

What Might a Future Global Climate Change Deal Look like?

The task ahead

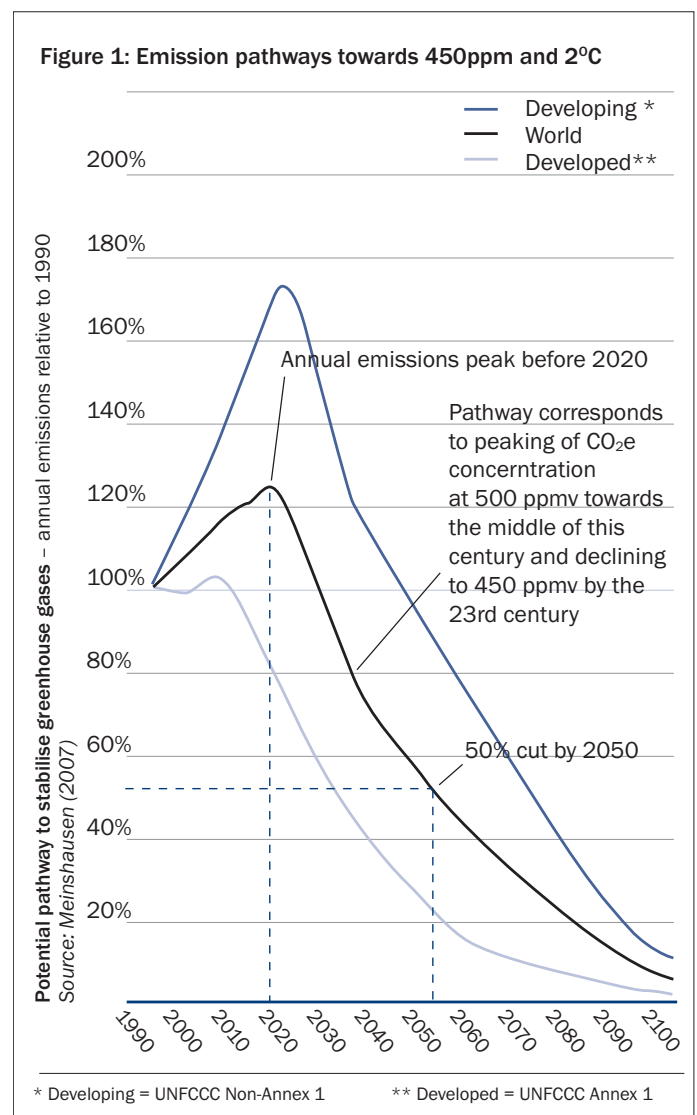
For the world to have a reasonable chance of avoiding the worst effects of climate change, the challenge is have global emissions of greenhouse gases peak by 2020 and then to reduce them to 50% of 1990 levels by 2050. These goals have been articulated by international science and policy leaders – the second even by the heads of state of the G8 countries at their recent 2008 meeting in Japan. For industrialised countries, the challenge is much greater than just the global percentages. Figure 1, taken from the recently released report by Tony Blair and The Climate Group (Climate Group, 2008), shows an illustrative set of pathways for global emissions and shares of this for industrialised and developing countries.

Lord Nicholas Stern points out in a very recent report (Stern, 2008), that what the global 50% by 2050 goal means ‘as a matter of arithmetic’ is

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1 This article draws, in particular, from a briefing paper, *The Architecture of a Global Climate Change Agreement*, prepared as part of the Tony Blair/Climate Group ‘Breaking the Climate Deadlock’ Initiative (see http://www.theclimategroup.org/special_projects/breaking_the_climate_deadlock/).

average global *per capita* emissions of about 2 tonnes of carbon dioxide equivalent (CO₂e) by 2050 – and that if there are any large economies emitting more than this, there need to be other equally large economies emitting commensurately less.²



Meeting the needs

The challenge in front of the global community is to craft, agree and *ratify* a multilateral agreement that adequately addresses the scale of the climate change problem. The agreement must therefore be able to meet the needs and expectations of all countries and ‘voting’ publics. This also must be done in the context of other imperatives that are bearing on country leaders, in particular energy security, water security, food security and sustainable development – and now, most recently, the global financial crisis.

To achieve, and be mindful of, these many objectives, of necessity any agreement will have to be both very comprehensive and very flexible. Given the need for global emissions to peak by about 2020 (in the face of current emissions growth trends), the agreement needs also to build on the international climate change policy that exists and is working. There is not the time to start with a new page. However, the sheer complexity of the challenge also means that the agreement must additionally be open to innovation and diplomacy of the highest levels.

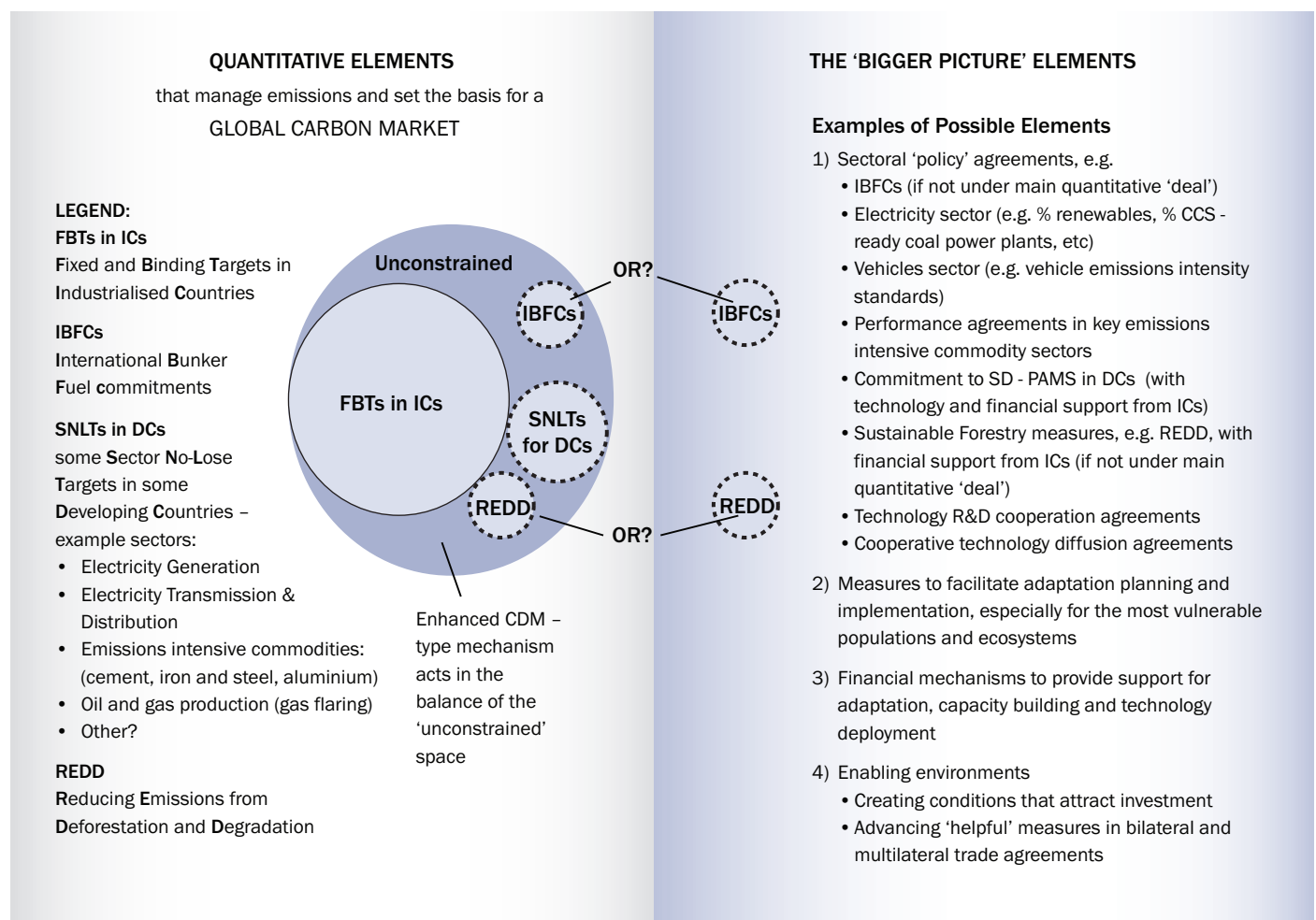
Key elements of a global agreement

Taken together, these above points clearly signal the need for an agreement that has at its core both some quantitative elements and some ‘bigger picture’ elements.

By quantitative, what is meant are elements that constrain emissions in a predictable way. This means a cap on the aggregate emissions of industrialised countries. And it can mean other forms of targets or commitments: for example, of a sectoral nature in some key developing countries, or covering international aviation and marine ‘bunker’ fuels. Importantly, it is these quantitative elements that create the basis for the emergence of a more robust and broad-based international carbon market. This is generally seen by experts to be a needed fundamental element of a future climate change agreement because of its ability to engage the world’s private sector and mobilise necessary levels of investment worldwide in low carbon technologies and practices.

But these quantitative elements can be seen as ‘threatening’ in some circles. In industrialised countries they can be seen to exacerbate competitiveness concerns in key industry sectors, especially at a time of economic slow-down and job losses. And for developing countries, any suggestion that emission constraints might place a cap on their right to industrialise and address their priority development concerns is an anathema. They can rightly point to the fact that current levels of climate change have been caused by the emissions of the developed world, that emissions in developing countries are typically just a fraction of those in developed countries on a per capita basis and that growth in emissions in developing countries

Figure 2: The two-sided architecture of a comprehensive and flexible agreement



over the last few decades is frequently tied to the fact that emissions-intensive manufacturing of products consumed in industrialised countries is now being done in their countries.

It is therefore unrealistic to expect agreement to be reached on a framework that is essentially just of a quantitative ‘managed emissions’ nature. Moreover, such quantitative elements and the carbon markets they engender do not, in themselves, ensure an adequate mitigation response. And dealing with the climate change challenge is not just about mitigation. There is a much bigger picture that an effective global agreement needs to address. Importantly, it is this ‘bigger picture’ side of the agreement that provides the possibilities for the needed innovations, leadership and diplomacy. Some of these ‘bigger picture’ elements will be important to help enable acceptance of the elements on the quantitative side of the agreement. In short, they are of the type: ‘We will be prepared to do this as long as, in return, you do that.’ The proposal by the European Union in January 2008 – ‘we can unilaterally agree to taking on a minus 20% target by 2020, but could go to minus 30% as part of a broader multilateral agreement with others doing their part’ – can be seen in this light, albeit what ‘bigger picture’ elements they are seeking from other countries, both industrialised and developing, are not yet clearly set out.

But there is much more to the ‘bigger picture’ side than just enabling the ‘quantitative’ side. By their nature, quantitative elements, especially those that rely on international carbon prices as a key driver for action, cannot be expected either to cover all sectors in all countries, or necessarily to achieve the full potential of emissions reductions in those sectors that are covered. In some circumstances it will be the ‘bigger picture’ measures that may play the greatest role in achieving the potential mitigation outcomes.

And as noted, it is not all about mitigation. The effects of climate change are large and increasingly looming, especially for some of the world’s most vulnerable populations and ecosystems. An effective global agreement must now also take a firm stance on means to address adaptation needs.

Figure 2 provides a depiction of the two-sided architecture that is proposed here. However, especially on the ‘bigger picture’ side, it is not intended to be exhaustive of possible innovative ideas for needed and helpful elements. It should be seen as high-level and generally illustrative.

On the quantitative side, the emissions circles represent aggregate emission totals under the various forms of management. The difference in the edges of these circles – i.e. of the large ‘FBTs in ICs’ (fixed and binding targets in industrialised countries) circle compared with the three smaller circles – is intended to denote the fixed nature of the former and the likely rate-based nature of the latter. In an emissions trading context, the trading unit associated with FBTs in ICs would be ‘allowances’ and for the other

three it would be ‘emission credits’, where performance was better than the crediting baselines that these targets and commitments represent. In addition, as noted in the depiction, the remaining ‘unconstrained’ space is where current and future enhanced CDM (Clean Development Mechanism)-type activities could be undertaken and provide a supply of credits into the FBTs in ICs circle to enable those countries to meet their targets at lower cost.

Further, with respect to the FBTs in ICs circle, such a circle is made up of the aggregate of the allowed emissions represented by the industrialised countries’ targets – e.g. the targets that Annex B countries agreed to under the Kyoto Protocol. This is shown as a single circle, and this may imply that this results from a single agreement that all industrialised countries are party to. But in practice this may be the sum of targets collectively negotiated by a group of countries under such an agreement, plus others’ targets that may sit outside the multilateral agreement but, nevertheless, represent self-imposed fixed and binding targets – for all or parts of their economy.³

A possible scenario for their being on the ‘bigger picture’ side would be if they struck a deal with the international community to voluntarily reduce or offset a certain percentage of their emissions.

This situation may necessarily result in some different emissions trading scheme ‘linkage rules’ between those in the collective and those outside. However, the overall point is that there is a sum of allowed emissions stemming from the targets of all these industrialised countries, and these form the basis for international emissions trading of the cap-and-trade variety among them.

Sector no-lose targets (SNLTs) for developing countries are expected to be of an intensity nature (e.g. carbon dioxide (equivalent) per megawatt-hour of electricity (CO₂e/MWh) or per tonne of cement). The no-lose nature of these targets simply means that there is no compliance penalty if the targets (intensity baselines) are not met. However, because the purpose of such a mechanism is to significantly ‘scale up’ the inward flows of carbon finance-supported low carbon technology (compared with the current CDM), these targets would be something that can reasonably be expected to be met and beaten. But this is not to suggest that they should be seen as overly soft targets opening the door to large credit generation for ‘likely to be done anyway’ actions. Given that these targets will be negotiated as part of the quantitative agreement ‘package’, subsequent additionality assessments would not be required. This is one of the means by which

this mechanism is different from any form of CDM.

In negotiating an acceptable intensity baseline, the process would be interested to know details of all relevant factors by which a given developing country could improve its intensity in the sector prior to the point that carbon finance is to take over. In this way, there will be an expectation on the industrialised countries' side that major developing countries will commit to some level of self-funded mitigation efforts, rather than just have all their efforts positively incentivised by industrialised countries through carbon credits.

The nature of possible international aviation and marine bunker fuel commitments (IBFCs) is somewhat less discernible. It is for this reason that they are shown as possibly occurring on either side of the quantitative and 'bigger picture' divide line. If on the quantitative side, this would imply some means had been negotiated to have these sectors accept (and be held to) some form of a binding emissions target (whether of a fixed or intensity nature). This would set the stage for these two sectors to be sellers into the international carbon market if they met and beat their targets, and be buyers from it if they did not.

A possible scenario for their being on the 'bigger picture' side would be if they struck a deal with the international community to voluntarily reduce or offset a certain percentage of their emissions. Their activity might therefore occur in the voluntary carbon market, not the compliance market that occurs through the elements on the compliance side of this proposed agreement.

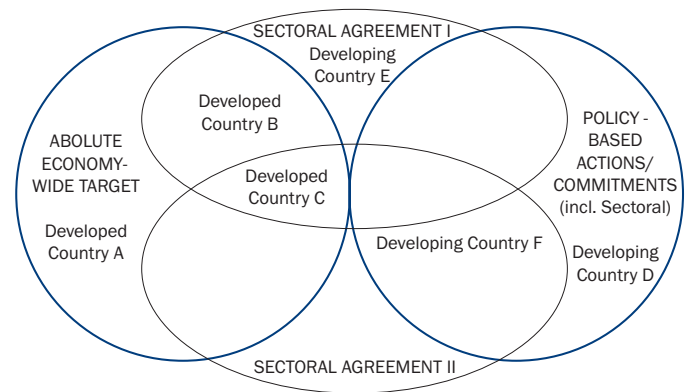
Similarly, on the issue of reducing emissions from deforestation and forest degradation (REDD), opinions currently are still quite divided as to whether this sector in developing countries should be one which receives its needed financial support through public sector (or even voluntary carbon market) funds, hence on the 'bigger picture' side. Or is it feasible to have its potential supply of credits incorporated into the compliance carbon market – with the risk of perhaps swamping the market and severely lowering the cost of carbon?

A sectoral perspective

When considering the proposed two-sided architecture from a sectoral perspective, a number of types of groupings and linkages become apparent. This has usefully been elaborated in work of the Pew Center on Global Climate Change on what they refer to as an integrated multi-track climate framework (Bodansky and Diringier, 2007). In a subsequent 'background note' on sectoral approaches (from which Figure 3 below is taken), they note that:

Sectoral approaches could sit alongside other types of action/commitments as elements of a comprehensive post-2012 framework. For example, the framework could include absolute economy-wide targets for some countries; policy-based actions/commitments (sectoral or economy-wide) for other countries; and one or more overlapping sectoral agreements (with different country groupings in each). (Pew Center, 2008)

Figure 3: Possible means of engagement at a sector level



In the illustration in Figure 3 above:

- developed country A takes an absolute economy-wide target;
- developed country B takes a target and participates in one sectoral agreement;
- developed country C takes a target and participates in two sectoral agreements;
- developing country D takes a policy-based (possibly sectoral) action/commitment;
- developing country E participates in a sectoral agreement; and
- developing country F takes a policy-based (possibly sectoral) action/commitment and participates in a sectoral agreement.

The two-sided architecture depicted in Figure 2 is fully consistent with this sectoral concept helpfully set out here by the Pew Center.

Negotiation process issues

Leaders have affirmed a number of times that the United Nations Framework on Climate Change (UNFCCC) is the proper forum within which to conclude a comprehensive climate agreement. This process is looking to achieve its primary outcomes at the 15th meeting of the Conference of the parties to the UNFCCC to be held in Copenhagen (COP 15) at the end of 2009. In particular, it would be expected that all of the quantitative elements of the agreement shown in Figure 2 would be negotiated under the UNFCCC process.

However, it is quite feasible (indeed probably necessary) that some of the agreements on the 'bigger picture' side might better be struck outside the UNFCCC process per se, but then be recognised as existing as the overall UNFCCC process 'package deal' is coming together. These, for example, might be cooperative financing or technology sharing elements that complement those in the UNFCCC agreement – for example, agreed bilaterally between key countries or among smaller groups of countries, or even among key industries operating in some countries. There might also be elements of the agreement – for example, related to sustainable forest

management or international trade – which might be struck in other multilateral fora.

While this ‘inside and outside the UNFCCC’ model suggests a more complex negotiating process, it has the great advantage of providing significant flexibility for the necessary diplomacy and leadership to bring an overall global deal together. In particular, it gets past the problem that the UNFCCC is a forum where it is only national governments at the negotiating table. A global climate change deal will need leadership initiatives also from international business, local government and civil society non-government groups at large. This is difficult when they can only be observers – and are out of the room completely when the final deals are being done.

2 For reference, current per capita emissions of some large economies (and current average

annual growth rates) are: United States 22T (0.4%); Russia 16T (1.2%); Japan 10T (0.7%); EU-27 10T (0.4%); Brazil 15T (0.2%); China 6T (2.7%); India 2T (2.8%).
3 A reality that faces negotiators is that the United States may, as with the Kyoto Protocol, struggle at home to ratify an international UN agreement. But this time around the signs are that, under a new administration, the US may agree to establish domestic targets and a binding internal emissions trading scheme.

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