

# **CARBON COMPLIANCE STRATEGY**

## **A Carbon Compliance System for Council**

### **2013-2015**

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**Acknowledgements**

The Carbon Compliance Strategy was developed by the Planning and Environment Group in consultation with Corporate Services (Finance team) and Engineers (Waste Management team).

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## CARBON COMPLIANCE STRATEGY

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### PUBLICATION DATA

A range of reference material has been used to develop this Carbon Compliance Strategy, including:

- Clean Energy Future Legislative Package, including the Clean Energy Act 2011;
- National Greenhouse and Energy Reporting Scheme, including the National Greenhouse and Energy Reporting Act 2007;
- Australian National Registry of Emissions Units Act 2011;
- Carbon Credits (Carbon Farming Initiative) Act 2011;
- Clean Energy (Auction of Carbon Units) Determination 2013; and
- Division of Local Government NSW Code of Accounting Practice.

A full list of reference material is contained in Appendix 1.

#### *Related Council Strategies, Policies, Plans and Procedures*

Existing Council strategies, policies, plans and/or procedures that relate to this strategy include: <sup>1</sup>

- Carbon Liability Financial Management Policy (Albury City Council, 2012);
- Investment Policy; and
- Procurement and Tendering Policy.

All information above has been reviewed with a view to assist Council in framing this strategy.

### EXECUTIVE SUMMARY

This Carbon Compliance Strategy sets out the functions of a compliance framework ('carbon compliance system') to ensure that Albury City Council meets its regulatory obligations under the Commonwealth's Clean Energy Act 2011. This carbon compliance system is necessary as Council has operational control of a 'designated large landfill facility' that is a 'liable entity' under this Act with respect to the operation of the Albury Waste Management Facility.

The Clean Energy Act 2011 is the legal instrument of the Commonwealth Government's Clean Energy Future policy that was released in 2011. This policy includes a raft of measures to curb greenhouse gas emissions, including a Carbon Pricing Mechanism (i.e. an emissions trading scheme) that commenced on 1 July 2012. Under this mechanism an entity that has operational control of a facility whose emissions exceed the threshold amount for covered emissions become liable for all its emissions covered by the Clean Energy Act 2011 (*vis-a-vis* 'liable entity').<sup>2</sup>

The functions of the carbon compliance system described in this strategy relate directly to the monitoring, registration, reporting, emissions liability management and record-keeping requirements of liable entities. Roles and responsibilities in relation to each function are allocated to specific Council business areas. This ensures (to the extent possible) compliance with the legal, procedural and financial requirements as non-compliance can result in significant financial penalties placed on Council.

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<sup>1</sup> Available at [https://eservice.alburycity.nsw.gov.au/portal/Temp/TrimDocumentViewer\\_399581\\_eMOWVHEXvB.pdf](https://eservice.alburycity.nsw.gov.au/portal/Temp/TrimDocumentViewer_399581_eMOWVHEXvB.pdf)

<sup>2</sup> An entity will be liable under the Clean Energy Act 2011 if it is a direct emitter of greenhouse gas emissions over 25 kt CO<sub>2</sub>-e.

The carbon compliance system also ensures a coordinated and systematic approach to managing the regulatory obligations and requirements thereunder. The carbon compliance system and its functions and business processes are defined herein, and are intended to be applied across the relevant Council operational areas that manage monitoring of waste data, landfill operational activities, environment and sustainability reporting, record-keeping and financial management. Further, this system is to operate under a defined governance structure and where applicable is to be supported and/or supplemented by existing Council strategies, policies and plans and their relevant processes and procedures, for example; with respect to financial management.

The objectives of this Carbon Compliance Strategy are to:

- ensure Council's compliance with legal, procedural and financial requirements of liable entities;
- define a carbon compliance system including its business model and procedures covering the necessary financial, business, human resources and information technology functions of the system; and
- establish a governance structure to support and maintain the Carbon Compliance System in its processes, procedures, decision points and reporting.

This strategy does not attempt to set out a whole-of-organisation carbon management framework, but instead has a sole focus on managing Council's emissions liability under the Clean Energy Act 2011.

This carbon compliance strategy applies directly to Council and will be reviewed every two years.

## **BACKGROUND**

### **Clean Energy Future Policy**

The Commonwealth government's "Securing a Clean Energy Future" policy outlined its vision for Australia to transition to a low carbon economy. This vision is predicated on a price on carbon; renewable energy; energy efficiency; and action on the land. These four pillars are considered as pivotal in a domestic scheme to curb the rise in greenhouse gas emissions, and as necessary in Australia's domestic effort toward achieving its short- and long-term greenhouse gas emission reduction targets of 5 per cent and 80 per cent, respectively, on 2000 emission levels.

Key to the domestic emissions trading (i.e. 'cap-and-trade') scheme is a price on carbon. The carbon price is fixed for 2012/13, 2013/14 and 2014/15 ('fixed price period') at \$23, \$24.15 and \$25.40 per tonne of CO<sub>2</sub>-e, respectively, and from 2015/16 onward the market will determine the price, that is; '*floating price period*'. Liable entities are required to surrender a number of permits<sup>3</sup> equal to their actual liable CO<sub>2</sub>-e emission each year, that is; '*emissions liability*'.

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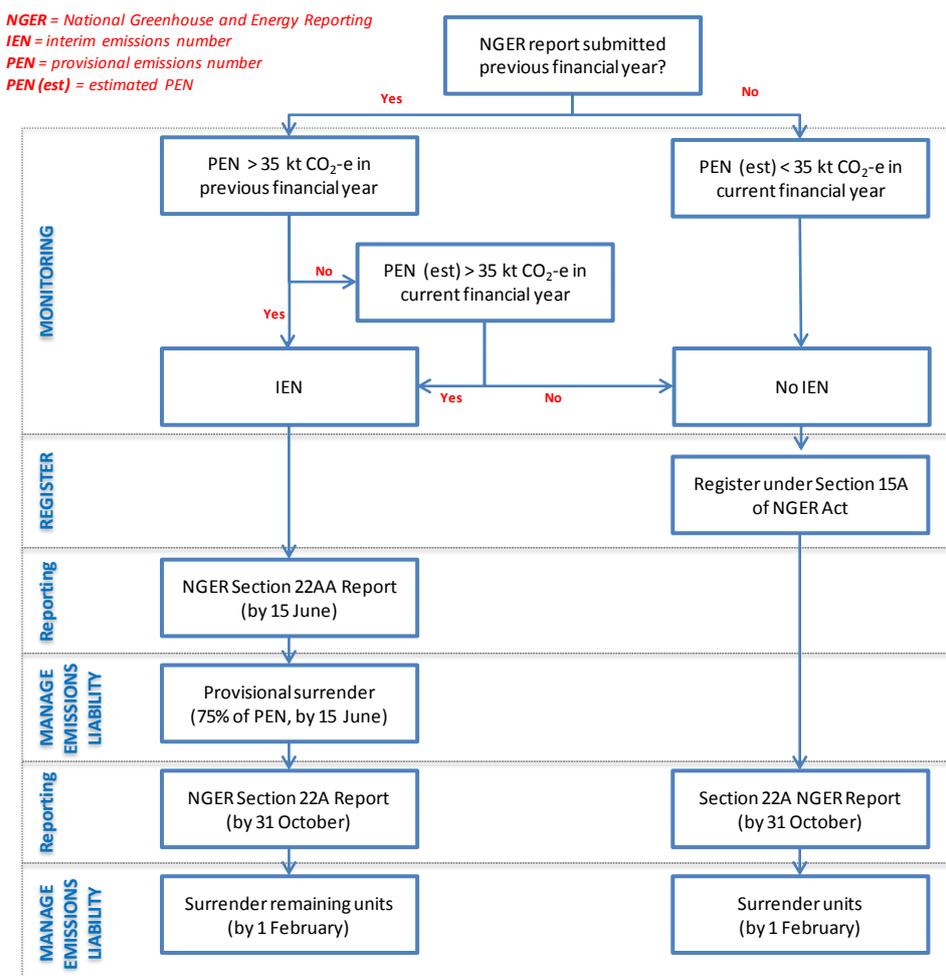
<sup>3</sup> Each emission permit is equal to one tonne of carbon dioxide equivalent.

**Obligations**

The Clean Energy Act 2011 outlines specific obligations on legal, procedural and financial requirements of liable entities. These requirements relate to monitoring, registration, reporting, emissions liability management and record-keeping. The decision-tree associated with each can be viewed in Figure 1 overleaf and under-pins the business model for the carbon compliance system.

Failure to comply with these obligations can result in pecuniary and/or financial penalties. Pecuniary penalties include fines and/or jail sentences depending on the nature of the offence under the Clean Energy Act. Financial penalties also extend to liable entities not surrendering enough eligible emissions units to satisfy their emissions liability by 15 June and/or 1 February that results in a ‘unit shortfall charge’. This charge represents the difference between the total liability and the number of units surrendered by the deadline, which is then multiplied by a specified amount. The specified amount is calculated as follows:

- In the fixed price period, the unit shortfall charge is 130% of the applicable fixed charge; and
- In the floating price period, the units shortfall charge is either an amount specified in the regulations, or up to 200% of the benchmark average auction price for the relevant financial year.



**Figure 1: Decision tree for the Carbon Compliance System.**

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### Monitoring

Council is required to report to the Clean Energy Regulator the amount of emissions or potential emissions for which it is liable (*'emissions number'*). The emissions number is to be derived from waste data monitored and measured in accordance with the National Greenhouse and Energy Reporting (Measurement) Determination, and estimated with use of methods and emissions data set out in this Determination.

Liable entities will report one or more 'provisional emissions numbers' (PENs), 'interim emissions numbers' (IENs) and 'final emissions number' (EN) depending on the decision tree in Figure 1 above, and/or how many activities are covered under the Clean Energy Act.

Council is also required to calculate and report the uncertainty in the emissions number. This uncertainty relates directly to the quality of monitored waste data.

### Registration

Council is a liable entity under the Clean Energy Act that relates to its operational control of the Albury Waste Management Facility. Hence Council must apply to register under the National Greenhouse and Energy Reporting Act and also under the Australian National Registry of Emission Units Act.

### Emissions Number

The amount of Council's emissions liability is determined by application of the provisions of the Clean Energy Act 2011 and the National Greenhouse and Energy Reporting scheme. The amount of emissions (i.e. emissions number) Council reports provides information to the Clean Energy Regulator for the purpose of calculating the emissions liability.

Emissions numbers are to be based on an estimate of Council's total covered emissions (see 'situation analysis' section below). This estimate must be calculated with use of methods set out in the National Greenhouse and Energy Report (Measurement) Determination 2008.

### Reporting Requirements

Liable entities are required to prepare and submit a report under the National Greenhouse and Energy Reporting Act. Specific requirements for this reporting are set out in the National Greenhouse and Energy Reporting Regulations 2008. These regulations outline the different reporting types (Section 19, Section 22A and Section 22AA reports), and the requirements and conditions of each.

All liable entities are required to report emissions numbers through the Online System for Comprehensive Activity Reporting ('OSCAR') that is maintained by the Clean Energy Regulator. In 2013 this system will be replaced by the online Emission and Energy Reporting System ('EERS') that is to be deployed in the second half of 2013.

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If in a given year of operation of a facility covered emissions are greater than 125 kt CO<sub>2</sub>-e, then an independent audit of these emissions is required in accordance with the National Greenhouse and Energy Reporting (Audit) Determination 2009. This audit is to confirm that the emissions have been estimated in accordance with the National Greenhouse and Energy Reporting Act 2007 and the National Greenhouse and Energy Reporting (Measurement) Determination 2008. The final report of the independent audit is to be attached to the report sent to the Clean Energy Regulator under the National Greenhouse and Energy Reporting Act 2007 by 31 October.

### Managing Emissions Liability

An emissions liability must be satisfied through procedures relating to the Australian National Registry of Emissions Units. A liable entity must first apply to register for an Australian National Registry of Emissions Units account with access provided to nominated authorised representatives designated by Council.

In meeting liability obligations liable entities:

- purchase units to satisfy an emissions liability in the period leading up to the provisional surrender (15 June) and the final surrender (1 February) dates in the fixed price period; and
- surrender units to the Clean Energy Regulator. For carbon units purchased in the fixed price period, surrender occurs automatically.

In the fixed price period carbon credits are to be purchased and surrendered directly through the Australian National Registry of Emissions Units, whereas in the floating price period the market will determine the price of carbon hence a 'carbon auction' system is to be established and administered by the Clean Energy Regulator.

### Record Keeping (Archiving)

Liable entities have specific record-keeping requirements under the National Greenhouse and Energy Reporting Act. These requirements are summarised as:

- documentary evidence relating to monitoring of covered emissions and underlying data to confirm stated amounts, for example: landfill receipts, invoices and details of payment methods;
- documentation of methods and assumptions used for estimating emissions;
- documents justifying selection of the monitoring methods chosen; and
- records supporting business decisions and accuracy.

These are required to be archived for five years for the purpose of being available for audit under the National Greenhouse and Energy Reporting (Audit) Determination 2009.

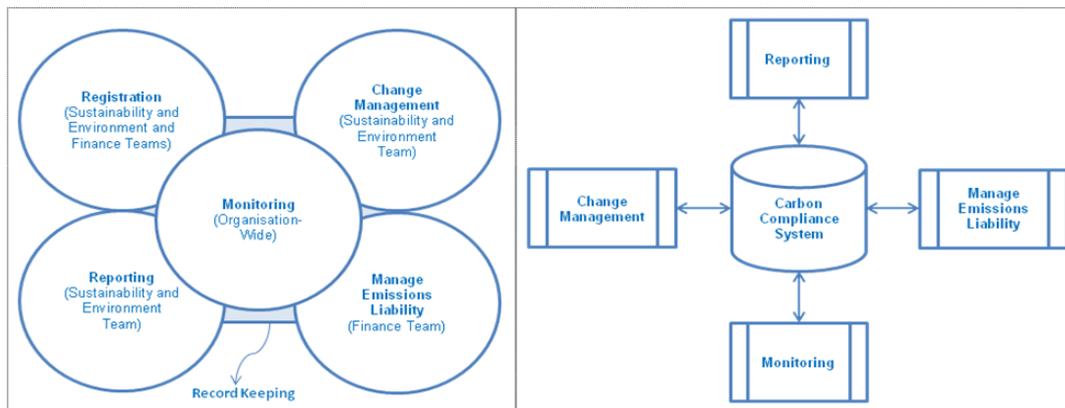
Liabe Entities Public Information Database

Information relating to liable entities are required by the Clean Energy Act 2011 to be stored in a public database – the Liabe Entities Public Information Database. This database is administered by the Clean Energy Regulator. As of January 2013 only Council’s name is included in the public information database on the Clean Energy Regulator website.

**CARBON COMPLIANCE SYSTEM**

The carbon compliance system is structured on Council’s obligations in relation to the Clean Energy Act. The obligations relate to monitoring, registration, reporting, managing the emissions liability and record-keeping, with each having unique processes and procedures. These are proposed to be streamlined through an integrated data and information system for carbon compliance. This can present efficiency gains in regards to managing carbon compliance, but the carbon compliance system can also be scaled up to cover a broader Council monitoring, evaluation and reporting framework.

Figure 2 below illustrates (on a simple level) the relationship between key obligations, and how these relate to the proposed carbon compliance system business model.



**Figure 2: Simple relationship diagram and business model for the carbon compliance system.**

**SITUATIONAL ANALYSIS**

Self Assessment

Council’s self assessment identified that greenhouse gas emissions arising from the operation of the Albury Waste Management Facility trigger the Clean Energy Act emission threshold of 25 kt CO<sub>2</sub>-e. Hence Council’s waste management facility is a liable entity under the Clean Energy Act and has been added to the Liable Entity Public Information Database.<sup>4</sup>

The self assessment also identified emissions from the operation of Council’s wastewater treatment plants. However, the operation of Council’s Waterview and Kremur Street wastewater treatment plants do not form a single undertaking with the Albury Waste Management Facility, hence emissions from these plants do not form part of the emissions liability under the Clean Energy Act 2011.<sup>5</sup> Further, emissions from these plants individually or collectively (as a single undertaking) do not trigger the emission threshold of 25 kt CO<sub>2</sub>-e, and therefore Council is not currently liable for these emissions.

Council was recently informed that emissions from the on-site use of petroleum-based oils and greases are covered emissions. The self assessment identified that emissions from this activity will add a negligible amount to the emissions number and the emissions liability. Further, the self assessment considered emissions from on-site composting activities that are also covered emissions under the Clean Energy Act. The self assessment identified that emissions from on-site composting are negligible due to standard operating procedures in regards to the management of this material.

As emissions associated with the operation of the Albury Waste Management Facility trigger the emission threshold, Council is required to apply for registration under Section 15A of the National Greenhouse and Energy Reporting Act by 31 August 2013.

The provisional (and final) emissions number for 2012/13 is zero hence Council will not be subject to processes relating the interim emissions number (see Figure 1). However, Council is required to

<sup>4</sup> Can be found at <http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/Liable-Entities-Public-Information-Database/LEPID-for-2012-13-Financial-year/Pages/default.aspx>

<sup>5</sup> Guidance from the Clean Energy Regulator confirmed that greenhouse gas emissions from the wastewater plants do not form part of the liability under the Clean Energy Act associated with the Albury Waste Management Facility.

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submit a Section 22A National Greenhouse and Energy Reporting Act report to the Clean Energy Regulator by 31 October 2013.

The self assessment identified that from 2013/14 covered emissions from the Albury Waste Management Facility will subject Council to processes relating to the provisional emissions number, and to processes relating to the management of an emissions liability. The self assessment also identified that the provisional emissions number is forecast not to exceed an emission threshold of 35 kt CO<sub>2</sub>-e until 2015/16. Hence Council (up until 2015/16) will not be subject to the interim emissions number process, and will only need to:

- report the final emissions number under Section 22A of the National Greenhouse and Energy Reporting Act by 31 October 2014;
- register under the Australian National Registry of Emissions Units Act; and
- surrender carbon units by 1 February 2015.

The self assessment identified that covered emissions from the Albury Waste Management Facility are forecast to trigger the 35 kt CO<sub>2</sub>-e threshold from 2015/16 (on a business as usual with no measures forecast scenario). Hence Council (from 2015/16 onward) will be subject to the interim emissions number process and is required to:

- report the interim emissions number under Section 22AA of the National Greenhouse and Energy Reporting Act by 15 June 2016;
- participate in the carbon auction and submit a provisional surrender of carbon units with the amount to be surrendered being 75% of the provisional emissions number of the previous financial year by 15 June 2016;
- report final emissions number under Section 22A of the National Greenhouse and Energy Reporting Act by 31 October 2016; and
- participate in the carbon auction and surrender remaining carbon units by 1 February 2017.

A forecast of the covered emissions from the operation of the Albury Waste Management Facility does not foresee the 125 kt CO<sub>2</sub>-e threshold for the independent audit being triggered until 2028/29 on a business-as-usual with no measures scenario.

### Albury Waste Management Facility

The Albury Waste Management Facility was opened in 1978 and receives in the vicinity of 200,000 tonnes of waste per year. The landfill services a wide area including AlburyCity, Corowa, Towong, Greater Hume, Wodonga and Indigo Shires. In 2012/13 AlburyCity diverted approximately 40% of waste away from landfill.

In 2009 AlburyCity entered in a public private partnership with LMS Energy to install infrastructure to collect and utilise biogas generated in the landfill. The biogas collection system at the Albury Waste Management Facility was recently registered as a Carbon Farming Initiative compliant project and thereby will generate carbon credits for each tonne of CO<sub>2</sub>-e abated. It will also generate revenue for each mega-watt-hour of electricity generated and sent to the grid. This collection system is operated by a third party (i.e. LMS Energy) who provide Council with a royalty payment for the financial benefit.

Council will introduce in 2014 a new kerbside collection bin for organic waste. Diverting organic waste from landfill will significantly reduce greenhouse gas emissions from the Albury Waste Management Facility.

### Records Management

Trim is the Council's record management system and it is intended that documentation from the monitoring, registration, reporting and managing the emissions liability will be streamlined through this system in accordance with Council's records management procedures.

### Financial Management

A 'landfill carbon fee' was developed in 2012 as a measure to aid Council manage the emissions liability associated with the operation of the Albury Waste Management Facility. This fee is predicated on a user-pays principle, and is based on knowledge of the carbon emission profile of waste, and utilises the Commonwealth Department of Treasury forecast of the carbon price.<sup>6</sup> This fee is reviewed annually under the Carbon Liability Financial Management Policy.

### Human Resources

The roles and responsibilities outlined in this strategy are to ensure Council complies with its regulatory requirements under the National Greenhouse and Energy Reporting Act and under the Australian National Registry of Emissions Units Act. Essentially this strategy formalises what has been in place and operational since 2011 with exception to the emissions liability process. Council has the current capacity to implement the carbon compliance system.

### Information Technology

The Mandalay software system is used by Council to monitor waste data over the weighbridge at the Albury Waste Management Facility.

Data management practices used to estimate and monitor the emissions number and the emissions liability is through a series of inter-connected Microsoft Excel spreadsheets. Waste tonnage data is provided by the Waste Management team for insertion into the NGER solid waste calculator whose output is linked to other Excel files. Monitoring of the emissions liability is undertaken in a separate Excel file.

Council will commence its consideration of requirements associated with the electronic platform for the carbon auctions. The Clean Energy Regulator has indicated that information on this platform will be available in the last half of 2013.

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<sup>6</sup> The Commonwealth 2013/14 budget (14 May 2013) revised downward the Treasury forecast of the carbon price for years 2015/16 through to 2019/20. However, a complete forecast out to 2050 has yet to be released. The main driver for this revision is the collapse in the price of an European Union Emission Allowances that as at 17 May 2013 was AU\$5.57.<sup>6</sup> The revised Treasury forecast of the carbon price is \$12.10 in 2015/16 (down from \$29), \$18.60 for 2016/17 and \$38 for 2019/20 (up from \$33).

## **STRATEGY**

### **Vision**

Council is a proactive organisation in managing its regulatory obligations in regards to the Clean Energy Act 2011.

### **Mission**

To ensure that Council's business processes provide effective management of its regulatory obligations under the Clean Energy Act.

### **Strategic Objectives**

The key objectives of this strategy are to:

- ensure Council's compliance with legal, procedural and financial requirements of liable entities;
- define a carbon compliance system including its business model and procedures covering the necessary financial, business, human resources and information technology functions of the system; and
- establish a governance structure to support and maintain the Carbon Compliance System in its processes, procedures, decision points and reporting.

### **Key Activities**

Key activity areas include:

- Monitoring;
- Registration;
- Reporting;
- Managing emissions liabilities; and
- Record keeping.

#### Monitoring

Monitoring is a critical business process of the carbon compliance system. It will enable Council to track its emissions number and liability, that in-turn inform a process to manage the landfill carbon fee and the Council 'Acquisition of Carbon Units Plan'.

Process monitoring is also important to manage the risk associated with the emissions liability. Critical control points have been put in place to ensure rigour and confidence in a process to manage the emissions liability (see Risk Management section below).

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Emissions numbers are required to be reported by liable entities under the National Greenhouse and Energy Reporting Act. Liable entities will report one or more:

- Provisional Emissions Numbers (PENs);
- Interim Emissions Numbers (IENs); or
- Final Emissions Number (EN).

**Table 1: Responsibilities for managing monitoring requirements**

Requirement	Activity	Responsible Business Area
Waste stream and type over the weighbridge	<ul style="list-style-type: none"> <li>• Monthly measurement</li> <li>• Storage in IT system</li> </ul>	Waste Management
Waste stream and type diverted	<ul style="list-style-type: none"> <li>• Monitoring onsite composting activities</li> </ul>	
Biogas collection and utilisation	<ul style="list-style-type: none"> <li>• Monthly monitoring</li> </ul>	Waste Management
Biogas data	<ul style="list-style-type: none"> <li>• Storage in IT system</li> </ul>	Waste Management
Petroleum-based oils and greases	<ul style="list-style-type: none"> <li>• Monthly monitoring of their use</li> </ul>	Fleet Management
Emissions number	<ul style="list-style-type: none"> <li>• Monthly estimate of emissions using NGER solid waste calculator</li> </ul>	Sustainability and Environment
<i>Reconciliation</i>	<ul style="list-style-type: none"> <li>• <i>Compare landfill carbon fee with estimated monthly emissions liability</i></li> </ul>	<i>Finance</i>
Record keeping	<ul style="list-style-type: none"> <li>• Waste tonnage measurement documentation (e.g. receipts, tax invoices, etc)</li> </ul>	Waste Management
	<ul style="list-style-type: none"> <li>• NGER solid waste calculator, method selection</li> </ul>	Sustainability and Environment
Change management in relation to NGER (Measurement) Determination	<ul style="list-style-type: none"> <li>• Review of NGER (Measurement) Determination</li> </ul>	Sustainability and Environment
<i>Quality assurance / control</i>	<ul style="list-style-type: none"> <li>• Data checking and verification</li> <li>• Record keeping</li> </ul>	Sustainability and Environment, Finance, Records Management

A liable entity may have one or more provisional emissions numbers depending on how many activities are covered under the Clean Energy Act. Council currently has one covered facility, namely the Albury Waste Management facility, but it will continue to monitor emissions from its two wastewater treatment plants.

The National Greenhouse and Energy Reporting (Measurement) Determination is revised each year. Hence it is important that Council reviews this prior to each financial year to identify changes that could affect the emissions numbers and liabilities, and the landfill carbon fee.

### Registration

As Council is a liable entity and will need to satisfy its emissions liability from 2013/14 onward, it is required to apply for registration under the National Greenhouse and Energy Act 2007 and also under the Australian National Registry of Emissions Units Act.

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## CARBON COMPLIANCE STRATEGY

**Table 2: Registration and authorised representatives of Council.**

Registration	Signatory	Authorised Representative	Back-Up
NGER	General Manager	Sustainability Officer, Sustainability and Environment	Team Leader, Sustainability and Environment
ANREU	General Manager	Primary: Director Corporate Services Secondary: General Manager	Finance Officer, Corporate Services

### Reporting

A requirement of liable entities is to prepare and submit a report under the National Greenhouse and Energy Reporting scheme.

**Table 3: Roles and responsibilities in relation to reporting under the NGER scheme.**

Requirement	Activity	Responsible Business Area
NGER Report	• Prepare report	Sustainability and Environment
	• Report approval	Management Executive
	• Report sign-off	General Manager
Quality assurance / control	• Review of NGER report	Waste Management, Finance
Record keeping	• Archiving of NGER report	Sustainability and Environment

### Emissions Liability Management

Liable entities are required to satisfy their emissions liability in accordance with procedures and timelines set out in the Clean Energy Act. Council procedures with regard to the management of the emissions liability are to be implemented through the Carbon Liability Financial Management Policy.

**Table 4: Responsibilities for managing the emissions liability.**

Requirement	Activity	Responsible Business Area
Interim emissions number	• Monthly monitoring of provisional emissions number to determine whether Council has progressive surrender requirement.	Sustainability and Environment
Emissions liability	• Monitored monthly based on provisional emissions number.	Finance
Carbon Auction	• Senior management agree to the Acquisition of Carbon Credits Plan and its carbon auction demand schedule.	Finance
	• Participate in auction.	
Carbon Acquittal	If have interim emissions number:	Director (Corporate Services), General Manager, Finance
	• Progressive surrender of carbon units.	
	• Surrender remaining carbon units	
Monitor ANREU account	If no interim emissions number:	Director (Corporate Services), Finance
	• Surrender carbon units based on final Emissions Number	
	• Surrender through the ANREU	
Review	• Unit shortfall charges	Finance
	• Other admin monitoring	
Quality assurance / control	• Carbon markets	Finance
	• Monthly provisional emissions number	
Record keeping	• Emissions liability	Sustainability and Environment, Management Executive
	• Acquisition of Carbon Credits Plan	

### Record Keeping

Liable entities are required to retain and archive documentation and decision-making outcomes in relation to monitoring of waste to landfill, and methods and related assumptions used to estimate greenhouse gas emissions from the operation of the landfill.

Current record keeping practices include:

- Use of the 'Mandalay' software at the Albury Waste Management Facility for recording measurements and observations on the amount and type of waste over the weighbridge;
- Decisions on the process of monitoring of waste, including standard operating procedures to aid visual characterisation of waste, and weighbridge technology and measurement calibration; and
- Archiving of the solid waste calculator after emissions have been estimated.

### **Risk Management**

There are two key areas of risk in the carbon compliance system with each relating directly to managing the financial risk associated with the emissions liability. As mentioned previously, the Clean Energy Regulator can apply provisions in the Clean Energy Act in relation to financial penalties for non-compliance in reporting (including monitoring of emissions number) or satisfying an emissions liability (i.e. not surrendering sufficient eligible carbon units).

The carbon compliance system places significant emphasis on process monitoring. Proposed controls are designed to ensure rigour and confidence in a process to manage an emissions liability. Process controls relate to the monitoring of:

- waste data quality to ensure the certainty of the emission number estimate and thereby reduce the risk of the unit shortfall charge;
- the emissions liability in relation to changes in the carbon price (especially in the floating price period);
- the landfill carbon fee in relation to its ability to offset the emissions liability;
- Options in relation to the carbon credits plan that is to be used as a basis to purchase carbon credit units;
- quality of regulatory reports; and
- the financial impact of the emissions liability on Council's budget.

An additional risk for Council relates to human resources to implement the carbon compliance system. The key human resource consideration of this carbon compliance system is the attribution of a role or responsibility to a team instead of an individual. This places emphasis on corporate knowledge as opposed to this knowledge being invested in individuals. However, there are circumstances in which the attribution had to be given to individuals, as required by regulation (e.g. Council's 'authorised representative'). Under this approach the risk would be on Council ensuring that the identified teams have the necessary and capable resources to fulfil the functions of the carbon compliance system.

### **Key Performance Measures (KPIs)**

The key performance measures include:

- no 'unit shortfall charge';
- no non-compliance notices; and
- no pecuniary and/or financial penalties issued by the Clean Energy Regulator on Council.

### **Strategic Relationships**

With carbon market specialists to ensure that Council is informed on issues, developments and related matters in regards to the carbon price and to aid managing the financial risk associated with carbon auctions.

### **Human Resources**

Business resources and expertise include:

- waste measurement and monitoring (currently Waste Management team);
- emissions estimation (currently Sustainability and Environment team);
- National Greenhouse and Energy Reporting Act (currently Sustainability and Environment team);
- carbon markets (currently Sustainability and Environment team); and
- emerging waste management technologies (currently Waste Management team and the Sustainability and Environment team).

Finance resources and expertise include:

- financial modelling of emissions liabilities (currently Sustainability and Environment team); and
- Carbon Liability Financial Management Policy (currently Finance team);

Information Technology resources and expertise include:

- Security arrangements for carbon auction platform;
- Streamline Mandalay (landfill monitoring software) into carbon compliance system.

### **Budget**

There is no budget required to implement the carbon compliance strategy with exception to ensuring that the necessary business, financial and IT resources and expertise enable the effective functioning of the carbon compliance system.

**Community Engagement and Marketing**

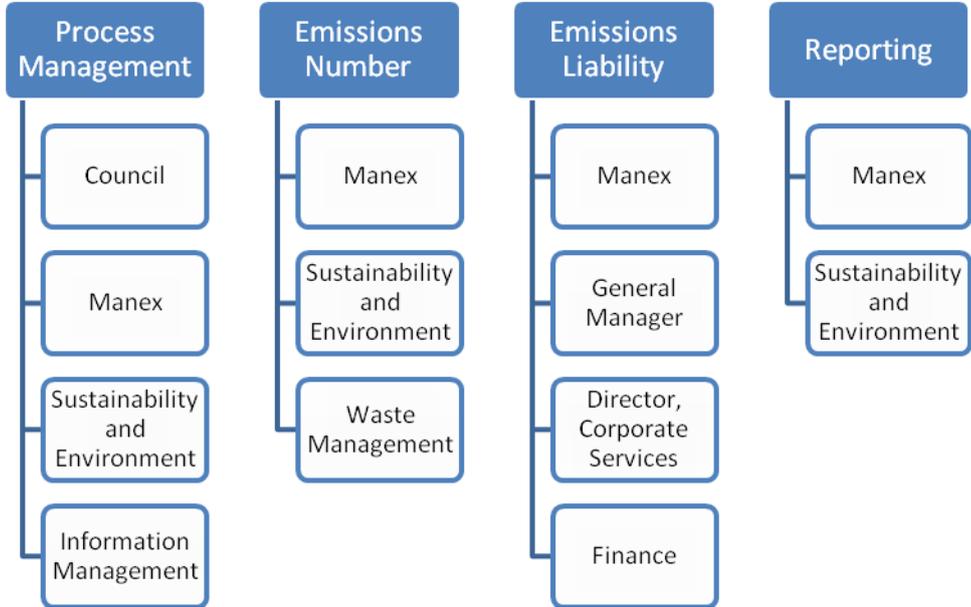
No community engagement required. An obvious exception to this would be any enquiry regarding what Council is doing in relation to managing its emissions liability.

**Governance Structure**

The governance structure, processes and procedures set out in this strategy are designed to ensure the effective functioning of a carbon compliance system pursuant of obligations set out in the Clean Energy Act. This strategy has defined roles and responsibilities of financial, business and IT functions of Council, and a review mechanism to ensure that the carbon compliance system is functioning effectively. The human resource function is implicit but necessary to ensure that the functional areas have the necessary and capable resources to fulfil the functions of this strategy.

The financial function of the system is of most importance as it contains the most risk. The financial function is to cover the process of managing an emissions liability.

The business function of the system is to ensure capabilities to implement the carbon compliance system and to manage emerging issues in relation to carbon, carbon compliance, monitoring and reporting and waste management. The business function should also enable a multi-disciplinary approach to managing Council's obligations through the coordination of knowledge and capability hubs.



**Figure 3: Governance structure for the carbon compliance system.**

The human resource function (albeit implicit) ensures that there is sufficient capacity and understanding to allow the carbon compliance system to operate effectively in relation to managing legal, procedural and financial obligations of Council under the Clean Energy Act.

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### **CARBON COMPLIANCE STRATEGY**

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The IT function is critical as both the carbon compliance system and legal obligations under the Clean Energy Act require an IT interaction. The consideration of IT in the carbon compliance system will enable Council to coordinate processes and procedures through streamlined corporate integrated information systems and knowledge hubs.

The carbon compliance system will be reviewed under the auspices of Management Executive ('Manex') who may recommend changes that are necessary to improve the functioning of this system. Manex also have an important role in guiding development of a "Acquisition of Carbon Units Plan" that sets out a demand schedule for the carbon auctions and inform the Council budget development process.

**APPENDIX 1: REFERENCE MATERIAL**

A large proportion of the reference material accessed relate specifically to legal, institutional, process and procedural provisions of the Clean Energy Act 2011 that directly relate to Council's obligations.

Materials reviewed include:

- *Securing a clean energy future – The Australian Government's climate change plan* (Commonwealth of Australia, 2011); <sup>7</sup>
- *Overview of the Clean Energy Legislation* (Commonwealth of Australia, 2011); <sup>8</sup>
- Department of Climate Change and Energy Efficiency fact sheets; <sup>9</sup>
- *Strong growth, low pollution – modelling a carbon price* (Commonwealth of Australia, 2011), as updated 21 September 2011; <sup>10</sup>
- Australian Competition and Consumer Commission guidance materials; <sup>11</sup>
- Clean Energy Legislative Package;
- *Clean Energy Act 2011*; <sup>12</sup>
- *Clean Energy (Consequential Amendments) Act 2011*; <sup>13</sup>
- *Carbon Credits (Consequential Amendments) Act 2011*; <sup>14</sup>
- *National Greenhouse and Energy Reporting Act 2007*, as amended by the Clean Energy (Consequential Amendments) Act 2011; <sup>15</sup>
- *National Greenhouse and Energy Reporting (Measurement) Determination 2008*, as amended 1 July 2011 (and currently under review); <sup>16</sup>
- Draft National Greenhouse and Energy Reporting (Measurement) Determination 2012;
- *National Greenhouse and Energy Reporting (Audit) Determination 2009*; <sup>17</sup>
- *National Greenhouse and Energy Reporting Regulations 2008*, as amended 24 April 2012 by the *National Greenhouse and Energy Reporting Amendment Regulation 2012*; <sup>18</sup>
- *Guide to carbon price liability under the Clean Energy Act 2011* (Clean Energy Regulator, 2012)
- *Australian National Registry of Emissions Units Act 2011*; <sup>19</sup>
- *Australian National Registry of Emissions Units Regulations 2011*; <sup>20</sup>
- *Carbon Credits (Carbon Farming Initiative) Act 2011*; <sup>21</sup>
- *Carbon Credits (Carbon Farming Initiative) Regulations 2011*; <sup>22</sup>
- *Carbon Credits (Carbon Farming Initiative) – Kyoto Australian Carbon Credit Unit Specification 2011*; <sup>23</sup>
- *Carbon Credits (Carbon Farming Initiative) – Landfill Legacy Emissions Avoidance Project Specification 2011*; <sup>24</sup>

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<sup>7</sup> Available at <http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/07/Consolidated-Final.pdf>

<sup>8</sup> Available at [http://www.cleanenergyfuture.gov.au/wp-content/uploads/2012/05/CEF-overview\\_Apr2012.pdf](http://www.cleanenergyfuture.gov.au/wp-content/uploads/2012/05/CEF-overview_Apr2012.pdf)

<sup>9</sup> Available at <http://www.cleanenergyfuture.gov.au/clean-energy-future/our-plan/>

<sup>10</sup> Available at <http://archive.treasury.gov.au/carbonpricemodelling/content/default.asp>

<sup>11</sup> Available at <http://www.accc.gov.au/content/index.phtml/tag/carbon/>

<sup>12</sup> Available at <http://www.comlaw.gov.au/Details/C2011A00131>

<sup>13</sup> Available at <http://www.comlaw.gov.au/Details/C2011A00132>

<sup>14</sup> Available at <http://www.comlaw.gov.au/Details/C2011A00102>

<sup>15</sup> Available at <http://www.comlaw.gov.au/Series/C2007A00175>

<sup>16</sup> Available at <http://www.comlaw.gov.au/Series/F2008L02309>

<sup>17</sup> Available at <http://www.comlaw.gov.au/Series/F2010L00053>

<sup>18</sup> Available at <http://www.comlaw.gov.au/Series/F2008L02230>

<sup>19</sup> Available at <http://www.comlaw.gov.au/Series/C2011A00099>

<sup>20</sup> Available at <http://www.comlaw.gov.au/Series/C2011A00099/Enables>

<sup>21</sup> Available at <http://www.comlaw.gov.au/Series/C2011A00101/Amendments>

<sup>22</sup> Available at <http://www.comlaw.gov.au/Series/F2011L02583>

<sup>23</sup> Available at <http://www.comlaw.gov.au/Series/F2011L02555>

# AlburyCity

## CARBON COMPLIANCE STRATEGY

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- Clean Energy (Auction of Carbon Units) Determination 2013;<sup>25</sup>

### *Consultations*

To clarify or to enhance understanding of information garnered from the reference material listed above, Council has consulted with the following organisations:

- Commonwealth Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (formerly Department of Climate Change and Energy Efficiency);
- Clean Energy Regulator;
- Australian Competition and Consumer Commission;
- Australian Landfill Owners Association;
- Australian Energy Market Commission; and
- Independent Pricing and Regulatory Tribunal.

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<sup>24</sup> Available at <http://www.comlaw.gov.au/Series/F2011L02554>

<sup>25</sup> Available at <http://www.comlaw.gov.au/Details/F2013L00759/16c8ee37-1266-4943-9dd6-55e75c00145d>

## **APPENDIX 2: DEFINITIONS**

### **Account Number**

In relation to the Australian National Registry of Emissions Units, it is Council's registry account number.

### **Carbon dioxide equivalence—Greenhouse gases can be measured in carbon dioxide equivalents**

Carbon dioxide equivalence, or CO<sub>2</sub>-e, is estimated by multiplying the amount of gas by the global warming potential of the gas.

### **Australian Carbon Credit Unit**

An Australian carbon credit unit is an emissions unit issued under the Carbon Farming Initiative (CFI) established by the Carbon Credits (Carbon Farming Initiative) Act 2011, for verified abatement activities by projects approved under the Carbon Farming Initiative. Also referred to as a 'CFI credit'.

### **Carbon Price**

See 'fixed price' and 'floating price' below.

### **Carbon Unit**

Is a unit issued to a person by the Clean Energy Regulator. Each carbon unit has a vintage year of a particular financial year which is reflected in its identification number.

### **Covered Emissions**

Scope 1 greenhouse gas emissions from a facility where the greenhouse gas emissions is released into the atmosphere as a result of the operation of the facility, and:

- Whose activity is not excluded by the Clean Energy Act.
- Methodology to estimate the greenhouse gas emissions is set out in the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

### **Designated Large Landfill Facility**

A landfill facility is a designated large landfill facility in relation to an eligible financial year if the number of tonnes of the carbon dioxide equivalence of the total amount of covered emissions, legacy emissions and exempt landfill emissions from the operation of the landfill facility during the eligible financial year is 25,000 or more. For this purpose, assume that the financial year beginning on 1 July 2011 is an eligible financial year.

### **Eligible Australian Carbon Unit**

Means:

- A Kyoto Australian carbon credit unit within the meaning of the *Carbon Credits (Carbon Farming Initiative) Act 2011*; or
- A non-Kyoto Australian carbon credit unit (within the meaning of *Carbon Credits (Carbon Farming Initiative) Act 2011*) issued in relation to an eligible offsets project for a reporting period; or
- An Australian carbon credit unit.

### **Eligible Emission Unit**

Is a carbon unit, an eligible international emissions unit (as defined by the Australian National Registry of Emissions Units Act 2011) or an eligible Australian carbon credit unit.

### **Eligible Financial Year**

Is the financial year beginning on 1 July 2012 or a later financial year.

### **Emissions Number (EN, IEN or PEN)**

The total quantity of emissions for which the entity is responsible is known as the emissions number. A person's emissions number for an eligible financial year is defined as the sum of the person's provisional emissions numbers for the eligible financial year. The provisional emissions number represents the emissions from a facility for which a person is responsible for in an eligible financial year.

The interim emissions number is equal to 75 per cent of the provisional emissions number.

### **Fixed Price**

The carbon price is fixed for the first three years. In 2012–13 it is \$23 a tonne of carbon dioxide equivalent, in 2013–14 it is \$24.15 a tonne and in 2014–15 it is \$25.40 a tonne. Liable entities can purchase units up to their emissions liability levels. Purchased units cannot be traded or banked. the carbon price

### **Floating Price**

From 1 July 2015 the price will be set by the carbon market. Most units will be auctioned by the Clean Energy Regulator who will begin auctioning units from the first half of 2014, in the lead up to the floating price period. The number of units the Government issues each year will be limited by a pollution cap set by regulations. Also called the 'flexible price' period.

**Interim Emissions Number**

See 'Emission number' above.

**Kyoto Units**

These are international carbon units generated under the Kyoto Protocol that Australia is a signatory to and subsequently ratified in 2007. There are three types of units: certified emission reductions (CER), emission reduction units (ERU) and removal units (RMU). These units are not the same as the European Unit Allowance under the European Emissions Trading Scheme that are also considered by the Clean Energy Act to be eligible international units subject to conditions.

**Legacy Waste and Emissions**

Legacy waste and emissions are attributed to waste deposited in landfill prior to 1 July 2012.

**Liable Entity**

A person defined by the Clean Energy Act 2011, including a local governing body, who has operational control of a facility whose covered emissions trigger the emissions threshold test of 25 kilo-tonne of carbon dioxide equivalents.

**National Greenhouse and Energy Reporting Scheme**

Mandatory reporting scheme established by the National Greenhouse and Energy Reporting Act 2007, as elucidated by the National Greenhouse and Energy Reporting Regulations 2008. Prescribed methods to estimate greenhouse gas emissions under this scheme are set out in the National Greenhouse and Energy Reporting (Measurement) Determination 2008 that covers both Scope 1 and Scope 2 emissions.

**Non-legacy Waste and Emissions**

Non-legacy waste and emissions refers to waste deposited in landfill on or after 1 July 2013.

**Operational Control**

A controlling corporation has operational control over a facility if it has the authority to introduce and implement any or all of the following for the facility:

- Operating policies;
- Health and safety objectives;
- Environmental policies.

**Provisional Emissions Number**

See 'Emission number' above.

**Scope 1 Emissions**

Emissions released into the atmosphere as a direct result of the activity or activities that make up the facility, such as fuel combustion for electricity generation, cement production or landfill operations.

**Scope 2 Emissions**

Emissions released into the atmosphere as a direct result of one or more activities that generate electricity, heating, cooling or steam that is consumed by the facility but do not form part of the facility.