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The Greenhouse Development Rights Framework

This brief argues that an emergency climate program is needed, that such a program is only possible if the international climate policy impasse is broken, and that this impasse arises from the inherent – but surmountable – conflict between the climate crisis and the development crisis. It argues that the best way to break this impasse is, perhaps counter-intuitively, by expanding the climate protection agenda to include the protection of developmental equity. To that end, the Greenhouse Development Rights (GDRs) framework is designed to hold global warming below 2°C while, safeguarding the right of all people everywhere to reach a dignified level of sustainable human development.

Climate science tells us that we have pushed beyond “dangerous anthropogenic interference with the climate system”, and are on the verge of committing to catastrophic interference. In this context, we argue for a stringent mitigation pathway (one that can only be achieved with international emergency program) that would give us a reasonable probability of keeping global warming below 2°C. This implies a pathway that would have global emissions peak in 2015, and then drop at a resolute 6% per year, to reach a level of 80% below 1990 levels in 2050. Along the way, CO₂ concentrations would peak near 425 ppm (with CO₂-equivalent levels reaching about 470 ppm) before they begin to fall.

The world’s wealthy minority has left so little space that, even if industrialized country emissions were to be suddenly and magically halted, the dramatic emissions reduction demanded by the climate crisis would require developing countries to urgently decarbonize their economies, and to do so while they are still combating endemic poverty. This is not only the core of the physical challenge, but also the crux of the international political impasse that now stymies the negotiations.

If an emergency program is to be embraced, it must not threaten to lock in today’s vast disparities of wealth and income. Just the contrary: It must drive down emissions, globally, even while the lives of the

poor are improving and ambitious development goals are being met and surpassed. To this end, it must slash the emissions of the already wealthy and, at the same time, prevent the unbounded emissions growth of those rising out of poverty without stifling their development aspirations.

The problem, of course, is that the world’s wealthier citizens will not agree to pay more than a trivial amount for climate change, and even less if the payments go to people and projects in “other countries”. Given this, Southern negotiators fear that a stringent global climate agreement would wind up saddling them with unacceptable costs and permanently constraining their development. In any case, poor countries – if they see mitigation as drawing resources from development and poverty alleviation – will balk at it. Which is why, before finally throwing their support behind any emergency program, Southern negotiators will need to see a proposal that, above all else, explicitly safeguards the right to development.

Thus, the political impasse. As long as there is no serious burden-sharing proposal on the table, that ensures that an emergency program can be executed without stifling development in the South, developing-country negotiators will conclude that their countries have more to lose than to gain from earnest engagement. In this context, we propose “Greenhouse Development Rights” as a burden-sharing framework for a regime that could break the impasse.

The GDRs framework seeks to not only acknowledge the right to development, but to actually place that right at its core. It seeks to secure, for the developing nations, a viable portion of the scant remaining atmospheric space, and to do so in a manner that allows them to prosper within it. It does this by codifying the right to development in terms of a development threshold, below which individuals are not required to help shoulder the burden of solving the climate problem. This development threshold is defined to reflect a level of welfare beyond basic needs, but well short of today’s levels of “affluent” consumption, which is to say that people below it

have little responsibility for the climate problem and relatively little capacity to invest in solving it. Indeed, they have development as their proper priority, and as they struggle toward a viable level of social well-being, they cannot reasonably be saddled with the costs of keeping society as a whole within the starkly limited global carbon budget.

People above the development threshold, on the other hand, are taken as having realized their right to development, and as bearing the responsibility to preserve that right for others. It is they who must share the burden – in accordance with the UNFCCC’s broad principle of “common but differentiated responsibility and respective capabilities” – of funding the global emergency program. It is they who must bear the costs of not only curbing the emissions associated with their own consumption, but also of ensuring that, as those below the threshold rise toward and then above it, they are able to do so along sustainable, low-emission paths.

In all this, responsibility and capacity are built deeply into the GDRs burden-sharing system, and this for the very pragmatic reason that they specify a viable and defensible foundation for a true emergency program. Indeed, the GDRs burden-sharing system is *progressive with respect to both responsibility and capacity*, in that it defines both with respect to the development threshold.

We suggest here a development threshold set at \$9,000/year (PPP). This figure, while certainly subject to discussion, is a reasonable reflection of a level at which one has largely overcome the struggle against privation and become a bona fide member of the global consuming class. (And it is much more relevant to the problems here than the oft-cited figures of \$1/day or \$2/day for a global “poverty line.”) It is above the global average income (of about \$8,500), and might reasonably be called a “global middle class” income level (not to be confused with the significantly higher rich-world middle-class standard.) In terms of the trade-off that we actually face – at what point should poorer people help bear the burden, so that wealthier people would bear less? – it draws the line in just about the right place.

We define capacity as income, excluding all income below the development threshold. We similarly define responsibility as cumulative carbon emissions, excluding all emissions deriving from

consumption below the development threshold. The logic here is that any burden-sharing framework designed to protect the right to development must necessarily exclude such “survival income” and “survival emissions.” Also, capacity and responsibility are defined in individual terms, in a manner that takes explicit account of the distribution of income and emissions – inequality – within countries. Relying merely on national per capita averages would fail to capture either the true depth of the development need or the actual extent of the national wealth.

We then combine those estimates (into a national “Responsibility and Capacity Indicator” – RCI) to quantify national mitigation and adaptation obligations corresponding to a global emergency program. The allocation of the burden along these lines¹ would see the US bearing slightly more than one-third of the global burden, and the EU bearing roughly one quarter, whereas China bears less than one-fifteenth, and India less than one three-hundredth (see Table 1).

If, for example, it turns out that the total costs of the emergency program are 1% of gross world product, then the implied annual obligations average \$780 for people above the development threshold in the United States, and, similarly, \$372 in the EU, \$142 in China and \$51 in India. (If total costs turn out to be 3% of GWP, then triple these figures.) Our conclusion is that if costs are shared within a progressive framework based on capacity and responsibility, then they will be shared in a manner that is both fair and fairly painless. We stress that, the higher these costs turn out to be, the *more* important it is to share them equitably, and note that, thankfully, the situation is not (yet) so dire that we are forced to consider truly heavy burdens and genuinely draconian decisions. This is to say that it is still possible to avert climate catastrophe while pursuing sustainable human development, in good faith and on a global scale. Our world is a rich one in which, despite the climate crisis and even the broader environmental crisis, viable options remain.

¹ This could, in theory, be done via a global cap-and-allocate system.

Table 1. Global percentage shares of population, income, capacity, cumulative emissions, responsibility and RCI for selected countries and groups of countries.

Percentage share of Global						
	Population	Income	Capacity	Cumulative emissions 1990–2005	Responsibility	RCI
United States	4.7	20.2	31.8	23.7	37.0	34.3
EU (27)	7.7	21.5	29.0	17.8	23.1	26.6
United Kingdom	0.9	3.3	4.7	2.5	3.6	4.3
Germany	1.3	4.0	5.6	3.8	5.2	5.5
Russia	2.2	2.5	1.5	7.4	4.3	2.3
Brazil	2.9	2.6	2.1	1.3	1.0	1.6
China	20.4	14.7	7.1	13.8	6.6	7.0
India	17.0	6.1	0.4	3.8	0.3	0.3
South Africa	0.7	0.9	0.8	1.6	1.5	1.1
LDCs	8.3	1.4	0.1	0.4	0.0	0.0
All high income	15.6	53.9	78.8	52.7	76.9	78.5
All middle income	47.7	36.6	20.7	41.1	22.8	21.1
All low income	36.7	9.5	0.5	6.2	0.4	0.5

The bad news is “merely” political, and amounts to two tasks. First, we must build the political will necessary to allocate a significant fraction of the gross world product (GWP) – 1% or perhaps even 3% – to implement a true emergency program. Second, we must ensure that the burden of that program is shared more or less along the lines of the “progressive global carbon tax” presented here. Both of these tasks are, admittedly, daunting, but it is time to recognize them for what they are – the necessary foundations of a viable global climate regime. Only if the relatively wealthy and relatively responsible (in both wealthier and poorer countries) pay the incremental costs of adaptation and clean-energy leapfrogging, with those who need to prioritize development be able to do so. In a world as bitterly divided as ours, a viable climate regime must at least do no harm, and this means that it must not erect further barriers to the progress of the poor. The key virtue of the Greenhouse Development Rights approach is that it does not do so. Indeed, it is because it does not do so that we can claim that the GDRs approach is, in fact, realistic. If the cost of meeting this condition is that, in the end, both mitigation and adaptation must be financed via a (fairly modest) tax on the luxury consumption of the relatively wealthy – for this is, finally, what GDRs proposes – well, what is this but realism about our actual conditions of life on this shared, finite planet?

Reference

Baer, Paul, Tom Athanasiou and Sivan Kartha (2007). *The Right to Development in a Climate Constrained World, The Greenhouse Development Rights Framework*. Heinrich-Böll Foundation, Berlin.

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