Climate and human rights:
Are global citizens equal before the Climate Convention?

Abstract

The Kyoto Protocol sets emission reductions for developed parties which also imply emission rights. How equitable are these rights? The Declaration of Human Rights proclaims that all human beings are equal in rights, and equal before the law. This analysis shows that in per-capita terms the Kyoto emission rights are not only different for every developed party, but also disproportionately high in relation to both global emissions and emissions of most developing parties. 89% of developed parties have acquired emission rights higher than the 2007 global per-capita emission; conversely, 76% of developing parties emitted in 2007 less than the global per-capita level. How would parties fare under equal per-capita emission targets? Assuming global reduction targets of 14% by 2020 and 50% by 2050, 5% of developed parties have rights under both targets; by comparison, 60% of developing parties emit less than the 2020 target, and 39% less than the 2050 target. An equitable distribution of emission rights would make the Kyoto flexibility mechanisms and possible successors largely unnecessary. Technology transfer and climate financing for developing parties would also lose grounds. Instead, straightforward trading of unused emission rights would provide developing parties with their own source of just and immediate financing.

Keywords: emission allowances; emissions reduction; equity; climate regime; technology transfer; financial mechanisms

1. **Emission rights are also human rights**

The Kyoto Protocol to the Climate Convention (United Nations, 1998) establishes initial binding commitments for developed (Annex 1) parties to reduce their greenhouse gas emissions. Timely stabilizing the global climate requires further and very substantial reduction commitments that developed parties are unwilling to accept, unless developing (non-Annex 1) parties take initial binding commitments; developing parties however are reluctant given their historically minor participation in global emissions.

The commitments set for developed parties are based on absolute 1990 emission levels, vary from party to party in the range of -10% to 8%, and should be achieved in the period 2008-2012.

It is important to realize that commitments set in the Kyoto Protocol imply in fact emission rights for developed parties, ranging from 92% to 110% of their absolute emissions in 1990. How equitable are these Kyoto emission rights?

Article 1 of the Universal Declaration of Human Rights (United Nations, 1948) proclaims that all human beings are equal in rights. Article 2 goes further by saying that no distinction shall be made on the basis of the status of the country to which a person belongs. Article 7 states that all are equal before the law and are entitled without any discrimination to equal protection of the law.

Therefore, if all human beings are entitled to equal emission rights, any rights granted by the Climate Convention should be based on equal per-capita emissions.

2. Kyoto emission rights versus per-capita emissions

The following analysis compares per-capita Kyoto emission rights of developed parties and per-capita emission levels of developing parties. For the sake of simplicity, the analysis considers CO2 emissions only, mostly from combustion of fossil fuels. All comparisons are made in terms of carbon contained in the CO2 emitted.

1990 CO2 emissions of developed parties were taken from their national communications as compiled by the Secretariat of the Climate Convention (2008). The figures considered in the analysis exclude emissions from land use, land-use change and forestry.

1997 CO2 emissions of developing parties were taken from statistics by the International Energy Agency (IEA, 2009). The figures considered correspond to emissions from combustion of fossil fuels under the Reference Approach.

Global CO2 emissions for 1990 and 1997 were taken from the Global Carbon Project (2009). The figures considered correspond to emissions from combustion of fossil fuels and cement production.

1990 population in developed parties and 1997 population in developing parties were taken from the above mentioned statistics by the IEA. 1990 global population was taken from statistics by the United Nations Secretariat (2009).

Table 1 presents the results of comparing the annual per-capita carbon emission rights acquired by 38 of the developed parties that ratified the Kyoto Protocol. Luxembourg

comes first with 7.95 tonnes, and Monaco last with 0.09 tonnes. Compared to the 2007 global per-capita emissions (1.29 tonnes), 34 developed parties (89%) have emission rights above and 4 parties (11%) below said global level. Considered together, per-capita emission rights of the 38 developed parties (2.95 tonnes) are 130% higher than the 2007 global per-capita emissions.

[Insert Table 1 here]

Table 2 presents the results of comparing the 2007 per-capita carbon emissions from 95 of the developing parties that ratified the Protocol. Qatar is by large the highest emitter with 16.18 tonnes. The Democratic Republic of Congo comes last with 0.01 tonnes. Compared to global per-capita emissions, 23 developing parties (24%) emit more and 72 parties (76%) less than the global level. Considered together, 2007 per-capita emissions of the 95 developing parties (0.73 tonnes) are 43% lower than the 2007 global per-capita emissions.

[Insert Table 2 here]

Tables 1 and 2 illustrate very well how inequitable the Kyoto emissions rights are, not only between developed parties, but especially to most developing parties.

3. Living under an equitable climate regime

How would the parties fare in a climate regime based on equal per-capita emission targets?

The analysis below assumes global reduction targets of 14% by 2020 and 50% by 2050, relative to 1990 levels. The corresponding global per-capita emission targets are 0.69 tonnes for 2020 and 0.34 tonnes for 2050.

The 2050 reduction target was taken from a recent study by Meinshausen et al. (2009). The 2020 target is a linear interpolation between a 5.5% global reduction by 2013, consistent with an equitable burden sharing of the Kyoto target, and the 2050 target. Projections of global population for 2020 and 2050 were taken from the above mentioned statistics by the United Nations Secretariat.

Only 4 developed parties (5%) have Kyoto emission rights below the 2020 and 2050 global emission targets (Table 1). Conversely, 57 developing parties (60%) are so far emitting less than the 2020 global target, and 37 parties (39%) less than the 2050 target (Table 2).

4. The consequences of equity

Making the Climate Convention compliant with the Declaration of Human Rights requires a fundamental change of principles: instead of the present rights and obligations of developed parties based on their absolute 1990 emissions, all parties must obtain rights and obligations calculated by multiplying their population by an equal per-capita allowance agreed to by the parties.

Such equitable distribution of emission rights and obligations between parties would make the Kyoto flexibility mechanisms and possible successors largely unnecessary. The well known intricacies and leaks of the Clean Development Mechanism would be

replaced by straightforward trading of unused emission rights between developing and developed parties. The other two Kyoto mechanisms would be replaced as well by straightforward trading of rights between developed parties. Ultimately, the separation of trading between developing and developed parties, and trading among developed parties would become redundant, leading to their merger into a global system of trading unused emission rights between all parties.

More recent trends like technology transfer to, and climate financing for developing parties would also lose most of their grounds.

As shown above, most developing parties are in good position to face an equitable burden sharing of emission reductions, and thus could well afford to wait while technological progress drives cost-to-performance ratios down. Current renewable energy technologies for example require country-sized installations to provide energy at the massive scale needed, which makes them very expensive if not impracticable.

Under equitable emission rights, any ad-hoc climate financing initiatives would become redundant. Instead, straightforward trading of unused emission rights would provide developing parties with their own source of just and immediate financing for climate related-needs, that parties could use according to their national interests and priorities.

Conclusions

From the above analysis it is evident that the Kyoto emissions rights are inequitable, not only between developed parties, but especially to most developing parties. This inequity also implies that developed parties have a historical emission debt with developing parties. How to measure and settle such debt is beyond the scope of this analysis.

Developing parties are at present in much better position to face an equitable burden sharing of global emission reductions than developed parties. While 60% and 39% of developing parties comply at present with the 2020 and 2050 targets respectively, only 5% of developed parties have emission rights that comply with both targets.

From this perspective, technology transfer is not crucial for developing parties at this moment. Current clean technologies have still substantial limitations to address climate change. Under equitable emission rights, the need of and the conditions for applying such technologies is more with developed parties; most developing parties are in much better position to wait until progress and eventual break-troughs make technology a major and more affordable player in reducing emissions.

Transitioning to a climate regime based on equal per-capita emission rights is urgent and crucial. The current impasse between developed and developing parties on how to share the reduction burden has it roots in inequality. Since the impasse is crippling the capacity of the Convention to timely address severe climate change, making the Convention more equitable would substantially enhance its performance.

Surprisingly, equity is not an explicit priority issue in the negotiations of the post-Kyoto regime. Other issues like climate financing and technology transfer are taking the attention of the negotiators while deepening the impasse. Ironically, a regime based on equitable emission rights would substantially boost transparent emission trading, providing developing parties with their own source of climate financing, while turning technology more relevant to developed parties only.

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Note

The views and opinions presented in this article are strictly personal, for which the author assumes full responsibility.

Mhai Selph, November 2009

Table 1

Kyoto emissions rights (tonnes carbon per capita)

1	Luxembourg	7.95
2	Estonia	6.03
3	Australia	4.80
4	Russian Federation	4.49
5	Canada	4.25
6	Czech Republic	4.00
7	Ukraine	3.75
8	Poland	3.34
9	Germany	3.26
10	Belgium	3.00
11	Finland	2.86
12	Slovakia	2.85
13	Bulgaria	2.84
14	Netherlands	2.68
15	Denmark	2.64
16	United Kingdom	2.59
17	Iceland	2.53
18	Belarus	2.51
19	Lithuania	2.45
20	Japan	2.38
21	Ireland	2.33
22	Norway	2.26
23	Hungary	2.13
24	Romania	2.10
25	New Zealand	2.07
26	Greece	2.05
27	Slovenia	2.04
28	Austria	2.02
29	Italy	1.92
30	Latvia	1.80
31	France	1.70
32	Sweden	1.65
33	Switzerland	1.64
34	Spain	1.47
35	Croatia	1.25
36	Portugal	1.09
37	Liechtenstein	0.18
38	Monaco	0.09
	All above	2.95

Global emissions

(tonnes carbon per capita)

2007	1.29
2020 target	0.69
2050 target	0.34

Table 2

2007 emissions by developing parties (tonnes carbon per capita)

1	Qatar	16.18	33	Jordan	0.92	65	Yemen	0.26
2	United Arab Emirates	7.88	34	Azerbaijan	0.92	66	El Salvador	0.24
3	Bahrain	7.56	35	Lebanon	0.76	67	Guatemala	0.24
4	Kuwait	7.03	36	Algeria	0.74	68	Pakistan	0.24
5	Trinidad and Tobago	6.22	37	Syria	0.74	69	Philippines	0.22
6	Brunei	4.73	38	Korea DPR	0.72	70	Nicaragua	0.21
7	Saudi Arabia	4.04	39	Botswana	0.69	71	Zimbabwe	0.19
8	Oman	3.88	40	Cuba	0.61	72	Sri Lanka	0.17
9	Kazakhstan	3.63	41	Ecuador	0.60	73	Paraguay	0.16
10	Singapore	3.47	42	Egypt	0.59	74	Angola	0.16
11	Korea	2.81	43	Tunisia	0.54	75	Ghana	0.11
12	Israel	2.58	44	Moldova	0.54	76	Congo	0.10
13	Cyprus	2.53	45	Dominican Rep.	0.54	77	Nigeria	0.10
14	Turkmenistan	2.50	46	Panama	0.53	78	Senegal	0.10
15	South Africa	2.49	47	Brazil	0.50	79	Benin	0.09
16	Libya	2.02	48	Uruguay	0.49	80	Côte d'Ivoire	0.09
17	Malaysia	1.94	49	Indonesia	0.47	81	Cameroon	0.08
18	Serbia	1.84	50	Armenia	0.44	82	Sudan	0.08
19	Malta	1.81	51	Gabon	0.42	83	Cambodia	0.08
20	Iran	1.78	52	Namibia	0.42	84	Kenya	0.08
21	Jamaica	1.40	53	Costa Rica	0.41	85	Myanmar	0.07
22	Venezuela	1.40	54	Morocco	0.37	86	Bangladesh	0.07
23	Bosnia & Herzegovina	1.31	55	Georgia	0.36	87	Haiti	0.07
24	Macedonia	1.25	56	Colombia	0.36	88	Zambia	0.06
25	China PR	1.25	57	Bolivia	0.35	89	Togo	0.04
26	Uzbekistan	1.18	58	Albania	0.35	90	Tanzania	0.04
27	Mongolia	1.18	59	India	0.33	91	Eritrea	0.03
28	Chile	1.18	60	Honduras	0.31	92	Nepal	0.03
29	Mexico	1.16	61	Kyrgyzstan	0.30	93	Mozambique	0.03
30	Argentina	1.13	62	Vietnam	0.30	94	Ethiopia	0.02
31	Thailand	1.03	63	Peru	0.28	95	Congo DR	0.01
32	Iraq	0.97	64	Tajikistan	0.28		All above	0.73

Global emissions
(tonnes carbon per capita)

2007	1.29
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2050 target	0.34