Sandbag position on COP15: Copenhagen 2009

Who is Sandbag?

Sandbag campaigns for more robust international carbon budgets in order to meet the imperatives of climate safety. For us this means increasing the share of global emissions covered by carbon caps, ensuring that such caps are sufficiently tight, and promoting coherent policies to meet these caps.

What are we campaigning for?

Sandbag is pursuing **a global carbon budget for emissions from the power sector** when the successor to the Kyoto Protocol is negotiated in Copenhagen this December.

Developed countries which ratified the Kyoto Protocol are currently subject to binding targets on their national carbon emissions, and any new agreement is likely to intensify these reduction targets. However, it is essential that the global regime incentivises reductions on a much larger scale than can be delivered in the developed countries alone. Devising a mechanism to control a greater share of global emission is essential if we are to avoid dangerous climate change. We propose that a contracting global power sector emissions budget is the most effective way to do this, and this document sets out how such an agreement would:

- Peak global CO_2 by 2015
- Incorporate emissions from emerging economies as well as developed countries
- Be readily implemented
- Be politically achievable

Why is a global carbon budget for power sector emissions the best way forward now?

1. Contracting power sector carbon budgets can peak CO_2 by 2015

Despite the signing of the UNFCCC in 1992, anthropogenic CO_2 emissions are still growing at a rate of approximately 2.5% a year[i]. Debate still centres on what global emissions should be in 2050, but such discussions fail to recognise the risk posed by rising concentrations now. If we do not peak emissions in the very near future we increase the risk of triggering events that will take away the option of stabilising at a moderately increased temperature. The material scientific consideration is the quantity of carbon released into the atmosphere, and any delays in implementing a downward trajectory will considerably magnify the risks.

The power sector currently accounts for the largest share of anthropogenic CO_2, with the 3,331 dirtiest fossil installations accounting for 30% of emissions[ii]. This makes rapid decarbonisation in this sector alone sufficient to reverse the growth in global emissions.

Figure 1 shows how a trajectory to reduce 2020 power emissions just 10% from current levels would peak energy CO_2 by 2015.[iii]

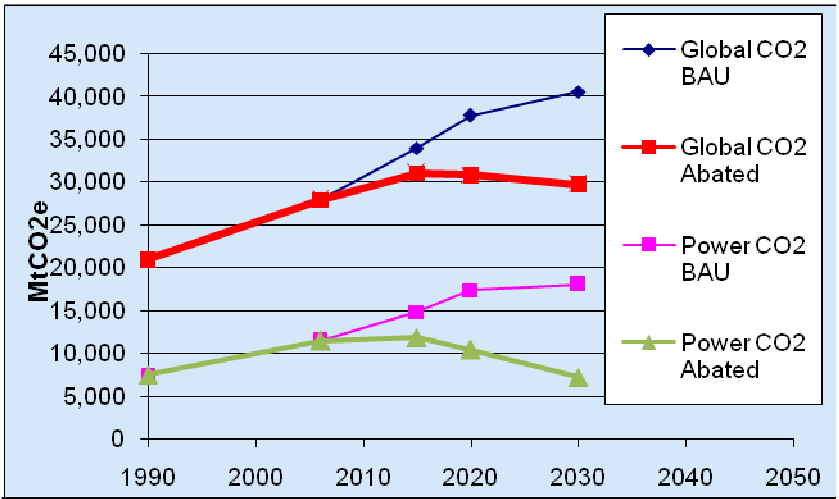

Figure 1

2. **Power sector caps can incorporate high emitters from developing and developed countries.**

Many commentators argue that an appropriate strategy at COP15 is to simply expand the existing Protocol to include the USA and emerging markets like China, India and Brazil. This ignores the political resistance of emerging markets to economy-wide caps and the logistical challenges inherent in them.[iv]

Continents/ Countries	% Sectoral Emissions	Installations
Africa	2.73	80
Asia	48.60	1549
China	26.94	659
India	5.37	160
Japan	3.40	130
Russia	3.98	200
Europe	15.08	635
North America	25.71	933
United States	23.50	833
Oceania	1.94	41
South America	0.93	93
Grand Total	95.00	3331

Figure 2

Emerging economies are unlikely to accept caps directly affecting industries in which they're globally competitive and which have enabled their recent growth. Moreover, the technical challenge of introducing carbon registries covering the whole economy is highly daunting to these nations, and without these, it is difficult for them to estimate "business as usual" emissions or assess the difficulties posed in reaching any national emissions target.

These newly industrialised nations are likely to be more receptive to caps limited to sectors immune from international competition – such as power, heat and transport. Of these three, the power sector is particularly amenable to carbon registries, both because power stations are a highly concentrated source of emissions and because registries of some kind are often already in place to comply with other pollution regulations.

A third advantage of a power sector cap for involving developing nations is that the power companies affected present a more homogenous group of interests than nation-states, thereby simplifying negotiations. Additionally, many power companies are multi-nationals capable of deploying carbon abatement strategies across several countries at once.

For developed countries, a power sector cap could readily operate within existing economy-wide Kyoto caps, much in the same way that the EU ETS caps large emitters within them. It would simply require that national caps were sub-divided.

3. **The power sector is best adapted to contract under a global cap**

Of all carbon emitting sectors, the power sector is the one with the most developed and best understood mitigation technologies, including combined cycle gas turbines (CCGT), nuclear, renewables, and carbon capture and storage (CCS). Recognising this, Europe has been confident in setting the sector challenging caps under the EU Emissions Trading Scheme (EU ETS)[v]. The US has also successfully introduced sectoral caps to nine states under its Regional Greenhouse Gas Initiative (RGGI) and many developing countries already have comprehensive plans to develop low carbon electricity generation.

The decarbonisation of other large emitting sectors (such as transport and heating) will be extremely dependent on a decarbonised power sector. In order to be low carbon, electric heating or electric vehicles need to be powered by clean electricity; low carbon cogeneration plant can provide heat as well as power; and low-carbon power sector could cleanly usher in and sustain a hydrogen economy.

4. A power sector cap is politically achievable

While a range of commendable approaches to a post-Kyoto agreement exist, many – for all their merits – will not be considered within UN negotiations. Sectoral approaches or "sectoral crediting", by contrast, have already been introduced to the official discussions by the US, Japan and others, opening a window to discuss the merits of a power sector cap.

This approach, which respects the limits of what is practically possible within the UNFCCC negotiation process, still remains compatible with a range of other campaign asks (e.g. 2℃, 350ppm) and negotiating positions.

5. How would this cap be delivered?

One of the beauties of the power sector cap is that it can accommodate a range of implementation policies including using differentiated allocation and compliance options to address differences in country circumstances. It can for example accommodate growth, apply different metrics to determine commitment sharing and allow for differentiated compliance regimes.

It would also leave participating states free to decide on the most appropriate means of meeting their power sector budgets (e.g. national carbon taxes, sectoral carbon markets, or regulative measures).

6. Conclusion

Rapidly reducing emissions from the power sector should be a clear priority in international negotiations. This is because of the significant share of global emissions they represent, their amenability to mitigation and regulation, and their essential role in decarbonising other sectors.

We urge negotiators in all major emitting countries to pursue a global agreement which sets carbon budgets for the sector and commits to reductions sufficient to bend the global curve in emissions by 2015.

A contracting carbon budget for power could then act as the forerunner to global caps in other non-competitive sectors, such as transport and heat, before ultimately expanding to cover industrial emissions.

For more information about this position statement please visit:
www.sandbag.org.uk/campaigns/copenhagen

To contact us please email: bryony@sandbag.org.uk or damien@sandbag.org.uk

---

[i] Globalcarbonproject.org (2000-2005 trends)
[ii] Data adapted from CARMA.org and the globalcarbonproject.org. 3,331 installations accounted for 10.9 Gt CO_2 in 2007 out of a global total of 36.4 Gt.
[iii] Just 9% off 2006 levels could achieve this (equivalent to 40% off BAU projections for 2020).
[iv] China has expressed a clear reluctance to adopt economy-wide caps, and we should not forget the damage done to the Kyoto Protocol when its largest capped emitter, the US, failed to ratify.
[v] The UK, Germany and Spain all handed out approximately 35% fewer EU ETS permits to the sector in Phase II (2008-12) relative to emissions in 2007