Members of the Issues Management Working Group

Blueprint for Carbon Pricing Policy Design

Context and background

For the past 20 years BP has believed – and communicated publicly – that a carbon price is the best policy to limit GHG emissions. Until around 2012, we held a strong preference for cap and trade over taxation, developed detailed design and implementation principles for carbon trading systems, and advocated their integration into actual carbon trading systems that were under development in specific jurisdictions (EU, Australia, US, China, etc.).

Around 2012, recognising that there was growing political resistance to carbon trading in some jurisdictions, we shifted to a pragmatic position of agnosticism between carbon taxation and trading – providing both approaches were well-designed and flexibly implemented.

What we have not done, in respect of content, is:

1. Developed detailed design and implementation principles for carbon taxation that are equivalent to those we have for carbon trading.
2. Developed detailed but generic design and implementation principles that could be applied to either trade or tax.

What we have tended not to do, in respect of advocacy stance, is:

1. Proactively supported poorly-designed pricing proposals already on the table. In this situation we have either remained silent or, where necessary, sought to improve them.
2. Pre-emptively proposed our own alternatives where proposals on the table could not, for a variety of reasons, be sufficiently improved. In this situation, we have either remained silent or, where necessary, opposed them.

This advocacy stance may sometimes have placed us behind or outside important public debates and some stakeholders have perceived our positions in support of carbon pricing to be held in principle only.

Recommendation

Content

The blueprint for carbon pricing design attached to this note is intended to fill the second gap identified above under content – by providing a set of detailed design and implementation principles that could be applied to either tax or trade. If IMWG accepts these principles, it is recommended that they should then form the basis of further work to develop a more detailed blueprint focusing specifically on carbon tax design – to complement our pre-existing blueprint for carbon trading design.

Advocacy stance

The intent is that the attached blueprint be used immediately, in particular to fill the second gap identified above under advocacy stance – to enable us pre-emptively to propose alternatives to poorly designed pricing systems. For this purpose, we recommend that the communications sub-committee convert the blueprint into communications-friendly messages that can be shared publicly, on the website, as handouts, etc. The more detailed version attached would be retained as an internal guide for BP staff directly engaged in actual public policy design discussions.

The IMWG is asked to review and endorse the principles and the advocacy stance proposed.

Paul Jefferiss
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Appendix 1: Blueprint for carbon pricing policy design

- Policy objectives: Policies to reduce GHGs should aim to deliver socially desired environmental goals at least cost, carefully balancing economic and social goals, including providing access to affordable energy. Such policies should be simple, technology-neutral, market-based and economy-wide.

- Carbon pricing: The most comprehensive and economically efficient form of GHG reduction policy is an economy-wide carbon price. It encourages all parties, including producers and consumers in all sectors, to make economic choices that reduce carbon, for example by using less energy, using energy more efficiently, choosing lower carbon sources of energy, shifting to industrial and agricultural practices that emit less carbon, capturing and using or storing carbon that is emitted (CCUS), or developing negative emissions technologies and enhancing natural sinks.

- Double regulation: While carbon pricing systems are in development and until they are widespread, other forms of carbon regulation may initially be necessary. However, once a carbon pricing system has been introduced, additional, future carbon pricing regulation should be pre-empted and existing, non-price regulation reformed and reduced, wherever there is the potential for direct overlap with or duplication of the carbon price. Double regulation will undermine the economic efficiency and cost-effectiveness which carbon pricing is intended to provide. This does not rule out the need for the limited use of supplementary or enabling policies where there are clear market failures (see below).

- Tax or trade: A carbon tax or a cap and trade system can be equally effective, provided both are well-designed and flexibly implemented according to the principles described below. Hybrid approaches, in which cap and trade systems for large industrial emitters are combined with taxation or "linked fees" for smaller emitters, can also be effective if they are well-designed.

- Price/abatement level and trajectory: Advance signalling and then gradual introduction of carbon pricing are the most cost-effective approach, with the carbon price (abatement level) starting low and ramping up slowly before accelerating and then levelling off. The ultimate, long-term target price/abatement level should be signalled as clearly and early as possible, ideally at the start. This approach is important to enable industry to make necessary operational and investment decisions in a timely way, so that intended environmental benefits can be delivered with minimal social

impacts (e.g. on employment or energy security) and economic costs. To create investor confidence, clarity, stability and predictability are key, with a minimum of political interference. These objectives must be carefully balanced against the need to periodically review and potentially adjust the price/abatement level to deal with unanticipated changes in the economic or environmental context.

- Review: environmental and economic assurance: It will be necessary to assure that both the environmental goal of carbon pricing, and the economic cost of meeting it remain appropriate over time. Environmental assurance is more likely to be needed in a price system (tax), where the level of abatement is an outcome, whereas economic assurance is more likely to be needed in a quantity system (cap) where the traded price is an outcome. To the extent possible, to minimise uncertainty and unnecessary opportunities for political interference, both environmental and cost objectives should be delivered on an ongoing basis via, flexible, dynamic and self-adjusting measures, such as a credit reserve in a traded system, or the ability to transfer liabilities between parties under a tax system. The proportion of offsets eligible for compliance, especially from AFOLU[1], should also be adjustable (up or down) to achieve both higher net ambition and lower net cost in both tax and trade systems. However, given the inevitability of technological innovation, economic change, or improved scientific understanding, scheduled and/or quantitatively triggered reviews will also be necessary, although the schedule and basis for review should be defined from the outset, and the degree and duration of deviation from the long-term price/abatement level trajectory limited.

- Wide coverage: The fairest and most economically efficient approach is to apply a carbon price consistently (i.e. the same price) to all GHGs (on a CO_2 equivalent basis) and to all sources of GHG emissions (in all economic sectors) for which reliable emissions data can be acquired. Where data aren't reliable, incentives should be provided to encourage the collection of necessary information so that carbon pricing coverage can be expanded.

  The key point is that a well-designed carbon pricing policy will not arbitrarily exempt a GHG or company or sector or emissive product from exposure to the carbon price, which would be neither fair nor efficient.

- Leakage: Until approximate equivalence of carbon pricing exists between trading jurisdictions (regions, nations or states), measures will be necessary to prevent the "leakage" or displacement of domestic economic/industrial

[1] Agriculture, forestry and other land use

activity – and carbon – to jurisdictions that lack a comparable price. Failure to prevent leakage will undermine the primary purpose of the carbon price – to reduce GHG emissions economy-wide.

There are various ways to prevent or reduce carbon leakage. If the point of regulation is far upstream, border carbon adjustments (BCAs) are probably the simplest option, in which the price on direct and indirect (e.g. purchased electricity or heat) emissions from the manufacture of products is removed (for exports) or imposed (for imports) at the border. However, BCAs can be politically divisive (seen as a barrier to trade) and depend heavily on life cycle assessment, for which data may be lacking or inaccurate. Partly for this reason, a downstream point of regulation is preferable (see below), in which direct and indirect GHG emissions from domestic manufacturing (large industrial emitters) in trade exposed and energy intensive (EITE) sectors are compensated for the carbon price (via free allowances in a trade system and rebates in a tax system), though the level of compensation should be less than 100% to preserve an incentive to abate at the margin, and with less efficient facilities receiving proportionately lower compensation. Sector eligibility for compensation should not be opaque, arbitrary or discriminatory but determined via a transparent, objective, evidence-based process that assesses:

- The proportion of domestic production that is exported
- The proportion of domestic consumption that is supplied by imported products
- The energy-intensity of domestic production.

Fuels or other emissive products (e.g. solvents) that are regulated immediately upstream of the point of emission (see below), including domestic/commercial fossil heating and transport fuels, should be subject to the carbon price whether they are domestically produced or imported.

- Point of Regulation: The point of application / collection of a carbon price should be as far downstream and close as practically possible to the point of actual emissions/point of final sale. This is preferable to far upstream regulation, in which coal, oil or gas are regulated at the mine mouth or well head. While an upstream point of regulation may appear to be administratively simple, environmentally effective and economically efficient, this is not the case because:
  - Not all coal, oil or gas emits CO_2 or CH_4 over its life cycle. Some fossil carbon remains embedded in non-emissive products. An increasing proportion of CO_2 may be captured and used or stored.

- Many GHG emissions, including a significant proportion of CO_2, do not arise from the combustion of fossil fuels, but from other industrial and agricultural processes
- If a carbon price is applied upstream, it is harder and more complex to design and implement a system for preventing carbon leakage from energy intensive and trade exposed industries downstream (see leakage point below).
- An upstream approach does not expose emitters directly or transparently to the carbon price (polluter pays) and decreases the ability to pass on costs to the end user.

A fully downstream approach works well for large or industrial emissions sources (process and combustion). For emissions from multiple small sources, such as the combustion of residential/commercial fossil heating and transport fuels, it may not be practical (or politically acceptable) to apply the price fully downstream at the point of sale, especially in a cap and trade system (which would require retailers or even individual users to acquire permits). For this reason, for these sources, at least in a trading system, the point of regulation may need to be moved upstream from the final point of sale to the closest practical point of regulation, which will normally be existing duty points.[2] For heating fuels this is likely to be the local distribution point and for fossil transport fuels the terminal rack, although this may vary by jurisdiction according to where duty is typically levied. A downstream carbon pricing system will therefore need to define an entity emissions threshold (e.g. 25,000te CO_2 pa) to determine which sources are "large emitters" to be regulated fully downstream, and which are regulated immediately upstream at the existing duty point.

- Use of revenues: It is for governments to determine how to spend carbon price revenues. Ideally, they should be returned to the economy in a non-distortionary way, preferably through reductions in other taxes that create economic distortions—for example, corporation, income or payroll taxes—with no net increase to the overall tax burden. Some proportion of revenues may be used to address adverse political, social or industrial impacts from the price, including citizen "dividends" or sector retraining programmes, or to reinforce the carbon reduction effects of the price by supporting low carbon research and development. However, ring-fencing of this kind is likely to be economically inefficient.

[2] In a tax system it would be possible to impose a carbon tax, like a sales tax, at the point of final sale (the pump or gas retailer) and this could improve transparency and cost pass through. However, this very transparency may also make it unpalatable to political decision makers.

- Offsets: Reductions of emissions in sectors that for practical reasons (see below under supplementary policies) are not directly exposed to the carbon price (potentially AFOLU), should be allowed as offset credits for emissions from sectors which are exposed to the price – provided reductions can be shown to be real, measurable, permanent and additional. This flexibility effectively exposes a wider scope of emissions to a carbon price and enables higher net abatement at lower cost.

- Supplementary policies: While carbon pricing is necessary and should be the central policy to limit GHG emissions, other, related forms of market failure may sometimes justify supplementary policies – provided they are highly targeted and, in some cases, time-limited. These include:
    - Direct regulation of some GHG emissions in some sectors which cannot, at least initially, be directly exposed to the carbon price for practical reasons (e.g. because they have hard-to-measure/attribute/abate emissions, such as methane emissions from AFOLU or oil & gas). Verified reductions in these sectors that go beyond regulatory requirements should be eligible for use as compliance offsets in sectors exposed to the carbon price (see above).
    - Standards to accelerate uptake of energy efficient technologies such as appliances, vehicles or buildings, where incentives to adopt are split or unclear, even with a carbon price.
    - Transitional incentives to help promising but immature low carbon technologies (e.g. CCUS and renewables) overcome various barriers to deployment. However, such incentives must be:
        - Tightly focused on technologies with objectively demonstrated potential for significant cost reduction and significant carbon savings
        - Truly transitional (i.e. gradually reduced and finally removed once the technology has either become commercial or shown that it cannot.

- Enabling policies: To underpin, amplify or enable market responses on the supply and demand side public support should be provided for:
    - Research and development to catalyse innovation to provide low-carbon options for the future.
    - Education to raise public awareness to highlight the energy challenges the world faces, and potential solutions.
    - Large-scale infrastructure (e.g. grid reinforcement or CO_2 pipelines) if it is market-enabling but too high-risk, large-scale and capital-intensive for the private sector to invest in alone.