

An Effective Allocation Criterion for CO₂ Emissions

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The Kyoto Protocol has set relatively easy targets for emission limitations for Annex I parties. These are not sufficient to save the earth from climate change or to "prevent dangerous anthropogenic interference" of the climate. It is the contention of the authors that eventually all parties to the Protocol will have to undertake commitments. Equal per capita emissions, with simple and transparent adjustments for the short- and medium-term, could be the most equitable basis for allocating emissions rights. It is reasonable to accept an individual as the unit of account since we are discussing anthropogenic emissions, i.e. those which are generated by humans. Besides being equitable, for any criterion to be successful it should be effective and implementable. In order to be effective, global emissions have to be restricted to a pre-determined level. This is possible with the widest participation, which would include both Annex I and Non-annex I countries. The approach should be practical, flexible and one which is easy to implement. This paper proposes a very simple exposition of the "common but differentiated" responsibility concept (Article 4.1 of the FCCC). It aims to strike a balance between the concerns relating to the choice of the numeraire, viz., population and GDP in determining emission targets. In this paper we have explored the principle of equal per capita emissions entitlements, adjusting them for severity of emission cuts that may be required of certain countries, using energy intensity in these countries and efficiency of energy use as tools. In other words both equity and efficiency considerations are addressed in the approach suggested herein. The approach is illustrated for the WRE 550 parts per million by volume concentration scenario.