

Clean Energy Future and Carbon Pricing

Information Paper No.2

Prepared 27 February 2012

MWMG strategic and operational activities

This paper has been prepared to inform MWMG stakeholders of the Group's activities in response to the Federal Government's Clean Energy Future Plan and the introduction of carbon pricing for metropolitan Melbourne's waste management arrangements.

Clean Energy Future Plan and carbon pricing mechanism

Recent federal legislation introduces a mechanism for pricing greenhouse gas emissions. The price is fixed for an initial three years from July 2012 to July 2015, starting at \$23 per tonne of carbon dioxide equivalent (t CO₂-e) and rising in the following two years by 2.5% plus the rise in the consumer price index (CPI). From July 2015, a cap-and-trade system will operate with a flexible price determined by the market. In the first years of the flexible price period a floor price of \$15/t CO₂-e plus CPI plus 4% per year will be applied.

Liability for the carbon price falls on sites which annually emit 25,000 t CO₂-e or more. The methods to determine liabilities are those of the National Greenhouse and Energy Reporting (NGER) Act. The liable entity is generally the organisation with operational control of the facility. This could be a local government.

Carbon pricing acts largely to support the existing directions of councils' waste strategies, diversion from landfill and waste minimisation.

Emissions from landfills

The carbon price applies to emissions from waste deposited at a liable landfill from 1 July 2012. The important gas is methane, which is allocated a CO₂-e value of 21. Emissions from waste deposited before that date are exempt from carbon pricing but count in determining the liability threshold. It is likely that all putrescible landfills servicing metropolitan Melbourne will be liable.

Landfill operators are required to estimate their emissions using a complex formula that assumes different carbon contents and decay rates for different waste materials. They can use their own waste composition data or default NGER values. If no gas is collected, the default emission rate for municipal waste works out at about 1.2 tonnes CO₂-e per tonne of waste. Measured landfill gas recovery is deducted from emission estimate, up to a deduction limit of 75% (Method 1 NGRS).

Landfill operators face a difficult task in setting prices to cover their liability – waste deposited today will emit for several decades, and future carbon prices are uncertain. However, operators can reduce their exposure to the uncertainty of future prices. During the fixed price period they can buy Kyoto-compliant credits created under the carbon farming initiative (CFI). After that date they can buy and bank permits at the time of deposition.

A range of individual site specific circumstances needs to be taken into account before an estimate of the carbon cost liability can be determined. The actual carbon price liability will vary with a range of unknowns including waste composition, site gas capture rates and potential, when emissions fall to below 25kt CO₂-e per year, site CFI eligibility (an influence for the next 5 -10 years), permit prices (an influence after three years) and liable organisations' commercial strategies and risk appetite. The Association of Australian Landfill Operators (ALOA) has indicated a potential carbon price of \$30 per tonne of CO₂-e for municipal waste deposited in landfills in 2012/13.

MWMG activities

In preparation for the implementation of the Federal Government's Clean Energy Future plan and the introduction of the carbon pricing mechanism, MWMG has been undertaking a range of strategic and operational activities in consultation with its portfolio agency partners, metropolitan Melbourne Councils, the Municipal Association of Victoria and the waste, and energy from waste (EFW), industry.

MWMG is committed to assisting metropolitan councils understand the implications of the Future Energy Plan (particularly carbon pricing and carbon farming initiative) on their operations with respect to waste management. In this regard MWMG is developing a knowledge bank and building expertise to assist directly those councils participating in MWMG contracts and indirectly those councils and regional waste groups with no waste management service contracts with MWMG.

Information Paper: MWMG has developed an information paper for councils summarising the ways that carbon pricing is likely to affect waste management and what councils can do.

Landfill Contracts: Under the current Metropolitan Waste Management Group Landfill Services Deeds, landfill operators can claim a variation due to carbon pricing. To ensure that claims are based on reasonable decisions and assumptions, MWMG is currently meeting with operators to discuss their understanding and potential approach to carbon pricing and is requesting operators to provide detailed information to justify any claim for increased payment. Twenty one of the thirty metropolitan Melbourne councils are party to contractual landfill arrangements established by MWMG. These contracts are for an initial four year period, expiring in 2015, with three two year extension options available. Contracted landfills are operated by SITA, Boral, Hanson, Wyndham, TPI and Thiess.



References and further information:

Australian Competition and Consumer Commission (2011) Carbon Price Claims: acc.gov.au/content/index.phtml/tag/carbon/

DCCEE (Department of Climate Change and Energy Efficiency 2011) Technical Guidelines for the estimation of greenhouse gas emissions by facilities in Australia, climatechange.gov.au/en/government/initiatives/national-greenhouse-energy-reporting/publications/technical-guidelines.aspx

DCCEE (2011b) Emissions from landfill facilities, www.cleanenergyfuture.gov.au/emissions-from-landfill-facilities-2/

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Carbon Cost Calculator for Landfills: MWMG has developed a carbon cost calculator for landfills to support councils and prepare for landfill contract variations which may arise. At the invitation of the EPA, the calculator and details about MWMG's landfill contract variation preparation were presented to the National Waste Policy Implementation Working Group – Landfill Management Cluster at its November 2011 meeting. MWMG will continue to provide support to this working group regarding energy and carbon policy issues affecting Victorian landfills and the waste and resource recovery industry.

Council (Landfill) User Groups: MWMG has commenced regular meetings with metropolitan council, RWMG and regional council User Groups to discuss carbon policy issues and implications and provide updates on developments and, for contracted councils prepare contract negotiation strategies in preparation for claims for contract price adjustments.

North West Organics Implementation: As part of the N.W Organics contract implementation, MWMG has reviewed the options available for the future management of garden and food organic waste and provided comparative TBL performance information, including greenhouse gas emissions, to the eleven N.W cluster councils.

South East Organics Tender: With advances in waste management technologies, financial incentives and the relative costs between landfill and other waste management options narrowing, it is likely that future procurement for organics processing services will see processing options other than composting presented for consideration. Advanced treatment technologies focussing on grid energy and other energy and/or carbon products may well need to be considered as part of the total solution for current organics recovery and processing issues.

Councils participating in MWMG facilitated procurement processes should have the expectation of such an outcome given the combined volumes increase the viability of advanced resource recovery technology (ARRT) outcomes. There will be an increased likelihood of tender submissions for the S.E Organics procurement including technologies associated with producing energy and carbon based outputs as an alternative to traditional compost products.

In consultation with the eight S.E councils, MWMG has reviewed the S.E Organics tender document and evaluation plan to encourage outcome-based service solutions and encourage wide interest and competition from all proven forms of technology capable of dealing with municipal organics.

To ensure participating councils are aware that tender submissions may involve processing technologies not dealt with in the 'Melbourne environment' before and new technologies may be presented, MWMG has prepared an information paper for council CEOs and senior officers. MWMG has also briefed the waste industry, State Government agencies (DPI) and the emerging EFW industry on its forward procurement plan to ensure an awareness of opportunities and to engender the highest level of tender participation and competition.

Eastern Organics: A briefing paper has been prepared for the five Eastern councils to consider future organics processing options following the termination of the ANL/Coldstream organics processing contract and within the emerging energy and carbon policy context.

Information Support: MWMG reviewed external advice provided to local government on the impact of the carbon price to local government and the waste sector to ensure the information communicated to councils is correct and up to date. MWMG also continues to support the Local Governments' Waste Management Forum, individual councils and council clusters by providing presentations and advice in relation to the introduction of carbon pricing. MWMG is also supporting MAV in its development of an economic study into the carbon price impacts for Victorian councils.

Government Relations: MWMG is actively discussing local government and municipal waste issues associated with carbon and energy policies with the Federal and State Governments. MWMG is also working with the Federal Government to clarify carbon price pass through arrangements for councils which contract for landfill services, the extent to which compost and alternate waste treatment facilities may be liable under the carbon pricing mechanism and ensure awareness and stakeholder communication of any changes made to federal regulations affecting waste management (NGERS Determination and approved CFI offset regimes).

Victorian Waste Policy Review: MWMG is supporting the review of Victorian waste policy and is providing advice into the strategic and operational issues affecting MSW and Victorian landfill and infrastructure planning with respect to energy and carbon policy and programs.

MWRRSP Review : The review of the Metropolitan Waste and Resource Recovery Strategic Plan (MWRRSP) and its infrastructure and landfill schedules will need to consider the potential impacts associated with the Federal Government's Future Energy Plan. MWMG is working closely with DSE, EPA, Sustainability Victoria and RWMGs to ensure a comprehensive and consistent state-wide approach is adopted for this work, in addition to the development of a Victorian Organics Strategy. MWMG's ongoing analysis of Melbourne's MSW waste stream data and councils' future waste management options will provide an evidence-based foundation to these initiatives.