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Department of Climate Change
Carbon Pollution Reduction Scheme Green Paper
Submission
GPO Box 854
Canberra ACT 2601
Australia

Dear Department of Climate Change:

BP has spent the better part of a decade supporting the case for policy action and certainty around climate change to allow business to manage the associated risks affecting their operations and to allow future investment in our energy infrastructure to be secured.

With the release of the Carbon Pollution Reduction Scheme (CPRS) Green Paper, it is now clear that Australia's response to climate change has evolved, and in the direction and manner that business requires. We support the commitment to early action; the focus on emissions trading as the key policy instrument, supplemented by complementary measures to facilitate investment in and deployment of large-scale, low-carbon, step-change technologies; and the proposal to deal directly with economic risks rather than allowing them to thwart the whole.

We are therefore pleased for the opportunity to comment on your Green Paper. The impact of the CPRS cannot be understated: it will lead to a structural adjustment of the Australian economy and will be precedent-setting for subsequent national emissions trading systems around the world. Accordingly, the imperative to "get it right" could not be greater.

Yours faithfully,
BP Australia Pty Ltd

Mark A. Proegler

Attachment

BP Australia Submission to the Carbon Pollution Reduction Scheme Green Paper

Overview of BP's Position

BP has spent the better part of a decade supporting the case for policy action and certainty around climate change to allow business to manage the associated risks affecting their operations and to allow future investment in our energy infrastructure to be secured. With the release of the Carbon Pollution Reduction Scheme (CPRS) Green Paper, it is now clear that Australia's response to climate change has evolved, and in the direction and manner that business requires. We support the commitment to early action; the focus on emissions trading as the key policy instrument, supplemented by complementary measures to facilitate investment in and deployment of large-scale, low-carbon, step-change technologies; and the proposal to deal directly with economic risks rather than allowing them to thwart the whole.

Australia's climate change policy goals—to begin greenhouse gas (GHG) emissions-reducing actions now---ahead of more global agreements to bind others, creates key challenges: to achieve meaningful emissions reductions while sustaining economic growth; and to not disadvantage Australia businesses who compete with others (either as imports or exports) who face no such carbon constraint. Solving this issue is fundamental to the scheme's success. It will also allow Australia to influence the design of emissions trading schemes in other energy intensive economies, such as the US, and enhance the nation's ability to effectively engage and lead global dialogue on post-2012 emissions reduction commitments.

The economic risks, in particular to our energy intensive and trade exposed industries (EITEs), need to be addressed directly, rather than being allowed to hold up progress. These risks are real: without proper mitigation, there will be trade distortions due to early action, and it will disadvantage Australian businesses which compete internationally. Policies to support EITEs are not an opt-out from meaningful climate change action; they are an enabling pre-requisite.

For their part, EITEs have an associated responsibility to apply enterprise in reducing their emissions as fast as possible to support the nation's climate change direction. BP accepts this responsibility.

Given the paramount significance of this EITE issue, it is critical that the Government gets it right—which means engaging with business in a transparent way to build a mutual understanding of adjustment costs, trade exposure, and policy goals. Only through focused collaboration will Australia develop an emissions trading system that is effective and an example for the rest of the world.

Summary Points of BP's Green Paper Submission

The Carbon Pollution Reduction Scheme Green Paper provides a comprehensive description of the Government's proposed design elements for emissions trading and supporting policies, and we congratulate the Department of Climate Change for this achievement. There are many design elements proposed by the Government that we

support. With limited modifications, we believe the proposed scheme will become an effective policy tool to guide Australia's transition to a competitive low emissions economy, and BP wants to play a constructive role in this transition.

We have organized our detailed responses by Green Paper chapter. Our main areas of concern are as follows:

- The key policy focus of achieving meaningful GHG emissions reductions needs to be achieved while maintaining economic growth and not disadvantaging Australian businesses—especially in the interim period ahead of global carbon regimes. This will impact the selection of the scheme cap, its trajectory, and the required level of transitional support for business and families, which should be based on economic impacts rather than being constrained by scheme revenue, as proposed. Given the significance of the structural adjustment required across the economy, BP is of the strong view that Government should provide the necessary transitional support from general revenue.
- Australia's "early actions" on climate change, while warranted and supported, require effective transitional support for trade-exposed industries. Without such an enabler, the scheme risks sacrificing economic growth for GHG reductions: Australia needs both.
- Contrary to the designation in the Green Paper, BP believes that the petroleum refining and LNG businesses are emissions-intensive and trade-exposed (EITE). In both cases there is the risk of Carbon leakage and for LNG there is the potential to limit the growth of a commodity that is recognised as an important lever in reducing global emissions by reducing the use of coal fired power.
- We do not support the use of the proposed EITE metric.
- There are a number of alternative ways to designate and provide temporary assistance to EITE industries that should be considered, including a metric based on value added, as well as a recent proposal by the Business Council of Australia (BCA). BP will continue to work with the Government and industry associations in a transparent way to ascertain the required level of transitional support.
- BP offers a number of specific recommendations on CPRS design and implementation issues based in our business views and experience with other trading systems and markets in Australia, Europe, and the United States.

BP endorses the use of a well-designed emissions trading scheme as the centrepiece of climate policy. However given the scale and urgency of required emissions reductions, BP also supports the use of transitional, complementary measures to accelerate the development and deployment of low-carbon technologies, to drive mitigation in sectors not covered by the scheme, and to address other market failures.

DETAILED COMMENTS (by Green Paper chapter)

CHAPTER 1 (Framework)

BP supports Australia's move to begin GHG emissions-reducing actions now: to initiate this structural adjustment of the Australian economy to put it on trajectory to lower emissions. We also fully endorse the use of a well-designed emissions trading scheme as the centrepiece of this policy—to provide for market-based, least-cost solutions to GHG emissions reduction. Given the scale and sense of urgency to reduce emissions, we also support the use of transitional, complementary measures to accelerate the development and deployment of low-carbon technologies, to drive mitigation in sectors not covered by the scheme, and to address other market failures.

By taking climate change action now—ahead of global binding agreements to reduce GHG emissions—Australia faces an additional challenge to achieve meaningful emissions reductions while sustaining economic growth. A key to achieving this will be to not disadvantage Australian businesses that compete with others (either as imports or exports) facing no such carbon constraint. Solving this issue is fundamental to the scheme's success and to Australia's ability to achieve one of its policy goals to help shape a global solution to climate change policy.

CHAPTER 2 (Coverage)

BP fully supports the objective for full scheme coverage—to provide for the widest possible carbon price signal into the economy to encourage behaviour changes. We are also supportive of the detailed Chapter 2 proposals, with the following clarifications.

Gases

The appropriateness of applying emissions trading to each of the Kyoto greenhouse gases needs to be evaluated separately for each gas. For more "specialised" gases it is likely that the transaction costs and complexity associated with their inclusion may outweigh the benefits. Alternative policy measures should be considered in this case.

Transport

BP supports the Green Paper's inclusion of liquid (transport) fuel emissions in the scheme. A primary rationale for this is the resulting, increased reach of the carbon price signal—and thus long-term behaviour changes—to all parts of the economy. As the Green Paper points out, transport emissions, comprising 14% of Australia's total emissions (and 20% of the covered sectors), are a significant emissions contributor. Since the beginning of the year, BP has been working with the Government and the Australian Institute of Petroleum (AIP) to consider the most effective and cost-efficient ways to implement this liquid fuels inclusion in the trading scheme.

Excise Tax Offset BP does not support the Green Paper's proposal to offset carbon price increases on liquid fuels with a matching reduction (offset) to the excise tax for the first three years of the scheme for motorists and for the first year for the road transport sector. From a policy perspective, it contravenes the goals of including

transport fuels in the first place, and delays the onset of needed behaviour changes in that sector. Given that significant transport emissions reductions will only be achieved via an integrated policy approach that addresses vehicle efficiency, fuel carbon content, and consumer behaviour (including urban design), this increases the importance of the first two policy measures. The use of this offset is also inconsistent with the policy of using income transfers to provide consumer assistance, and will introduce price distortions in the carbon market.

From a practical perspective, it will be difficult and costly to implement an excise offset—with a key challenge being managing the trade-off between achieving an absolute "cent for cent" match between the excise tax offset and the product carbon price and maintaining market integrity. To achieve an absolute match will negatively impact carbon market integrity, liquidity, and the necessary development of the secondary market by possibly limiting permit availability or by fixing the carbon (permit) price for a significant part of the market. There will also be transitional issues to consider when this temporary offset is removed after three years.

The offset proposal also fails to cover those liquid fuels that are not subject to excise (such as LPG).

Noting the concerns above, if the Government nonetheless decides to proceed with the carbon excise tax offset, BP recommends that its implementation should:

- Maintain carbon market integrity and liquidity by continued inclusion of freely traded permits associated with transport emissions, which comprise 20% of CPRS permits.
- Provide for a transparent carbon price to the consumer.
- Recognise that an absolute "cent for cent" match of excise tax offset to product carbon price will be difficult to achieve if market integrity and liquidity is to be maintained and if implementation costs and government administrative burdens are to be minimised.

Carbon Price Basis for Products The Green Paper places the obligation for transport emissions on the upstream fuel supplier. As a point of clarification, our customers will continue to have the fundamental liability for the emissions resulting from the use of our products. BP's upstream obligation means that we will be acting as their agent in submitting allowances – essentially on their behalf. BP's upstream obligation for its liquid fuels will require the annual purchase of approximately $0.7 billion[1] of permits as well as the creation of pricing mechanisms to place the appropriate carbon costs on our products. While we are confident of our ability to manage the associated commercial risks inherent in this process, the Government can play a key role in facilitating market functioning and transparency on behalf of consumers. In particular, the Government should stipulate the basis (not the absolute price) for the carbon price component of liquid fuels for retail consumers. This may be in the form of an 'advisory' price published in conjunction with monthly/quarterly auctions, such that the auction clearing price is converted to a cents/litre index for each fuel type expected to apply to fuel sales for the coming period. This will allow retail consumers to understand what component of their pump price represents the carbon value. While BP would support the publication of an advisory price, we would not expect any enforcement powers to attach to this "advisory" price.

[1] Valued at $25/tonne CO2e

Point of Acquittal We support the Green Paper position that the point of acquittal for all liquid fuels should be at the point at which fuel excise is liable to be remitted on all liquid fuels entering the Australian fuels market. As acknowledged in the Green Paper, the fuel excise arrangements are very well defined in legislation, and have accurate and well established measurement, reporting, acquittal and assurance arrangements. The fuel excise arrangements also include detailed mechanisms for the exclusion of fuel that is exported, used for international transport, sequestered in plastics, and supplied to visiting defence forces and consular vehicles – activities which are proposed to sit outside the CPRS or be subject to other specific arrangements under the CPRS, either now or in the future.

Large Users BP supports the principle that large emitters should be responsible for acquitting permits for their direct emissions, including those from liquid fuels. However, given that the primary emissions obligation is on the fuel supplier (which makes use of existing excise tax systems), this will require another mechanism to document this transfer of obligation to the user. We support the creation of such a process, provided:

- The fuel user is registered under the CPRS as being a 'liable entity'
- The upstream entity and the fuel user are in agreement on the specific volumes of fuel for which emissions obligations will be transferred
- The CPRS Regulator has established a system for recording such liability transfers and for incorporating such information as is appropriate in public reporting about emissions obligations (either general or entity specific)

In the interest of simplicity for the start-up of trading, we support the Green Paper proposal to delay opt-in of large users for at least the first twelve months of the scheme. In the interim, we will seek commercial solutions for our large customers who are interested in taking on this obligation. We will also continue our work with the Government and our industry association, the AIP, to develop feasible "netting out" arrangements.

Shipping

BP recognises the fact that the Kyoto Protocol specifically excludes emissions from ships, and that the International Maritime Organisation (IMO) was mandated by the UNFCCC to develop a GHG reduction proposal for the shipping sector. BP believes that the IMO (of which Australia is a member) is the entity best suited to formulate and regulate a global shipping emissions solution. We do not support individual countries establishing their own ship emission trading schemes due to the complexity of administrating schemes as vessels pass through each countries territorial waters, along with the fact that such schemes will do little to reduce overall shipping emissions.

Waste

BP recommends that liable reporting entities should be required to report waste emissions only if they are material; for instance, if they represent more than 5% of the reporting entity's total emissions. This will contribute to the cost effectiveness of the scheme by avoiding costly measurement and tracking of emissions that have minimal impact.

Carbon Capture and Storage

Decreasing carbon dioxide emissions from stationary sources is a key priority for Australia, and carbon capture and storage (CCS) technology is seen as a vital part of the national mitigation portfolio. Accordingly, its effective treatment within a trading scheme is important—to provide for market incentives and commercial flexibility. BP's recommended position is Green Paper Option 1, which provides the opportunity for CCS operators to earn permits for sequestered carbon, which they could then sell or surrender to cover any emissions. This is preferred to Option 2 (where CCS emissions are netted from the originating entity's gross emissions) since it: 1) provides the required commercial flexibility for cases where the CCS facility operator and the "originating entity" are separate commercial entities; and 2) it is more consistent with the provisions in the recent Draft Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill that provides for separate storage rights for a CCS operator. While we recognise that this adds additional regulatory complexity, this primarily comprises the issuing of permits for these "credits"—which will be the same process used to recognise emissions reduction from forestry projects, which are likely opt-ins to the scheme.

LPG

LPG is used in stationary energy and in transport (as autogas). BP believes that LPG for both applications should be included in the CPRS. We support the recommendations of the Australian LPG Association (ALPGA), as documented in their Green Paper submission.

Biofuels

BP supports the preferred position that scheme obligations would not apply to emissions from biofuels or energy from biomass, which would continue to receive a "zero" rating. The biofuels provisions should allow for non-conventional (bio-fuels other than ethanol and bio-diesel) renewable fuels such as renewable diesel and renewable LPG.

Forestry

BP supports the potential opt-in of reforestation activities, provided that suitable long-term liability structures are in place to support trading activity.

CHAPTER 3 (Carbon Market)

BP believes that one of the primary objectives of the CPRS should be to create a robust, liquid carbon market, including the facilitation of an active secondary market, to facilitate least-cost emissions reduction. A well-functioning market and its resulting forward carbon price expectations is a particular need in the oil & gas sector, with its long development timelines and requirements of significant upfront capital investment. It will also facilitate more effective carbon pricing for liquid fuel (transport) products. We support many of the preferred positions stated in the Green Paper, although we have clarifying points and recommendations on a number of issues.

Permit Information Availability

In response to the Green Paper's solicitation for views (Box 3.2) on what permit information should be publicly available, BP's recommendations are:

- Information associated with quantities and prices of permits auctioned should be available to all market participants. However, this information should not include any specific bidding quantities and prices associated at a company level.
- Historical auction results should be available at all times.

Permit Definition and Access

BP fully supports the preferred positions listed in boxes 3.1 and 3.2. We agree that permits should be treated as financial products, and therefore regulated under the existing Financial Services/ASIC regime. We also strongly agree with the preferred position that permits can be traded by any legal or natural person and that there would be no restriction on foreign ownership of permits.

Intertemporal Flexibility

Banking and Borrowing We support the recommendation of unlimited banking, with a preference for Option 1--allowing a certain percentage of a party's obligation to be met using the following year's vintage (not a subset of a year's vintage). We also support the limit on borrowing, with the provision that increased borrowing be allowed in the first year.

Cost Containment and Price Caps The need for explicit cost containment measures may be especially important during the initial years of the cap-and-trade program since emissions abatement activities will take time to initiate and commercially available financial tools and strategies for managing volatility and risk will not be fully developed. Cost containment measures should be designed to address a variety of reasonable concerns about the price and cost impacts of a cap-and-trade system. The primary concerns are twofold: a) short term extreme price volatility; and b) sustained high permit prices, or an allowance price trajectory that discourages important investments in emissions-reducing technologies. While a price cap is one form of cost containment, BP recommends the following package of tools which could be used in various combinations to deal with the key concerns:

- Acceptance of project based domestic and international Kyoto-eligible offsets for part of compliance;
- Acceptance of international allowances for compliance from countries with capped emissions;
- Unlimited banking of offsets and allowances;
- Limited borrowing from the following compliance year.

BP does not support the use of a price cap. Its use as a cost containment mechanism, as proposed in the Green Paper, potentially sacrifices environmental certainty for price certainty, thereby negating a primary benefit of emissions trading. Once the price cap is hit, the Government is obligated to issue permits, the volume of which has no limit, leading to a breach of the scheme emissions cap.

A compliance penalty, which BP recommends, can also effectively serve as a price cap, as it does in the EU ETS (European Union Emissions Trading Scheme). Our view

is that this penalty should be high (e.g. in the EU ETS, it is €100/tonne), and should employ a "make-good" provision requiring the emitter to purchase the proper amount of permits, thereby avoiding the need for the Government to issue additional permits above the cap.

The governance process for the scheme should include a process to deal with the case that allowance prices have reached very high levels. The EU ETS provides a potential example of this.

CHAPTER 4 (Targets and caps)

BP recognises the Government's challenge in providing explicit carbon caps ahead of the completion of Treasury modelling. However, we encourage the Government to confirm, as soon as possible, the near-term CPRS targets (2010-2012), which we understand are consistent with the existing Kyoto commitment that ends in 2012. This is important to provide near-term certainty and established caps before a future international agreement influences the shape of the forward emissions trajectory. BP also recommends the release of information on medium term caps and trajectories as soon as possible—and preferably ahead of the White Paper—to permit assessment of industry impacts prior to its publication. We also encourage the release of the Treasury modelling assumptions as soon as possible—to ensure that industry specific (e.g. LNG) growth estimates are consistent with our projections, and therefore adequately accounted for.

BP supports the announcement of 5-year (minimum) rolling caps, with extension to an international commitment period (once negotiated). However, this should be a mandatory, not an optional, extension, as suggested in the Green Paper. We also support the provision of 5-year minimum information on indicative trajectories, as well as the existence of continuous gateways running 10 years beyond the minimum 5 years of scheme caps.

CHAPTER 5 (Reporting and Compliance)

Effective and robust reporting and compliance systems are a critical foundation to an emissions trading scheme to guarantee system integrity and to provide maximum compatibility with international regimes. BP supports many of the Green Paper proposals in this area, with the following clarifications and recommendations.

Alignment of CPRS (and EEO) with NGER One reporting requirement, based on the NGER model, should form the data set that can be used for all GHG reporting requirements, including CPRS. In addition to what is described in the Green Paper, this should also align with the Energy Efficiency Opportunities (EEO) requirements.

Liquid Fuel (transport) Emissions There is no current requirement in the NGER model to report emissions from the liquid (transport) fuels. This needs to be rectified as soon as possible, preferably linking with existing excise arrangements to avoid duplication of effort. The calculation process for transport emissions should be clarified and integrated as much as possible with the OSCAR system.

Reporting Detail There is a need to further clarify the detailed reporting requirements of the CPRS to permit updates in BP's own reporting systems. These should be released as soon as possible to ensure our ability to meet compliance requirements in an appropriate timeframe.

Assurance BP supports initial mandatory third party assurance for large users. Once a robust system has been established, there should be the provision for self-assessment with periodic audits. This would align with the tax system practices and reduce the cost burden of this assurance process.

Operational Control Given the many and varied contractual arrangements that exist within business and joint ventures in the oil and gas sector, it is essential that the definition of operational control be established and tested as soon as possible. This will permit the identification for businesses that are in scope, and those that are out of scope. Some flexibility in establishing the party that has operational control at facilities where several parties have an interest is important in the initial years of the scheme.

Accuracy BP supports the Green Paper proposal to increase levels of data accuracy over time. However, it needs to be acknowledged that flexibility may be required in the early years of the scheme to accommodate system upgrades to deliver these new levels of accuracy. For complex industrial processes such as refining, the costs associated with improved accuracy could be substantial. Accordingly, requirements for increased accuracy need to be balanced with their cost effectiveness.

Methodologies Calculation methodologies should be aligned between NGER and CPRS. BP supports the approach that the intent to change methodologies will be signalled well in advance (5 years) to allow system upgrades etc.

CHAPTER 6 (Linking)

BP supports the goal to link Australia's trading scheme with other international schemes. This linking expands the potential for economic gains from trade and associated cost savings—whether this comes from direct linking (allowances) or indirect linking (linking via the inclusion of international offsets that are accepted in multiple trading systems, e.g. CDM, JI). Larger and more liquid markets are inherently more efficient, reducing transactions costs and providing capital for a larger pool of opportunities for low cost abatement.

BP also supports most of the Green Paper's preferred positions on linking, with the following clarifications and recommendations:

Permit Units

Australia Units BP agrees that the scheme's carbon pollution permit should be distinct from Australia's international (Kyoto Protocol) units. We suggest that the unit should be called an EMU (Emissions Mitigation Unit).

Kyoto Units The inclusion of Kyoto units (CERs, ERUs, RMUs) in the scheme provides a needed degree of market flexibility and indirect linkage with global regimes. BP believes that the lowest-cost outcome would be achieved by placing no limitations on

the use of these units (as opposed to the limits proposed in the Green Paper) leaving this to the market instead.

Forestry Credits BP supports the use of forestry credits with the caveat that suitable long-term liability structures need to be in place to support trading activity.

Linking Rules

In response to the Green Paper's solicitation for views (Section 6.8) regarding notice before qualitative restrictions on linking rules are changes, BP's recommendations are:

- Linking Rules - notice given before qualitative restrictions are changed
- Qualitative restrictions should follow the preferred position used for quantitative limits, types of Kyoto units and restrictions on conversions of Australia's carbon pollution permits to Assigned Amount Units (AAUs) - that is: provide the maximum feasible level of certainty about future linking arrangements. Notice of a change in the qualitative restrictions should follow the rolling 5 year certainty period with any new change to be recognised in the 5th year when the rolling 5 year period is extended each year.

CHAPTER 7 (Auctioning)

BP supports most of the Green Paper's preferred positions on auctioning, with the following clarifications and recommendations:

- We support the recommendation that the relevant minister will direct the early phase of the scheme - with an independent regulator appointed to manage the auction process at a later date.
- BP advocates the use of monthly or quarterly auctions, which should mitigate working capital requirements without severely affecting the development of needed secondary markets.
- We support the Green Paper's preferred position to auction four vintage years (current + three year future). However, our preference would be to extend this out to five vintage years (current + four year future), in line with emission cap timing.
- BP advocates that at least 50% of a compliance year auctions should be undertaken during the actual compliance year. This should contribute to a high level of (price) transparency and trading volume during the compliance year. This is a particularly relevant issue for BP, given the significant emissions obligation for our liquid fuels (transport) products, and need for effectively adding the carbon price to these products.
- Presuming adequate volumes of permits, BP recommends that auctions for future permit vintages be held twice a year instead of once per year, as indicated in the Green Paper. This should enhance the ability to manage longer term carbon risk.
- BP recommends the use of a sealed bid auction, enabling companies to enter schedules of different volumes and prices in advance. This style of auction would follow a similar format to that of the Settlement Residue Auctions currently undertaken by NEMMCO within the National Electricity Market
- We recommend simultaneous auctions (for current and future vintages) as this would provide better price management.

- BP's preference is for auctions to begin as early as possible; fourth quarter, 2009, would be preferable.
- We support the Green Paper proposal to hold one auction for the relevant year's vintage at the end of the financial year - before the surrender date. This should provide the market with the access to true-up positions and without being affected by any liquidity issues that may be evident in the secondary market.
- BP believes that only the Government should release permits under the auction process. Those entities that receive free permits should look to the secondary market to monetise any residual permit length. This will help develop the secondary market and provide less complexity to the auction process
- BP would support any assistance from the DCC to mitigate working capital issues associated with purchasing future vintage permits, subject to that assistance not requiring onerous or restrictive prudential requirements.

CHAPTER 9 (EITE)

Achieving a successful solution for providing transitional assistance to Emissions Intensive Trade Exposed (EITE) industries--realising emissions reduction while maintaining economic growth--will be the key determinant of ETS success. Policies to support EITEs are not an opt-out from meaningful climate change action; they are an enabling pre-requisite.

Australia's climate change policy goals—which BP supports—to begin GHG emissions-reducing actions now, ahead of more global agreements to bind others, creates key challenges: to achieve meaningful emissions reductions while sustaining economic growth; and to not disadvantage Australian businesses who compete with others (either as imports or exports) who face no such carbon constraint. Solving this issue is fundamental to the scheme's success-- and to Australia's ability to use this achievement to enhance its ability to effectively engage and lead global dialogue on post-2012 emissions reduction commitments. Accordingly, the treatment of EITE industries is an enabler to climate change policy success in Australia and beyond. In particular, a well functioning Australia emissions trading system could be precedent setting for similar policy developments in the United States, which is also an energy and resource intensive economy.

In large measure, BP supports the stated key rationales for providing assistance to EITE industries, with the following clarifications:

- address the major (*not "some of the")* competitiveness impacts of the scheme on EITE industries in order to reduce carbon leakage
- provide transitional support to EITE industries that will be most severely affected by the introduction of a carbon constraint
- support production and investment decisions that would be consistent with a global carbon constraint

BP endorses some of the key Green Paper concepts for EITE support, e.g. that this assistance, in the form of permits, is transitional, will decrease with time, and will be reviewed five years after the scheme start. However, we do not support the cap on total assistance, nor do we agree with the proposed metric to determine EITE status. In addition, as currently envisaged, BP is very concerned that the Green Paper

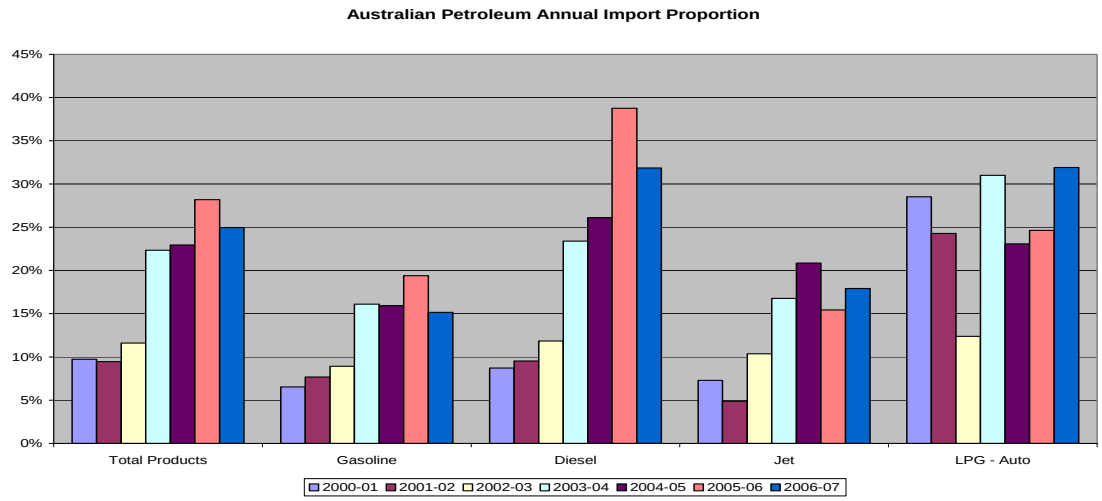
proposal would provide no temporary assistance to two industries that are trade exposed and emissions intensive: petroleum refining and LNG.

Cap on EITE Assistance The Government acknowledges that the CPRS represents a fundamental economic restructuring of the economy. It also recognises the resulting competitive impacts on Australian industry that are magnified by the (current) lack of carbon constraints on most of Australia's competitors. Accordingly, the level of total transitional EITE assistance should be the amount required to maintain industry competitiveness and economic growth. It should not be capped by CPRS permit auction revenue, or an arbitrary percentage of it. The Government should be prepared to fund transitional assistance to industry and consumers from the general revenue (if required), which would represent Australia's investment and contribution to a successful scheme. It also needs to acknowledge that its selected emissions cap and trajectory will have a direct bearing on business impacts and on the total amount of required assistance.

Petroleum Refining Industry

The continued viability of petroleum refining during the transition to a low-carbon economy in Australia is an important contributor to Australia's energy security. BP operates two refineries in Australia. Our Bulwer Island refinery outside of Brisbane processes 88,000 barrels of crude oil per day, and produces a range of products including LPG, petrol, kerosene, jet fuel, heating oil, diesel, bitumen and sulphur. BP's Kwinana Refinery, located in Western Australia outside of Perth, is Western Australia's only refinery. With a capacity of 138,000 barrels of crude oil per day, it is also Australia's largest refinery.

Trade Exposure We believe that the Australia refining industry is trade-exposed. Petroleum products are sold in Australia at import parity prices, as documented in a recent report by the ACCC.[2] Accordingly, carbon costs cannot be passed on to the market. Imports represent 25% of liquid fuels demand in Australia, and come from Singapore, South Korea, Taiwan, and India—none of whom have any carbon constraints. The following figure[3] depicts Australian imports by product.



[2] "Petrol Prices and Australian Consumers: Report of the ACCC Inquiry Into the Price of Unleaded Petrol", Chapter 7, December 2007.
[3] AIP

Emissions Intensity The Australian refining industry is emissions-intensive. In addition, recent investments to meet Australian clean fuel standards have increased asset emissions intensity.

Based on the Green Paper proposals, the petroleum refining industry would not qualify for EITE designation and temporary assistance (Box 9.5). Given the inability of the refining sector to pass on carbon costs, this will erode margins and investment, leading to loss of Australia refining capacity as facilities shut down, increasing imports and carbon leakage—which is in direct conflict with Australia policy goals. Reduction of domestic refining capacity will also reduce Australia's supply security. This refining sector issue highlights the interaction of Australia's policies for climate change and energy security, and the need for clarity on this issue to drive the preferred outcome.

In terms of numbers[4]:

- Investment in Australia refining has averaged $1 billion per year for the last 5 years; this will diminish without EITE support.
- Over the last 15 years, a carbon price of $50/tonne would have accounted for 40% of total Earnings Before Interest, Tax and Depreciation (EBITDA). At $20/tonne it would have been 16% of EBITDA.
- From 1999-2001, the costs of a carbon price of $40 per tonne would have exceeded industry profits.

To remain viable, the refining industry will require transitional support in the form of EITE assistance. Given that finding a solution to this EITE issue is an ongoing one, BP will continue to consult with the Government, undertake our own analysis, and work with the AIP to ascertain what this level of support should be. Note: please see the AIP Submission to the Green Paper for additional details on the industry and discussion of this EITE issue.

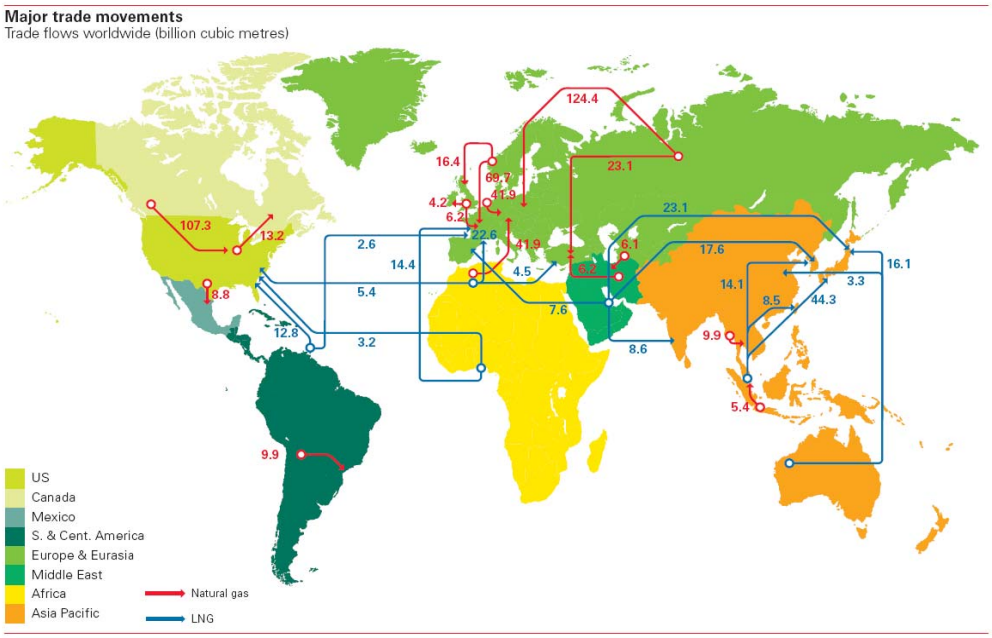
LNG

BP is a 1/6th owner of the North West Shelf (NWS) LNG project, Australia's single largest resources project. The venture has been operating since 1989 and will produce 16.3 million tonnes per annum of LNG with the recent addition of a 5th LNG train, for export markets in Asia. BP is also actively evaluating the development of future LNG projects with our Joint Venture partners in the Browse and Carnarvon basins off the northern coast of Western Australia.

Trade Exposure The Australian upstream oil and gas industry—particularly the LNG industry—operates within a globally competitive environment. The demand for natural gas has grown steadily over the last twenty years, especially in the Asia Pacific region, where gas consumption has more than quadrupled since 1980. Australia currently exports around 15½ million tonnes of LNG per year, to customers in Japan, China, South Korea and Taiwan. Japan remains Australia's major customer, with around 80 per cent of Australia's LNG exports in 2006-07. Australia currently accounts for approximately 9 per cent of global LNG exports.[5]

[4] Source: AIP
[5] *BP Statistical Review of World Energy*, June 2008

The following figure shows major global liquefied natural gas trade movements in 2007, highlighting Australia's major markets and major competitors in the Asia-Pacific region.



The development of oil and gas resources is also characterised by significant up front capital investments and long development lead times. For this reason new LNG investments are typically underpinned by long term (15+ years) sales contracts. In Asia, LNG pricing terms are usually indexed to global oil prices with the consequent commodity price exposure borne by the supplier.

The majority of the existing NWS LNG sales contracts were originally executed prior to the introduction of the CPRS, and while a number of these have recently been extended, the Commercial terms generally do not allow us to pass on any new carbon costs to our customers, as these were simply not anticipated at the time. In addition, the terms of any new LNG sales from existing or future LNG projects has to be put in the context of the competitive supply environment. With major competition likely to come from countries such as Indonesia, PNG and Qatar it is highly unlikely that Australian producers will be able to directly pass on these costs.

Emissions Intensity The LNG production process is emissions-intensive, and comprises two major sources: naturally occurring CO2 in the gas reservoir and those arising from combustion during the liquefaction process. Notwithstanding the debate around the specific Emissions Intensity measure, the fact remains that LNG is and will be a significant contributor to growth in emissions.

It is important to note the impact that several years of severe capital cost inflation has had in the industry. Unit capital costs per installed tonne of LNG capacity has increased circa fivefold in the last 10 years, drawing a significant distinction in the economics between existing and new LNG projects. The former will benefit from relatively lower unit development costs and written down values whereas new projects do not. The incremental impact of the introduction of the CPRS will be more significant on new LNG projects.

Based on the Green Paper proposals, the LNG industry would not qualify for EITE designation and temporary assistance (Box 9.5). This will lead to significant additional costs for this sector. BP strongly believes, however, that the role of gas in a carbon constrained world will become increasingly significant in tackling climate change, and while LNG exports are a major source of current and future revenue for Australia, it is also uniquely positioned to contribute to global emissions reductions. Accordingly, it is important that the introduction of the CPRS does not disadvantage LNG relative to our international competitors and to coal.

Given that finding a solution to this EITE issue is an ongoing one, BP will continue to consult with the Government, undertake our own analysis, and work with the Australian Petroleum Production and Exploration Association (APPEA) to ascertain what this level of support should be. Note: please see the APPEA Submission to the Green Paper for additional details on the industry and discussion of this EITE issue.

EITE Approaches & Permit Allocation

EITE Metric The use of the proposed emissions intensity metric (total emissions per unit revenue) to determine EITE status does not sufficiently reflect the materiality of carbon cost impacts across the disparate sectors. Its revenue component is distorted by the structure of the industry, e.g. those with high input costs, and it disadvantages businesses further down the production chain of a given product. While the use of a single metric is desirable from an implementation perspective, it must not lead to improper classification and potential unintended consequences.

Alternative EITE Metrics & Approaches BP supports the use of an alternative intensity metric that relates to the "materiality of financial impact", which is a Green Paper criterion. Examples of "value added" metrics include emissions/ (EBITDA + labour), emissions/(EBIT + labour) or emissions/operating costs. When considering the need for support to EITE industries, it is important to review the impact on both existing infrastructure and major new investments. In addition, these values should be based on long-run averages to recognise the cyclical nature of many industries.

A recently released BCA report[6] also offers a potential alternative to the Green Paper approach that should be considered. This method calculates carbon costs relative to industry/activity value added (described as EBITDA+labour), and recommends these costs be borne by the company up to a 3% to 5% threshold, above which the trade-exposed business would receive free permits for a transitional period. This is an idea that bears further study and analysis as the Government reconsiders other approaches to this EITE issue.

BP recommends that the Government review the AIP submittal to the Green Paper, which provides thorough industry analysis of alternative emissions intensity metrics.

Permit Allocation The basis for permit allocation to EITE industries should be via an industry benchmark that represents emissions per unit input (or output), which should be allocated on a facility basis.

[6] *How Emissions Trading Can Work for the Environment and the Economy*, August 2008

Other Recommendations

Refining

- State and Local Government based caps (Queensland) on CO2 emissions should be removed since this interferes with the CPRS, which will set the Australia national cap. State emissions reductions should be a market-based outcome resulting from emissions trading.

LNG

- Harmonisation with existing regulations: Existing regulations must be modified to take account of the fact that CO2 abatement opportunities will now be driven by an economic justification to do so i.e. new LNG projects should not be mandated to sequester CO2 on purely environmental grounds.

CHAPTER 11 (Tax and Accounting Issues)

Tax Issues

BP is in general agreement with the Government's proposals in regard to tax, and particularly the specific tax regime proposed to deal with the income tax consequences of permit transactions. However we believe that further consideration and clarification should be given to the following areas:

- Free Permits There will be tax timing issues for entities that receive free permits that are not used until subsequent income years. This could be addressed by recognising the income in the year the free permit is used, or exempting free permits from the tax system. It will also be necessary to address the issue of ensuring there is no double taxation of unused free permits under the 'rolling balance' closing stock method.
- Timing of Surrender There need to be clear rules to recognise the point when a permit is surrendered and deductions are available, particularly for companies that may operate under substituted accounting periods.
- Market Value of Closing Stock BP seeks clarification on how the market value for the closing stock of permits is to be determined for the 'rolling balance' calculation.
- GST Clarification The Green Paper contains sound proposals regarding GST treatment, but this section is particularly brief and raises concerns that conflicting technical interpretations could be adopted - either by taxpayers or the ATO - which may be contrary to the Government's intended position. For this reason clarification which is binding on the ATO would be highly desirable to avoid any potential uncertainty. In particular, it would be good to ensure that it is clear that permit instruments are not interpreted as representing "financial supplies" and thereby give rise to the inability to claim input tax credits in taxable businesses.
- Associated Transactions The tax rules need to be clear and able to deal effectively with any associated transactions that arise under the scheme, including hedging and derivative type transactions.
- International Taxation The tax treatment of cross-border transactions and international participants to the system has not been addressed and needs to be clarified.

- Stamp Duty While this is a State tax rather than a Federal matter, it would be desirable to understand whether and how stamp duty is likely to apply to permit related and associated transactions under the scheme.

Accounting Issues

BP is familiar with the accounting challenges of an emissions trading system given our involvement in the EU ETS. Accordingly, we are aware of the current challenges arising from the lack of explicit accounting requirements for emissions-related assets and liabilities under International Financial Reporting Standards (IFRS). We support the Government's actions to encourage the International Accounting Standards Board (IASB) to amend IFRS to facilitate emissions-related reporting rules ahead of the scheme start to provide certainty. The implications of an inconsistent approach and hence inconsistent reporting between companies include:

- risks to shareholder value and effective decision making
- potentially increased volatility in market prices in early stages
- impacts reflected in income statements and on balance sheets
- difficulty in making competitor comparisons/benchmarking for both BP and regulators
- difficulties in company/business transactions and valuation
- the use of more than one reporting methodology, particularly for tax purposes. This will lead to increased complexity and potentially risky manual interfaces to adjust one process to the other.

CHAPTER 12 (Transitional Issues)

Given the significance of economic reform under the Carbon Pollution Reduction Scheme as well the imperative to reduce emissions soon, and at scale, parallel policies and actions will be required to effectively meet climate change policy objectives and provide the needed transition to a lower-carbon economy. BP supports many of the Green Paper comments, with the following clarifications and recommendations.

Guidelines

Need for Streamlining Transitional or complementary measure should only be introduced or maintained where the CPRS cannot deliver the proposed policy objective.

Support for Existing Processes BP fully supports both the Commonwealth and the States through COAG in their efforts to review existing measures and remove those that duplicate the intent of the CPRS. This is an essential step to reduce the compliance burden for industry and ensure that legislation is fit-for-purpose.

Climate Change Action Fund

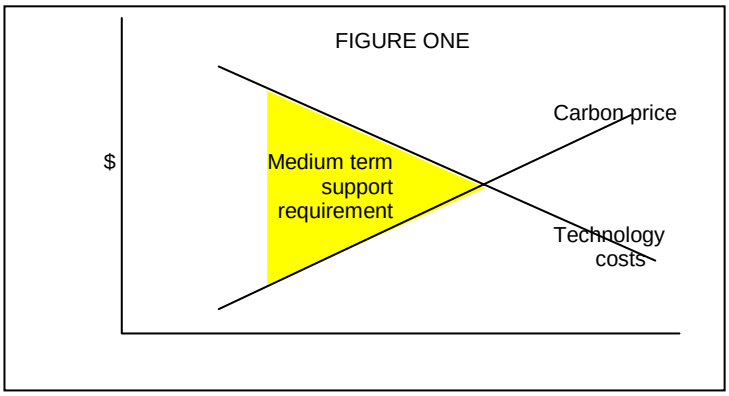
As detailed in the CPRS, the CCAF is designed to provide funding to those industries that do not receive free permit allocation. In order to bring about the deployment of low emissions technologies at the scale and speed that is required to mitigate climate change, this fund should be broadened to support LETs (Low Emissions Technologies)

from any industrial sector that can deliver significant abatement, regardless of support under an EITE or ESAF designation.

Complementary Measures

Carbon Price BP believes that a carbon price introduced under the CPRS will be the primary long term policy mechanism that drives the use of low carbon technologies. We also recognise that in the medium term, complementary measures will be required. In summary, this is because (i) the costs of new technologies will initially be high; (ii) the carbon price is initially likely to be low; and (iii) the urgency with which science indicates that the world must reduce its carbon emissions.

These transitional, complementary policies will help drive the development and deployment of low carbon technologies, whose initial carbon costs are high. This is shown in Figure 1.



This illustrates two key points:

- The carbon price is generally expected to be introduced at a modest level and then rise as the cap in the trading scheme is tightened;
- The cost of new technologies will start high and then reduce as they are deployed with increasing knowledge and scale, with first movers quickly disadvantaged against later entrants who are able to access their learnings and drive down costs.

Combinations of transitional, market-based measures (such as NRET) and direct project support (along the lines of the former Low Emission Technology Development Fund, or perhaps the Climate Change Action Fund) are likely to be the most efficient medium term basis for the accelerated deployment of new technologies. Their continued utilisation will be a key policy response to protect against both (a) locking in a higher future mitigation burden by tolerating too slow a start in technology deployment, and (b) the risk of short term carbon price shocks if the need for accelerated carbon reduction forces the economy to deploy new technologies at the top of their price curve without any other protection.

An important benefit of this approach is that the use of direct policy support will both accelerate the deployment of technologies *and also* accelerate their path down the cost curve. The sooner the technologies move down the cost curve, the sooner they can be supported by a carbon price alone, and these complementary measures can be removed.

The Appendix includes BP's May 2008 Submission to the Wilkins Review, and includes more detail on complementary policies and providing solutions to market failures, as exhibited in the solar photovoltaic (PV) industry.

Chapter 13 (Governance)

BP supports the Government's recommendations for the proposed governance structure. In particular, we agree that:

- Governance arrangements should provide as much certainty and predictability for regulated entities and the market as is practicable.
- Elected representatives (the Parliament and the Government, acting through the responsible minister) would be given responsibility for policy decisions with significant and far-reaching implications, and an independent regulator would be responsible for decisions that are essentially administrative in nature or that involve individual cases.
- Indicators of scheme caps and gateways should be included in the establishing Act and that actual scheme caps and gateways would be set out in delegated legislation.
- Industry assistance criteria and levels of assistance would be determined by Parliament, not the Regulator.
- A special-purpose regulator to administer the scheme should be established, accountable to the responsible minister.
- The consolidation of the proposed scheme regulator, the Greenhouse and Energy Data Officer, and the Renewable Energy Regulator should be considered. In addition, an independent expert committee should conduct a public strategic review of the independent regulator every 5 years.

APPENDIX

1. "Op-ed" Gerry Hueston, "Carbon reduction: Getting closer to getting it right"
2. BP submittal, Wilkins Strategic Review of Climate Change Programs, 20 May 2008
3. BP in Australia *at a glance* webpage

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Big picture still eludes business

The response to climate change is hindered by obsession with short-term risks, writes Gerry Hueston

P HAS spent the best part of a decade repeatedly arguing the case for policy certainty around climate change to allow business to manage the associated risks affecting their operations and to allow future investment in our energy infrastructure to be secured.

With the release of the Government's Carbon Pollution Reduction Scheme Green Paper, it is now clear that Australia's response to climate change has evolved, and in the direction and manner business requires.

This is an evolution of certainty, as the Green Paper provides a clear signal to business that there is a policy commitment to early action, based on market mechanisms, and with economic risks dealt with directly rather than thwarting the whole.

This is an evolution of leadership, because in some countries there is no consensus for early action at all, despite clear evidence that the costs of delay outweigh the costs of action.

This is an evolution of strategy, because it has the potential to deliver a competitive advantage to Australia through the adoption of market mechanisms, such as emissions trading.

And this is an evolution in progress, because despite Australia having much at stake as an energy exporter and an economy dependent on energy-intensive industries it has chosen to address the risks directly and not opt out of addressing its challenges.

Now, the challenge is to translate our evolution in principles into practical actions, as the Green Paper becomes a White Paper. Now is certainly not the time to be mired down in unproductive arguments, and yet it is evident business and NGOs have got off to a bad start. Many have quickly settled into the old terms of debate: presenting an adversarial paradigm of business wanting opt-outs from meaningful action.

This paradigm is flawed. I support early action on climate change and I support emissions trading as it provides a broad-based response to reducing our emissions, and in a way that can allow the impact on the Australian economy to be carefully managed.

But for a decade now, progress has been thwarted by an obsession with the risks to the short-term economy.

Unfortunately this progress is still at threat unless all parties become involved in a policy debate that includes getting the balance right both now and in the future.

There is no doubt risks to our economy are real: without proper mitigations, there will be a trade distortion due to early action, it will disadvantage Australian businesses which compete internationally, and it will put at risk thousands of jobs across the economy. Critically, there also will be a social impact as families on low incomes face a disproportionate burden from higher fuel and energy costs.

These risks are unintended, unproductive and unnecessary; and unless we tackle them they will continue to be able to thwart meaningful progress and put at risk Australia's energy security. Even the sickest of patients cannot take his medicine unless the side-effects are treated. The less mitigation there is for the risks, the less meaningful the carbon price can be.

It is clear then that we must get the right mitigation policies in place if we are to avoid excessive trade distortion, enable Australian businesses to compete both at home and abroad, secure present and future employment and cushion the impact on those in our community who are disadvantaged.

Mitigation is not opting out. It in no way undermines the effectiveness of a Carbon Pollution Reduction Scheme. It is, in fact, the confidence that Australia can get these mitigation policies right that encouraged the business community to abandon its reticence on climate change, and to become involved in preparing for action.

Business, government and NGOs must stop debating whether to support these policies and start focusing on practical details that look at how to make them work.

After all, there is plenty at stake. Worldwide we're at an inflection point on our future energy mix. Energy demands are rising rapidly and with that so are greenhouse gas emissions.

If we can get our policy structures right, we will be able to smooth the transition to a lower carbon economy while providing for a stable and secure energy future.

A global trading system should be Australia's ultimate objective; otherwise some high-emitting nations will enjoy a "free-ride" on the reductions of others. But just because it's not achievable immediately, should not deter Australia from starting now. The only way to effect change is to set an example and find ways for co-operation.

But we won't be able to move on to a focused and fruitful discussion that can lead to effective change both at home and abroad until we acknowledge that the broad principles in the Green Paper are sound.

Gerry Hueston is president of BP Australasia and a member of the Business Council of Australia's Sustainable Growth Taskforce.

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bp

20th May 2008

Mr Roger Wilkins AO
Strategic Review of Climate Change Programs
Department of Finance and Deregulation
John Gorton Building
King Edward Terrace
PARKES ACT 2600

Dear Sir,

Strategic Review of Climate Change Programs

BP Australia welcomes the opportunity to contribute to the Strategic Review of Climate Change Programs commissioned by the Minister for Finance and Deregulation Hon. Lindsay Tanner MP and the Minister for Climate Change and Water, Senator the Hon. Penny Wong. We trust that the comments within this letter will be received as a useful contribution to your Review and we would be happy to discuss them with you at your convenience.

Long run primacy of carbon price signal

BP strongly supports the use of market based mechanisms as the most efficient means of allocating resources to the reduction of carbon emissions. We should therefore aim for the most transparent and least distorted market possible, as we would with any other sector of the economy. The logic of this position suggests that the "destination" for climate change policies is a sole reliance on a carbon-price which is applied as broadly as possible across the economy and across all the greenhouse gases. With this is mind, your Strategic Review of Climate Change Programs is of paramount importance. Over the past decade, a plethora of policies have been introduced at both State and Commonwealth level to address the challenge of climate change, increasing the compliance burden for business. For example, in the absence of mandatory national greenhouse gas reporting, many schemes have been introduced to capture greenhouse and energy data, including the Greenhouse Challenge Plus program, Energy Efficiency Opportunities legislation and a host of State schemes. We strongly support the rationalisation of these policies and replacement with a single reporting framework through the National Greenhouse and Energy reporting legislation that will support the introduction of the Australian Emissions Trading System (ETS).

However, the simplicity of this position underestimates the complexity of the challenge. In fact, as a dictum, the same piece of rationalist logic could be applied across a broad spectrum of Government policies such as taxation, service provision or trade policy. In actual fact, however, much of Government business and policy debate is devoted to the exceptions to the rules of economic rationalism rather than their application, because the complexity of society demands that these exceptions are provided.

Thus whilst we acknowledge and support the view that the destination for climate change policies should be a pure and unencumbered reliance on an ETS, we equally acknowledge that the reality is more complex. There will be legitimate reasons for exceptions, and therefore we recommend that Government acknowledges and makes transparent the case for them.

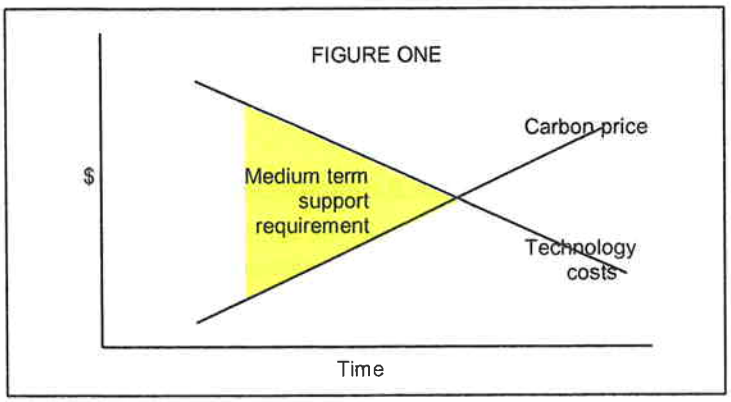
We see broadly that these areas will require additional policy focus, alongside the ETS:

- In the medium term, direct support to accelerate the development and deployment of new low carbon technology options;
- An enduring focus on policy to address market failures that are separate to climate change and therefore are not addressed by a carbon price;
- An enduring focus on other aspects of environmental policy to ensure they do not undermine or exacerbate the challenge for carbon pricing.

We explore these areas in more detail below.

Medium term requirement for complementary measures

The speed with which we need to address the emissions reduction task must not be underestimated if we are to reduce our total carbon emissions to 60% below 1990 levels by 2050 whilst at the same time growing our economy. The power stations that will be operating in 2050 and beyond are being designed today, and the technology choices that Australia makes in the next decade will reposition its ability to reduce carbon emissions for a generation.



It is therefore of strategic importance to the climate change challenge that the appropriate policy signals are taking effect in the market straight away in order to accelerate the deployment of new technology. However, as Figure One demonstrates, new low carbon technologies are caught in a paradox:

- The carbon price is generally expected to be introduced at a modest level and then rise as the "cap" in the ETS is tightened;
- The cost of new technologies will start high and then reduce as they are deployed with increasing knowledge and scale, with first movers quickly disadvantaged against later entrants who are able to access their learnings and drive down costs.

Unfortunately, because of the implacability of the science-driven requirement to reduce our carbon emissions in a short timescale, we need to drag forwards the deployment of new low carbon technologies before the point at which these trajectories would otherwise intersect.

Policymakers effectively have two options at their disposal. On the one hand, they could drive up the carbon price faster and sooner by setting tough and non-negotiable targets in the ETS, so that the economy has no choice but to deploy low carbon technologies quickly and the carbon price floats freely at whatever level is required. The problem with this approach is that to begin start deploying the technologies on an industrial scale, such that the first projects bear fruition in a medium term (2020) time horizon, an initial carbon price of some hundreds of dollars per tonne would likely be required in our estimation. With these costs borne across the economy in the form of higher fuel and utility bills for working families and industry, such a policy response does not appear tenable.

On the other hand, the second policy response is to seek to reduce the effective technology cost by maintaining and strengthening transitional measures. Combinations of market based measures (such as MRET) and direct project support (along the lines of the former Low Emission Technology Development Fund) are likely to be the most efficient medium term basis for the accelerated deployment of new technologies. Their continued utilisation will be a key policy response to protect against both (a) locking in a higher future mitigation burden

by tolerating too slow a start in technology deployment, and (b) the risk of short term carbon price shocks if the implacability of the carbon reduction imperative forces the economy to deploy new technologies at the top of their price curve without any other protection.

An important second benefit of this approach is that the use of direct policy support will both accelerate the deployment of technologies *and also* accelerate their path down the cost curve. The sooner the technologies move down the cost curve, the sooner they can be supported by a carbon price alone, and these complementary measures can be dispensed with.

Economic rationalists could perhaps counter that history typically demonstrates that markets have worked best when fettered with the fewest constraints and interventions. Indeed, if we had an indefinite period of time to meet the challenge of climate change, we would agree with them that an unfettered carbon market would be the most efficient means of resource allocation. But we do not have an indefinite period of time: we must halve our carbon emissions quickly, during a period when we expect to double our energy consumption. It would be pressing the purity of economic rationalism into the realms of negligent complacency, were we to argue that a single policy instrument, the carbon price, could bear this whole burden.

The scale of the challenge will be reflected in the scale of the medium term policy commitment required. Policymakers have become used to supporting renewable energy through relatively generous mechanisms but on only a very small aggregate scale. For example, the entire current installed wind capacity in Australia creates on average some 2,500GWh of power per year[1]. A single 500MW clean coal power station with 80% availability would provide that amount plus a further 1,000GWh of additional power as well – 3,500GWh in total, from just one project. Even a modest 5cpl per kWh subsidy such as has effectively been provided to renewable energies such as wind and hydro through the MRET scheme would sum up to the equivalent of $175 million of subsidy *every single year* to a single project of this scale, if the same support mechanisms were applied – or billions of dollars over the life of the project.

We make this point not to argue that this should be the basis for policy setting, but rather as a means of seeking to adjust the mindset of the community when it considers the scale of policy support required. The deployment of low carbon power on a scale never before achieved will need support on a scale never before applied: the challenge is not to support small projects with ten or fifty million dollars at a time, but rather to convert the capital stock of the economy as a whole. Writing bluntly, the requirement will run to billions of dollars from both the private and public sectors.

The deployment of low carbon power on a scale never before achieved will need support on a scale never before applied.

It would be folly to transfer the burden of this task onto a single policy instrument, and we argue strongly that an ETS must be supported by additional medium term measures at scale. In 2007, BP was one of a group of companies who called for a National Low Emission Technology Strategy[2] to oversee these policy measures, and we recommend that the Wilkins Review adopts such a recommendation as its own.

For the last two years, BP and Rio Tinto, through their joint venture company, Hydrogen Energy, have been studying the feasibility of building a 500MW Integrated Gasification and Combined Cycle (IGCC) power plant with Carbon Capture and Storage (CCS) near Perth. Although we have recently concluded that the geological formations that we have studied do not provide the level of certainty we require for an early project, we have nevertheless acquired valuable perspectives on the challenges of deploying this technology at scale. We have attached therefore Hydrogen Energy's submission to the Garnaut Review, "Australian Climate Change Mitigation – a project developer's perspective on the challenges for CCS"

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[1] http://www.auswind.org/downloads/factsheets/WindEnergyInAustralia.pdf
[2] http://www.businessandclimate.com/

with this letter and would be happy to facilitate a meeting with the Project Director at your convenience.

Not all market failures relate to carbon

It would be a mistake to survey the entire landscape of policies relating to energy technologies that happen to have a low carbon footprint, and to assume that carbon is the only motivation for putting policies in place to support them.

For the solar photovoltaic (PV) industry, for example, a carbon price will provide marginal assistance but it does not overcome the fundamental market failure that it faces, which is the systematic locking out of its power from a proper place in the value chain. Indeed, our belief is that Solar PV would be economic today, even without a carbon price, were it able to claim its proper place in the value chain.

Solar PV is a distributed peak-load generation source that is currently being denied the opportunity to contest the competitive generation markets available to other generation sources. The power generation (wholesale) market is fundamentally different to the retail market, in that the wholesale market operates on a half-hourly basis and prices within it reflect the real time value of power in the given half hour. Retail prices however are based on a 365 day, 24 hour average of the value of power in order to simplify tariffs for the consumer. In real time therefore, average retail prices are below true value during peak periods, but in compensation of this are above true value in off peak periods.

Solar PV is a peak power generation source. It ought to be paid the wholesale value of the power that it generates, but instead it is paid the retail value which significantly undervalues its contribution. For example, the standard retail tariff in Sydney is 12c/kWh, whilst the wholesale value of electricity during summertime peak period can reach as much as 25c/kWh[3]. When a consumer installs a solar PV system, they are absolving their electricity retailer of the need to purchase power at such levels – but in return they are compensated at 12c/kWh. The retailer pockets the difference between the two, which is the true value that the solar PV system has created, and thus the individual that has actually made the investment in a solar system is denied the rewards of that investment.

Our belief is that Solar PV would be economic today, even without a carbon price, were it able to claim its proper place in the value chain

The best response to this market failure would be to address it directly. Modern and inexpensive metering systems enable the power that is generated by solar PV systems to be measured in half hour increments. In the long run, regulators should ensure that retailers are obliged to reimburse the owners of such systems for the true value of the power they generate, which is of course the real time avoided cost of the generation that the retailer would otherwise have been obliged to purchase, plus the avoided costs of transmission and distribution. With access to fair, real-time market pricing for their product, solar PV systems should not need additional policy support.

However, this is not current policy and there are no current plans to remove the structural market failure imposed upon the owners of solar PV systems by the way that the market has been set up by the electricity regulators. Policy support is therefore needed to address this market failure, and care must be taken not to sweep away such support on the misunderstanding that the support was aimed at a carbon objective.

In recent history, this market failure has been partially addressed by the Photovoltaic Rebate Programme (PVRP), a direct subsidy. The level of direct subsidy that this programme has provided has been the subject of many changes and thus the ability of the industry to

[3] "The value of PV in summer peaks" Dr Muriel Watt, University of NSW, 2004

develop efficiently in response to it has been significantly curtailed. Similarly the support has been focused at domestic investors, and thus prevented access to commercial investors and rooftops that will enable the industry to develop the commercial scale needed to move down the cost curve. Moreover the decision in the 2008 Federal Budget to means-test the PVRP and restrict it to households with less than $100,000 annual taxable income has dealt a severe blow and effectively caused the industry to "down tools" on important programmes such as "Solar Cities". Industries which rely on direct subsidies are of course inherently vulnerable to such Budget decisions, which partly explains why support has been growing to replace the subsidy with a Feed In Tariff (FIT) which more directly addresses the market failure in question.

A FIT operates in lieu of real time market pricing, by "deeming" what the proper value of PV generation is and then paying it through a fund raised from a network levy. It is a poor substitute for removing the market failure, but in the interim it is an appropriate transitional measure. Some States and Territories have announced small FITs, and the COAG process is co-ordinating a national FIT model.

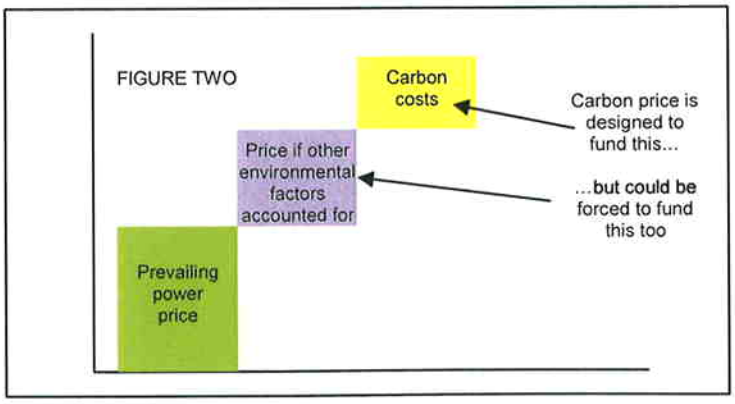
It is important that the Wilkins Review acknowledges that some of the policy measures which support new energy technologies are aimed at addressing market failures other than climate change, and thus should not be assumed to be replaced by a carbon price.

Interaction with other environmental policies

Although the Wilkins Review is primarily focussed on those programs that are explicitly designated as Climate Change policies, it is important to note that other policies could have a profound effect on the efficacy of the ETS. For example, continued approval of power stations under the various Environmental Protection Acts around the nation at below-world-standard levels is placing an undue burden on the carbon price.

Post-combustion capture of CO2 from a coal fired power station depends as a pre-requisite upon the installation of Flue Gas Desulphurisation for example, whilst pre-combustion capture in an Integrated Gasification Combined Cycle achieves best in class performance across a range of pollutants not related to climate change, such as emissions of Mercury, oxides of Nitrogen and Sulphur, and Particulates.

The approval of power stations in Australia that do not meet these world-best-practice-standards means that the Carbon Price has to cover not just the cost of acquitting carbon itself, but also playing catch up on the other (necessary pre-requisite) environmental factors. A post-combustion capture power station, for example, would have to fund Flue Gas Desulphurisation as well as carbon acquittal, placing an unnecessary burden on the carbon price by allowing the conventional power price to remain at levels lower than would otherwise prevail. Figure Two highlights this burden in indicative form.



This burden could be removed if environmental regulators moved progressively towards world best practice. But in the interim, every time a new "dirty" power station is approved, it is enabled to sell low cost power into the grid, reduce the market price of power, and thus increasing the economic hurdle for every form of "clean" power, be it wind, solar, clean coal or other technology and thus adding extra burdens to the task to be completed by the carbon price.

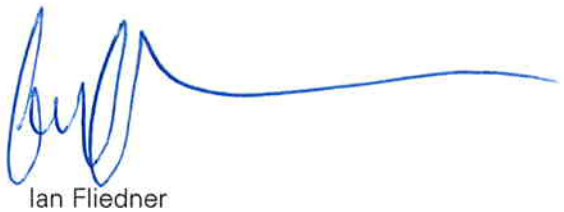
Conclusion

In summary, the tenor of our submission to the Wilkins Review is as follows:

- In the long run and in an ideal world, the burden of reducing carbon emissions would fall solely upon a carbon price transmitted as part of an Emissions Trading System;
- In the medium term and in a complex and less than ideal world, medium term policy measures will be required to directly accelerate the deployment at scale of low emission technologies, and they will be required on a scale beyond that which has been available in the past;
- Not all market failures are carbon market failures, and thus they will not all be addressed by a carbon price. Technologies such as solar PV happen to have carbon benefits, but the main market failures hindering them relate to market structure rather than carbon and measures to overcome those particular failures will continue to be needed;
- The impact of environmental regulation outside the specific climate change area also needs considering. The continued approval of power stations at below world's best practice on other environmental factors simply drives down the cost of power and increases the burden that must be worn by the carbon price.

We trust that this has been a helpful submission.

Yours faithfully



Ian Fliedner

BP Australia

BP in Australia at a glance

BP Australia is driven by the upstream exploration, refining of crude oil and natural gas, the downstream marketing supply of fuel, lubricant and bitumen products

BP has worked in Australia since 1920. Today, we're involved in a range of activities, such as exploring natural gas and crude oil resources. We also refine and market petroleum products, produce lubricants, and help to generate a significant amount of solar power.

Our crude oil refineries at Kwinana in Western Australia and Bulwer Island in Queensland are flourishing, having been upgraded to produce some of the cleanest fuels available in Australia.

We also make and market BP and Castrol lubricants. Castrol is one of Australia's market leaders providing world-class quality lubricants for the local market.

BP Solar has been operating in Australia for over 20 years. We're the only company in Australia producing solar cells on a commercial scale. The BP Solar facility at Sydney Olympic Park is the largest of its kind in the southern hemisphere and recently boosted its capacity by 25 per cent.

We have 2 key petroleum refining facilities and

a network of almost 1,400 service stations in Australia

We also have a network of almost 1,400 service stations throughout Australia, including a number of 24-hour truckstops on the country's major highways. Our focus on superior locations, as well as the fresh food and coffee we provide through our Wild Bean Cafés, have made us a strong competitor in both the fuel retail and convenience sectors.

Our exploration business is focused on the North West Shelf (NWS), where we're one of six participants in Australia's largest resource development. The NWS is rare in that it produces the full range of hydrocarbon products: natural gas, liquefied natural gas, liquefied petroleum gas, crude oil and condensate. To meet the growing demand for energy in China, we've rapidly expanded capacity and output at the NWS project.

See more about BP in Australia at www.bp.com.au.