



Commonwealth  
Fisheries Association

29 April 2011

Committee Secretary  
Select Committee on the Scrutiny of New Taxes  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Dear Sir/Madam

The Commonwealth Fisheries Association (CFA) welcomes the establishment of the Senate Committee on New Taxes and the Inquiry into Carbon Tax Pricing Mechanisms and is pleased to provide comment in relation to aspects of the terms of reference.

The CFA believes that a successful emissions reduction strategy should be flexible to accommodate a range of mechanisms that most efficiently and effectively meet its objective. CFA understands that putting a price on carbon, including through taxation mechanisms, will lead to higher costs for energy, including fuel, which is a major input to fishing operations. The Commonwealth fishing industry has already achieved significant reductions in carbon emissions and is concerned with the potential of a pricing mechanism to reduce industry's ability to invest in further sustainability initiatives.

The CFA acknowledges the potential impact of pricing carbon on the entire seafood supply chain notwithstanding, the following submission focuses on wild catch commercial fishing activities.

We welcome the opportunity to discuss any aspect of this submission in further detail.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Trixi Madon', is written over a light blue horizontal line.

Trixi Madon  
CEO



Commonwealth  
Fisheries  
Association

## **SUBMISSION: Inquiry into Carbon Tax Pricing Mechanisms**

### **Summary**

The CFA represents businesses operating in Commonwealth managed fisheries around Australia.

The seafood industry is Australia's sixth most valuable food based primary industry. Australia's seafood production is not sufficient to meet growing domestic consumer demand. Australia is a net importer of seafood and as such Australian producers are *trade-exposed*.

Australian fisheries are some of the most sustainable in the world. The CFA strongly supports Australia's strong policy on sustainability but notes that measures implemented to achieve this level of sustainability impose costs on Australian producers that are often not faced by overseas competitors whose fish is imported to Australia.

The fishing industry is energy intensive and diesel fuel is a vital supply into the fishing industry, comprising between 10-40% of total operating costs (depending on the fishery)<sup>1</sup>. Australian fishers are already incentivised to save fuel (and reduce emissions) by a strong upward trend in fuel prices. Increasing fuel costs have placed significant financial pressure on Australian fishing businesses; a carbon tax on seafood will further pressure the industry.

There are currently no viable low emission fuel alternatives for fishing vessels. Fisheries management measures, including fleet rationalisation, are a proven means to reduce emissions intensity and this has already occurred in Commonwealth fisheries. The Commonwealth fishing industry has achieved significant reductions in CO<sub>2</sub> emissions over a number of years. These have occurred through some technological and operational changes but mostly, and importantly, through changes in fisheries management. We believe that a focus on a carbon pricing and emissions trading scheme may overshadow other appropriate mechanisms for specific industry sectors to reduce their emissions.

A carbon tax has the potential to disadvantage Australian fishers, by advantaging international fishing operators who in most cases operate in economies with lower sustainability standards and without a cost on carbon.

The Australian seafood industry is a *price taker*, as the entire Australian wild-catch production represents just 0.002% of the world's seafood production. As a *price-taker* the Australian fishing industry's national and international competitiveness is sensitive to increases in cost of production.

Seafood consumption provides recognised and significant health and well-being benefits.

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<sup>1</sup> ABARES *Fishery Status Reports 2009*.

## Recommendations

The CFA supports:

1. The adoption of measures that promote the competitiveness of Australia's fishing industry, particularly where the impacts of an Australian carbon tax and future emissions trading scheme affect industry profitability.
2. A carbon pricing scheme that recognises the importance of, and incorporates, non-pricing mechanisms to achieve maximum emissions reductions. This acknowledges that different 'suites' of actions will be most effective for differing industry sectors.
3. The current Government's commitment that directs emissions from the fishing sector will be exempt from any carbon price mechanism. This is welcome – however, there is a need for measures to offset any increases in costs arising from a proposed carbon tax. As a food producing sector, this commitment should be safeguarded for the fishing industry into the future.
4. That the development of a carbon tax be undertaken in consultation with the seafood industry to ensure the Australian industry's economic stability is not threatened by imposing additional costs or providing unfair advantage to seafood importers.

## Overview of the CFA and the Seafood Industry

The Commonwealth Fisheries Association is the peak industry body representing the interests of fishers operating in Commonwealth managed fisheries. Commonwealth fisheries contribute \$314m<sup>2</sup> of Australia's \$1.4 billion of wild-catch production.

The Commonwealth fishing industry operates out of 26 main ports, and many smaller landing/refueling ports, around Australia; many of these are in remote areas. The industry contributes to the economy, particularly in rural and regional Australia, with direct employment in fisheries production and processing, and substantial downstream employment in supporting industries including transportation, storage, wholesaling, retailing sectors, catering and tourism sectors.

Commonwealth fishers are committed to environmental sustainability. The sector is regulated by two ecologically sustainable development (ESD) frameworks – the *Fisheries Management Act 1998* and *Environment Protection and Biodiversity Conservation Act 1999* with a current focus on natural resources and eco-system management. Climate change effects are just one of a number of stressors that are taken into account in fisheries management decisions. We draw to your attention the *National Climate Change and Fisheries Action Plan 2009-2012* that addresses emissions reductions in the fishing industry and which acknowledges the role of government in Action 2.2<sup>3</sup>:

*Consider fuel efficiency and other relevant factors when reviewing or implementing legislation and/or regulations (e.g. those relating to fisheries input controls) to avoid imposing unnecessary inefficiencies on fishers.*

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<sup>2</sup> ABARE. 2010. *Australian fisheries statistics 2009*, p65.

<sup>3</sup> [http://www.daff.gov.au/data/assets/pdf\\_file/0004/1882273/national-climate-change-action-plan-fisheries-aquaculture-nov-2010.pdf](http://www.daff.gov.au/data/assets/pdf_file/0004/1882273/national-climate-change-action-plan-fisheries-aquaculture-nov-2010.pdf)

The seafood industry is Australia's sixth most valuable food-based primary industry. Australia is a net importer, both in value and volume terms, to meet Australia's growing demand for seafood. Australia's commercial seafood production only provides approximately 35 per cent of domestic demand<sup>4</sup>

The fishing industry also plays an important role in Australia as a contributor to food security for which the health and well-being benefits of seafood are well established and recognized internationally. The CFA calls for Government policy that facilitates the industry to remain economically viable to ensure future supply of quality seafood to the Australian community.

### **Will a carbon tax reduce the fishing industry's CO<sub>2</sub> emissions?**

*The underlying purpose of a carbon tax is to reduce emissions of carbon dioxide and thereby slow global warming<sup>5</sup>.*

It is possible for the fishing industry to reduce emissions and emission intensity through a range of measures including conversion to alternate lower emission fuels, technology driven energy efficiencies such as through gear design and fisheries management including fleet rationalisation. It is worthwhile to examine the potential of each:

1. The conversion of fishing vessels to alternative fuels or the replacement fishing vessels allowing the use of alternate fuel use is not an economically viable option at present.

A 2007 Australian report on alternative fuels for fishing vessels<sup>6</sup> researched the potential of alternative fuels to reduce costs, and also to reduce emissions, investigated low quality distillate (Marine Gas Oil/Marine Diesel Oil, MGO/MDO), natural gas (Liquefied Natural Gas/Compressed Natural Gas, LNG/CNG), liquefied petroleum gas (LPG), biodiesel, fish oil, ethanol and hydrogen. The report found that, "*The general conclusion is that there is no straightforward solution to high fuel costs in terms of alternative fuels*". Additional issues identified included marine safety risks (gases, ethanol, hydrogen), storage at sea (gases), unavailability (biodiesel), competing value as a food (fish oil), unavailability in Australia (MDO, MGO), increased sulphur emissions (MDO, MGO) and cost (biodiesel).

Two recent international symposia focussed on energy efficiency in the fishing industry, including for responding to climate change – in the US the *Energy Use in Fisheries: Improving Efficiency and Technological Innovations from a Global Perspective* (November 2010)<sup>7</sup>; and in Europe the *First International Symposium on Fishing Vessel Energy Efficiency* (May 2010).

These symposia noted that although reducing fuel use is possible through technological changes these generally come at very significant costs and associated challenges such as on-board storage of alternate fuels and lack of infrastructure for these fuels (particularly in remote areas) with viability being very dependent on the cost of fuel. Such technical solutions also did not necessarily provide the greatest emissions reductions.

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<sup>4</sup> Fisheries Research and Development Corporation. *Annual Report 2009-10*. 'Commercial seafood production' includes edible and non-edible products.

<sup>5</sup> Parliament of Australia Parliamentary Library  
[www.aph.gov.au/library/pubs/climatechange/responses/economic/carbontax.htm](http://www.aph.gov.au/library/pubs/climatechange/responses/economic/carbontax.htm)

<sup>6</sup> Goldsworthy, L. Dr. FRDC Project 2007/200 *Development Subprogram: alternative fuels for fishing vessels*

<sup>7</sup> Hosted by US National Oceanic and Atmospheric Administration.

## 2. Energy efficient technology does not provide significant savings alone

International experience, particularly in the New Zealand fishing industry (where the economy has had carbon costed for some time), has been that energy efficient fishing gear has not generally produced measureable savings. Fuel consumption as a result of the movement of fishing gear (such as nets, post, trawl and longline) is only a proportion of the total consumption. Each individual gear component forms a part of the fishing gear related consumption. For example, a 10% increase in the efficiency of a trawl (net) can be calculated as follows and in the example below brings about a reduction in fuel consumption in the order of half of one percent:

**Fuel saved by 10% gain in the energy efficiency of a trawl net:**

$$\begin{aligned} &= (\% \text{ used to drag fishing gear}) * (\text{time spent fishing}) * (\% \text{ of total fishing gear drag}) * (\% \text{ component efficiency}) \\ &= (50\%) * (50\%) * (20\%) * (10\%) \\ &= 0.5\% \end{aligned}$$

A recent EU project investigating energy savings in a number of fisheries found that adaptations were economically unviable in most cases, even at a range of fuel costs, and concluded that:

*The techno-economic analysis shows that for many fleets, which are highly fuel dependent, improvement of economic performance can be **only** achieved by a mix of technical **and** operational adaptations aimed at reduction of fuel intensity **and** adaptations aimed at increasing earnings from catches.<sup>8</sup>*

[Author's emphasis]

## 3. Good fisheries management has already returned significant emission reductions

The UN Food and Agriculture Organisation notes that internationally:

*Greenhouse gas contributions of fisheries and related supply chain features are small when compared with other sectors but, nevertheless, can be reduced with identifiable measures already available. In many instances, climate change mitigation could be complementary to and reinforce existing efforts to improve fisheries sustainability (e.g. reducing fishing effort and fleet capacity in order to reduce energy consumption and carbon emissions).<sup>9</sup>*

And in relation to fishing's carbon footprint:

*Good fisheries management can substantially improve fuel efficiency for the sector...<sup>10</sup>*

A key message coming out of the above international events is that an effective (and possibly the most effective) way to reduce fuel use, and therefore greenhouse emissions, is through improved fisheries management including through reduction in fishing fleets/effort; this was considered more promising than technological improvements by some.

In late 2005 the Australian Government announced the *Securing Our Fishing Future* structural adjustment package. A key component of the package was a fishing concession buyback to allow fishing businesses to voluntarily exit the industry. By facilitating business exit and reducing fishing capacity (vessel numbers) this has improved the fishing industry's profitability. A significant driver of this improved profitability has been reduced fuel use (and cost).

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<sup>8</sup> First International Symposium on Fishing Vessel Energy Efficiency E-Fishing, Vigo, Spain, May 2010.

B. van Marlen & P. Salz. *Energy Saving in Fisheries – EU project ESIF*

<sup>9</sup> 2010. *The State of World Fisheries and Aquaculture*. FAO. P117.

<http://www.fao.org/docrep/013/i1820e/i1820e00.htm>

<sup>10</sup> 2009 *State of World Fisheries and Aquaculture* FAO. <http://www.fao.org/news/story/en/item/10270/icode/>

The number of vessels operating in four key Commonwealth fisheries decreased by approximately 50 per cent between 2002-2003 and 2008-2009 with the greatest rationalisation (32 per cent) as a result of the structural adjustment package<sup>11</sup>. These fisheries achieved energy efficiencies equivalent to emissions reduction in the order of 35 per cent over a four year period alone (Table 1).

**Table 1 Fuel cost, deduced usage and CO2 emissions pre-rationalisation 2005-06 and post-rationalisation 2008-09.**

Fishery	2008-09			2005-06		
	Fuel cost <sup>12</sup> (\$Am)	Litres diesel <sup>13</sup> (@ \$0.85/L <sup>14</sup> )	CO <sub>2</sub> e tonnes (@2.672)	Fuel cost (\$Am)	Litres diesel (@ \$0.83/L <sup>15</sup> )	CO <sub>2</sub> e tonnes (@2.672)
Northern Prawn	20.8	24,470,588	65,385	34.1	41,084,337	109,777
Eastern Tuna & Billfish	7.6	8,941,176	23,891	9.6	11,566,265	30,905
Commonwealth Trawl	8.2	9,647,059	25,777	12.2	14,659,937	39,171
Gillnet, Hook & Trap	2.2	2,588,235	6,916	2.3	2,771,084	7,404
<b>TOTALS</b>	<b>38.8</b>	<b>45,647,059</b>	<b>121,969</b>	<b>58.2</b>	<b>70,081,624</b>	<b>187,258</b>

The structural adjustment package also introduced changes to the way fisheries are managed. Moves towards greater efficiencies for example, through defined individual property rights and individual transferable quotas (ITQ) will further facilitate increased operational efficiencies including fuel efficiency.

These measures in themselves are likely to have provided the greatest bearing on reducing fuel usage across the Commonwealth fishing fleet and therefore reducing greenhouse gas emissions. Further technical solutions (even where economically viable) are likely at best to deliver only modest/minimal further overall reductions in emissions.

### **The consequences of a carbon tax and higher fuel prices**

The fishing industry are *price-takers* and not *price-makers* in economic terms given the domestic market is dominated by imported seafood. It is this competition from imports, mostly from countries where carbon is not costed into the economy, and from competing proteins that set seafood prices. Given that it is likely that increased operational costs from the imposition of a carbon tax will not be able to (or only to a limited extent) be passed to consumers such a tax would reduce the Australian industry's profitability and therefore ability to make further reductions in emissions.

While high fuel prices have largely been the driver for efforts to improve fuel efficiency on an enterprise level they also prevent fishers from making adaptations and encouraging innovation by cutting the economic margins to the point where investment is difficult.

The real value of Commonwealth fisheries' production declined 47% over the period 2001-02 and 2008-09<sup>16</sup>. With increasing costs and a deteriorating competitive position, the financial viability of many in the industry is affected.

<sup>11</sup> Viera. S. et al Impact of the structural adjustment package on the profitability of Commonwealth fisheries 2010

<sup>12</sup> *Ibid*, p17.

<sup>13</sup> Deduced

<sup>14</sup> ABARES 2010, *Australian commodity statistics 2010*, p107.

<sup>15</sup> *Ibid*..

This decline is also very marked when compared with ALL other marine industries. The 2010 Australian Institute of Marine Science *Index of Marine Industry* shows the marine/maritime sector making a major contribution to Australia's strong economic performance<sup>17</sup>. All industry sectors, including marine-based aquaculture, increased value of production between 2001-02 and 2008-09. Only commercial wild-catch fisheries value of production decreased during this timeframe.

One of the biggest challenges facing the commercial fishing industry in Australia is maintaining profitability in a trading environment typified by increasing international competition from foreign fisheries that operate with lower costs, in subsidised markets, without a cost of carbon and with lower sustainability costs. The increasing cost pressures in Australia, particularly due to high fuel prices, are threatening the economic viability of many fishing operations.

If a carbon tax of \$30/tonne were introduced, for example, it is estimated it would potentially result in the reduction by 17% of (2008-09) profits for the four Commonwealth managed fisheries presented above (Table 2).

**Table 2 A case study review of the affect of a potential \$30/tonne carbon tax 2008-09 profitability of four Commonwealth managed fisheries**

<b>Fishery</b>	<b>NER<sup>18</sup> (profit) (\$Am)</b>	<b>Tax at \$30/tonne<sup>19</sup> (\$Am)</b>	<b>NER (profit) reduced (%)</b>
Northern Prawn Fishery	11.0	1.96	18
Eastern Tuna and Billfish Fishery	-1.1	0.72	-65
Commonwealth Trawl Fishery	7.1	0.77	11
Gillnet, hook and trap fishery	5.0	0.21	4
<b>TOTAL</b>	<b>22.0</b>	<b>3.66</b>	<b>17</b>

The impact of increased fuel costs as a result of government policy to reduce carbon emissions and need to ensure that industries in rural and regional areas are not disadvantaged was recognised by the previous government who made a commitment to rebate the effect of the then proposed carbon pollution permits on businesses in fishing industries for three years. This was considered necessary as the excise system effectively does not apply to the sector in relation to that proposed carbon pollution reduction scheme.

We note that the current government has also stated that direct emissions from the fishing industry will be exempt from liability under the proposed carbon price mechanism. However, CFA does have concerns regarding the indirect impact of the introduction of a carbon price.

End.

<sup>16</sup> ABARES.2010. *Fishery status reports 2009: status of fish stocks and fisheries managed by the Australian Government*.

<sup>17</sup> <http://www.aims.gov.au/source/publications/pdf/AIMS%20Index%20of%20Marine%20Industry-Dec%202010.pdf>

<sup>18</sup> Viera. S. et al *Impact of the structural adjustment package on the profitability of Commonwealth fisheries* 2010 Tables 9, 12, 14, 16.

<sup>19</sup> Estimated, assumed.