



Plastics and Chemicals Industries Association INC A.R.B.N. 063 335 615

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The Secretary
Senate Standing Committee on Economics
PO Box 6100
Parliament House
CANBERRA ACT 2600
economics.sen@aph.gov.au

Dear Sir/Madam

Submission to the Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme

Thank you for the opportunity to provide a submission to Submission to the Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme.

Should you wish to discuss anything further, the appropriate contact in PACIA is Peter Gniel, Director Trade and Economic Policy. He can be reached on (02) 6230 6985 or via email at pgniell@pacia.org.au.

Yours sincerely

A handwritten signature in blue ink that reads "Margaret Donnan". The signature is written in a cursive style and is placed on a light-colored rectangular background.

Margaret Donnan
Chief Executive Officer



Plastics and Chemicals Industries Association

Submission to the Senate Inquiry into the exposure drafts of the legislation to implement the Carbon Pollution Reduction Scheme

INTRODUCTION

The Plastics and Chemicals Industries Association (PACIA) is the peak national body representing the diversity of companies in the chemicals and plastics sectors:

- Turnover in these sectors is approximately \$32.5 billion
- Industry value added is \$9.6 billion
- Wages and salaries \$4.7 billion
- Employment in the sectors is about 85,000 people directly
- The sectors represent between 9 and 10 per cent of total Australian manufacturing activity.

The plastics and chemicals industries, their supply chain relationships, R&D and skilled workforce are central to Australia's current high income economy and in particular, to attaining an environmentally sustainable future.

According to a 2003 Report by Professor Brain¹, Australia is one of very few countries in the world where the full supply chain in plastics and chemicals industries is located domestically. These integrated industries feed into and underpin most industry and manufacturing sectors in Australia including but not limited to the automotive, furniture, agriculture, packaging and medical products industries.

Further information on the Strategic Importance of the Chemicals and Plastics Industries are at [Attachment 1](#)

Trade in plastics and chemicals is truly global, with over 80 countries reporting an industry with a turnover of more than \$US1bn. Commodity polymers are now traded on the London Metals Exchange.

As a consequence of the structure and size of the Australian market for chemicals, and freight costs from Australia, the chemicals sector in Australia is typically import replacement focused. Local producers lack the scale and economies of plants in other producer countries, but reliable, low-cost energy, comparatively lower capital costs (on depreciated plant) and production flexibilities that meet demands from local customers for low-volume, specialised products enable Australian companies to remain competitive in their own market.

¹ The report can be provided upon request.

Most of the growth in world chemicals productive capacity in recent years has occurred in Asia. In the past 15 years, Asia (other than Japan) has doubled its share of global chemicals production to one quarter of the total. As a consequence, Australian producers are particularly exposed to low-cost competition and the fluctuations of world markets, including extended periods of depressed prices.

The Australian chemicals and plastics industry is the world's 21st largest producer. Five of the world's current top 10 producers are from countries that do not have emission obligations under the Kyoto Protocol, including China and India. The largest growth area in the industry is in Asia and the Middle East (both of which are without emission constraints).

PACIA POSITION ON CLIMATE CHANGE

PACIA supports:

- Fair and equitable international action to address the climate change, with the Federal Government taking the lead role;
- The introduction of an emissions trading scheme (ETS) as the central policy tool to find the lowest cost abatement opportunities across the economy;
- An ETS that recognises and responds to the impacts on industry (in particular the trade exposed sectors) and households;
- Comprehensive, clear and consistent legislation to give effect to an ETS as soon as practicable to provide certainty to industry;
- Taking the appropriate amount of time to ensure that:
 - the impacts of the scheme on industry and households are understood;
 - international developments are fully taken into consideration;
 - legislation and accompanying regulation can be fully analysed.
- Complementary measures including:
 - support for RD&D;
 - action to address the non-covered sectors (such as agriculture) in the ETS.

TIMELINES

PACIA notes that this submission is necessarily limited and at high level due to the extremely tight timetable for response. In this light, it is undoubtedly difficult to comment in significant detail on the legislation.

FROM THE GREEN PAPER TO THE WHITE PAPER

In providing its submission to the CPRS Green Paper, PACIA focused on two key issues of vital importance to the chemicals and plastics Industries:

- Impact of the scheme on business; and
- The treatment of hydrocarbons as feedstocks where the embedded carbon is not combusted, but rather sequestered in product.

The table below identifies the key recommendations by PACIA and the responses in the White Paper:

PACIA Recommendations from the Green Paper	White Paper Position
<p>Emissions Intensive Trade Exposed Industries (EITE)</p> <ul style="list-style-type: none"> • Full transitional assistance is critical to the ongoing viability of the industry, and should take full account of both existing and new investment in trade exposed industries. • EITE assistance should: <ul style="list-style-type: none"> ○ be provided to all trade exposed firms and not be limited by an arbitrary cap (as per the current 30% proposal); ○ be provided as permits, not cash; ○ cover all direct emissions (i.e. Scope 1) and the costs passed through from non-trade exposed industries (such as electricity and feedstocks); ○ eligibility criteria should include a test for trade exposure; ○ not contain an emissions intensity threshold given the trade exposure test; ○ be estimated on a “contiguous facility” basis. • If government is to apply an emissions intensity test, revenue is fundamentally flawed. The use of an Earnings Based or Value Add measure would more effectively address the policy objective of ensuring that trade exposed industries are not disadvantaged. • The impact of the scheme on SME’s (especially those that are trade exposed) has been given little attention or analysis. Most trade exposed companies ineligible for EITE assistance responded in a survey by PACIA at a carbon cost of \$20 per tonne, the only options was to absorb the cost with approximately 50% of respondents stating they may be forced to close. 	<p>The White Paper made some amendments in response to concerns raised by industry, including:</p> <ul style="list-style-type: none"> • Increasing the total number of permits available to EITE industries to assist the transition, • Lowering the threshold for 60% assistance; • Including the “scope 3” emissions from the use of natural gas and ethane for use as feedstocks in the assessment of EITE eligibility; • The addition of a trade exposure test; and • The capacity to use a value add metric in determining EITE eligibility. <p>Although there has been some movement on assistance provided to the EITE sector, PACIA remains concerned that the impacts of the scheme on trade exposed industries remains misunderstood and that the response remains deficient.</p>
<ul style="list-style-type: none"> • The importance of the Climate Change Action Fund (CCAF) cannot be underestimated if trade exposed companies find themselves ineligible for EITE assistance. 	<p>PACIA welcomed the additional detail on the Climate Change Action Fund. The program appears to be consistent with PACIA’s view that there should be three elements:</p> <ul style="list-style-type: none"> • An education function; • An auditing function; and • Structural adjustment.
<ul style="list-style-type: none"> • PACIA supports the proposal for “netting out” of hydrocarbons supplied as feedstocks where they are not combusted, but sequestered as product. 	<p>The White Paper supports PACIA’s view and has established the Obligation Transfer (OTN) mechanism.</p>

KEY ISSUES WITH THE DRAFT BILL

Emissions Intensive Trade Exposed Industries (Part 8, Sections 165-173)

PACIA is disappointed to see that the Draft Bill provides only cursory attention to the treatment of the EITE sectors and the intention is to provide almost all detail in regulation. This in effect gives the Parliament little capacity to provide meaningful input or amendments. Similarly, this deficiency provides little or no certainty to industry moving forward.

It is PACIA's firm belief that more detail is required in the Bill. Given that the section is deficient, PACIA can only provide comment on the intended policy:

- EITE assistance should be provided to all trade exposed businesses. It is unfortunate that a measure of emissions intensity is being used as a proxy for trade exposure.
- EITE assistance should remove the 0%, 60% and 90% thresholds and provide equal assistance to all trade exposed industries to offset the costs of the scheme until such time as international competitors face the same obligations. PACIA believes the appropriate level of transitional assistance should be 90%. The current proposal has vastly differing impacts across the sector where some companies are eligible to receive 90% compensation where others receive nothing, even though either entity is equally trade exposed and does not have the capacity to pass on the costs. This results simply in a given company having to absorb the costs and potentially threatening their ongoing viability.
- The annual 'decay factor' of 1.3% for EITE assistance needs to be removed. Abatement in these sectors should be driven by the price incentive as the scheme cap reduces over time, not by an arbitrary reduction in assistance.
- Should these changes be made, the need for complicated provisions around an "activity" definition could be dispensed with. The activity definition, whereby entities are only being assessed for part of their operations, means that an entity's effective assistance is significantly reduced from either the 90% or 60% assistance.

Climate Change Action Fund

PACIA's strong preference is for all trade exposed industries to be eligible for transitional assistance. However, we also see significant value in the proposed Climate Change Action Fund (CCAF). Unfortunately, this programme is not included in the Bill and therefore PACIA is unable to provide additional comment.

PACIA would emphasize the following point from our Green Paper submission in the context of the need to provide support for all trade exposed companies:

"The impact of the scheme on SME's (especially those that are trade exposed) has been given little attention or analysis. Most trade exposed companies ineligible for EITE assistance responded in a survey by PACIA at a carbon cost of \$20 per tonne, the only options was to absorb the cost with approximately 50% of respondents stating they may be forced to close".

Obligation Transfer Number (Part 3, Sections 41-68)

PACIA welcomes the establishment of the Obligation Transfer Number (OTN) mechanism. The mechanism allows companies who do not combust hydrocarbons but rather sequester them in product to purchase the fuel without the upstream liability attached, that is, carbon price free. It also allows for significant emitters to account for their own emissions.

However, there are a number of concerns/issues with the Draft Bill. PACIA would note that a number of concerns would be addressed if the use of an OTN was mandatory for feedstock users:

- Section 42: It is intended for the application for an OTN to be set out in Regulation and that there will be a fee:

- What information is required?
 - PACIA believe there should be no fee for what is an essential provision for the Chemicals and Plastics industries.
- Section 44 (2) states that "the Authority may issue an OTN":
 - Does this mean that the issue of an OTN is discretionary, irrespective of whether you meet the criteria? PACIA would propose that an OTN "must" be issued where the criteria are met?
- Section 44 (4) - OTN issued within 90 days of application:
 - PACIA is concerned that in order to be ready to use the OTN by scheme commencement in 1 July 2010, the Act and the Regulations must be in place before the end of 2009. Our understanding is that the regulations in relation to OTNs may not be ready for consideration until the 1st Quarter of 2010.
- Section 44 (5): Although the Authority can refuse to issue an OTN and must provide written notice, there is no provision in the Bill requiring reasoning for the decision.
- Section 48: An OTN is not transferable
 - Although PACIA broadly supports this provision, we believe that there should be a mechanism for transfer in the event of an assignment of a business (i.e. on a sale of business).
- Section 52 (1) - The mandatory category for quotation of OTN for feedstocks used in the manufacture of products that sequester carbon (eg plastics) is too narrow (i.e. over 25kt in relation to a fuel at a facility or LPG) and specifically excludes liquid petroleum fuel (which may include Naphtha). PACIA believes that the quotation of OTNs should be mandatory where the eligible upstream fuel is consumed as a feedstock. We appreciate that the definition for feedstock is broad and that there would need to be a narrower definition of chemical feedstock such as "a feedstock where none or only part of that feedstock was combusted in the manufacture of a product"..
- Section 52 (1) (a): We also provide the following comments on the existing provisions relating to the Mandatory use of an OTN for large users:
 - In order to use an OTN in this category, an entity must have 25kt emissions from the relevant eligible upstream fuel in the relevant facility during the previous financial year. A number of issues arise:
 - An entity may use large volumes of fuel but not combust them meaning that they may not pass the 25kt test. For feedstock users, it would be a disastrous outcome given the potential additional costs, eg if the feedstock user only emitted 10% of the contained carbon it would be paying for up to 225,000 tonnes of carbon that is not emitted.
 - Similarly, what would be the outcome be if there were technological advances that enable an entity to reduce the emissions associated with the processing of the relevant eligible upstream fuel such that their emissions fell below the threshold?
 - If a facility is under repair or subject to other interruptions for a substantial period of time, an entity would not be able to quote an OTN in the relevant year.

Although some of the scenarios listed above are unlikely, they are possible. Legislation should not be drafted on the basis of unlikely.

- As noted above, it is essential that all feedstock users of hydrocarbons are able to use OTNs as it is possible that these entities could be charged a carbon price where there are no emissions.
 - PACIA also believes that where an entity has the right to quote an OTN for one eligible upstream fuel, it should be entitled to quote that OTN for all purchases of eligible upstream fuels. This will make the scheme more administratively efficient. The alternative is to require the liable party to differentiate between emissions from purchases under an OTN and purchases that are not. It may be physically impossible to make this differentiation where different feedstocks are used in one process.
- Section 54 (1): We are not able to assess whether the definition of Liquid Gas Marketers covers all dispositions of LPG for resupply.

- Section 58: This section refers to voluntary quotation for feedstocks.
 - The description is where "the recipient carries on a business that involves using (or consuming) the fuel (other than by way of combustion) to manufacture a product". In a number of cases in the chemicals and plastics industries, there is some combustion of hydrocarbons even though the majority of carbon is sequestered in product. The section could be made clearer by linking the use to the fuel to include partial combustion.
- Section 59: Transformation of fuel:
 - Methanol needs to be recognised as an "eligible upstream fuel".
- Section 66: Refusal of a voluntary OTN:
 - As noted above, the rejection of an OTN to a feedstock user could have devastating consequences to an entity' ongoing viability. PACIA again emphasizes the importance of ensuring that all feedstock users are able to utilize an OTN and that the OTN is not rejected.

CONCLUSION

While PACIA supports the introduction of an ETS as the central policy tool for responding to climate change, we are concerned that there has been insufficient time to provide a detailed response or to fully analyse the expected economic impacts of the Scheme. We emphasize the need to provide greater certainty to the trade exposed sector and encourage there to be a number of amendments in support of these sectors. PACIA welcomes the OTN provisions, but we raise a number of concerns, many of which could be addressed by making it mandatory the use of an OTN by purchasers of fuels for feedstock purposes.

Attachment 1

The Strategic Importance of the Chemicals and Plastics Industries

The plastics and chemicals industries, their supply chain relationships, R&D and skilled workforce are central to Australia's current high income economy and in particular, to attaining an environmentally sustainable future.

In 2006, the Victorian Government's Department of Innovation, Industry and Regional Development together with PACIA and ACCORD commissioned Prof Brain and the National Institute of Economic and Industry Research to analyse the current contribution and future challenges and opportunities for the plastics and chemicals industries. It should be noted that this Report was produced before the current Emissions Trading Scheme and suite of transition measures were proposed. Nevertheless, the resulting '*Report on the Economic and Social Contribution of the Plastics and chemical Industries to Victoria and Australia*' (The Brain Report) produced a number of Strategic Imperatives that are invaluable to the Commonwealth Government in its consideration of how to configure our transition to an environmentally sustainable, viable economy. Pertinent findings are included below. Also included here are some observations on current and future trends toward sustainable plastics and chemicals to an environmentally sustainable future.

The independent Brain Report found in Victoria alone that 'given the scale of [existing] chemical production, the chemicals sector is one of the most important drivers of Victorian economic activity'. Indeed,

"in 2004 the chemicals sector was directly or indirectly responsible for 7.3 per cent of total Victorian economic activity, as measured by gross State product, and directly or indirectly created 124,000 Victorian employment positions."

The level of economic activity increases to '9.1 per cent when account is taken of the productivity enhancing/cost saving benefits the chemicals sector generates for other sectors in the Victorian economy'.

In other words, Victoria's domestic chemicals sector is not only an important sector in its own right, it has a multiplier effect in productivity and cost saving benefits to the broader economy that would be foregone if sections of the chemicals sector moved off shore.

Care needs to be taken in devising a transition path to a sustainable future that supports the retention and growth of the plastics and chemicals industries. The Brain Report ranks the chemicals industry's strategic value as follows:

- Equal to the motor vehicles industry
- 1.5 times the contribution of the tourism industry
- 3 times the contribution of the mining industry
- Slightly less than the contribution of the food industry.

The independent Brain Report emphatically states:

Recognition by policy makers and external stakeholders of the chemical sector's economic and social contribution is crucial to future industry policy. In many ways the relationships that exist between the chemical sector and broader manufacturing exemplify the importance of ensuring a critical mass. There is little doubt that without a healthy local chemical sector, Australian manufacturing would suffer significant losses in research and development contribution and

innovation capabilities and enablers; two essential ingredients to future sustainability of manufacturing.

Contributions by the plastics and chemicals industries to environmentally sustainable industries in Australia and overseas

The remarkable advances in the science of plastics and chemicals, their versatility, availability, and cost-effectiveness means they are becoming substitutes for other more expensive and scarce materials. They are already an intrinsic part of our daily lives. The flexibility and strength of plastics mean they can be formed and reformed, with multiple uses and multiple lives. They can be bonded and combined with natural materials such as cloth, paper and metals and completely synthetically produced.

Plastics and chemicals were the defining marker for the 20th century and present the biggest lever for a sustainable 21st century.

As such, plastics and chemicals have a key role to play in finding sustainable solutions to many of the world's challenges, including climate change. Some areas are outlined below.

1. Energy shortages: plastics and chemicals can help alleviate the looming energy crisis in these ways:
 - improving the energy efficiency of buildings i.e. insulation, lighter materials, composites in construction and fittings
 - contributing to the efficiency of renewable energy sources i.e. materials in the manufacture of wind turbines, solar panels and installation equipment, piping for geothermal systems, fuel cells and hydrogen production and storage
 - contributing to digital communications, enabling miniaturization and portability
 - products at end-of-life unable to be mechanically recycled have significant residual energy and are able to be diverted from current landfills and contribute energy generation opportunities.

At a global level, in 2008, BASF published a carbon balance study. This contrasts the CO₂ emission-savings that are achieved with their products and procedures with the emissions from raw material extraction, production and product disposal. The results, that have been confirmed by the Öko-Institut in Freiburg (Germany) show that BASF products can save three times more greenhouse gas emissions than the entire amount caused by the production and disposal of all these products (*Source: Factor 3: BASF's climate Balance, website: www.corporate.basf.com*)

2. Food production and storage: plastics and chemicals can help in these ways:
 - Plastics account for only 16% of packaging by weight and protect over 50% of consumer goods (PACIA)
 - Extending the shelf-life of goods and other perishables, contributing to net savings of product, materials and resources
 - Green, bio-packaging for the growing, storage and transport of food and products from greenhouses to aquaculture
 - Crop protection products can sustain agriculture in drought conditions and support low tilling practices
 - Transport and treatment of water that is consistent quality and fit for purpose.
3. Materials shortages: plastics and chemicals can help in these ways:
 - Australia has reasonable levels of plastics and chemicals recycling and this is increasing, meaning products have more than one life
 - Durability and recyclability – some plastics and chemicals are inert, meaning they endure and can be recycled many times. A 2001 independent study by the RMIT Centre for Design reported an 80% saving for making a Kg of plastic packaging from recycled feedstock

compared with virgin sources. (Source: *Stage 2 report for Life Cycle Assessment for Paper and Packaging Waste Management Scenarios in Victoria, January 2001*)

- Degradability - others biodegrade, meaning they compost or dissolve
- In some cases the next available material to plastics can consume more energy and resources to manufacture

A recent, independent study commissioned by Plastics Europe, the pan-European Association, found that the total life-cycle energy needed to produce, use and recover plastic products in Western Europe is 3.900 Mill GJ/a and the total life-cycle GHG emissions are 172 Mt/a. Furthermore the results show that substitution of plastic products up to a maximum would need 600 - 1.400 Mill GJ/a more energy (or about 26% more energy) than needed in the total life-cycle of all plastic products today. In the same way, substitution of plastic products up to a maximum would cause 58 - 135 Mt or about 56% more GHG emissions than the total life-cycle of all plastic products today. (Source: *Plastics Europe: GUA – the Contribution of Plastic Products to Resource Efficiency*)

4. Technical advancement: plastics and chemicals can help in these ways:
 - Nanotechnology opens up possibilities in composite materials for medical treatments such as heart devices and self-healing polymers, in domestic goods, telecommunications, smart clothing and paints etc.
 - Sustainable cleaning and hygiene products contribute to reduced energy and water consumption, water reuse.
 - A local manufacture capability is the technology and knowledge cornerstone for managing the materials and products at end-of-life.