

## **Appendix D: Possible strongly affected industries**

### **D.1 Gas-fired and diesel-fired electricity generators**

The Northern Territory Government argued in its Green Paper submission that the Territory's gas- and diesel-fired electricity generators have an overall emissions intensity similar to that of coal-fired electricity generators, and so face a 'significant exposure' to a carbon price (Submission 782, p. 12).

The Australian Government considers that, regardless of its emissions intensity, the structure of electricity supply in the Northern Territory is such that generators in that market are not exposed to significant competition from alternative generation sources. The vertically integrated, government-owned supplier of electricity in the territory is unlikely to be economically constrained in its ability to pass on the costs of the scheme to consumers, and so will not be exposed to significant losses of asset value.

In a similar vein, KPMG argued that some off-grid gas-fired generators may be strongly affected by the scheme because of contractual impediments to carbon cost pass-through, or because of the discontinuation of the NSW Greenhouse Gas Abatement Scheme (GGAS) (Submission 545, p. 10).

As noted in Section 13.1.1, the Government does not consider that strongly affected industry assistance is an appropriate way to address contractual impediments to carbon cost pass-through. This issue is considered in more detail in Chapter 15, which also outlines an assistance package to address the particular circumstances of some GGAS participants, including landfill gas generators and waste coal mine methane generators.

In the light of Policy positions 13.1 and 15.2, the Government will not provide strongly affected industry assistance to gas- or diesel-fired electricity generators.

### **D.2 Pumped storage hydro-electric generators**

Tarong Energy Corporation argued that Wivenhoe Power Station, and similar 'pumped storage' hydro-electric generators, should receive assistance as a strongly affected industry.

Pumped storage hydro-electric generators use low-cost 'off-peak' energy to pump water uphill for storage, enabling the generation of electricity during higher-priced 'peak' periods.

Tarong Energy's argument for assistance relies on the assumption that there will be a material difference between the rate of carbon cost pass-through to electricity prices in peak and off-peak times due to the higher emissions intensity of coal-fired electricity generators, which provide the bulk of off-peak generation.

The impact of the scheme on pumped hydro-electric generators is unlikely to be material. Pumped storage hydro-electric generators do not create energy, but simply provide a

mechanism for storing energy generated in off-peak times when it is less valuable so that it can be provided in peak times when it is more highly valued. Accordingly, they exist largely to supply peaking portions of the market, and their revenue is highly dependent on the competitive dynamics in that portion of the market and the general extent of price volatility in the market.

The Government considers that the profitability of such generators is driven primarily by the significant revenue available from supplying electricity during peak periods, rather than by changes in the cost of generating that electricity (that is, the cost of pumping water). The significant premium paid by energy consumers to manage the risk of price volatility in the market reflects the value of electricity at peak times. It is unlikely that pumped storage hydro-electric generators will not be able to pass on the majority of their additional costs under the scheme through the premiums they are able to charge.

There is no strong case that the scheme will materially affect the ability of pumped storage hydro-electric generators to pass through to consumers the carbon costs incurred in pumping water.

### **D.3 ‘Captured’ coal mines**

Several submissions from the coal-mining industry argued that ‘captured’ coal mines should receive assistance as a strongly affected industry. Those stakeholders included the Australian Coal Association, the Minerals Council of Australia, the New South Wales Minerals Council, Centennial Coal, Xstrata Coal and Wesfarmers Limited.

The Government acknowledges that the relative emissions intensity of coal-fired electricity generators has the potential to cause impacts in the generation sector that translate through to the mines that supply coal to those generators. However, the particular circumstances of those coal mines might not justify assistance measures.

Even though coal-fired electricity generators’ profitability might reduce under the scheme, that loss will not affect coal mines supplying them unless the generators materially reduce the volume of coal they use. The Government’s modelling of the electricity generation sector indicates that the majority of coal-fired electricity generators are able to maintain their market share during the first decade of the scheme.

Those generators that might lose volume or close during the first decade of the scheme are generally those of relatively lower efficiency and therefore higher emissions intensity, and may be vulnerable to losing market share in the absence of the scheme. Offering assistance to a coal mine that supplies such a generator would require the Government to assess the likelihood that the generator would not have lost market share in the absence of the scheme.

Furthermore, providing assistance on this basis requires the assumption that, in the event of the closure of a given generator, the coal mine would be physically unable to supply another generator in the domestic or export markets. This requires an assessment of the physical circumstances of a mine, such as access to railway or port facilities, as well as the likelihood that a new facility would be constructed to use the coal at that source, such as a generator using carbon capture and storage or coal gasification technologies.

Because of these material uncertainties, the Government will not provide strongly affected industry assistance to ‘captured’ coal mines.

However, the Government recognises the significant exposure of particularly emissions-intensive underground coal mines under the scheme, and has proposed a transitional assistance package to this class of coal mines through the Climate Change Action Fund (see Section 18.2.1).

## **D.4 Gas transmission pipelines**

The Australian Pipeline Industry Association and Dampier–Bunbury Natural Gas Pipeline argued that some gas transmission pipelines should receive assistance as a strongly affected industry because they will be unable to pass the cost of the scheme on to users of pipeline services under existing contractual arrangements.

As noted in Section 13.1.1, the Government does not consider that strongly affected industry assistance is an appropriate method for addressing contractual impediments to cost pass-through but, as outlined in Chapter 15, it recognises the importance of this transitional issue.

The gas transmission pipeline industry has not provided evidence that, in the absence of contractual impediments to carbon cost pass-through, the scheme would prevent pipeline operators from passing on a material portion of their carbon costs and so cause a significant loss of asset value. Therefore, the Government will not provide strongly affected industry assistance to gas transmission pipelines.

## **D.5 Landfill waste and wastewater facilities**

The Transpacific Industries Group and the Australian Local Government Association argued that the landfill waste industry should be regarded as a strongly affected industry because of the potential for competitive distortions to occur between landfills with different emissions profiles. The Sunshine Coast Regional Council and Brisbane City Council argued that waste facilities should be treated as a strongly affected industry, but only when those facilities are operated by a local government.

The particular issues associated with covering the landfill waste sector are dealt with in more detail in Chapter 6. The proposal for delayed coverage of ‘legacy emissions’ from the landfill waste sector significantly addresses the issue of competitive distortions between landfill facilities.

The Victorian Water Industry Association argued that the wastewater industry is likely to be strongly affected, on the basis that the industry is ‘concerned about the social implications of passing on costs to our customers as a consequence of regulation—being an essential service provider’ (Submission 858, p. 2).

The submission does not indicate that costs are not able to be passed on within the wastewater industry. Given this, the Government considers that direct assistance to households, rather than strongly affected industry assistance to wastewater facilities, is the best mechanism to

ensure that individuals will be able to cope with any increase in the cost of water supply services due to the carbon costs associated with wastewater facilities.

## **D.6 Landfill gas electricity generators**

The landfill gas industry is a separate industry from the landfill waste industry, involving the capture of landfill gas from waste facilities by an independent entity that is not the operator of the waste facility.

LMS Generation argued that the landfill gas industry should receive assistance as a strongly affected industry because of the removal of the revenue stream received by some operators in this industry due to the expected cessation of the NSW GGAS. Furthermore, LMS Generation argued that some industry operators face contractual impediments to recovering the lost revenue through accessing higher electricity prices that might arise under the scheme, or higher Renewable Energy Certificate prices that might arise under the expanded national Renewable Energy Target.

Chapter 15 outlines an assistance package for particular GGAS participants, including some landfill gas generators. The Government recognises that some landfill gas generators may be unable to capture comparable benefits under the scheme as would be available to them if GGAS continued.

Furthermore, the Government does not consider that contractual impediments to accessing higher electricity prices that might be prevalent under the scheme justify assistance as a strongly affected industry. Finally, the Government notes that landfill gas is treated as a biofuel under the scheme, and so generators incur no liability for emissions from combusting landfill gas.

On this basis, the landfill gas industry cannot be considered to demonstrate the strongly affected industry characteristic of emissions intensity. Therefore, the Government will not provide strongly affected industry assistance to landfill gas electricity generators.

## **D.7 Aviation and tourism**

Skywest Airlines, the Regional Aviation Association, Virgin Blue and Qantas argued that domestic aviation should be regarded as a strongly affected industry. The National Tourism Council, the Queensland Tourism Industry Council and the Australian Services Union also supported assistance for the domestic aviation industry to offset the impact of the scheme on the aviation and tourism industries.

Aviation industry submissions did not consistently argue that the industry would be unable to pass costs through to consumers:

Skywest will have no choice but to pass the cost increases [of the scheme] directly on to the travelling public, resource companies and the airfreight industry. (Skywest Airlines, Submission 216, p. 2)

The impact of the recent fuel price spike on airlines throughout the world has demonstrated the limited ability of airlines to pass on increased costs to consumers. (Virgin Blue, Submission 461, p. 3)

The Government considers that the emissions intensities of competitors in the aviation industry are sufficiently similar that firms in the industry will be able to pass on a large portion of the costs of the scheme to consumers.

Furthermore, the extent of increases in the price of air travel is unlikely to be sufficient to materially reduce demand for these services. Virgin Blue estimates the emissions intensity of aviation to be around 800 tonnes of CO<sub>2</sub>-e per million dollars of revenue (Submission 461, p. 2). At a carbon price of \$25 per tonne of CO<sub>2</sub>-e, this represents approximately a 2 per cent increase in the cost of air travel, which is broadly similar to the general level of inflation in the consumer price index in any given year.

Qantas and Virgin Blue both argued that domestic aviation was a trade-exposed industry because of the potential for substitution by travel overseas (through either lost inbound tourism or increased international travel by Australians).

It is relevant to note that international aviation will not be covered by the scheme. The arguments of Qantas and Virgin Blue suggest that the scheme creates potential distortions to arise through substitution between domestic aviation, which is covered by the scheme, and international aviation, which is not.

However, many factors impact on demand for tourism in Australia, particularly the exchange rate. Given that the cost of air travel is only a small component of the cost of a holiday it is very unlikely that cost increases on Australian aviation will result in a significant reduction in tourism levels or demand for domestic air travel for recreational purposes.

With respect to the demand for air travel for business purposes, the nature of the service provided by the aviation industry, such as a flight from Sydney to Melbourne, is such that it cannot be easily substituted with an equivalent service that is not covered by the scheme. Whilst travellers could combine two international flights to reach their destination, such as flying from Sydney to Melbourne via Auckland, it is highly unlikely that it would cost-effective to do so, especially considering the extra time involved.

This suggests that consumers of air travel for business purposes are even less likely than recreational travellers to materially reduce their demand for these services in response to the likely increase in the cost of flights.

The Government considers that the aviation industry will have some capacity to pass-through the carbon cost it faces, implying that it would not be eligible for EITE or strongly affected industry assistance.

## **D.8 Community services**

Aged and Community Services Australia and the Australia Institute argued that providers of community services will face a significant cost impost from the scheme and will be unable to pass on those costs to users of their services.

Preliminary analysis conducted for the Government by the Centre for Integrated Sustainability Analysis at the University of Sydney indicates that the emissions intensity of the community services sector is around 99 tonnes of CO<sub>2</sub>-e per million dollars of revenue (see Appendix D of the Green Paper). This is well below the threshold of emissions intensity established for the provision of assistance to firms that undertake EITE activities (1,000 tonnes of CO<sub>2</sub>-e per million dollars of revenue, or 3,000 tonnes of CO<sub>2</sub>-e per million dollars of value added).

Given the low emissions intensity of the community services sector, the Government considers that direct assistance to households, in particular low-income households, is the best mechanism to ensure that individuals will be able to contribute to any higher costs for community services associated with the introduction of the scheme. Chapter 17 outlines the Government's commitments to providing assistance to households.

Furthermore, the Government will provide funds for capital improvements in the community services sector to allow energy efficiency improvements through the Climate Change Action Fund, reducing the impact of the scheme on this sector.

## **D.9 Government administration**

The South East Queensland Council of Mayors, the Western Sydney Regional Organisation of Councils, the Local Government Association of Tasmania, the Shoalhaven City Council and the Australia Institute argued that local government should be treated as a strongly affected industry, or otherwise provided with 'compensation' to adapt to the scheme. The concerns of these stakeholders related primarily to the cost impost on local governments resulting from the coverage of the waste sector, as well as from electricity and petrol use.

The Australia Institute also argued that state and territory governments, as well as individual Australian Government agencies, would face a cost impost and would need increased funding to maintain services.

Government administration is not emissions-intensive. Preliminary analysis conducted for the Government by the Centre for Integrated Sustainability Analysis indicates that the emissions intensity of the government administration sector is around 70 tonnes of CO<sub>2</sub>-e per million dollars of revenue—well below the 1,000-tonne threshold for the provision of assistance to businesses that undertake EITE activities.

Furthermore, the Government's policy positions on the coverage of the waste sector, and its commitment to initially offset the impact of the scheme on road transport, largely address some key concerns of these stakeholders.

Local governments are also able to access assistance through the Government's Climate Change Action Fund to support capital investment in innovative low emissions technologies,

supply chain improvements or products and energy saving projects with long pay-back periods.

## **D.10 Public transport**

The Sunshine Coast Regional Council argued that ‘sustainably focused’ local government activities, such as public transport, should be considered for assistance similar to that proposed for strongly affected industries.

In the first year of the scheme, the Government will offset the cost of the scheme for heavy vehicles through providing a ‘CPRS fuel credit’. Over the longer term, the relative position of public transport will improve as the effects of the scheme flow through the transport sector.

Given this, and the high degree of public subsidy prevalent in this industry, the Government does not consider that public transport operators will be strongly affected by the scheme.