total carbon dioxide budget equitably among the countries of the world there is from the point-of-view of climate justice no other sensible principle than a per capita key, that is, each inhabitant of the earth is entitled to the same right to emit a certain amount of carbon dioxide. For the period between 1990 and 2050 this amounts to an average value of 2.7 tons of carbon dioxide per capita per year. From the year 2050 onwards this figure should only be about one ton of carbon dioxide per capita per year. Threshold and developing countries, which today and in the future exceed this limit, would have to approximate this figure up to the year 2050. Since in the period between 1990 and 2009 the overall emission already amounted to 500 billion tons of carbon dioxide globally, a budget of merely 600 billion tons of carbon dioxide remains for the rest of the period (2010-2050). If the total budget is attributed to the individual states according to such a per capita key, we get

a cumulative carbon dioxide budget for each state for the entire period. Accordingly, China would for the period between 1990 and 2050 be entitled to a total budget of 239 billion tons of carbon dioxide, due to its covering 22% of the world population (in 1990), of which it has used, from 1990 to 2009, 75 billion tons, which leaves a budget remainder of 164 billion tons of carbon dioxide for the remaining period from 2010 to 2050. However, considering the estimated annual amount of emissions in 2008 of 6.2 billion tons of carbon dioxide, China will already have used up the budget it is entitled to in 26 years from now; that is, China too must aim at a reduction of its carbon dioxide emissions, the more so if an annual population and economic growth are included in the calculations.

The analogous calculations for the USA show a total budget of 52 billion tons of carbon dioxide for the period between 1990 and 2050, in accordance with its 4.7 percentage of the world population. Yet, between 1990 and 2009 the USA has already emitted more than double the amount of carbon dioxide into the atmosphere, namely 108 billion tons of carbon dioxide. This means that the USA is not entitled to any more emission rights at all from now until 2050 and that the USA has to pay compensations for their negative budget (-56 Gt CO₂). According to this approach, countries such as Germany and Russia have also already emitted more than they are entitled to for the entire period from 1990 to 2050, yet considerably less than the USA has (see Table).

Financial evaluation

For some industrialised countries (the USA, Russia, Germany) to gain emission rights already used up in the past and further emission rights required for future emissions, a price would have to be agreed upon for one ton of carbon dioxide. This price would have to be fixed in global climate negotiations with the option of adaptations in later negotiations, should new aspects become relevant. This price should not be calculated too low for the accumulation of a meaningful global climate fund fed from these means. From this climate fund effective investments for the avoidance of emissions as well as for necessary adaptation measures to future climate change should be financed on behalf of those developing countries which do not use up all the emission rights they are entitled to (such as India).

A still very rough cost calculation on the basis of estimated measures required for avoidance and adaptation in developing countries (cf. UNFCCC) amounts to a figure of about 40 USD per ton of carbon dioxide. From this, the dimension of money transfer from the industrialised to the developing countries can be assessed. For the USA the amount of money would be 2.2 trillion USD for the period between 1990 and 2009 to balance the deficit accumulated in the past (56 billion tons of carbon dioxide, see Table). To prevent unacceptably high money transfers in the starting phase of such agreements, sensible transition regulations would have to be found for this historical debt. The current annual carbon dioxide emission of the USA amounting to about 6.1 billion tons of carbon dioxide (see Table) would have to be calculated at a price of about 40 USD per ton, that is, about 244 billion USD per year. The current annual carbon dioxide emissions, for example, of Germany, amounting to about 0.9 billion tons of carbon dioxide, would accordingly have to be calculated at a price of 36 billion USD per year.

Table: “CO2-emissions and CO2 budgets of some selected countries”

Area	Share of World population in 1990 %	Total budget 1990-2050 Gt CO2	Emissions to date 1990-2009 in Gt CO2	Budget 2012-2050	Estimated emissions in Gt CO2 in 2008	Reach of the budget lifetime, assuming annual emission as in 2008
World	100	1 100	500	600	30	20
China	22	239	75	164	6.2	26
India	16	175	19	156	1.5	103
EU	8,9	98	81	18	4.5	4
USA	4.7	52	108	-56	6.1	- 9
Indonesia	3.4	38	4,8	33	0.38	88
Brazil	2.9	31	6,1	25	0.46	55
Russia	2.8	31	31	-0.29	1.6	0
Japan	2.3	26	23	2.4	1.3	2
Mexico	1.6	18	6,9	11	0.46	23
Germany	1.5	17	17	-0,90	0.91	- 1
Burkina Faso	0.16	1.7	0.0090	1.7	0.00062	2810
Maldives	0.0041	0.045	0.0098	0.035	0.00071	50

Global calculation system

For the ISW (Institute of social, ecological and economic studies, Munich) a trade in emission rights as suggested by the German Advisory Council on Global Change (WBGU) does not seem desirable, because with a system of emission trade a sphere of investment would be opened for international speculation with the known negative effects. To regulate and to supervise this process the foundation of an organisation working along the principles of the UN, for example, a World Climate Organisation (“WCO”) is advisable, which calculates, administers, controls and enforces the necessary data, budgets and transfer payments from the industrialised countries to the developing and threshold countries. This organisation should work on a completely transparent basis but also be equipped with sanction instruments.

A financial fund fed by those transfer payments would have a significant size (about \$ 500 billion/a). This sum represents a quantity similar to the figure given by the Climate Secretariat in Bonn for measures to combat climate change and for measures for adaptation to climate change. This fund would take on a substantial meaning for the sustainable development of poorer countries without the developing countries just remaining in the role of petitioners. Such a fund could enable a new direction for inventive energy production, for new mobility systems and in general a transition to a low-carbon age. In this approach they would have a right to financial compensation – in return for unused emission rights. The payments by the industrialised countries would not merely be effected on a voluntary basis, but represent compensation payments for climate “debts” since 1990.

Financial compensation for underdeveloped countries

An expressed and also strictly controlled aim of these enormous financial transfers to the poorer countries would be the establishment of economy and energy infrastructures which do not follow the fossil-energy-based road to development of the industrialised countries but jump over this phase of historical development of technology. The establishment of such a completely new global economic structure can only be brought about by financial transfers in these dimensions. This also seems to be the only way to tackle climate change, which is a global problem of humanity. That is, parallel to the absolutely necessary reduction measures in the rich countries a new, sustainable path of development without resorting to fossil energies should be taken in the still underdeveloped countries.

Climate justice

This approach would make the polluter-pays principle and the principle of climate justice the basis of calculations and of financial compensation between North and South dating from 1990. Transfer payments should be used exclusively for financing the reduction of carbon dioxide emissions, for restructuring energy supply in favour of renewable forms of energy, for inventions in new mobility systems and the corresponding necessary adaptations to damage due to climate change already in effect on a regional level (the building of dykes, irrigation, desalinisation of sea water, forestation, social compensation measures, etc.) and for halting deforestation.

A climate compromise based on this approach would require concessions from all groups of countries: from the industrialised countries' far-reaching obligations for reduction as well as comprehensive technological and financial transfers are expected. In turn, the threshold and developing countries would have to accept the fact that economic development based on fossil fuels is no longer future-proof, so that they too would have to introduce transition measures towards a climate compatible society.

Exchange of know-how

An additional aspect of solving dangerous climate change as a global problem of humanity would be the abolition of patent rights for innovations of effective emission-reduction technologies and the introduction of renewable energies in developing countries. For developing sustainable and adapted technologies, joint research and development institutions of industrialised and developing countries should be established to put into practice an exchange of know-how for finding joint solutions to the global climate problem.

Initiative on a global scale

This model of a just and viable solution to the global climate problem appears almost impossible to realise in the face of present-day political and economic conditions. The deeper causes of the problem lie in the fact that the dominant powers are structured according to capitalist principles both with regard to their economy and their society and that they want to preserve this dominance by all means. In addition, the most influential

power groups in the global capitalist system - energy, car, airplane- and arms-producing companies - are mired in the fossil system of production and consumption. Despite the cultivation of their image to the contrary, these groups do not have the slightest interest in relinquishing their power and their squeezing of extra profits from the exploitation of fossil raw-materials and from the continued use of combustion technologies in the traffic and energy sectors.

For all these reasons we need a big global climate justice movement and broad anti-capitalist initiatives of progressive parties, social and civil society movements, trade unions, intellectuals and open-minded and interested governments, which helps to lend political impact to these ideas - with regard to next climate summits and also beyond.

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