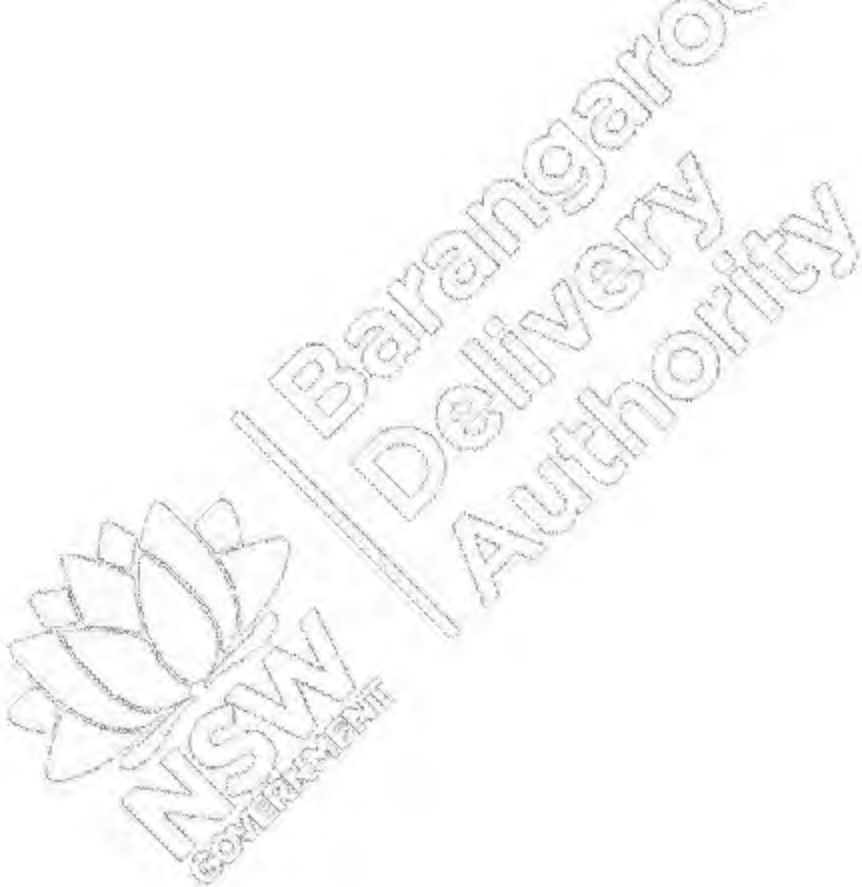
















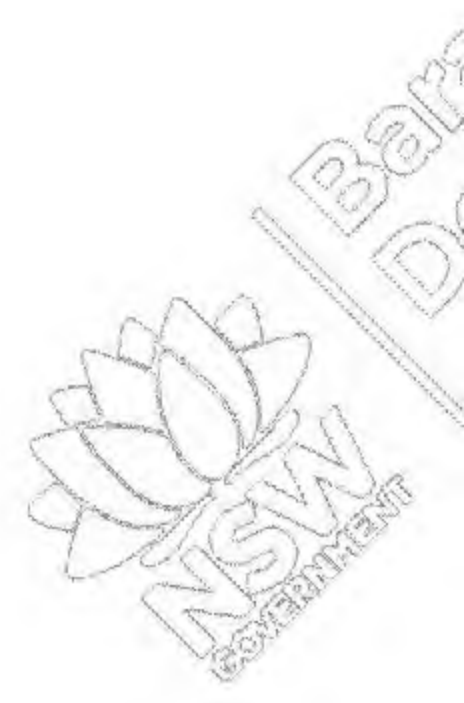












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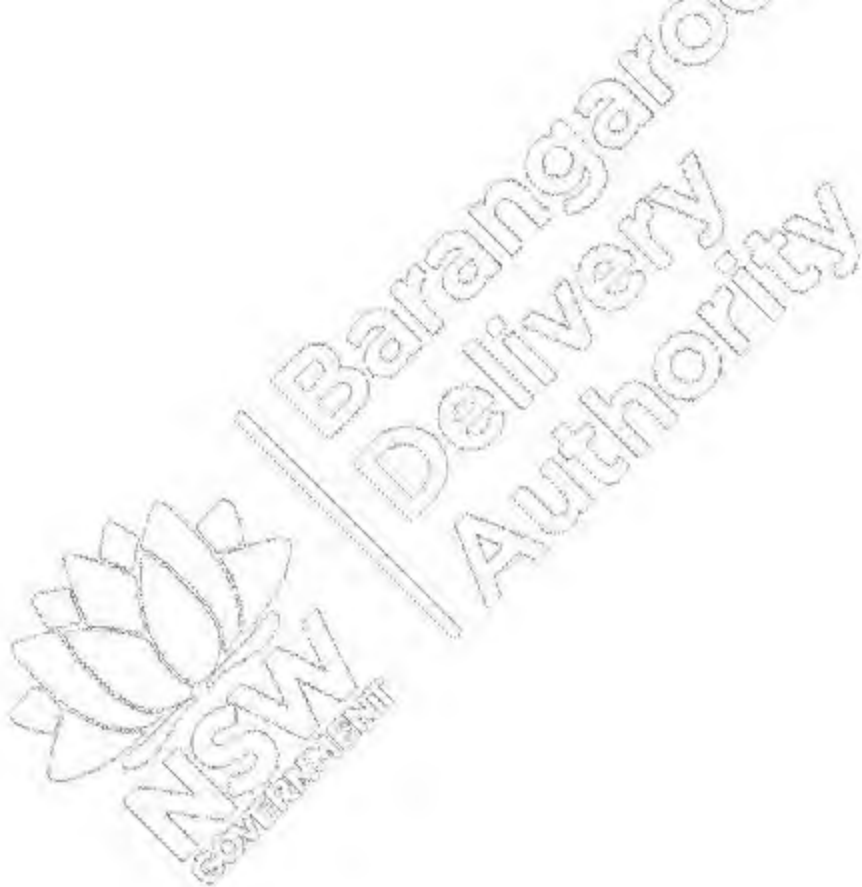
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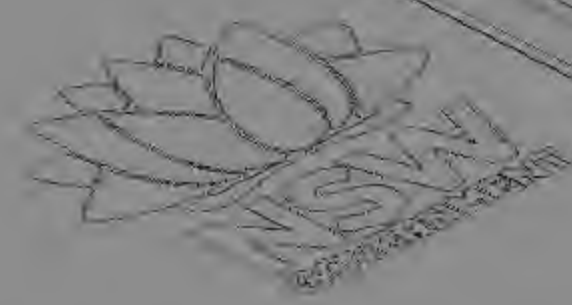
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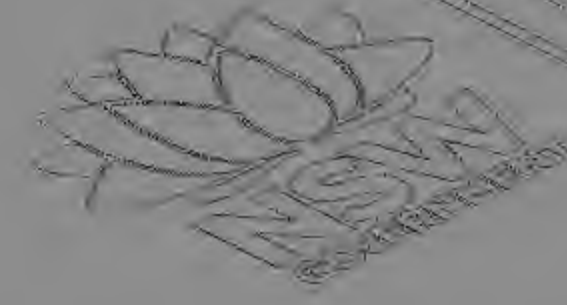
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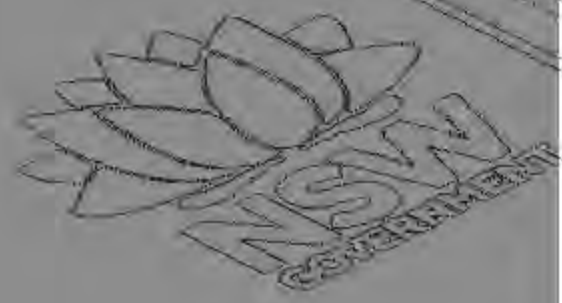
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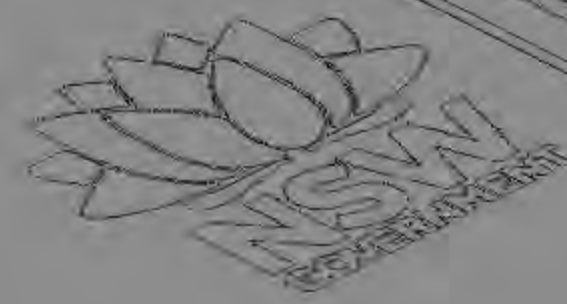
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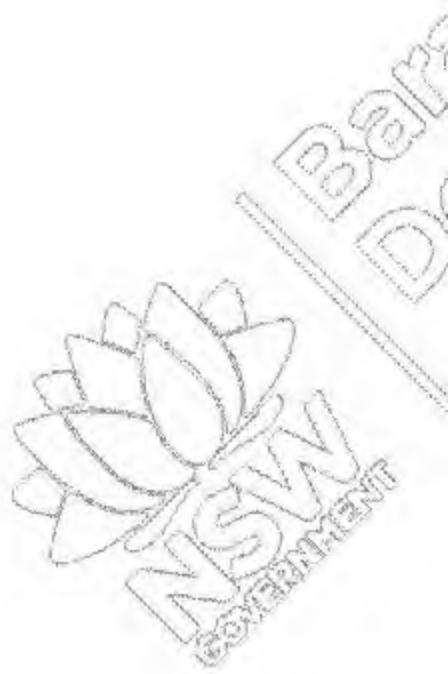








## Annexure NN – Right of Entry Waiver Deed



# Right of entry waiver deed

Barangaroo Delivery Authority  
Authority

Grocon (CB) Developments Pty Limited  
Developer

Grocon Constructors Pty Ltd  
General Guarantor



[Financier]  
Financier

Clayton Utz  
Lawyers  
Level 15, 1 Bligh Street  
Sydney NSW 2000  
GPO Box 9806  
Sydney NSW 2001  
Tel +61 2 9353 4000  
Fax +61 2 8220 6700  
[www.claytonutz.com](http://www.claytonutz.com)

Our reference 104/18637/80128948

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## Right of entry waiver deed

### Date

### Parties

**Barangaroo Delivery Authority** of 21/201 Kent Street, Sydney NSW 2000  
(Authority)

**Grocon (CB) Developments Pty Limited ACN 614 118 642** of 3 Albert Coates Lane, Melbourne VIC 3000 (Developer)

**Grocon Constructors Pty Ltd ACN 006 703 091** of 3 Albert Coates Lane, Melbourne VIC 3000 (General Guarantor)

[Financier] ABN [number] (Financier)

### Background

- A. The Authority, the Developer, the General Guarantor and the [redacted] have entered into the CENDA under which the Developer has agreed to carry out the Works in respect of the Developer's Project on Central Barangaroo.
- B. The Developer has granted or will grant the Securities to the Financier.
- C. The Financier has asked the Authority to give the Financier access to the Licensed Area in certain circumstances.
- D. The Authority has agreed to give that access subject to the delivery to the Authority of this deed signed by the Developer and the Financier.

### Operative provisions

## 1. Definitions and interpretation

### 1.1 Definitions

In this deed:

**Amount of the Consideration** means:

- (a) the amount of any payment in connection with a supply; and
- (b) in relation to non-monetary consideration in connection with a supply, the GST exclusive market value of that consideration as reasonably determined by the supplier.

**Authorised Officer** means:

- (a) for the Authority, its Chief Executive Office or other equivalent person authorised by the Board of the Authority;
- (b) for the Developer, its Chief Executive Officer or other equivalent person authorised by the Board of the Developer; and

- (c) for the Financier, a director or secretary or any other person appointed by that other person to act as an Authorised Officer for the purposes of this deed,
- or any other person nominated by or on behalf of a party as an authorised officer by notice in writing to the other party.

**Business Day** means a day that is not a Saturday, Sunday or public holiday in Sydney or the days between 24 December and 2 January in each year.

**CENDA** means the Central Barangaroo Development Agreement between the Authority, the Developer, the General Guarantor, the [REDACTED] dated [date] for the development of Central Barangaroo.

**Construction Licence** means the construction licence between the Authority, the Developer, the General Guarantor and the Office Guarantor dated [date] granted by the Authority under clause 13.2 ('Grant of Construction Licence') of the CENDA.

**Corporations Act** means the Corporations Act 2001 (Cth).

**Costs** means any costs, expenses, charges, liabilities or disbursements.

**Equipment** means the equipment detailed in Schedule 1.

**Guarantors** means the General Guarantor and the [REDACTED]

**GST** has the meaning given in the GST Act.

**GST Act** means the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

**GST exclusive market value** has the meaning it has in the GST Act.

**Input Tax Credit** has the meaning given in the GST Act.

**Licensed Area** means those parts of Central Barangaroo which the Developer has access to pursuant to a Construction Licence which the Authority has granted to the Developer.

**Related Body Corporate** has the meaning given in the Corporations Act.

**Securities** means a mortgage, charge or lease.

**Tax Invoice** has the meaning given in the GST Act.

**Termination Date** means the date specified in a notice given by the Authority to the Developer under clause 8.1 ('Authority's right to terminate') of the Construction Licence.

## 1.2 Interpretation

Unless the contrary intention appears, a reference in this deed to:

- (a) a group of persons is a reference to any two or more of them jointly and to each of them individually;
- (b) an agreement, representation or warranty in favour of two or more persons is for the benefit of them jointly and each of them individually;
- (c) an agreement, representation or warranty by two or more persons binds them jointly and each of them individually;
- (d) anything (including an amount) is a reference to the whole and each part of it;

- (e) a document (including this deed) includes any variation or replacement of it;
- (f) an accounting term is a reference to that term as it is used in accounting standards under the Corporations Act, or, if not inconsistent with those standards, in accounting principles and practices generally accepted in Australia;
- (g) Australian dollars, dollars, \$ or A\$ is a reference to the lawful currency of Australia;
- (h) a time of day is a reference to Sydney time;
- (i) the singular includes the plural and vice versa;
- (j) the word "person" includes an individual, a firm, a body corporate, an unincorporated association and an authority;
- (k) a particular person includes a reference to the person's executors, administrators, successors, substitutes (including persons taking by novation) and assigns;
- (l) the words "including", "for example" or "such as" when introducing an example, do not limit the meaning of the words to which the example relates to that example or examples of a similar kind;
- (m) an exhibit, annexure or schedule is a reference to an exhibit, annexure or schedule to this deed;
- (n) a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them; and
- (o) a reference to any thing (including, without limitation, any amount and the Equipment) is a reference to the whole and each part of it and a reference to a group of persons, is a reference to all of them collectively, to any two or more of them collectively and to each of them individually.

### 1.3 Headings

Headings are inserted for convenience and do not affect the interpretation of this deed.

### 1.4 Capitalised terms in the CENDA

Capitalised terms not defined, but used in this deed, have the same meaning as in the Development Agreement.

### 1.5 Inconsistency with CENDA

If there is inconsistency between the provisions of this deed and the CENDA, the provisions of the CENDA prevail.

---

## 2. Consideration

Each party acknowledges entering into this deed and incurring obligations and giving rights under this deed for valuable consideration received from each other party.

---

## 3. Authority's consent

### 3.1 Access to Central Barangaroo

Subject to clause 3.2, the Authority agrees that the Financier may have access to the Licensed Area to:

- (a) install, maintain, repair, replace or remove the Equipment; and
- (b) inspect the Equipment.

### 3.2 Conditions of access

The Financier may not have access to the Licensed Area unless the Financier:

- (a) has given the Authority not less than 5 days' prior written notice; and
- (b) is accompanied by a representative of the Authority (if the Authority requires); and
- (c) complies with the Authority's reasonable directions in connection with that access and in connection with the carrying out of works, including directions relating to installing and removing the Equipment.

### 3.3 Equipment not a fixture

The Authority agrees that, irrespective of how the Equipment is installed, the Authority has no proprietary interest in the Equipment (except to the extent that the Authority has rights under clause 5.3).

### 3.4 Equipment risk

The Equipment is at the Financier's risk at all times.

### 3.5 Notification by Financier or the Developer

The Financier or the Developer may notify the Authority that further equipment (which must be accurately described in the notice) is to be installed on the Licensed Area and used by the Developer. If the Financier or Developer gives that notice then that equipment is Equipment for the purposes of this deed.

### 3.6 Landlord not liable

The Financier agrees that the Authority is not liable:

- (a) for any payment under any agreement (whether entered into before or after this deed) between the Financier and the Developer in connection with the Equipment; or
- (b) to comply with any other obligation of the Developer under such an agreement.

## 4. Indemnities and release

### 4.1 Financier's indemnity

The Financier indemnifies the Authority against any liability or loss arising from, and any Costs incurred in connection with:

- (a) the Financier exercising or purporting to exercise its rights under this deed or under any agreement between the Developer and the Financier in connection with the Equipment; and
- (b) the Financier's breach of this deed; and
- (c) any claim which the Developer has or makes against the Authority because of anything the Financier does or has not done.

## 4.2 Financier's release

The Financier releases the Authority from, and agrees that the Authority is not liable for, liability or loss arising from, and Costs incurred in connection with:

- (a) anything the Financier or any third person does or omits to do in connection with the Equipment; and
- (b) any person exercising, or purporting to exercise, its rights under this deed or under any agreement between the Developer and that person in connection with the Equipment.

## 4.3 Developer's release

The Developer releases the Authority from, and agrees that the Authority is not liable for, liability or loss arising from, and Costs incurred in connection with:

- (a) anything the Financier or any third person does or omits to do in connection with the Equipment; and
- (b) any person exercising, or purporting to exercise, its rights under this deed or under any agreement between the Developer and that person in connection with the Equipment.

## 4.4 No breach by the Authority

The Developer agrees that:

- (a) the Financier and the Authority may exercise their rights under this deed; and
- (b) the Authority is not in breach of any obligation under the CENDA or at common law because the Authority:
  - (i) entered into this deed; or
  - (ii) gave rights under it.

## 4.5 Acknowledgement

The Developer and the Financier each acknowledge that the Authority has entered into this deed at the request of the Developer and the Financier.

---

## 5. General obligations

### 5.1 Developer to give notice

The Developer agrees to notify the Financier if the CENDA is terminated.

### 5.2 Financier to make good

The Financier agrees:

- (a) to repair any damage caused by the Financier or any of its employees, officers, agents or consultants in connection with the exercise of the Financier's rights under this deed; and
- (b) if Equipment affixed to the Licensed Area is removed, to reinstate the Licensed Area to its condition before the Equipment was affixed; and

- (c) if the Developer has not already done so, to remove the Equipment on the Termination Date.

### 5.3 Authority may treat Equipment as abandoned

- (a) The Authority may treat the Equipment as abandoned, and deal with it in any way it sees fit, if the Equipment is not removed from the Licensed Area within the time specified in the CENDA for the removal of the Developer's property from the Licensed Area, or if no time is specified, on the Termination Date.
- (b) The Financier agrees to pay or reimburse the Authority for the Authority's Costs in connection with the exercise of the Authority's rights under this clause 5.3 on demand from the Authority.

### 5.4 Authority's rights

The Authority may:

- (a) do anything which the Financier or the Developer should have done under this deed but which it has not done or which the Authority considers it has not done properly; and
- (b) recover the Costs incurred by the Authority as a debt payable on demand.

The Authority may exercise its rights under this clause 5.3 even though this deed has expired or has been terminated.

### 5.5 Financier's dealings

The Financier may not dispose of or otherwise deal with its interest in the Equipment without first causing any proposed donee or other party to the dealing to enter into an agreement with the Authority, the form and substance of which is approved by the Authority, under which that person agrees to be bound by the provisions of this deed as if it were the Financier. The Authority is released from any obligation it has to the Financier under this deed when that agreement (signed by the proposed donee or other party) is delivered to the Authority.

### 5.6 Provisions of CENDA not affected

- (a) This deed and anything done by Developer or the Authority under this deed:
  - (i) does not affect the rights and obligations of the parties under the CENDA;
  - (ii) is not to be taken as a waiver of any rights of the Authority under the CENDA;
  - (iii) does not constitute any concession in favour of Developer in respect of any obligations which Developer has under the CENDA; and
  - (iv) does not release or discharge any of the obligations of Developer under the CENDA.

### 5.7 Release of Authority

The Authority is released from any obligation it has under this deed from the date it ceases to be the registered proprietor of the Licensed Area.

## 6. GST

### 6.1 Interpretation

- (a) Except where the context suggests otherwise, terms used in this clause 6 have the meanings given to those terms by the A New Tax System (Goods and Services Tax) Act 1999 (as amended from time to time).
- (b) Any part of a supply that is treated as a separate supply for GST purposes (including attributing GST payable to tax periods) will be treated as a separate supply for the purposes of this clause 6.
- (c) A reference to something done (including a supply made) by a party includes a reference to something done by any entity through which that party acts.

### 6.2 Reimbursements

Any payment or reimbursement required to be made under this deed that is calculated by reference to a Cost or other amount paid or incurred will be limited to the total Cost or amount less the amount of any input tax credit to which an entity is entitled for the acquisition to which the Cost or amount relates.

### 6.3 Additional amount of GST payable

Subject to clause 6.5, if GST becomes payable on any supply made by a party (**Supplier**) under or in connection with this deed:

- (a) any amount payable or consideration to be provided under any provision of this deed (other than this clause 6), for that supply is exclusive of GST;
- (b) any party (**Recipient**) that is required to provide consideration to the Supplier for that supply must pay an additional amount to the Supplier equal to the amount of the GST payable on that supply (**GST Amount**), at the same time as any other consideration is to be first provided for that supply; and
- (c) the Supplier must provide a tax invoice to the Recipient for that supply, no later than the time at which the GST Amount for that supply is to be paid in accordance with clause 6.3(b).

### 6.4 Variation

- (a) If the GST Amount properly payable in relation to a supply (as determined in accordance with clause 6.3 and clause 6.5), varies from the additional amount paid by the Recipient under clause 6.3, then the Supplier will provide a corresponding refund or credit to, or will be entitled to receive the amount of that variation from, the Recipient. Any payment, credit or refund under this clause 6.4(a) is deemed to be a payment, credit or refund of the GST Amount payable under clause 6.3.
- (b) The Supplier must issue an adjustment note to the Recipient in respect of any adjustment event occurring in relation to a supply made under or in connection with this deed as soon as reasonably practicable after the Supplier becomes aware of the adjustment event.

### 6.5 Exchange of non-monetary consideration

- (a) To the extent that the consideration provided for the Supplier's taxable supply to which clause 6.3 applies is a taxable supply made by the Recipient in the same tax period (**Recipient Supply**), the GST Amount that would otherwise be payable by

the Recipient to the Supplier in accordance with clause 6.3 shall be reduced by the amount of GST payable by the Recipient on the Recipient Supply.

- (b) The Recipient must issue to the Supplier an invoice for any Recipient Supply on or before the time at which the Recipient must pay the GST Amount in accordance with clause 6.3 (or the time at which such GST Amount would have been payable in accordance with clause 6.3 but for the operation of clause 6.5(a)).

## 6.6 Indemnities

- (a) If a payment under an indemnity gives rise to a liability to pay GST, the payer must pay, and indemnify the payee against, the amount of that GST.
- (b) If a party has an indemnity for a cost on which that party must pay GST, the indemnity is for the cost plus all GST (except any GST for which that party can obtain an input tax credit).
- (c) A party may recover payment under an indemnity before it makes the payment in respect of which the indemnity is given.

## 6.7 No merger

This clause will not merge on completion or termination of this deed.

# 7. Ratification by the Guarantors

## 7.1 Status of this deed

For the purposes of the CENDA and the definition of 'Project Document', the parties acknowledge and agree that this deed constitutes a 'Project Document'.

## 7.2 Guaranteed Obligations

As from the date of this deed, each of the parties to this deed acknowledges and agrees that the Developer's obligations under this deed as a Project Document form part of the 'Guaranteed Obligations' for the purposes of the CENDA.

## 7.3 Ratification by the Guarantors

- (a) The General Guarantor separately confirms and ratifies each of its obligations under the guarantee and indemnity contained in clause 46 ('General guarantee and indemnity') of the CENDA including the obligations under this deed.
- (b) The [REDACTED] separately confirms and ratifies each of its obligations under the guarantee and indemnity contained in clause 47 ([REDACTED] Guarantee and indemnity') of the CENDA including the obligations under this deed.

# 8. General

## 8.1 Notices

Unless expressly stated otherwise in this deed, all notices, consents, requests, waivers and other communications between the parties in connection with this deed must be given in accordance with the requirements of clause 51 ('Notices') of the CENDA.

## 8.2 Governing law

This deed is governed by the law in force in New South Wales.

### 8.3 Costs

In connection with this deed and any document or matter in relation to it, the Developer agrees to pay or reimburse the Authority for:

- (a) the Authority's reasonable Costs in connection with:
  - (i) negotiating, preparing, executing and, if applicable, stamping; and
  - (ii) obtaining any consents the Authority must obtain before giving approvals; and
- (b) the Authority's Costs in connection with the Developer's default, including enforcing rights; and
- (c) everything the Developer must do under this deed.

The Developer agrees to pay amounts due under this clause on demand from the Authority.

Schedule 1 - Equipment

**Executed** as a deed.

### Authority

The seal of Barangaroo Delivery Authority is affixed in the presence of:

\_\_\_\_\_  
Signature of witness

\_\_\_\_\_  
Signature of Chief Executive Officer

\_\_\_\_\_  
Full name of witness

\_\_\_\_\_  
Full name of Chief Executive Officer

### Developer

**Executed by Grocon (CB) Developments Pty Limited ACN 614 118 642** in accordance with section 127 of the Corporations Act 2001 (Cth):

\_\_\_\_\_  
Signature of director

\_\_\_\_\_  
Signature of company secretary/director

\_\_\_\_\_  
Full name of director

\_\_\_\_\_  
Full name of company secretary/director

### General Guarantor

**Executed by Grocon (CB) Developments Pty Limited ACN 614 118 642** in accordance with section 127 of the Corporations Act 2001 (Cth):

\_\_\_\_\_  
Signature of director

\_\_\_\_\_  
Signature of company secretary/director

\_\_\_\_\_  
Full name of director

\_\_\_\_\_  
Full name of company secretary/director

**Executed by** [redacted] in accordance with section 127 of the Corporations Act 2001 (Cth):

Signature of director

Signature of company secretary/director

Full name of director

Full name of company secretary/director

#### Financier

**Executed by** [Financier's] ACN [insert] in accordance with section 127 of the Corporations Act 2001 (Cth):

Signature of director

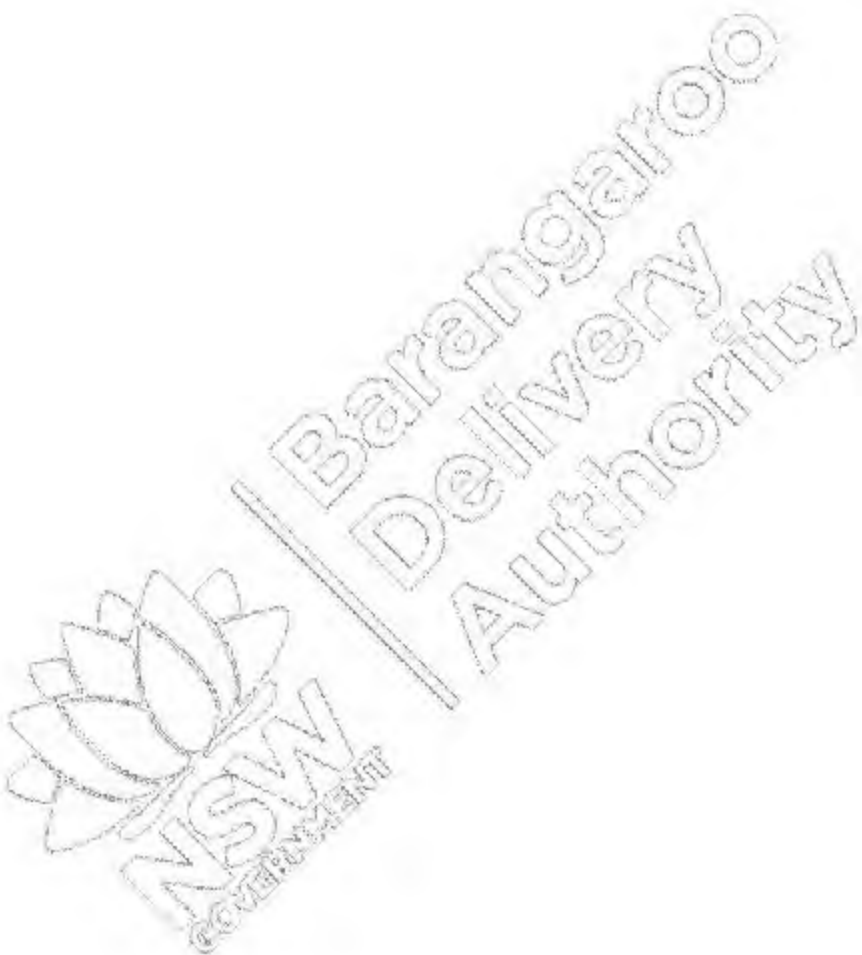
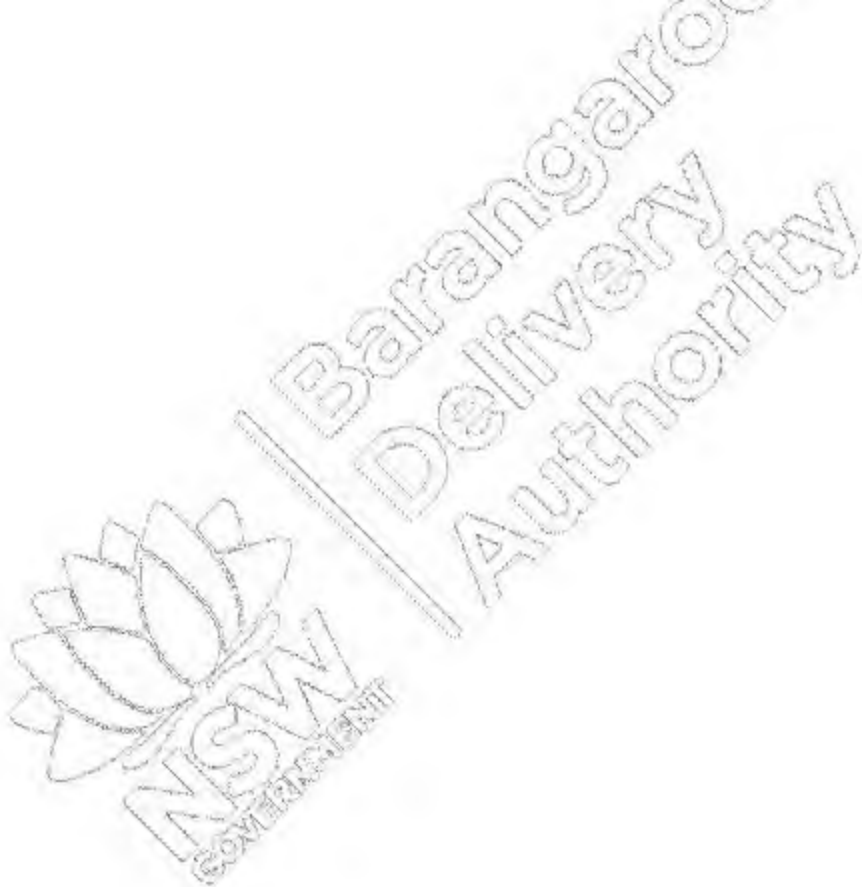
Signature of company secretary/director

Full name of director

Full name of company secretary/director







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Authority



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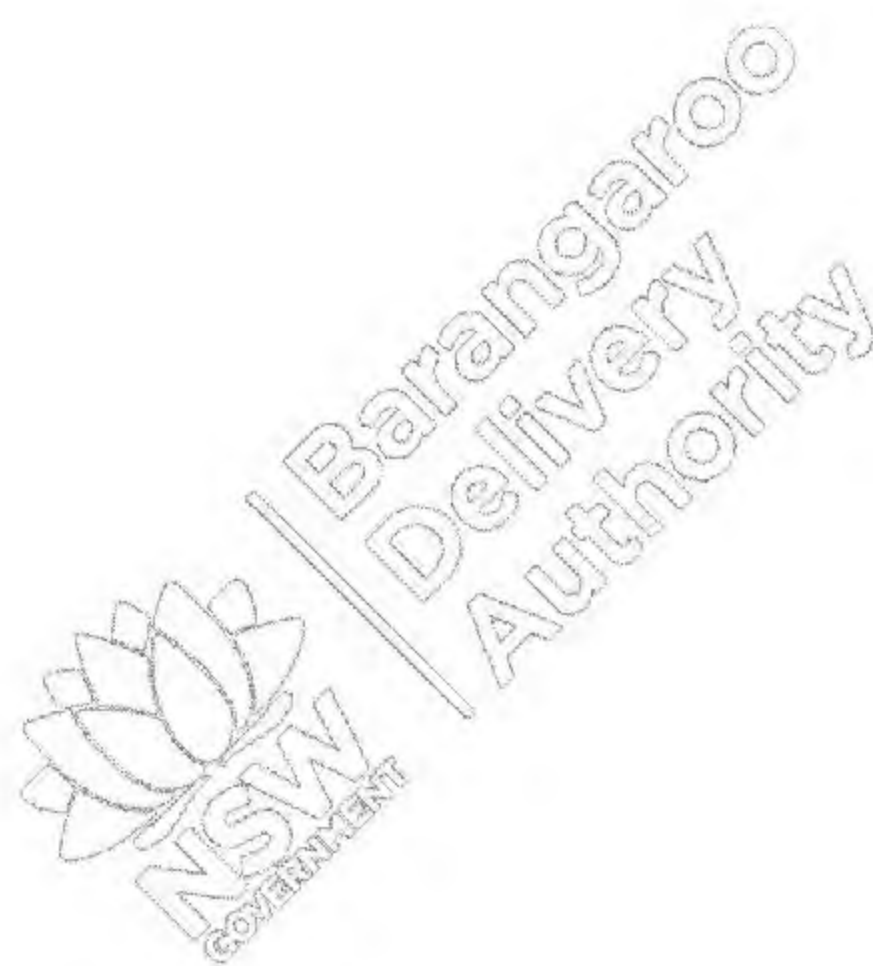


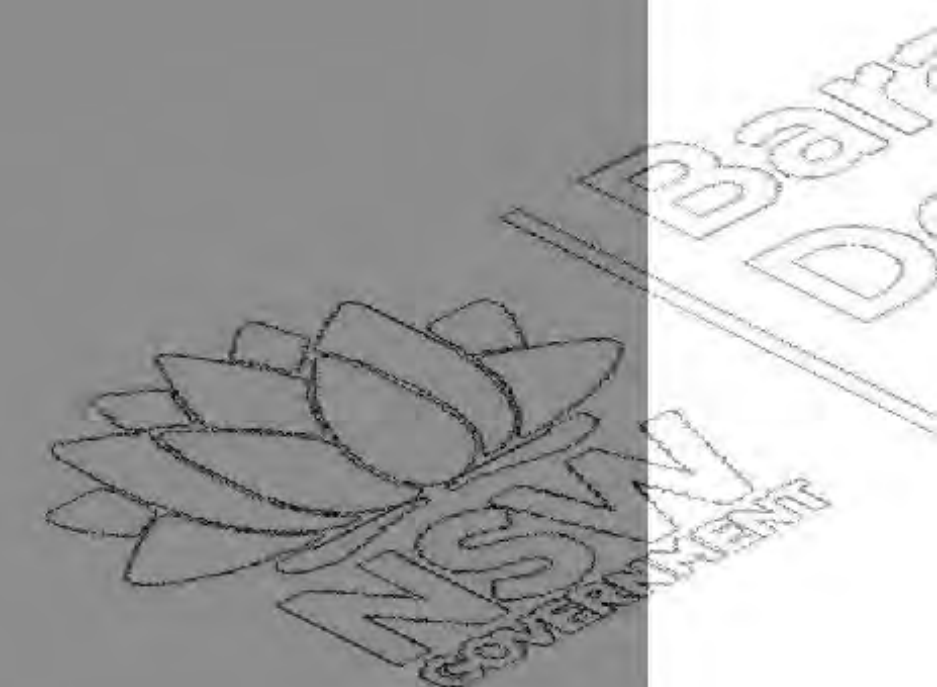
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Annexure RR - [REDACTED]







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Annexure SS [REDACTED]

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[REDACTED]

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Annexure TT - Environmental Reports

ANNEXURE TT - Environmental Documents

| Rev 1.4, 201216 |                                                                                                   |                           |                                                                                                                                        |                                                                                                                                                                                                       |               |
|-----------------|---------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| BDA File Number | Title                                                                                             | Document Reference        | Main Document                                                                                                                          | Supporting Document                                                                                                                                                                                   | Document Date |
| 1               | Central Development Tender Documents                                                              |                           |                                                                                                                                        |                                                                                                                                                                                                       |               |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation                                                                                                            | L001-BDA-Rev2, Remediation Advice                                                                                                                                                                     | 26/11/2015    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2010a, Data Gap Investigation, EPA Declaration Area (Part of Barangaroo Site and Hickson Road), Millers Point, NSW, AECOM Australia Pty Ltd.                                                    | 23/09/2010    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2011a, Human Health and Ecological Risk Assessment Declaration Site (Development Works) Remediation Works Area - Barangaroo, AECOM Australia Pty Ltd                                            | 9/06/2011     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2011b, Human Health and Ecological Risk Assessment Addendum Other Remediation Works (South) Area, Barangaroo, AECOM Australia Pty Ltd                                                           | 4/07/2011     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2011c, Amended Remedial Action Plan Barangaroo - DRWS Area, AECOM Australia Pty Ltd.                                                                                                            | 7/07/2011     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2012b, Supplementary Data Gap Investigation, VMP Area, Hickson Road, Millers Point, NSW, AECOM Australia Pty Ltd.                                                                               | 9/03/2012     |
|                 |                                                                                                   |                           |                                                                                                                                        | AECOM 2012c, Human Health and Ecological Risk Assessment                                                                                                                                              | Oct-12        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2013a, VMP Remediation Extent VMP Remediation Works Area (Parts of Barangaroo and Hickson Road), Millers Point, NSW, AECOM Australia Pty Ltd                                                    | 23/07/2013    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | AECOM 2013b, Remedial Action Plan, NSW EPA Remediation Site 21122 and Block 4 (Stage 1b) Development Works, Barangaroo, Millers Point, NSW, July 2013, AECOM Australia Pty Ltd                        | 24/07/2013    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | BDA, 2014a, Modification to Barangaroo Concept Plan, Central Barangaroo and Headland Park, 20 March 2014, Barangaroo Delivery Authority                                                               | 20/03/2014    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | Driscoll 2013, The Use of Asbestos-Contaminated Soils on Barangaroo, Final Report, Associate Professor Tim Driscoll Sydney School of Public Health, Sydney Medical School, University of Sydney       | Mar-13        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | Environ 2010, Site Audit Report and Site Audit Statement, Overarching Remedial Action Plan, Barangaroo, ENVIRON                                                                                       | 2/06/2010     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | Environ 2013a, Site Audit Report and Site Audit Statement, Remedial Action Plan, Barangaroo Central, July 2013.                                                                                       | 31/07/2013    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | Environ 2013b, Site Audit Report, Remedial Action Plan, Declaration Area and Block 4, Barangaroo, 31 July 2013.                                                                                       | 31/07/2013    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | ERM 2006, East Darling Harbour Geotechnical and Environmental Investigations: Summary of Findings, ERM Australia.                                                                                     | 27/09/2006    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | ERM 2007, Environmental Site Assessment, East Darling Harbour, Sydney, NSW, ERM Australia.                                                                                                            | 21/06/2007    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | ERM 2008, Additional Investigation Works at Barangaroo, Hickson Road, Millers Point, NSW, ERM Australia.                                                                                              | Jul-08        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | ERM 2010, Overarching Remedial Action Plan for The Barangaroo Project Site, Sydney, ERM Australia.                                                                                                    | 1/06/2010     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2011a, Remedial Action Plan, Barangaroo Headland Park, Hickson Road, Sydney, NSW, Final Draft, Revision F, February 2011, JBS Environmental Pty Ltd (now JBS&G)                                   | Feb-11        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2011b, Human Health and Ecological Risk Assessment, Barangaroo Headland Park, Revision 2, February 2011, JBS Environmental Pty Ltd (now JBS&G)                                                    | 1/09/2011     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS, 2012a, Data Gap Investigation, Barangaroo Central, Hickson Road, Sydney, NSW, Revision C, August 2012, JBS Environmental Pty Ltd (now JBS&G).                                                    | Aug-12        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2012b Human Health and Ecological Risk Assessment Proposed for Imported Soils, Barangaroo Central, Hickson Road, Sydney, NSW, Revision C, July 2012, JBS Environmental Pty Ltd (now JBS&G).       | Jul-12        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2013a, Additional Human Health Risk Assessment: Calculations - Basement Exposures Barangaroo Central Residential Development, Letter dated 25 January 2013, JBS Environmental Pty Ltd (now JBS&G) | May-13        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2013a, Human Health Risk Assessment, Barangaroo Development Authority, Barangaroo Central, Hickson Road, Sydney, NSW, Revision C, May 2013, JBS Environmental Pty Ltd (now JBS&G)                 | May-13        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS 2013c, Remedial Action Plan, Barangaroo Delivery Authority, Barangaroo Central Hickson Road, Sydney, NSW, Rev H, May 2013, JBS Environmental Pty Ltd (now JBS&G)                                  | May-13        |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS&G 2013d, Assessment of Proposed Implications of Modifications to Barangaroo Central Concept Plan Barangaroo Central, Hickson Road, Sydney NSW, Letter to BDA dated 3 October 2013                 | 3/10/2013     |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | JBS&G 2014a, Assessment of Proposed Implications of Modification to Barangaroo Central Concept Plan Barangaroo Central, Hickson Road, Sydney NSW, Letter to BDA dated 29 May 2014                     | 29/05/2014    |
|                 | Request for Development Bids - Central Barangaroo - Part F - Guidelines and Technical Information | Part F13                  | Contamination / Remediation - Selected references as identified in L001-BDA-Rev2, Remediation Advice                                   | NSW EPA 2010, Notice of Approval of Voluntary Management Proposal, Approval No 20101713, Approved date 23 July 2010, Area No 3221.                                                                    | 23/07/2010    |
| 2               | Additional Geotechnical Data                                                                      |                           |                                                                                                                                        |                                                                                                                                                                                                       |               |
| 2.1             | Additional Geotechnical Reports                                                                   | GEOTLCOV 24015AL-AB       | Barangaroo South - Ex-situ Remediation of proposed services - EXTRACT for Geotech - Cardno                                             | Preliminary Environmental Investigation 30-38 Hickson Rd Millers Point - Coffey                                                                                                                       | 12/05/2008    |
| 2.2             | Additional Geotechnical Reports                                                                   | ENVILCOV 00437AA-R04      | Specialist Desktop Geotechnical Report to Accompany Project Application MP 10, Q026 Remediation and Landforming Works: Barangaroo LLMP |                                                                                                                                                                                                       | 12/10/2012    |
| 2.3             | Additional Geotechnical Reports                                                                   | 0080637R03                | Additional Investigation Works at Barangaroo - ERM                                                                                     |                                                                                                                                                                                                       | Jul-08        |
| 2.4             | Additional Geotechnical Reports                                                                   | Q044432RP02, Rev 01       | Environmental Site Assessment, East Darling Harbour Sydney NSW - Final Report - ERM                                                    |                                                                                                                                                                                                       | 21/06/2007    |
| 2.5             | Additional Geotechnical Reports                                                                   | GEOTLCOV 24015AO-BP1      | Barangaroo South - Pittman LJV Dyke Hydraulic Testing Report - Coffey                                                                  |                                                                                                                                                                                                       | 30/05/2014    |
| 2.6             | Additional Geotechnical Reports                                                                   | 60313921_GE_30_03         | Stage 1B Perimeter Retention Wall Investigation Report - AECOM                                                                         |                                                                                                                                                                                                       | 5/06/2014     |
| 2.7             | Additional Geotechnical Reports                                                                   | CBD-2110-GHD-R-GE-001[F]  | Sydney Metro Authority CBD Metro - Geotechnical Interpretative Report - GHD                                                            |                                                                                                                                                                                                       | Aug-09        |
| 2.8             | Additional Geotechnical Reports                                                                   | GEOTLCOV24015AO-BK        | Barangaroo Stage 1B - Stormwater Drain Assessment of Geotechnical Conditions - Revised Report - Coffey                                 |                                                                                                                                                                                                       | May-14        |
| 3               | Remediation Stormwater Works REF and S96                                                          |                           |                                                                                                                                        |                                                                                                                                                                                                       |               |
| 3.1             | Section 96 REF Amendment Stormwater Diversion                                                     | NA50613044                | Barangaroo South Stag 1B - Phase 1 Stormwater Diversion Works Civil Engineering Report Modification to Temporary Works                 | Barangaroo South Stag 1B - Phase 1 Stormwater Diversion Works Civil Engineering Report Modification to Temporary Works                                                                                | 21/09/2016    |
| 3.2             | Section 96 REF Amendment Stormwater Diversion                                                     |                           | Contamination Letter for Proposed Hickson Rd Temporary Stormwater Construction Works, Hickson Rd, Millers Point                        | Contamination Letter for Proposed Hickson Rd Temporary Stormwater Construction Works, Hickson Rd, Millers Point                                                                                       | 19/09/2016    |
| 3.3             | Section 96 REF Amendment Stormwater Diversion                                                     |                           | Section 96(2) Modification Application to SSD 5897 - Barangaroo South Stage 1B Temporary Stormwater Diversion Works - Letter           |                                                                                                                                                                                                       | 28/09/2016    |
| 3.4             | Remediation Stormwater Works REF                                                                  | NDA50613044               | Barangaroo South Stage 1B - Hickson Rd Stormwater Diversion Works Civil Engineering Report                                             |                                                                                                                                                                                                       | 23/11/2015    |
| 3.5             | Remediation Stormwater Works REF                                                                  |                           | Barangaroo South Stage 1B - Phase 2 Stormwater Diversion Works - Drawings                                                              | Case No CN135414SW Drawings 1-10.                                                                                                                                                                     | 7/12/2015     |
| 3.6             | Remediation Stormwater Works REF                                                                  | JBA 10051                 | Review of Environmental Factors - Stage 1B Stormwater Diversion Works within Hickson Rd - JBA                                          |                                                                                                                                                                                                       | Jan-16        |
| 3.7             | Remediation Stormwater Works REF                                                                  | 60336060_LT08             | Hickson Rd Stormwater Construction Works - Review of Environmental Factors                                                             |                                                                                                                                                                                                       | 27/11/2015    |
| 3.8             | Remediation Stormwater Works REF                                                                  |                           | Contamination Letter Hickson Rd, Millers Point - AECOM                                                                                 |                                                                                                                                                                                                       |               |
| 3.8             | Remediation Stormwater Works REF                                                                  |                           | Air Quality and Odour Impact Analysis - Stage 1B Permanent Stormwater deviation works - Letter - AECOM.                                |                                                                                                                                                                                                       | 24/11/2015    |
| 3.9             | Remediation Stormwater Works REF                                                                  | YN210079/NDAS0613044_1532 | Barangaroo South Flood Study - Barangaroo South Stage 1A and 1B - Cardno                                                               |                                                                                                                                                                                                       | 11/03/2015    |
| 4               | Remediation Utilities Reports                                                                     |                           |                                                                                                                                        |                                                                                                                                                                                                       |               |
| 4.1             | Utilities Report - Cardno                                                                         | 50613044-32               | Barangaroo South - Ex-Situ Remediation of Proposed Services                                                                            |                                                                                                                                                                                                       | 5/04/2016     |
| 4.2             | Utilities Report - Christie Civil Potholing                                                       |                           | Barangaroo South Stage 1B - Potholing and Services Investigations                                                                      |                                                                                                                                                                                                       |               |
| 5               | Temporary Anchor License                                                                          | IA318336317.1             | Hickson Road - Perimeter Retention Walls and bulk Excavation / Remediation Works - BDA and Lend Lease                                  |                                                                                                                                                                                                       | 23/05/2016    |
| 6               | Remediation Temporary Walls                                                                       |                           | Selected drawings for retaining walls along Hickson Rd West                                                                            | Selected Drawings BB:2SD 100/G100 to BB:2SD 100/G500                                                                                                                                                  | 31/03/2016    |

**This Annexure TT consists of documents totalling over 17,000 pages.**

**Refer to attached table of contents of documents on display at the Barangaroo Delivery Authority by appointment.**



**This Annexure B has been wholly  
redacted from page 1 to 99**

Annexure VV - Dalgety Bond Stores Agreement

# Bond Stores Coordination Deed

Barangaroo Delivery Authority  
The Authority

Aqualand Millers Point Pty Limited  
Aqualand

Clayton Utz  
Lawyers  
Level 15 1 Bligh Street  
Sydney NSW 2000  
GPO Box 9806  
Sydney NSW 2001  
Tel +61 2 9353 4000  
Fax +61 2 8220 6700  
[www.claytonutz.com](http://www.claytonutz.com)

Our reference 104/18637/80128948

L1320735142.18

# Bond Stores Coordination Deed

## Date

**Parties**                      **Barangaroo Delivery Authority** of 21/201 Kent Street SYDNEY NSW 2000 (Authority)

**Aqualand Millers Point Pty Limited ACN 605 926 887** of Level 29, Unit 5, 225 George Street SYDNEY NSW 2000 (**Aqualand**)

## Background

- A. The Authority is the registered proprietor of the land comprising Barangaroo, including Barangaroo Reserve and the car parking facility at Barangaroo Reserve.
- B. Aqualand is the leasehold owner of the Land pursuant to the Bond Stores Head Lease.
- C. Aqualand has agreed to grant a licence of part of the Land to the Authority in order to connect the Bond Stores with the public domain at Barangaroo around Nawi Cove.
- D. The Authority has agreed to grant a licence in respect of the Barangaroo Reserve Car Spaces to Aqualand (or its sub-tenants) and carry out landscaping in respect of the area of the Bond Stores to be licenced to the Authority.

## 1. Definitions and interpretation

### 1.1 Definitions

The following words have these meanings in this deed, unless a contrary intention appears:

**Application** means any application for an Approval including a Modification and a Significant Application.

**Approval** means any permit, licence, consent, grant, certificate, sealing, Modification or other approval obtained or required to be obtained from a government agency (other than a consent or approval obtained or required to be obtained from the Authority under this deed), utility providers or any other person in relation to Aqualand's proposed use of the Land as contemplated by this deed and includes any consent, licence or approval required by the Authority, any planning approval and any requisition, condition or requirement from a government agency, utility provider or any other person.

**Barangaroo Reserve Car Parking Licence** means the licence to be granted by the Authority to Aqualand in accordance with clause 5.

**Barangaroo Reserve Car Spaces** mean a total of 24 car spaces within the car parking facilities at "The Cutaway" at Barangaroo Reserve in such locations as specified by the Authority from time to time by notice to Aqualand.

**BDA Office** means office space for the use by the Authority or its nominee in connection with the management and operation of the Barangaroo precinct.

**Bond Stores** means the buildings, improvements and other structures situated on the Land.

**Bond Stores Head Lease** means the lease of the Land granted by the Authority (as landlord) to Aqualand (as tenant) registered U15733.

**Bond Stores Sublease** means the lease of that part of the Land known as "Bond Store A, 1 Munn Reserve, Millers Point" granted by Aqualand to the Bond Stores Subtenant registered A1149307.

**Bond Stores Subtenant** means Universal Pictures (Australasia) Pty Limited ACN 087 513 620 (including any assignee or successor in title in respect of its interest in the Bond Stores Sublease).

**Business Day** means any day other than:

- (a) a Saturday, Sunday or public holiday in Sydney; or
- (b) the days between 24 December and 2 January in each year; or
- (c) any days during the Christmas closedown period for the NSW government sector as described in Premier's Memorandum M2016-01 and each replacement memorandum.

**Consent Authority** means, in relation to an Application, the government, semi government, local government, statutory, public, ministerial, civil, administrative, fiscal or judicial body or other authority or body and, where applicable, an accredited certifier accredited under section 109T of the EP&A Act having the function to determine the Application.

**Construction Zone** has the meaning given in clause 4.4(a).

**Cultural Institution** means the cultural institution as nominated by the Authority from time to time.

**Early Activation** means early activation uses [REDACTED]

**EP&A Act** means the Environmental Planning and Assessment Act 1979 (NSW).

**Foreshore Area** means that part of the on-grade area the subject of the Bond Stores Head Lease marked as "C" on the Plan.

**Foreshore Area Licence** means a licence of the Foreshore Area in the form of Schedule 2.

**Foreshore Vacation Condition** means Aqualand procuring the Bond Stores Subtenant's relinquishment of the licence which it holds in respect of 11 car spaces situated on the Land and providing evidence of such relinquishment to the Authority.

**GFA** means gross floor area and has the same meaning as it has under the Standard Instrument (Local Environmental Plans) Order 2006.

[REDACTED]

[REDACTED]

[REDACTED]

**Land** means the land comprised within folio identifier 100/838323.

[REDACTED]

[REDACTED]

**Landscape Area** means the area nominated by the Authority within the Foreshore Area in which the Authority will carry out the landscaping works pursuant to clause 4.1(c) (indicatively shown as the area marked "B" on the Plan).

**Law** includes all statutes, regulations, by-laws, ordinance and other delegated legislation, orders, notices and any rule of common law or equity and any statutory guidelines, policies and environmental planning instruments.

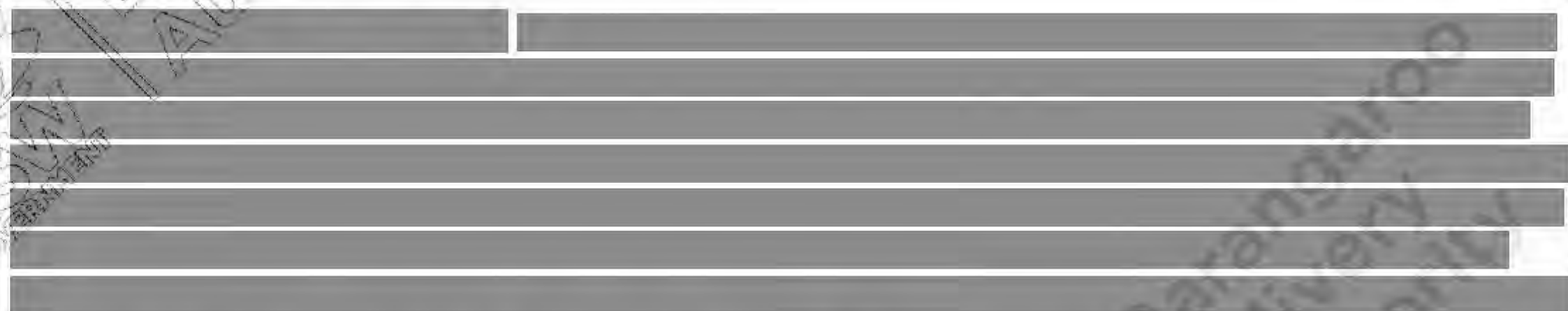
**Modification** means any of one or more of the following:

- (a) a modification of the concept plan applicable to the Land within the meaning of section 75W of the EP&A Act;
- (b) a surrender (in whole or as to part only) of the concept plan applicable to the Land within the meaning of section 75YA of the EP&A Act (whether by modification, operation of Law or any other means);
- (c) a modification of the environmental planning instrument governing the development of the Land, as applicable from time to time (whether by amendment, operation of Law or any other means); or
- (d) the replacement of the environmental planning instrument governing the development of the Land with a new environmental planning instrument.

**Occupation Certificate** means an interim or final occupation certificate to be issued under Part 4A of the EP&A Act to enable the occupation or use of a structure in accordance with the EP&A Act.

**Office Premises** means Level 3 of the Bond Stores.

**Plan** means the plan attached as Schedule 1.



**Retail Area** means the area of the Land identified as the "Retail Area" in the Plan.

## 1.2

### Interpretation

In this deed unless the context indicates a contrary intention:

- (a) an obligation or a liability assumed by, or a right conferred on, 2 or more persons binds or benefits them jointly and severally;
- (b) "person" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;
- (c) a reference to a party includes that party's executors, administrators, successors and permitted assigns, including persons taking by way of novation and, in the case of a trustee, includes a substituted or an additional trustee
- (d) a reference to a document (including this) is to that document as varied, novated, ratified or replaced from time to time;
- (e) a reference to a statute includes its delegated legislation and a reference to a statute or delegated legislation or a provision of either includes consolidations, amendments, re-enactments and replacements;

- (f) a word importing the singular includes the plural (and vice versa), and a word indicating a gender includes every other gender;
- (g) a reference to a party, clause, schedule, exhibit, attachment or annexure is a reference to a party, clause, schedule, exhibit, attachment or annexure to or of this deed, and a reference to this deed includes all schedules, exhibits, attachments and annexures to it;
- (h) if a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;
- (i) "includes" in any form is not a word of limitation; and
- (j) a reference to "\$" or "dollar" is to Australian currency.

## 2. Vacation of Foreshore Area and availability of Bond Stores

### 2.1 Existing use

Aqualand covenants and warrants that:

- (a) the Bond Stores Subtenant's only rights to use the Foreshore Area are those rights pursuant to the Bond Stores Sublease and that no other rights or interests have been granted in respect of the Foreshore Area;
- (b) it has not granted any interest in the Land to any party other than the Bond Stores Subtenant; and
- (c) on and from the date of this deed, it will not grant any new interest in the Foreshore Area (other than as contemplated by this deed).

### 2.2 Aqualand to procure Foreshore Vacation Condition

- (a) Aqualand must use its best endeavours to satisfy the Foreshore Vacation Condition as soon as is practicable after the date of this deed,
- (b) If the Foreshore Vacation Condition is satisfied, Aqualand must give a notice to the Authority:
  - (i) confirming that the Foreshore Vacation Condition has been satisfied; and
  - (ii) providing evidence satisfactory to the Authority confirming that the Bond Stores Subtenant releases all claims and interest which it may have in the Foreshore Area.

### 2.3

- [REDACTED]
- [REDACTED]
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| ■ | [REDACTED] |
| ■ | [REDACTED] |

## 4. Foreshore Area Licence

### 4.1 Grant of Foreshore Area Licence

On the date on which the Foreshore Vacation Condition is satisfied, Aqualand grants the Foreshore Area Licence to the Authority (subject to a right of way across the Foreshore Area for the benefit of Aqualand as shown on the Plan) and otherwise on the following terms:

- (a) the term will be for the balance of the term of the Bond Stores Head Lease less one day;
- (b) the licence fee will be [REDACTED]; and
- (c) the Authority will, at the Authority's cost, landscape the Foreshore Area to provide a grassed open area and otherwise to a standard determined by the Authority acting reasonably. The Authority will prepare a landscaping plan for the Landscape Area and submit this to Aqualand for consent (such consent not to be unreasonably withheld or delayed). The Authority must give Aqualand at least 3 months' notice prior to commencing the landscaping works.

### 4.2 Execution of Foreshore Area Licence

The parties must, within 20 Business Days after the date on which the licence is granted pursuant to clause 4.1, do all things necessary to prepare, sign and exchange the licence substantially in the form attached as Schedule 2. The Foreshore Area Licence comes into existence and is binding on the Authority and Aqualand even if any party does not comply with this clause 4.2 or does not comply with it on time.

### 4.3 Acknowledgement regarding Retail Area

- (a) The parties acknowledge and agree that Aqualand proposes to use the Retail Area for retail uses.
- (b) Each party must use reasonable endeavours to ensure that their respective uses of the Foreshore Area (pursuant to the Foreshore Area Licence) and the Retail Area do not unduly interfere or materially adversely impact on the other party's use of the Land.

### 4.4 Adjustment of Foreshore Area to exclude Construction Zone

- (a) At any time after Aqualand receives approval to [REDACTED] Aqualand may by notice to the Authority given in accordance with clause 4.4(b), terminate the Foreshore Area Licence in respect of that portion of the Foreshore Area (if any or all) as Aqualand intends to use for construction staging purposes and/or development under [REDACTED] (Construction Zone).
- (b) A notice given for the purposes of clause 4.4(a) must:
  - (i) attach a copy of [REDACTED] and the approval given in respect of [REDACTED];

- (ii) attach a plan:
    - A. identifying the Construction Zone; and
    - B. showing the Foreshore Area as amended to exclude the Construction Zone;
  - (iii) be given no more than 2 months prior to the date Aqualand reasonably anticipates to be the date for commencement of work under the approval to [REDACTED]; and
  - (iv) specify the date on which the Foreshore Area is to be amended to exclude the Construction Zone (as identified in the notice), provided that such date must not be earlier than one month after the date of the notice.
- (c) If Aqualand gives a valid notice pursuant to clauses 4.4(a) and 4.4(b), the Foreshore Area under the Foreshore Area Licence is reduced to exclude the Construction Zone on the date specified in the notice and the Foreshore Area Licence will cease to apply in respect of the Construction Zone.

#### 4.5 Adjustment of Foreshore Area at request of Authority

- (a) At any time after the date of this deed, whether or not the Foreshore Area Licence has been granted, the Authority may give a notice to Aqualand requesting that the Foreshore Area is adjusted by enlarging or reducing the Foreshore Area (including by adjusting any part of the Retail Area), provided that any proposed area must be wholly situated within the Land.
- (b) A notice given for the purposes of 4.5(a) must:
  - (i) attach a plan:
    - A. identifying the area to be included or excluded from the Foreshore Area; and
    - B. showing the Foreshore Area as adjusted; and
  - (ii) specify the date on which the Foreshore Area is to be amended to reflect the relevant adjusted area as identified in the notice, provided that such date must not be earlier than one month after the date of the notice.
- (c) If the Authority gives a valid notice pursuant to clauses 4.5(a) and 4.5(b), Aqualand must act reasonably in considering the Authority's proposal and must within 20 Business Days after the date of the notice, give a notice to the Authority either:
  - (i) accepting the Authority's proposal as set out in the notice; or
  - (ii) rejecting the Authority's proposal and providing detailed reasons as to why the proposal cannot be agreed by Aqualand having regard to the existing contractual commitments that Aqualand has under the Bond Stores Sublease.
- (d) If Aqualand accepts the Authority's proposal, the Foreshore Area under the Foreshore Area Licence is adjusted by enlarging or reducing the Foreshore Area (as relevant) on the date specified in the notice and the Foreshore Area Licence will cease to apply in respect of any area excluded from the Foreshore Area as a result of the adjustment.

## 5. **Barangaroo Reserve Carparking Licence**

### 5.1 **Grant of Barangaroo Reserve Carparking Licence**

Subject to Aqualand granting the Foreshore Area Licence to the Authority, the Authority will promptly after the date of that licence, grant Aqualand the right to use the Barangaroo Reserve Car Spaces for the balance of the term of the Bond Stores Head Lease less one day on the terms set out in the form of licence attached as Schedule 3.

### 5.2 **Execution Barangaroo Reserve Carparking Licence**

The parties must, within 20 Business Days after the date on which the Barangaroo Reserve Carparking Licence is granted pursuant to clause 5.1, do all things necessary to prepare, sign and exchange the licence substantially in the form attached as Schedule 3. The Barangaroo Reserve Carparking Licence comes into existence and is binding on the Authority and Aqualand even if any party does not comply with this clause 5.2 or does not comply with it on time.

## 6. **Sydney Metro**

- (a) Aqualand acknowledges and agrees that part of the Land and the area surrounding the Land may be required to be accessed by Transport for NSW (and its subcontractors, agents and employees) for the purposes of constructing the Sydney Metro Project and as indicatively shown in the plan attached as Schedule 5.
- (b) Aqualand agrees to act reasonably in providing access to Transport for NSW (and its subcontractors, agents and employees) across the Land as required in connection with these works from the date of this deed and until the relevant works are completed and in accordance with any terms of access agreed between Aqualand and Transport for NSW (and its subcontractors, agents and employees).

## 7. **Stamp Duty indemnity**

- (a) Subject to clause 7(b), the Authority agrees to pay to Aqualand, within 10 Business Days of a written demand by Aqualand, an amount equal to any stamp duty payable by Aqualand in respect of each of the following:
  - (i) the execution of this deed;
  - (ii) the grant of the Barangaroo Reserve Carparking Licence by the Authority to Aqualand;
  - (iii) the surrender of the Bond Stores Head Lease for [REDACTED];
  - (iv) [REDACTED].
- (b) The Authority will not be obliged to pay any amount to Aqualand under clause 7(a) in respect of stamp duty payable on:
  - (i) any mortgages, charges or other security interests granted by Aqualand with respect to its rights under this deed;
  - (ii) any lease which is granted in respect of the Land;
  - (iii) any merger, or surrender and re-grant, or the grant of any concurrent Leases in respect of the Land.

## 8. Termination

If after [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED]  
 [REDACTED] either party  
 may terminate this deed, the Foreshore Area Licence and the Barangaroo Reserve Car  
 Parking Licence on one month's notice to the other party (such notice to be given within  
 [REDACTED]  
 [REDACTED])

## 9. Notices

### 9.1 Form

Unless expressly stated otherwise in this deed, all notices, certificates, consents, approvals, waivers and other communications in connection with this deed must be in writing, signed by an Authorised Officer of the sender and marked for attention as set out below or, if the recipient has notified otherwise, then marked for attention in the way last notified:

#### Authority

Name: Barangaroo Delivery Authority  
 Address: 21/201 Kent Street  
 SYDNEY NSW 2000  
 Email: lawyer@barangaroo.nsw.gov.au  
 For the attention of: General Counsel

#### Aqualand

Name: Aqualand Millers Point Pty Ltd  
 Address: Level 29, Unit 5, 225 George Street SYDNEY  
 Email: [REDACTED]  
 For the attention of: [REDACTED]

### 9.2 Delivery

Notices must be:

- (a) left at the addresses referred to in clause 9.1; or
- (b) sent by prepaid post (airmail, if appropriate) to the addresses referred to in clause 9.1; or
- (c) sent by email to the email address (or addresses) referred to in clause 9.1.

However, if the intended recipient has notified a changed postal address or changed email address, then the communication must be to that address or number.

### 9.3 When effective

Notices take effect from the time they are received unless a later time is specified in them.

#### 9.4 Receipt - postal

If sent by post, notices are taken to be received 5 Business Days after posting (or 10 Business Days after posting if sent to or from a place outside Australia).

#### 9.5 Communications by email

With respect to communications sent by email:

- (a) only the letter in .pdf format attached to the email and, subject to clause 9.5(b), any attachments to such letter which are referred to in the letter, will form part of the communication under this clause 9.5. Any text in the body of the email or the subject line will not form part of the communication;
- (b) an attachment to an email will only form part of a communication under this clause 9.5 if it is in \*.pdf, \*.xls, \*.doc, \*.vsd, \*.mpp, \*.mdb, \*.xer or \*.ppt format, or such other format as may be agreed between the parties from time to time; and
- (c) the parties agree, with respect to any communications under or in connection with this deed:
  - (i) to ensure that their respective firewall and/or mail server (as applicable):
    - A. allows messages of up to 20 MB (or such greater capacity as may be agreed between the parties from time to time) to be received;
    - B. does not trap any messages in the spam filter which:
      - 1) in the case of notices sent by the Authority to Aqualand, have been sent from '\*.nsw.gov.au'; and
      - 2) in the case of notices sent by Aqualand to the Authority, have been sent from '\*.aqualand.com.au'; and
    - C. automatically sends a receipt notification to the sender upon receipt of a message; and
  - (ii) to use reasonable endeavours to ensure that their respective systems automatically send a notification message to each of the sender and the recipient when a message is received by the recipient's domain but cannot or will not be delivered to the recipient.

#### 9.6 Receipt - email

If notices are sent by email they are taken to be received:

- (a) by 5:00pm (local time in the place of receipt) on a Business Day - at the time in the place to which it is sent equivalent to the time shown on the automatic receipt notification received by the party sending the email from the recipient; or
- (b) after 5:00pm (local time in the place of receipt) on a Business Day, or a day that is not a Business Day - on the Business Day following the date on which it is sent equivalent to the date shown on the automatic receipt notification received by the party sending the email from the recipient.

## 9.7 Receipt - general

If notices are left at an address or received after 5.00pm in the place of receipt or on a non-Business Day, they are to be taken to be received at 9.00am on the next Business Day.

## 10. General

### 10.1 Governing law

This deed is governed by and must be construed according to the law applying in New South Wales.

### 10.2 No fettering of Statutory Power

Nothing in this deed will operate so as to fetter or in any way impede the exercise of the statutory powers, functions and discretion of the Authority in its role as a government agency under the Barangaroo Delivery Authority Act 2009 (NSW) or its role as Roads Authority under the Roads Act 1993 (NSW).

### 10.3 No partnership or agency

Except as expressly provided in this deed nothing contained or implied in this deed will:

- (a) constitute or be deemed to constitute a party to be the partner, agent or legal representative of any other party for any purpose whatsoever or create or be deemed to create any partnership; or
- (b) create or be deemed to create any agency or trust.

### 10.4 Further assurance

Each party must do, sign, execute and deliver and must procure that each of its Employees and Agents does, signs, executes and delivers, all deeds, documents, instruments and acts as reasonably required of it or them and must carry out and give full effect to this deed and the rights and obligations of the parties under it.

### 10.5 Counterparts

This deed may be executed in any number of counterparts and all of those counterparts taken together constitute the same instrument.

### 10.6 Attorneys

Each attorney who executes this deed on behalf of a party declares that the attorney has no notice of the revocation or suspension by the grantor or in any manner of the power of attorney under the authority of which the attorney executes this deed.

### 10.7 Entire agreement

This deed forms the entire agreement of the parties on the subject matter. The only enforceable obligations and liabilities of the parties in relation to the subject matter are those that arise out of the provisions contained in this deed. All representations, communications and prior agreements in relation to the subject matter are merged in and superseded by this deed.

### 10.8 Amendment

This deed may only be amended or supplemented in writing signed by the parties.

## 10.9 Severability

Any provision in this deed which is invalid or unenforceable in any jurisdiction is to be read down for the purposes of that jurisdiction, if possible, so as to be valid and enforceable, and is otherwise severed to the extent of the invalidity or unenforceability, without affecting the remaining provisions of this deed or affecting the validity or enforceability of that provision in any other jurisdiction.

## 10.10 Waiver

The non-exercise of or delay in exercising any power or right of a party does not operate as a waiver of that power or right, nor does any single exercise of a power or right preclude any other exercise of it or the exercise of any other power or right. A power or right may only be waived in writing, signed by the party to be bound by the waiver.

## 10.11 Rights cumulative

The rights and remedies provided in this deed are cumulative and do not exclude any rights or remedies provided by Law.

## 10.12 No contra proferentum

In the interpretation of this deed, no rule of construction will apply to disadvantage a party because that party proposed a provision of this deed or the deed itself.



Executed as a deed

Authority

[Redacted]

is affixed by authority of the Chief Executive Officer in the presence of:

[Redacted]

Office held

[Redacted]

Office held

Aqualand

Signed, sealed and delivered for and on behalf of Aqualand Millers Point Pty Limited by its attorney under the

[Redacted] dated 22 July 2016

[Redacted] in New South Wales

[Redacted] 4711 No. 224

and in the presence of:

[Redacted]

Full name of witness

[Redacted]

Full name of attorney

Schedule 1 - Plan



**Schedule 2 - Form of Foreshore Area Licence**

# Foreshore Area Licence

**Barangaroo Delivery Authority**

Licensor

**Aqualand Millers Point Pty Limited**

Licensor

Clayton Utz  
Lawyers  
Level 15 1 Bligh Street  
Sydney NSW 2000  
GPO Box 9806 Sydney NSW 2001  
Tel +61 2 9353 4000  
Fax +61 2 8220 6700  
[www.claytonutz.com](http://www.claytonutz.com)

Our reference 170/18637/80128948

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# Foreshore area licence

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## Date

## Parties

**Aqualand Millers Point Pty Limited ACN 605 926 887** of Level 29, Unit 5, 225 George Street SYDNEY NSW 2000 (**Licensor**)

**Barangaroo Delivery Authority ABN 94 567 807 277** of 21/201 Kent Street, Sydney NSW 2000 (**Licensee**)

## Background

- E. The Licensor is the leasehold owner of the Land comprising part of Barangaroo and in which the Foreshore Area is situated.
- F. The Licensor has agreed to grant a licence of the Foreshore Area to the Licensee in order to connect the Bond Stores with the public domain at Barangaroo around Nawi Cove.
- G. The Licensee has agreed to accept a licence of the Foreshore Area, subject to the terms of this deed.

## Operative provisions

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### 1. Definitions and interpretation

#### 1.1 Definitions

In this deed:

**Barangaroo** has the meaning given to that word under the Barangaroo Delivery Authority Act 2008 (NSW).

**Bond Stores** means the buildings, improvements and other structures situated on the Land.

**Bond Stores Coordination Deed** means the deed entered into by the Licensee and Licensor entitled "Bond Stores Coordination Deed" dated on or about the date of this deed.

**Bond Stores Head Lease** means the lease of the Land granted by the Authority (as landlord) to Aqualand Millers Point Pty Ltd ACN 605 926 887 (as tenant) registered U15733.

**Commencing Date** means the date in Item 1.

**Foreshore Area** means that part of Barangaroo hatched and marked "C" as shown on the Foreshore Area Plan.

**Foreshore Area Plan** means the plan attached as Annexure A.

**Expiry Date** means the date in Item 2.

**GST** includes amounts defined as "GST" under the GST law and:

- (a) amounts payable on account of a notional liability under Division 177 of the GST Act; and

- (b) "GST equivalents" payments under the Intergovernmental Agreement Implementation (GST) Act 2000 (NSW) (or similar payments under corresponding legislation of any other State or Territory).

**GST Act** means the A New Tax System (Goods and Services Tax) Act 1999.

**GST law** has the same meaning as in the GST Act.

**Land** means the land specified in Item 3.

**Licensee's Employees** means the Licensee's employees, officers, consultants, agents, contractors and invitees or any of them.

**Licensor's Employees** means the Licensor's employees, officers, consultants, agents, contractors and invitees or any of them.

**Licence Fee** means [REDACTED]

**NSW Government** means the Crown in right of the State of New South Wales and its agencies.

**Permitted Use** means the use specified in Item 4.

**Retail Area** means the area hatched on the Foreshore Area Plan for retail uses.

**Term** means the term of the licence granted under this deed, beginning on the Commencing Date and ending on the date determined in accordance with clause 9.

## 1.2 Interpretation

In this deed:

- (a) headings are for convenience only and do not affect interpretation; and
- (b) unless the context indicates a contrary intention:
- (i) an obligation or a liability assumed by, or a right conferred on, 2 or more persons binds or benefits them jointly and severally;
  - (ii) "**person**" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;
  - (iii) a reference to a party includes that party's executors, administrators, successors and permitted assigns, including persons taking by way of novation, and, in the case of a trustee, includes a substituted or an additional trustee;
  - (iv) a reference to a document (including this deed) is to that document as varied, novated, ratified or replaced from time to time;
  - (v) a reference to a statute includes its delegated legislation and a reference to a statute or delegated legislation or a provision of either includes consolidations, amendments, re-enactments and replacements;
  - (vi) a word importing the singular includes the plural (and vice versa) and a word indicating a gender includes every other gender;
  - (vii) a reference to a party, clause, schedule, exhibit, attachment or annexure is a reference to a party, clause, schedule, exhibit, attachment or

- annexure to or of this deed, and a reference to this deed includes all schedules, exhibits, attachments and annexures to it;
- (viii) if a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;
  - (ix) "includes" in any form is not a word of limitation;
  - (x) a reference to "\$" or "dollar" is to Australian currency; and
  - (xi) a reference to an item is to an item in the reference schedule to this deed.

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## **2. The licence**

### **2.1 Licence**

The Licensor grants the Licensee a non-exclusive licence of the Foreshore Area, from the date of this licence until this licence ends in accordance with clause 9, for the Permitted Use subject to the terms of this deed.

### **2.2 No exclusive possession**

This deed does not confer on the Licensee any right of exclusive possession of any part of the Foreshore Area.

### **2.3 Personal rights only**

The rights conferred on the Licensee by this deed are personal rights in contract only and do not create any tenancy or any estate or interest in the Foreshore Area.

### **2.4 No dealing**

- (a) Subject to clause 5, the Licensee cannot sublicense or part with or share possession of the Foreshore Area or assign, novate or otherwise transfer any of its rights or obligations under this deed [REDACTED].
- (b) The Licensee may assign its interest in this deed with the prior written consent of the Licensor.

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## **3. Licence Fee**

The Licensee must pay the Licence Fee to the Licensor, if demanded.

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## **4. Licensor's obligations**

### **4.1 Obligations**

The Licensor must:

- (a) maintain and keep the Foreshore Area including the landscaping in good repair;
- (b) keep the Foreshore Area and surrounding areas clean, tidy and free of rubbish and vermin;
- (c) pay all outgoings and costs in respect of the Foreshore Area, including the cost of any utilities supplied to the Foreshore Area, any taxes, estate levy, cultural

contribution, rates, levies and other costs assessed in respect of the Foreshore Area;

- (d) maintain and manage the Foreshore Area at its cost and to a standard reasonably required by the Licensee (in its absolute discretion), including procuring at the Licensee's own cost the cleaning, structural or capital repairs, maintenance, repair, security and servicing of the Foreshore Area;
- (e) not do anything:
  - (i) the Licensee reasonably considers is dangerous, annoying, offensive, immoral or illegal;
  - (ii) to contaminate or pollute the Foreshore Area or any part of Central Barangaroo or the surrounding environment;
  - (iii) that interferes with, obstructs access to, damages or overloads the Foreshore Area; or
  - (iv) in the Foreshore Area, that interferes with, disturbs or causes a nuisance to users of the Public Domain outside the Foreshore Area;
- (f) not damage or destroy anything on the Foreshore Area or any part of Central Barangaroo.

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## 5. Sublicensing

The Licensee may grant non-exclusive sub-licences to the Licensor in respect of the Retail Area for the purposes of granting sub-sublicenses to retail tenants provided that any such sub-sublicense must:

- (a) be made only in respect to the Retail Area;
- (b) terminate immediately on the Expiry Date or earlier termination of this deed;
- (c) include provisions requiring the sub-licensee to:
  - (i) comply with all reasonable notices issued by the Licensee to the sub-sublicensee in relation to usage, cleaning, maintenance or safety issues arising from the use of the Foreshore Area;
  - (ii) comply with all directions of the Licensee in respect of emergencies or events which occur in or which may affect the Foreshore Area; and
  - (iii) procure the sub-sublicensee to ensure that the Licensee is able to access the Foreshore Area at all times and without prior notice.

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## 6. Indemnities and releases

### 6.1 Licensee accepts risk

The Licensee enters the Foreshore Area and uses the Foreshore Area at its own risk.

### 6.2 Indemnity

The Licensor is liable for and indemnifies the Licensee and the NSW Government against all liability, loss, costs and expenses arising from or incurred in connection with:

- (a) anything (including damage, loss, injury and death) caused or contributed to by the act, omission, negligence or default of the Licensor or the Licensor's Employees;
- (b) anything occurring on, originating in, or coming from, the Foreshore Area; and
- (c) the termination of this deed if this deed is terminated for whatever reason.

### **6.3 Release**

The Licensor releases the Licensee and the NSW Government from all, and agrees that the Licensee is not liable for any, liability, loss, costs and expenses arising from or incurred in connection with anything (including damage, loss, injury and death) unless it is caused by the Licensee's negligence.

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## **7. Transfer**

If the Licensor sells, transfers or assigns its interest in the Bond Stores Head Lease, or any part of the land comprising the Foreshore Area (including by operation of law or statutory vesting) then:

- (a) the Licensor must ensure that the purchaser, transferee or assignee enters into an agreement with the Licensee on terms reasonably required by the Licensee, that preserves the Licensee's rights and obligations under this deed and under which the transferee or assignee agrees to comply with the terms of this deed as if it had been named in this deed as the Licensor;
- (b) if requested by the Licensee, the Licensor must sign any document and must do any thing required in order to effect a transfer of the Licensor's interest in this deed; and
- (c) the Licensor must release the Licensee from the date of the transfer or assignment from its obligations under this licence.

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## **8. No Default**

Despite any term, condition or other provision of this licence (express or implied) it is expressly agreed between the Licensor and Licensee agree that, no term, condition or other provision (express or implied) on the part of the Licensee is an essential or fundamental term of this licence and subject always to clause 9.1, the Licensor must not be entitled with or without notice to forfeit, or terminate or determine this licence for any reason, including, without limitation, if the Licensee is in default of any term, condition or other provision (express or implied) of this licence.

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## **9. Licence ends**

### **9.1 Events**

This deed ends on the Expiry Date.

### **9.2 Licensee to vacate**

If no succeeding licence is granted by the Licensor to the Licensee, the Licensee must:

- (a) remove the Licensee's Property;
- (b) vacate the Foreshore Area and leave it in good order and condition; and

- (c) make good any damage caused to the Land by removing the Licensee's possessions and vacating the Foreshore Area.

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## **10. General**

### **10.1 Notices**

Each communication (including each notice, consent, approval, request and demand) under or in connection with this deed:

- (a) must be in writing;
- (b) must be addressed as shown in Item 5 (or as otherwise notified by that party to each other party from time to time);
- (c) must be signed by the party making it or (on that party's behalf) by the solicitor for, or any attorney, director, secretary, or authorised agent of, that party;
- (d) must be delivered by hand or posted by prepaid post to the address, or sent by fax to the number, of the addressee, in accordance with clause 10.1(b); and
- (e) is taken to be received by the addressee:
  - (i) (in the case of prepaid post sent to an address in the same country) on the third day after the date of posting;
  - (ii) (in the case of prepaid post sent to an address in another country) on the fifth day after the date of posting by airmail;
  - (iii) (in the case of fax) at the time in the place to which it is sent equivalent to the time shown on the transmission confirmation report produced by the fax machine from which it was sent; and
  - (iv) (in the case of delivery by hand) on delivery,

but if the communication is taken to be received on a day that is not a working day or after 5.00 pm, it is taken to be received at 9.00 am on the next working day ("working day" meaning a day that is not a Saturday, Sunday or public holiday and on which banks are open for business generally, in the place to which the communication is posted, sent or delivered).

### **10.2 Governing law**

This deed is governed by and must be construed according to the law applying in New South Wales.

### **10.3 Jurisdiction**

Each party irrevocably:

- (a) submits to the non-exclusive jurisdiction of the courts of New South Wales, and the courts competent to determine appeals from those courts, with respect to any proceedings that may be brought at any time relating to this deed; and
- (b) waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceedings have been brought in an inconvenient forum, if that venue falls within clause 10.3(a).

#### **10.4 Stamp duties**

The Licensor:

- (a) must pay all stamp duties and any related fines and penalties in respect of this deed, the performance of this deed and each transaction effected by or made under this deed;
- (b) indemnifies the Licensor against any liability arising from failure to comply with clause 10.4(a); and
- (c) is authorised to apply for and retain the proceeds of any refund due in respect of stamp duty paid under this clause.

#### **10.5 Indemnity**

- (a) Each indemnity by the Licensor in this deed is a continuing obligation, separate and independent from the other obligations of the Licensor, and survives termination or expiry of this deed.
- (b) It is not necessary for Licensee to incur expense or to make any payment before enforcing a right of indemnity conferred by this deed.
- (c) The Licensor must pay on demand any amount it must pay under an indemnity in this deed.

#### **10.6 Licensee's Employees**

The Licensee must ensure that the Licensee's Employees comply, if appropriate, with the Licensee's obligations under this deed.

#### **10.7 Licensor's Employees**

The Licensor must ensure that the Licensor's Employees comply, if appropriate, with the Licensor's obligations under this deed.

#### **10.8 Cause**

If this deed says that the Licensor must not do something, the Licensor must not do anything that could result in that thing happening.

#### **10.9 Changes by legislation**

If the Licensor's rights or obligations under this deed are changed by legislation so that the Licensee's rights or obligations are adversely affected, the Licensor waives its rights under that legislation to the extent that it is not prohibited by that or any other legislation.

#### **10.10 Right to rectify**

The Licensee may do anything that the Licensor should have done under this deed but that the Licensor has not done or that the Licensee reasonably considers the Licensor has not done properly.

#### **10.11 Amendments**

This deed may only be varied by a deed executed by or on behalf of each party.

## 10.12 Counterparts

This deed may be executed in any number of counterparts and by the parties on separate counterparts. Each counterpart constitutes the deed of each party who has executed and delivered that counterpart.

## 10.13 Waiver

- (a) Failure to exercise or enforce, or a delay in exercising or enforcing, or the partial exercise or enforcement of, a right, power or remedy provided by law or under this deed by a party does not preclude, or operate as a waiver of, the exercise or enforcement, or further exercise or enforcement, of that or any other right, power or remedy provided by law or under this deed.
- (b) A waiver or consent given by a party under this deed is only effective and binding on that party if it is given or confirmed in writing by that party.
- (c) No waiver of a breach of a term of this deed operates as a waiver of another breach of that term or of a breach of any other term of this deed.

## 10.14 Further acts and documents

Each party must promptly do all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by another party to give effect to this deed.

## 10.15 Consents

A consent required under this deed from a party may be given or withheld, or may be given subject to any conditions, as that party (in its absolute discretion) thinks fit, unless this deed expressly provides otherwise.

## 10.16 Severance

If at any time any provision of this deed is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, that will not affect or impair:

- (a) the legality, validity or enforceability in that jurisdiction of any other provision of this deed; or
- (b) the legality, validity or enforceability under the law of any other jurisdiction of that or any other provision of this deed.

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## 11. GST

### 11.1 Definitions and interpretation

In this clause 11:

- (a) **Agreed Price** means the amount the Recipient is required to pay under any provision of this deed (except this clause 11) for a supply;
- (b) **Supplier** means a party who makes a supply whether on behalf of another entity or otherwise;
- (c) a reference to a supply is a supply under this deed;

- (d) a reference to GST payable by the Supplier includes any GST payable by the representative member of any GST group of which the Supplier (or the entity on whose behalf the Supplier is acting) is a member; and
- (e) words and phrases used that are also used in the GST Act have the same meaning as in that Act, except that:
  - (i) **"GST"** has the meaning given in clause 1.1;
  - (ii) **Recipient** means a party who provides or is liable to provide consideration under this deed for a supply; and
  - (iii) any part of a supply that is treated as a separate supply for GST purposes (including attributing GST payable to tax periods) is treated as a separate supply for the purposes of this clause.

## 11.2 Reimbursements

Any payment or reimbursement required to be made under this deed that is calculated by reference to an amount paid or incurred is limited to the total amount less any input tax credit to which an entity is entitled for an acquisition to which the amount relates.

## 11.3 GST payable

Despite the other provisions of this deed, if the Supplier is or becomes liable to pay GST in respect of any supply:

- (a) the Agreed Price for that supply is exclusive of GST;
- (b) the Recipient must pay an additional amount equal to the GST in connection with that supply;
- (c) the Supplier must issue a valid tax invoice to the Recipient in respect of that supply; and
- (d) the additional amount payable under clause 11.3(b) must be paid at the same time as the first part of any consideration is provided for that supply or on receipt of a valid tax invoice for the taxable supply to which the additional amount relates, whichever is the later.

## 11.4 Variation

If the amount the Supplier recovers from the Recipient on account of GST on a supply differs for any reason from the amount of GST paid or payable by the Supplier on that supply, then the Recipient must pay to the Supplier on demand (or the Supplier must credit the Recipient with) the amount of that difference. If any adjustment event occurs in relation to a supply, the Supplier must give the Recipient an adjustment note within 14 days after the date of the adjustment event.

## 11.5 Penalties

If the Recipient does not comply with its obligations under this deed or with its obligations under the GST law in connection with this deed and because of this the Supplier becomes subject to penalties or interest for late payment of GST, then the Recipient must pay the Supplier on demand an amount equal to the amount of the penalties and interest.

## Reference schedule

### Item 1 Commencing Date

[insert]

### Item 2 Expiry Date

The earlier of:

- (a) the day immediately preceding the date the Bond Stores Head Lease is terminated; and
- (b) the date this deed is terminated, pursuant to the Bond Stores Coordination Deed.

### Item 3 Land

The land comprised in Folio Identifier 100/838323 being lot 100 in Deposited Plan 838323.

### Item 4 Permitted Use

Any use permitted by law, including the use of the Foreshore Area for year-round pedestrian, bicycle and light vehicular access for ingress, egress and regress.

### Item 5 Address for service of notices

#### Licensors

Name: Aqualand Millers Point Pty Ltd  
Address: Level 29, Unit 5, 225 George Street, Sydney NSW 2000  
Email: admin@aqualand.com.au  
For the attention of: Office Administrator

#### Licensee

Name: Barangaroo Delivery Authority  
Address: 21/201 Kent Street, Sydney NSW 2000  
Email: lawyer@barangaroo.nsw.gov.au  
For the attention of: General Counsel

Executed as a deed,

**Licensor**

Executed by **Aqualand Millers Point Pty Limited ACN 605 926 887** in accordance with section 127 of the Corporations Act 2001 (Cth):

\_\_\_\_\_  
Signature of director

\_\_\_\_\_  
Signature of company secretary/director

\_\_\_\_\_  
Full name of director

\_\_\_\_\_  
Full name of company secretary/director

**Licensee**

The seal of **Barangaroo Delivery Authority** is affixed by authority of the Chief Executive Officer in the presence of:

\_\_\_\_\_  
Signature of authorised person

\_\_\_\_\_  
Signature of authorised person

\_\_\_\_\_  
Name of authorised person

\_\_\_\_\_  
Name of authorised person

\_\_\_\_\_  
Office held

\_\_\_\_\_  
Office held

Annexure A - Foreshore Area



## Schedule 3 - Form of Barangaroo Reserve Car Parking Licence



# Barangaroo Reserve car parking licence

**Barangaroo Delivery Authority**

Licensor

**Aqualand Millers Point Pty Limited**

Licensee



## Barangaroo Reserve car parking licence

### Date

### Parties

Barangaroo Delivery Authority of 21/201 Kent Street SYDNEY NSW 2000 and (Licensor)

Aqualand Millers Point Pty Limited ACN 605 926 887 of Level 29, Unit 5, 225 George Street SYDNEY NSW 2000 (Licensee)

### Background

The Licensor leases premises in the Building to the Licensee under the Lease.

The Car Park is in the Building.

The Licensor has agreed that the Licensee may park motor vehicles in the Car Park subject to this licence.

### Operative provisions

## 1. Definitions and interpretation

### 1.1 Definitions

In this licence:

**Bond Stores Coordination Deed** means the deed entered into by the Licensee and Licensor entitled "Bond Stores Coordination Deed" dated on or about the date of this deed.

**Building** means the Building specified in Item 1.

**Car Park** means the car park specified in Item 2.

**CENDA** means the document entitled "Central Barangaroo Development Agreement" between the Licensor, Grocon (CB) Developments Pty Limited ACN 614 118 642 and others dated **[insert]** as varied from time to time.

**CPI** means the consumer price index published by the Australian Statistician for Sydney or the index that replaces it.

**CPI Increase Date** means each anniversary of the Market Review Date.

**Current CPI** means the CPI number for the quarter ending immediately before the relevant CPI Increase Date.

**GST** includes amounts defined as "GST" under the GST law and:

- (a) amounts payable on account of a notional liability under Division 177 of the GST Act; and

- (b) "GST equivalents" payments under the Intergovernmental Agreement Implementation (GST) Act 2000 (NSW) (or similar payments under corresponding legislation of any other State or Territory).

**GST Act** means the A New Tax System (Goods and Services Tax) Act 1999.

**GST law** has the same meaning as in the GST Act.

**Institute** means the Australian Property Institute Incorporated (New South Wales Division).

**Lease** means the lease of the land comprised within folio identifier 100/838323 granted by the Licensor (as landlord) to the Licensee (as tenant) registered U15733.

**Licence Fee** means the yearly amount in Item 3 as changed in accordance with clause 3.

**Licensee's Employees** means the Licensee's employees, officers, consultants, agents, contractors and invitees or any of them.

**Market Review Date** means the date [REDACTED]

**Parking Impost** means a tax, levy, impost, duty or charge in connection with parking spaces of the type the subject of this licence imposed by any authority on or after the date of this licence.

**Payment Date** means:

- (a) at any time whilst the Licence Fee is [REDACTED];
- (b) following the determination of the Licence Fee pursuant to clause 3.4: on the first day of the month next arising after the date on which the Licence Fee is so determined; and
- (c) thereafter, and at all other times: on the first day of each month.

**Previous CPI** means the CPI number for the quarter ending immediately before the last CPI Increase Date (or if there has not been one, the Commencing Date) before the relevant CPI Increase Date.

**Valuer** means a certified practising valuer with the Institute who is an associate member of at least 5 years' standing or a fellow of the Institute who has at least 5 years' experience in, and at the time of appointment is actually engaged in, valuing assets similar to the Car Park and/or spaces within the Car Park.

## 1.2 Interpretation

In this licence headings are for convenience only and do not affect interpretation and unless the context indicates a contrary intention:

- (a) an obligation or a liability assumed by, or a right conferred on, 2 or more persons binds or benefits them jointly and severally;
- (b) "person" includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;
- (c) a reference to a party includes that party's executors, administrators, successors and permitted assigns, including persons taking by way of novation, and, in the case of a trustee, includes a substituted or an additional trustee;

- (d) a reference to a document (including this licence) is to that document as varied, novated, ratified or replaced from time to time;
- (e) a reference to a statute includes its delegated legislation and a reference to a statute or delegated legislation or a provision of either includes consolidations, amendments, re-enactments and replacements;
- (f) a word importing the singular includes the plural (and vice versa), and a word indicating a gender includes every other gender;
- (g) a reference to a party, clause, schedule, exhibit, attachment or annexure is a reference to a party, clause, schedule, exhibit, attachment or annexure to or of this licence, and a reference to this licence includes all schedules, exhibits, attachments and annexures to it;
- (h) if a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;
- (i) "includes" in any form is not a word of limitation;
- (j) a reference to "\$" or "dollar" is to Australian currency; and
- (k) a reference to an item is to an item in the reference schedule to this licence.

## **2. The licence**

### **2.1 Licence**

The Licenser grants the Licensee a non-exclusive licence, from the date of this licence until this licence ends in accordance with clause 9, for the Licensee to park motor vehicles in the Car Park subject to this licence.

### **2.2 No exclusive possession**

This licence does not confer on the Licensee any right of exclusive possession of any part of the Car Park and the Licenser may at any time in its absolute discretion exercise all its rights including its right to enter and use the whole or any part of the Car Park. The Licensee must not restrict the Licenser's access to the Car Park in any way.

### **2.3 Personal rights only**

The rights conferred on the Licensee by this licence are personal rights in contract only and do not create any tenancy or any estate or interest in the Car Park.

### **2.4 Number of motor vehicles**

The Licensee may park the number of motor vehicles specified in Item 4 in the Car Park in the positions the Licenser specifies from time to time.

### **2.5 No assignment or sublicensing**

- (a) Subject to clause 2.5(b), the Licensee must not sublicense or assign, novate or otherwise transfer any of its rights or obligations under this licence.
- (b) Despite clause 2.5(a), the Licenser:
  - (i) may, without the prior consent of the Licenser, grant a sub-licence of the licensed spaces within the Car Park to any subtenant under the Lease; and

- (ii) must grant a licence on the same terms as this licence to a transferee of the Licensee's rights under the Lease who is approved by the Licensor in accordance with the Lease.

### 3. Licence Fee

#### 3.1 Payment of Licence Fee

The Licensee must pay the Licence Fee to the Licensor free of all deductions, by equal monthly instalments in advance on each Payment Date.

#### 3.2 Parking imposts

The Licensee acknowledges that Parking Imposts are not included in the Licence Fee. The Licensee must pay to the Licensor on demand all Parking Imposts paid or payable by the Licensor in connection with the parking spaces the subject of this licence.

#### 3.3 Parking space levy

On or before 1 September in each year until this licence ends, the Licensee must pay to the Licensor the whole or a proportionate part (if any part of the period in respect of which the levy is payable does not fall within the term of this licence) of any levy that is or will be payable by the Licensor under the Parking Space Levy Act 2009 in respect of the number and type of parking spaces the Licensee is entitled to use to park motor vehicles in the Car Park under this licence.

#### 3.4 Market review of Licence Fee

- (a) The Licensor may give the Licensee a notice of the Licensor's assessment of the then current annual market licence fee of spaces within the Car Park at the relevant Market Review Date at any time after a Market Review Date.
- (b) Unless the Licensee gives the Licensor a notice stating the Licensee's assessment of the current annual market licence fee of spaces within the Car Park at the relevant Market Review Date within 30 days after the Licensor gives its notice (and in this regard time is of the essence), the Licence Fee on and from the relevant Market Review Date is the current annual market licence fee in the Licensor's notice.
- (c) If the Licensee gives a notice under clause 3.4(b) on time, the Licensor and the Licensee must attempt to agree in writing on the Licence Fee on and from the relevant Market Review Date. If the Licensor and the Licensee agree in writing within 14 days after the Licensee gives its notice, the amount agreed on is the Licence Fee on and from the relevant Market Review Date.
- (d) If the Licensor and the Licensee have not agreed on the Licence Fee on and from the relevant Market Review Date within 14 days after the Licensee gives its notice, the parties must attempt to agree in writing on a Valuer to determine the current annual market licence fee of spaces within the Car Park at the relevant Market Review Date and appoint that Valuer jointly within 7 days after agreeing who that Valuer is to be.
- (e) If the Licensor and the Licensee cannot agree on a Valuer within 28 days after the Licensee gives its notice under clause 3.4(b), either party may ask the President of the Institute to nominate a Valuer and the parties must appoint that Valuer jointly within 7 days after the nomination is made.

- (f) If either party does not join with the other to appoint a Valuer within 7 days after the parties agree in writing who the Valuer is to be or the Valuer is nominated under clause 3.4(e), the other party may appoint the Valuer agreed on or nominated.
- (g) The party or parties appointing the Valuer must instruct the Valuer at the time of the appointment to determine the current annual market licence fee of spaces within the Car Park at the relevant Market Review Date and to:
  - (i) give that determination to the parties, in writing, with reasons, within 28 days after being appointed;
  - (ii) have regard to, and assume that the Licensee has complied with, the terms of this lease;
  - (iii) disregard the goodwill of the Licensee's Business and the value of any fit out to spaces within the Car Park the Licensee has paid for;
  - (iv) disregard any subtenancy; and
  - (v) make that determination as an expert, not as an arbitrator.
- (h) Subject to clause , the Valuer's determination of the current annual market licence fee of spaces within the Car Park at the relevant Market Review Date is final and binding on the parties and is the Licence Fee on and from the relevant Market Review Date.
- (i) The Licensor and the Licensee must each pay one half of the Valuer's costs.
- (j) The Licensor and the Licensee must each pay one half of the Valuer's costs unless in its notice under clause the Licensee has assessed the current annual market licence fee of spaces within the Car Park at the relevant Market Review Date at more than 5% less than the Valuer determines, in which case the Licensee must pay all the Valuer's costs.
- (k) If the Licence Fee to apply on and from a Market Review Date has not been agreed on or determined by that Market Review Date:
  - (i) the Licensee must continue paying instalments of Licence Fee at the rate applicable before that Market Review Date; and
  - (ii) on the first Payment Day after the Licence Fee to apply on and from that Market Review Date is agreed on or determined, the Licensee must pay the difference between what it has paid on account of Licence Fee and the Licence Fee for the period beginning on that Market Review Date and ending on the day before that Payment Day and interest for the same period on the amount of that difference pursuant to clause 3.6.
- (l) Despite the other provisions of this clause 3.4, the Licence Fee on and from the relevant Market Review Date must not be less than the Licence Fee immediately before that Market Review Date.

### 3.5 CPI increases in Licence Fee

- (a) If the Current CPI for a CPI Increase Date is more than the Previous CPI, then the Licence Fee on and from that CPI Increase Date is the Licence Fee immediately before that CPI Increase Date multiplied by the Current CPI and divided by the Previous CPI.
- (b) On the first Payment Day after the Current CPI for the relevant CPI Increase Date is available, the Licensee must pay the difference between what it has paid on

account of Licence Fee and the Licence Fee for the period beginning on that CPI Increase Date and ending on the day before that Payment Day and interest for the same period on the amount of that difference pursuant to clause 3.6.

- (c) If the CPI is no longer published, or if, in the opinion of the Licensor or the Licensee, the CPI no longer accurately reflects the rate of price change in Sydney, either party may ask the President of the Institute to nominate an index published quarterly that reflects that rate and "CPI" then means that index. The parties must each pay one half of the President's costs for nominating an index.

### 3.6 Interest

If the Licensee does not pay an amount when it is due, it must pay the Licensor interest on that amount on demand from when it becomes due until it is paid in full. Interest is calculated at a rate of      per annum.

## 4. Licensee's obligations

### 4.1 Use of Car Park

The Licensee must:

- (a) comply with the Licensor's rules and regulations applying to the Car Park;
- (b) obey all reasonable instructions given by the Licensor or any person the Licensor appoints to control the Car Park;
- (c) not park motor vehicles in any part of the Car Park except in accordance with clause 2.4;
- (d) not clean, grease, oil, repair or wash any motor vehicle in the Car Park;
- (e) not put rubbish or litter in any part of the Car Park;
- (f) not obstruct the movement of other motor vehicles using the Car Park;
- (g) not do anything which might endanger the Building or the Car Park or anything in them or any person in the Building or the Car Park; and
- (h) not do anything that is a nuisance or annoyance to the Licensor or other Car Park users, occupiers of the Building, or the owners or occupiers of neighbouring premises.

### 4.2 Security

- (a) The Licensee must inform the Licensor immediately if any security key, security card or other security device the Licensor has given to the Licensee is lost, damaged or stolen, and must pay to the Licensor immediately the cost of replacing any security key, security card or other security device which is lost, damaged or stolen.
- (b) All security keys, security cards and other security devices the Licensor gives to the Licensee remain at all times the Licensor's property.
- (c) When this licence ends, the Licensee must return to the Licensor immediately all security keys, security cards and other security devices the Licensor has given the Licensee.

## 5. Insurances, indemnities and releases

### 5.1 Licensee accepts risk

The Licensee enters the Car Park and parks and drives motor vehicles in the Car Park at its own risk.

### 5.2 Insurance

The Licensee must:

- (a) not do anything that could:
  - (i) prejudice any insurance of the Car Park or the Building or property in them; or
  - (ii) increase the premium for that insurance, without the Licensor's consent;
- (b) keep current during the term of this licence, insurance against third party injury in connection with the Licensee's motor vehicles and all other insurances required by law or that the Licensor reasonably requires;
- (c) pay to the Licensor on demand any increase in insurance premiums payable by the Licensor in connection with additional risks caused or contributed to by the act, omission, negligence or default of the Licensee or the Licensee's Employees; and
- (d) give the Licensor on demand evidence that the Licensee has complied with clause 5.2(b).

### 5.3 Indemnity

The Licensee is liable for and indemnifies the Licensor against all liability, loss, costs and expenses (including legal fees, costs and disbursements on the higher of a full indemnity basis and a solicitor and own client basis, determined without taxation, assessment or similar process and whether incurred by or awarded against the Licensor) arising from or incurred in connection with:

- (a) anything (including damage, loss, injury and death) caused or contributed to by the act, omission, negligence or default of the Licensee or the Licensee's Employees or the Licensee's use of the Car Park;
- (b) the Licensee's default under this licence;
- (c) the termination of this licence (including the Licensor's loss of the benefit of the Licensee complying with the Licensee's obligations under this licence from the date this licence is terminated until the expiry date of the Lease) if this licence is terminated:
  - (i) because of the Licensee's default under this licence or the Licensee's repudiation of this licence;
  - (ii) under clause 10 and:
    - A. an insurer refuses to pay a claim because of;
    - B. any insurance in connection with the Building or the Car Park is prejudiced because of; or

- C. the destruction, damage or inaccessibility was caused or contributed to by,
- (d) the act, omission, negligence or default of the Licensee or the Licensee's Employees; and
- (e) this licence ending because the Lease is terminated because of the Licensee's default under the Lease or the Licensee's repudiation of the Lease (including the Licensors loss of the benefit of the Licensee complying with the Licensee's obligations under this licence from the date this licence ends until the expiry date of the Lease).

## 5.4 Release

The Licensee releases the Licensor from all, and agrees that the Licensor is not liable for any, liability, loss, costs and expenses (including legal fees, costs and disbursements on the higher of a full indemnity basis and a solicitor and own client basis, determined without taxation, assessment or similar process and whether incurred by or awarded against the Licensor) that the Licensee may have or claim to have or but for this release might have had against the Licensor (including any of which the Licensee is not aware, or could not have been aware, at the date of this licence) arising from or incurred in connection with:

- (a) anything (including damage, loss, injury and death) whether or not caused or contributed to by the Licensor's act, omission, negligence or default;
- (b) the Licensor doing anything the Licensor is permitted or obliged to do under this licence; and
- (c) the Licensee not being able to use any part of the area in which the Licensee may park motor vehicles under this licence because a motor vehicle that is not the Licensee's is parked there, unless the Licensor has given written consent for that vehicle to be parked there.

## 5.5 No obligation to check

The Licensor is not obliged to check the identity or authority of any person removing or attempting to remove a motor vehicle from the Car Park.

## 6. Warranty as to FIRB

The Licensee;

- (a) warrants that they have the necessary capacity to enter into this Deed and that none it is not required to obtain FIRB Approval or give notice of a 'notifiable action' under the *Foreign Acquisitions & Takeovers Act 1975* (Cth) (**FIRB Act**) in relation to it entering into this Deed;
- (b) will, on and from the date of this Deed, indemnify the Licensor against any Cost, Loss, liability or damage arising from a breach of the warranty under this clause 6; and
- (c) agrees that if due to a change in;
  - (i) the FIRB Act or other legislation regulating the acquisition of interests in Australian land or the published policy in relation to any such legislation; or
  - (ii) the ownership of the Licensee,

resulting in FIRB approval or the giving of a notice of a 'notifiable action' being required in relation to the entry into this Deed, the Licensor will obtain such approval or give such notice or otherwise comply with the requirements of that legislation prior to entering into the relevant documents.

## 7. Sale of Car Park

- (a) If the Licensor sells the Car Park either with or separately from the Building, the Licensor must ensure that the purchaser enters into an agreement with the Licensee which preserves the Licensee's rights and obligations under this licence.
- (b) If the Car Park is sold, the Licensor is no longer bound by this licence from the time the purchaser enters into the agreement referred to in clause 7(a) except in respect of matters arising before the date of that agreement.
- (c) If the Licensor grants a head lease of the Car Park, the Licensor must ensure that the head lease expressly preserves the Licensee's rights and obligations under this licence.

## 8. Default

The Licensee is in default under this licence and the Licensor may terminate this licence if:

- (a) the Licensee is in default under the Lease;
- (b) the Licensee does not pay the Licence Fee as required by this licence and this default continues for at least 14 days; or
- (c) the Licensee does not comply with any other obligation under this licence and does not remedy that default within 28 days after the Licensor gives the Licensee a notice requiring the Licensee to remedy the default.

## 9. Licence ends

### 9.1 Events

This licence ends on the earliest to occur of:

- (a) the date the Lease expires or is terminated;
- (b) the date this licence is terminated; and
- (c) despite clause 1.1(c), if the Licensee is an individual, when the Licensee dies.

### 9.2 Licensee to vacate

When this licence ends, the Licensee must:

- (a) promptly remove from the Car Park any motor vehicle belonging to it or that it has parked there; and
- (b) vacate the Car Park, leaving it in good order and condition.

### 9.3 Failure to vacate

If the Licensee does not comply with clause 9.2 on time, the Licenser may comply with it (if necessary, in the Licensee's name) at the Licensee's risk and expense. The Licensee must pay to the Licenser on demand as liquidated damages a sum equal to the cost to the Licenser of complying with that clause.

## 10. Destruction of or damage to the Car Park

### 10.1 Abatement and notice

- (a) If the Car Park is destroyed or the whole or any part of the Car Park is damaged so that the whole or part of the area in which the Licensee may park motor vehicles under this licence is unfit or substantially unfit for the Licensee to use, or if, for any reason, that area is inaccessible or substantially inaccessible, the Licenser must give the Licensee a notice, within 3 months after the destruction or damage occurs or that area becomes inaccessible or substantially inaccessible, as the case may be, either:
  - (i) terminating this licence on a date that is at least 1 month after the date the Licenser gives the notice; or
  - (ii) stating that the Licenser intends to do what is necessary to make the area in which the Licensee may park motor vehicles under this licence fit for the Licensee to use or to make that area accessible, as the case may be.
- (b) If the Licenser gives a notice under clause 10.1(a)(ii) but does not carry out the intention stated in it within a reasonable time in all the circumstances, the Licensee may give the Licenser a notice that the Licensee intends to terminate this licence if the Licenser does not do what is necessary to make the area in which the Licensee may park motor vehicles under this licence fit for the Licensee to use or to make that area accessible, as the case may be, within a reasonable time after the Licensee gives its notice.
- (c) If the Licenser does not comply with clause 10.1(a) or with the Licensee's notice under clause 10.1(b), the Licensee may terminate this licence with not less than 1 month's notice to the Licenser.
- (d) If the Car Park is substantially damaged, even if the Licensee has access to and can use the area in which the Licensee may park motor vehicles under this licence, the Licenser may give the Licensee a notice terminating this licence on a date that is at least 1 month after the Licenser gives the notice.
- (e) The Licensee need not pay instalments of Licence Fee for the period during which the area in which the Licensee may park motor vehicles under this licence is unfit for the Licensee to use or during which the Licensee does not have access to it.
- (f) The Licensee may reduce instalments of Licence Fee for the period during which the area in which the Licensee may park motor vehicles under this licence is substantially unfit for the Licensee to use or is substantially inaccessible by a proportion equal to the Licensee's loss of amenity to that area.
- (g) The Licensee must continue to pay, and not reduce instalments of Licence Fee, if there is a dispute under this clause 10 until that dispute is resolved or determined.
- (h) Despite the other provisions of this clause 10, the Licensee must not stop paying or reduce instalments of Licence Fee or terminate this licence if:

- (i) an insurer refuses to pay a claim because of;
- (ii) any insurance in connection with the Building or the Car Park is prejudiced because of; or
- (iii) the destruction, damage or lack of accessibility was caused or contributed to by,

the act, omission, negligence or default of the Licensee or the Licensee's Employees.

- (i) Neither party may take action against or claim damages or compensation from the other because this licence is terminated under this clause 10 unless one or more of the events set out in clause 10.1(h)(i), (ii) and (iii) occur.
- (j) The Licensor is not obliged by this clause 10 to rebuild or repair the Building or the Car Park.

## 10.2 Disputes

- (a) Any dispute under this clause 10 about the amount of the Licence Fee to be abated and the duration of that abatement must be determined by a valuer, who is a certified practising valuer with the Australian Property Institute Incorporated, New South Wales Division who is an associate member of at least 5 years' standing or a fellow of the Institute who has at least 5 years' experience in, and at the time of appointment is actively engaged in, valuing premises in buildings like the Building, agreed on between the Licensor and the Licensee.
- (b) If the Licensor and the Licensee cannot agree on a valuer within 1 month after the date the dispute arises, then either the Licensor or the Licensee may ask the President of the Australian Property Institute Incorporated New South Wales Division to appoint a valuer as described in clause 10.2(a) to determine the amount by which the Licence Fee is to be abated and the duration of that abatement.
- (c) In making the determination the valuer is to act as an expert and not as an arbitrator, and the valuer's decision is final and binding on the parties.
- (d) The Licensor and the Licensee must pay the valuer's costs of the determination in equal shares.

## 11. General

### 11.1 Notices

Each communications (including each notice, consent, approval, request and demand) under or in connection with this licence:

- (a) must be in writing;
- (b) must be addressed as shown in Item 5 (or as otherwise notified by that party to each other party from time to time);
- (c) must be signed by the party making it or (on that party's behalf) by the solicitor for, or any attorney, director, secretary, or authorised agent of, that party;
- (d) must be delivered by hand or posted by prepaid post to the address, or sent by fax to the number, of the addressee, in accordance with clause 11.1(b); and
- (e) is taken to be received by the addressee:

- (i) (in the case of prepaid post sent to an address in the same country) on the third day after the date of posting;
- (ii) (in the case of prepaid post sent to an address in another country) on the fifth day after the date of posting by airmail;
- (iii) (in the case of fax) at the time in the place to which it is sent equivalent to the time shown on the transmission confirmation report produced by the fax machine from which it was sent; and
- (iv) (in the case of delivery by hand) on delivery,

but if the communication is taken to be received on a day that is not a working day or after 5.00 pm, it is taken to be received at 9.00 am on the next working day ("working day" meaning a day that is not a Saturday, Sunday or public holiday and on which banks are open for business generally, in the place to which the communication is posted, sent or delivered).

## 11.2 Governing law

This licence is governed by and must be construed according to the law applying in the State of New South Wales.

## 11.3 Jurisdiction

Each party irrevocably:

- (a) submits to the non-exclusive jurisdiction of the courts of the State of New South Wales, and the courts competent to determine appeals from those courts, with respect to any proceedings which may be brought at any time relating to this licence; and
- (b) waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceedings have been brought in an inconvenient forum, if that venue falls within clause 11.3(a).

## 11.4 Expenses

The Licensee must:

- (a) pay promptly for everything it must do under this licence unless this licence expressly says otherwise; and
- (b) reimburse the Licensor on demand for, and indemnifies the Licensor against:
  - (i) **(Preparation):** all expenses (including legal fees, costs and disbursements) reasonably incurred in connection with negotiating, preparing and executing this licence, and any subsequent consent, agreement, approval, waiver or amendment relating to this licence; and
  - (ii) **(Enforcement):** all expenses (including legal fees, costs and disbursements) on the higher of a full indemnity basis and a solicitor and own client basis, determined without taxation, assessment or similar process and whether incurred by or awarded against the Licensor) arising from or incurred in connection with exercising, enforcing or preserving, or attempting to exercise, enforce or preserve, rights under this licence.

## 11.5 Stamp duties

The Licensee:

- (a) must pay all stamp duties and any related fines and penalties in respect of this licence, the performance of this licence and each transaction effected by or made under this licence;
- (b) indemnifies the Licenser against any liability arising from failure to comply with clause 11.5(a); and
- (c) is authorised to apply for and retain the proceeds of any refund due in respect of stamp duty paid under this clause.

## 11.6 Indemnity

- (a) Each indemnity by the Licensee in this licence is a continuing obligation, separate and independent from the other obligations of the Licensee, and survives termination or expiry of this licence.
- (b) It is not necessary for Licenser to incur expense or to make any payment before enforcing a right of indemnity conferred by this licence.
- (c) The Licensee must pay on demand any amount it must pay under an indemnity in this licence.

## 11.7 Licensee's Employees

The Licensee must ensure that the Licensee's Employees comply, if appropriate, with the Licensee's obligations under this licence.

## 11.8 Cause

If this licence says that the Licensee must not do something, the Licensee must not do anything which could result in that thing happening.

## 11.9 Changes by legislation

If the Licensee's rights or obligations under this licence are changed by legislation so that the Licenser's rights or obligations are adversely affected, the Licensee waives its rights under that legislation to the extent that it is not prohibited by that or any other legislation.

## 11.10 Right to rectify

The Licenser may do anything which the Licensee should have done under this licence but which the Licensee has not done or which the Licenser reasonably considers the Licensee has not done properly.

## 11.11 Amendments

This licence may only be varied by a deed executed by or on behalf of each party.

## 11.12 Counterparts

This licence may be executed in any number of counterparts and by the parties on separate counterparts. Each counterpart constitutes the deed of each party who has executed and delivered that counterpart.

### 11.13 Waiver

- (a) Failure to exercise or enforce, or a delay in exercising or enforcing, or the partial exercise or enforcement of, a right, power or remedy provided by law or under this licence by a party does not preclude, or operate as a waiver of, the exercise or enforcement, or further exercise or enforcement, of that or any other right, power or remedy provided by law or under this licence.
- (b) A waiver or consent given by a party under this licence is only effective and binding on that party if it is given or confirmed in writing by that party.
- (c) No waiver of a breach of a term of this licence operates as a waiver of another breach of that term or of a breach of any other term of this licence.

### 11.14 Further acts and documents

Each party must promptly do all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by another party to give effect to this licence.

### 11.15 Consents

A consent required under this licence from a party may be given or withheld, or may be given subject to any conditions, as that party (in its absolute discretion) thinks fit, unless this licence expressly provides otherwise.

### 11.16 Severance

If at any time any provision of this licence is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, that will not affect or impair:

- (a) the legality, validity or enforceability in that jurisdiction of any other provision of this licence; or
- (b) the legality, validity or enforceability under the law of any other jurisdiction of that or any other provision of this licence.

---

## 12. GST

### 12.1 Definitions and interpretations

In this clause 12:

- (a) **Agreed Price** means the amount the Recipient is required to pay under any provision of this licence (except this clause 12) for a supply;
- (b) **Supplier** means a party who makes a supply whether on behalf of another entity or otherwise;
- (c) a reference to a supply is a supply under this licence;
- (d) a reference to GST payable by the Supplier includes any GST payable by the representative member of any GST group of which the Supplier (or the entity on whose behalf the Supplier is acting) is a member; and
- (e) words and phrases used that are also used in the GST Act have the same meaning as in that Act, except that:
  - (i) "GST" has the meaning given in clause 1.1;

- (ii) **Recipient** means a party who provides or is liable to provide consideration under this licence for a supply; and
- (iii) any part of a supply that is treated as a separate supply for GST purposes (including attributing GST payable to tax periods) is treated as a separate supply for the purposes of this clause.

## 12.2 Reimbursements

Any payment or reimbursement required to be made under this licence that is calculated by reference to an amount paid or incurred is limited to the total amount less any input tax credit to which an entity is entitled for an acquisition to which the amount relates.

## 12.3 GST payable

Despite the other provisions of this licence, if the Supplier is or becomes liable to pay GST in respect of any supply:

- (a) the Agreed Price for that supply is exclusive of GST;
- (b) the Recipient must pay an additional amount equal to the GST in connection with that supply;
- (c) the Supplier must issue a valid tax invoice to the Recipient in respect of that supply; and
- (d) the additional amount payable under clause 12.3(b) must be paid at the same time as the first part of any consideration is provided for that supply or on receipt of a valid tax invoice for the taxable supply to which the additional amount relates, whichever is the later.

## 12.4 Variation

If the amount the Supplier recovers from the Recipient on account of GST on a supply differs for any reason from the amount of GST paid or payable by the Supplier on that supply, then the Recipient must pay to the Supplier on demand (or the Supplier must credit the Recipient with) the amount of that difference. If any adjustment event occurs in relation to a supply, the Supplier must give the Recipient an adjustment note within 14 days after the date of the adjustment event.

## 12.5 Penalties

If the Recipient does not comply with its obligations under this licence or with its obligations under the GST law in connection with this licence and because of this the Supplier becomes subject to penalties or interest for late payment of GST, then the Recipient must pay the Supplier on demand an amount equal to the amount of the penalties and interest.

## Reference schedule

### Item 1 Building

The Cutaway at Barangaroo Reserve

### Item 2 Car Park

**[The car parking facility situated within the Building]**

### Item 3 Licence Fee

subject to review pursuant to clause 3.4

### Item 4 Number of cars

Twenty-four (24)

### Item 5 Address for service of notices

#### Licenser

Name: Barangaroo Delivery Authority  
 Address: 21/201 Kent Street  
 SYDNEY NSW 2000  
 Email: lawyer@barangaroo.nsw.gov.au and  
 For the attention of: Barangaroo Lawyer

#### Licensee

Name: Aqualand Millers Point Pty Ltd  
 Address: Level 29, Unit 5, 225 George Street SYDNEY  
 Email: admin@aqualand.com.au  
 For the attention of: Office Administrator

Executed as an agreement.

Licensee

The seal of Barangaroo Delivery Authority is affixed by authority of the Chief Executive Officer in the presence of:

Signature of authorised person

Signature of authorised person

Name of authorised person

Name of authorised person

Office held

Office held

Licensee

Executed by Aqualand Millers Point Pty Limited in accordance with section 127 of the Corporations Act 2001 (Cth)

Signature of director

Signature of company secretary/director

Full name of director

Full name of company secretary/director

### Schedule 4 - Commercial Terms

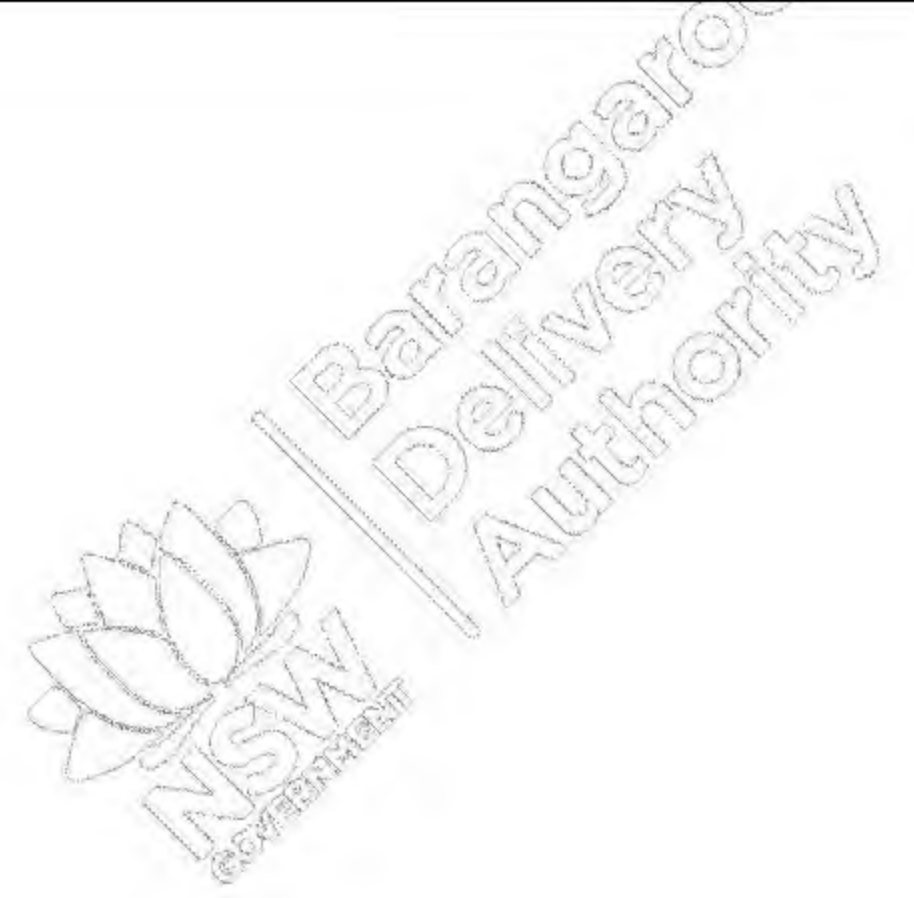
|                            |                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Premises                   | Level 3 – 547 sqm                                                                                                                                                                                                                                        |
| Commencing Gross Rent      | [REDACTED]                                                                                                                                                                                                                                               |
| Outgoings                  | Outgoings pay to be paid by tenant at [REDACTED] ■ [REDACTED]<br>[REDACTED] ■ [REDACTED]                                                                                                                                                                 |
| Rent Commencement          | On the lease commencement date                                                                                                                                                                                                                           |
| Term                       | 5 years commencing on the lease commencement date                                                                                                                                                                                                        |
| Lease Expiry               | The date being 5 years after the lease commencement date                                                                                                                                                                                                 |
| Use                        | Commercial Offices                                                                                                                                                                                                                                       |
| Access                     | Prior access for fit out and occupation will be provided once a lease has been signed by both parties, bank guarantee have been provided by the Sub-tenant together with insurance certificates                                                          |
| Sub-landlord               | Aqualand Millers Point Pty Limited ACN 605 926 887                                                                                                                                                                                                       |
| Sub-tenant                 | Barangaroo Development Authority                                                                                                                                                                                                                         |
| Rent Reviews               | Increase by [REDACTED] annually on each anniversary of the lease.                                                                                                                                                                                        |
| Method of Payment          | Monthly in advance, payable on or before the 1st day of the month by direct debit or electronic funds transfer, as directed by Sub-landlord.                                                                                                             |
| Cleaning                   | The Sub-tenant will pay cleaning costs in addition to the base rent at the monthly amount agreed by the Sub-landlord and the Sub-tenant and payable on the same date and in the same manner as the Rent.                                                 |
| Common Area Cleaning       | The Sub-tenant will clean and repair all common areas.                                                                                                                                                                                                   |
| Bank Guarantee             | Not applicable                                                                                                                                                                                                                                           |
| Legal Costs                | The Sub-tenant will pay its own legal costs plus registration costs. The Sub-landlord will pay lease preparation costs plus its own legal costs.                                                                                                         |
| Signage                    | The Sub-tenant is permitted to erect signage on the tenant directory board in the building entry lobby, identifying the location of the Sub-tenant's Premises. All signage must be in keeping with existing signage and the building in general.         |
| Car Parking                | NIL                                                                                                                                                                                                                                                      |
| Public Liability Insurance | Not applicable. The Sub-tenant will self-insure.                                                                                                                                                                                                         |
| Fit-out                    | The Sub-tenant's fit-out is to be undertaken in accordance with the managing agent's fit-out guide and is subject to the Sub-landlord's approval of plans and workmanship. The Sub-landlord's approval for such works will not be unreasonably withheld. |

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sub-landlord Works</b>           | The Sub-landlord will present the tenancy in as-is condition, clean and tidy. The Sub-landlord will remove loose items and existing partitioning to offices as directed by the Sub-tenant prior to lease commencement. The Sub-landlord will make repairs to any damaged areas in the removal of partitions.                                                                                                                                                                                                             |
| <b>Make Good</b>                    | The Sub-tenant is only required to make good any part of the Premises that it modifies to the same layout as at Lease Commencement subject to Sub-landlord final approval. The Sub-tenant is not required to rebuild any part of the fitout which is removed prior to occupation. The Premises will be left clean and tidy.                                                                                                                                                                                              |
| <b>After Hours Air Conditioning</b> | The Sub-landlord must provide air-conditioning to the Premises: <ul style="list-style-type: none"> <li>(a) between the hours of 8:00AM and 6:00PM Monday to Friday at no additional cost; and</li> <li>(b) outside of the hours specified above at commercial rates if requested by the Sub-tenant</li> </ul>                                                                                                                                                                                                            |
| <b>Permitted Hours of Use</b>       | Building hours of operation are 8am to 6pm on normal business days.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Assignment and Sub-Leasing</b>   | <p>The Sub-tenant may assign the sub lease, grant a sub-sub-lease, or otherwise transfer its interest in the Lease to parties capable of fulfilling the Sub-tenant's obligations under the Lease, subject to the Sub-landlord's consent (not to be unreasonably withheld).</p> <p>The Sub-landlord may require additional security from an assignee.</p> <p>The Sub-tenant will pay all reasonable legal and other costs incurred by the Sub-landlord in respect of consenting to and documenting such arrangements.</p> |
| <b>GST</b>                          | GST will be paid by the Sub-tenant in addition to the rent and other amounts payable under the sub-lease.                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Confidentiality</b>              | The commercial terms are private and confidential between the Sub-landlord and Sub-tenant. The Commercial Terms must not be disclosed by the Sub-landlord or the Sub-tenant other than to their consultants, employees, or advisers, or as required by Law.                                                                                                                                                                                                                                                              |

Schedule 5 - Sydney Metro access plan

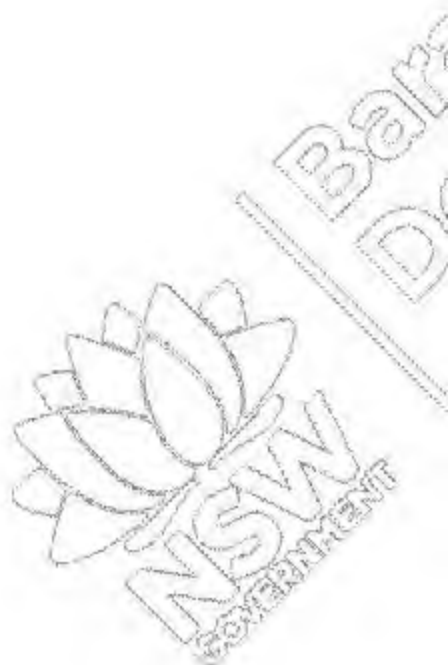






**This Annexure WW has been wholly  
redacted from page 1 to 59**

**Annexure XX - National Carbon Offset Standard for precincts**



**DRAFT**

# **National Carbon Offset Standard for Precincts**



**An Australian Government Initiative**

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**Inside Cover:** This document, the *National Carbon Offset Standard for Precincts*, brings together all carbon neutral information as relevant to precincts. It provides the rules for measuring, reducing, offsetting and reporting emissions to make a carbon neutral claim for precinct operations under the Standard (Section 2), and provides guidance on how to seek carbon neutral certification under the Australian Government's Carbon Neutral Program (Section 3). This is the first version of the *National Carbon Offset Standard for Precincts*

# 1 Overview and key principles

## 1.1 Introduction

Going carbon neutral means reducing greenhouse gas emissions where possible and using offset units to compensate for the remainder to achieve net zero emissions.

By becoming carbon neutral, businesses and other organisations are positioning themselves for growth and competitiveness in a lower emissions future. In working towards carbon neutrality, these organisations demonstrate their leadership in emissions management, and respond to growing stakeholder expectations of corporate responsibility. For precincts, expectations from occupants and tenants for sustainable and energy efficient accommodation are key drivers for considering carbon neutrality.

The Australian Government is working in partnership with the property sector and other businesses to reduce greenhouse gas emissions, and is providing a credible framework for those voluntarily seeking to achieve carbon neutrality or net zero emissions.

The draft *National Carbon Offset Standard for Precincts* (the Standard) is a voluntary standard for carbon neutral precincts in Australia. The Standard sets rules for measuring, reducing, offsetting and reporting emissions to make a carbon neutral claim for precinct operations (Section 2).

Certification against the Standard is provided through the Australian Government's Carbon Neutral Program, also described in this document (Section 3).

The Carbon Neutral Certification Trade Mark (the certification trade mark) is available to certified precincts. It provides a legitimate and visible stamp of approval that a precinct has met the Standard and provides the sector with further opportunities to showcase climate leadership to stakeholders.

The National Carbon Offset Standards and carbon neutral certification are also available for organisations, products & services, and buildings ([www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral)).

- National Carbon Offset Standard for Organisations
- National Carbon Offset Standard for Products & Services
- National Carbon Offset Standard for Buildings

When considering carbon neutral certification please contact the Department early to confirm the appropriate choice of certification category (organisation, product & services, buildings, precincts). The Department retains the right to determine the certification category for an application.

## 1.2 Development of the Standard

The National Carbon Offset Standard and Carbon Neutral Program were launched by the Australian Government in 2010. Since then the Standard and certification program have provided a credible framework for achieving carbon neutrality through emissions reduction and offsetting. The Standard and Program were designed for organisations and products & services.

In March 2016, the Minister for the Environment announced that the National Carbon Offset Standard would be expanded to include buildings and precincts.

The Department of the Environment and Energy (the Department) established an expert committee comprising property sector representatives, carbon accounting experts, the National Administrator for the National Australian Built Environment Rating System (the NABERS Administrator), and the Green Building Council of Australia (GBCA), to work through potential technical, policy and implementation issues for precincts applying the carbon accounting and offsetting rules of the National Carbon Offset Standard.

The *National Carbon Offset Standard for Buildings* was developed in parallel with the Standard for precincts to ensure alignment between requirements.

## 1.3 The Standard – principles

The Standard is based on international standards and tailored to the Australian context. Section 4: References lists the Australian and international standards that form the basis for the Standard.

The requirements of the Standard (Section 2) are underpinned by key carbon accounting and offset integrity principles.

### 1.3.1 Carbon accounting principles

To achieve carbon neutrality under the Standard, the carbon account of a precinct must be calculated according to the following principles.

These principles are based on those outlined in the *Greenhouse Gas Protocol – Global Protocol for Community-scale Greenhouse Gas Emissions Inventories* (World Resources Institute C40 Cities Climate Leadership Group and ICLEI, 2014) and are consistent with those outlined under other relevant Australian legislation and international standards, including the AS ISO 14064 and ISO 14040 series (references at Section 4).

- **Relevance:** Ensure the greenhouse gas inventory of a precinct appropriately reflects the greenhouse gas emissions attributable to that precinct and serves the decision-making needs of users – both internal and external.
- **Completeness:** Account for and report all greenhouse gas emissions sources and activities within the defined boundary of the precinct. Disclose and justify all exclusions.
- **Consistency:** Use consistent methodologies to allow for meaningful comparisons of greenhouse gas emissions over time. Transparently document any changes to the data, boundary, methods, or any other relevant factors in the time series.
- **Transparency:** Compile, analyse and document greenhouse gas information clearly and coherently so that auditors and the public may evaluate its credibility. Disclose any relevant assumptions and make appropriate references to the calculation methodologies and data sources used.
- **Accuracy:** Ensure the quantification of greenhouse gas emissions is unbiased (not systematically over or under actual emissions) and uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information. Where uncertainty is high, use conservative values and assumptions.

### 1.3.2 Offsets integrity principles

Offset units can be used to compensate for emissions that cannot be reduced through energy efficiency or procurement of renewable energy within the precinct, and to bring the carbon account down to zero.

The purchase of offset units supports projects that reduce or remove emissions from the atmosphere, such as through reforestation, renewable energy or energy efficiency. The projects and offset units are verified by independent auditors through internationally recognised standards. These standards ensure the projects are implemented, run and managed properly and the credits they generate represent real and actual emission sequestered or avoided.

**One offset unit is issued for each tonne of emissions avoided or removed from the atmosphere.**

The Department reviews the credibility of publicly available offset units. Only offset units that have met the integrity principles below are eligible for use in a carbon neutral claim against the Standard.

The integrity principles are based on the offsets integrity framework for Australian Carbon Credit Units (ACCUs) as set out in the *Carbon Credits (Carbon Farming Initiative) Act 2011*. The offsets integrity principles ensure that any unit used to offset emissions as part of a carbon neutral claim under the Standard represents a genuine and credible emissions reduction.

For a unit to be eligible for use under the Standard it must meet the following requirements:

- **Additional:** It must result in emissions reductions that are unlikely to occur in the ordinary course of events, including due to any existing commitment or target publicly agreed by the entity responsible for issuing the units. It must represent abatement that has not been double counted.
- **Permanent:** It must represent permanent reductions in greenhouse gas emissions. In the case of sinks, this requires that the carbon stored is sequestered and will not be released into the atmosphere for a period of 100 years. Where a period of less than 100 years is applied to sequestration units, an appropriate discount must be applied.
- **Measurable:** Methods used to quantify the amount of emissions reductions generated must be supported by clear and convincing evidence.
- **Transparent:** Consumers and other interested stakeholders must have access to information about the offset project that generated the abatement, including the applied methodology and project monitoring arrangements.
- **Address leakage:** The system responsible for generating the offset unit must provide deductions for any material increases in emissions elsewhere which nullify or reduce the abatement that would otherwise be represented by the offset unit.
- **Independently audited:** The circumstances responsible for the generation of the unit must be verified by an independent, appropriately qualified third party and not found to be in contradiction with these integrity principles.
- **Registered:** The offset unit must be listed and tracked in a publicly transparent registry.

A decision framework based on the offsets integrity principles is used to determine the eligibility of offset units under the Standard. A list of offset units that have met the integrity principles and are eligible for use under the Standard is provided in *Appendix A: Eligible offset units*.

Appendix A will be updated as new information or different offset units become available. This may result in the addition of new offset units, or the removal of existing ones.

## 1.4 Carbon neutral certification

Certification against the Standard allows for the use of the certification trade mark which can be used to

showcase the precinct's carbon neutrality. Certification can be sought through the Australian Government's Carbon Neutral Program by applying to the Department (Section 3).

Precincts considering carbon neutral certification should contact the Department early to confirm their appropriate choice of certification category (organisation, product & services, buildings, precincts).

### 1.4.1 Use of the certification trade mark

The Australian Government has registered the Carbon Neutral Certification Trade Mark (the certification trade mark) which can be used under licence to show a precinct complies with the Standard.

The certification trade mark is only available to precincts that are certified and have executed a Certification Trade Mark Licence Agreement (licence agreement) with the Department.

The certification trade mark can only be used in direct relationship with the category of certification. For example, an organisation occupying space in a certified precinct cannot use the certification trade mark on its own documents or in any other way that suggests the claim of carbon neutrality applies to this organisation (unless the organisation is itself certified against the *National Carbon Offset Standard for Organisations*).

## 1.5 Making carbon neutral claims

When making a carbon neutral claim against the Standard the responsible entity must be mindful of its obligations under Australian Consumer Law.

Australian Consumer Law applies to all forms of marketing, including claims on packaging, labelling and in advertising and promotions across all media (print, TV, radio and internet).

Consumers, investors and tenants are entitled to rely on any carbon neutral claim made in reference to the Standard and expect these claims to be truthful. The responsible entity must ensure any claim made regarding compliance with the Standard is accurate and appropriately substantiated.

## 2 Requirements of the Standard

### 2.1 Using the Standard

The Standard is voluntary. However, where a precinct chooses to claim carbon neutrality against the Standard, it must be applied consistently and fully.

Throughout the Standard, the term 'must' is used to signify what is required to make a carbon neutral claim in accordance with the Standard. The terms 'can' or 'may' are used where a precinct can apply its own discretion and choose from several options, all of which are acceptable under the Standard. The term 'should' is used to indicate a recommendation by the Department, in line with best practice.

The Standard can be applied to make a carbon neutral claim for **precinct operations**.

A **precinct** is 'more than a building and less than a city' and is primarily defined by its geographical boundaries, which, at a minimum, must incorporate public infrastructure beyond a single building. For an isolated building, refer to the *National Carbon Offset Standard for Buildings*.

The Standard only applies to the carbon neutrality of a precinct's operational emissions. Therefore, to be carbon neutral under the Standard means the net emissions associated with the operation of a precinct are equal to zero.

The embodied emissions in the materials and construction of the precinct are not covered by the Standard (but may be considered for future versions of the Standard). Reducing embodied energy in infrastructure is important and encouraged.

The **responsible entity** is the person or organisation that has taken responsibility for making a carbon neutral claim or seeking carbon neutral certification. The responsible entity should be clearly identified and must be able to meet the requirements of the Standard, including carbon accounting, regular reporting and purchasing of offset units as required to make the carbon neutral claim.

#### Self-declaration

The Standard can be used to calculate a precinct's carbon account and offset emissions, without seeking certification.

Where the Standard is being used as the basis of a self-declaration of carbon neutrality, the user must fully disclose and provide transparency as to the actions behind the carbon neutral claim. This allows the public to develop an informed opinion on the validity of the claim. When self-declaring carbon neutrality, the requirements detailed in Sections 2.2 – 2.7 must be followed.

Self-declaration is sometimes considered as a step towards certification.

#### Important:

1) The certification trade mark cannot be used unless certification has been granted by the Department (Section 3).

2) A precinct that is self-declared carbon neutral against the Standard but is not certified, is not eligible to offer zero emissions accommodation to carbon neutral network members (businesses and organisations that are certified against the *National Carbon Offset Standard for Organisations*) (Section 2.3.5.3).

## 2.2 Achieving and maintaining carbon neutrality

To achieve and maintain a valid and credible carbon neutral claim against the Standard, the responsible entity must:

- **MEASURE:** Prepare a carbon account (Section 2.3)
- **REDUCE:** Reduce emissions where possible (Section 2.4)
- **OFFSET:** Cancel eligible offset units to compensate for remaining emissions (Section 2.5)
- **REPORT:** Report publicly (Section 2.6)
- **AUDIT:** Arrange for an independent audit of the carbon account and public report (Section 2.7).

A key element of a carbon neutral claim for precincts is investor and tenant confidence in the validity of the claim. The requirements of the Standard have been designed to provide precincts and tenants with transparent information on the actions taken to achieve carbon neutral status.

Each of the stages above must be completed annually (with the exception of the independent audit, which must be completed every two years), to support the validity and transparency of the carbon neutral claim (Figure 1).

This Standard only concerns greenhouse gas emissions. Other environmental impacts of the precinct do not need to be assessed for the purpose of the Standard.

Sections 2.3– 2.7 describe the requirement of the Standard and provide guidance on how to meet those requirements to achieve carbon neutrality.

Certification against the Standard can be sought through the Carbon Neutral Program (Section 3).

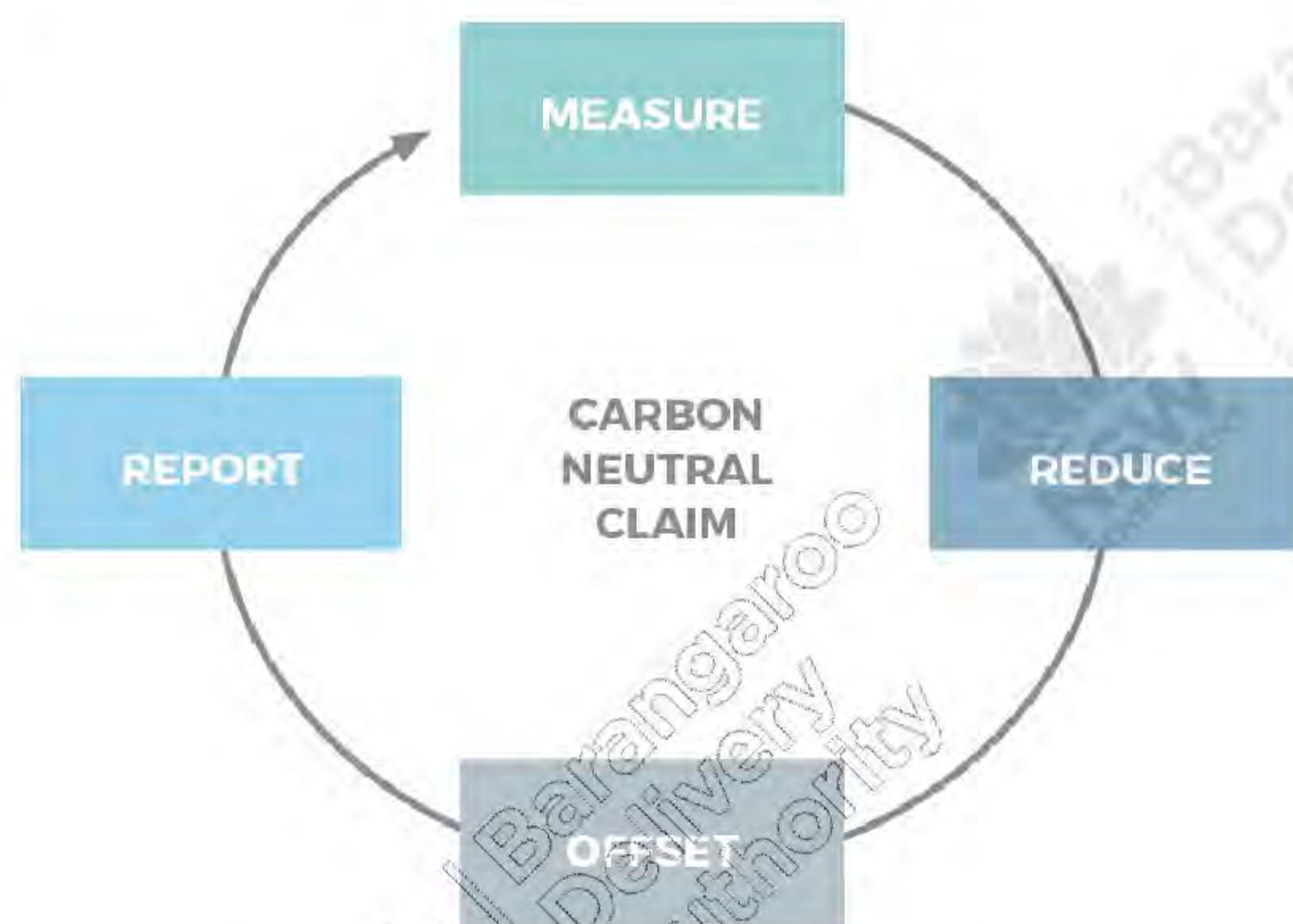


Figure 1: Annual cycle of activities for claims of carbon neutrality

## 2.3 MEASURE: Prepare carbon account

Preparing a carbon account involves the following steps:

- Step 1:** Establish the emissions boundary
- Step 2:** Identify greenhouse gas emissions sources within the boundary
- Step 3:** Set a base year
- Step 4:** Collect data on identified emissions sources
- Step 5:** Calculate the total carbon account attributable to the precinct.

The responsible entity may choose to prepare their own carbon account, or may engage a consultant to prepare the carbon account or to provide technical advice.

### 2.3.1 Step 1: Establish the emissions boundary

Defining the emissions boundary is the first step in the carbon accounting process. This step is critical to ensuring the accurate development of a carbon account. The boundary refers to the coverage and extent of the carbon account and thereby determines what emission sources are included or excluded. The key principles governing the inclusion or exclusion of emissions from a carbon account are relevance and materiality. These are described in Section 2.3.2.

The carbon account must include the greenhouse gas emissions attributable to the operations of the whole precinct. The emissions boundary is defined using the geographic boundaries of the precinct as the main criterion. The geographic boundaries applied to the precinct for use under the Standard should be consistent with the boundaries of the precinct in planning documents. The emissions boundary also needs to align with community expectations of the precinct's border.

All relevant activities and emission sources occurring within these geographic boundaries must be considered for inclusion.

The precinct's emissions boundary must be transparently documented and disclosed along with the reasoning for choosing the boundary. Where significant exclusions are made, they must be clearly stated, and the reasons for and implications of the exclusions must be justified. A disclosure statement, including reason and justification for any exclusions, must be published as part of the public report (Section 2.6).

Achieving carbon neutrality for a precinct is likely to require agreement across a range of stakeholders (owner, administration body, manager, tenants), hence the notion of operational control is not useful to define a precinct's boundary (as opposed to an organisation for example).

There are no limitations set for the nature of the responsible entity, as long as it can fulfil the requirements of this Standard and collect the information necessary for a robust carbon account for the precinct.

#### Opportunities for carbon neutral tenancy arrangements

If a carbon neutral organisation certified against *National Carbon Offset Standard for Organisations* is accommodated in a carbon neutral precinct certified against the *National Carbon Offset Standard for Precincts*, the emissions from the accommodation only need to be offset by either the organisation or the precinct.

For example:

- A carbon neutral certified precinct can account for the emissions from a carbon neutral certified tenant as zero emissions,
- or
- A carbon neutral certified organisation can account for the emissions from its accommodation within a carbon neutral certified precinct as zero emissions.

Such arrangements must be transparently reported as part of the public report (Section 2.6). This must provide information on which entity (precinct or tenant) has committed to achieving zero emission for the accommodation.

Carbon accounting for carbon neutral tenancies (or other carbon neutral activities) is described in Section 2.3.5.

## 2.3.2 Step 2: Identify emission sources

### Types of greenhouse gas emissions

The Standard requires that emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro-fluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>) must be included in the carbon account.

### Relevant emissions

Emissions included within the emissions boundary can be classified into 'scopes' by reference to the Greenhouse Gas Protocol to 'help delineate direct and indirect emissions sources' (WBCSD and WRI, A corporate accounting and reporting standard, 2013).

- **Scope 1** emissions include all direct greenhouse gas emissions from sources that are within the precinct's emission boundary. These could be emissions from fuel use, refrigerants and electricity generation.
- **Scope 2** emissions include purchased electricity, heat and steam i.e. energy produced outside the boundaries of the precinct but used within the precinct (unless they are purchased for resale).
- **Scope 3** emissions are all indirect emissions that occur as a result of the activities of the precinct, but occur from sources not necessarily within the precinct's boundary.

A precinct's embodied emissions (including energy associated with materials introduced through renovation, fit out or upgrade) is not considered part of a precinct's carbon account.

According to the principle of completeness (Section 1.3.1), all relevant emissions sources within the emissions boundary must be accounted for, so that a comprehensive and meaningful carbon account is compiled.

- All Scope 1 and 2 emissions within the boundary of a precinct are considered relevant emission sources under the Standard and must be included.
- Scope 3 emissions identified should be tested for relevance and materiality in accordance with the GHG Corporate Standard and the flow diagram at the end of this section.

The Standard is aligned with the GHG Corporate Standard (WBCSD and WRI, A corporate accounting and reporting standard, 2013) which specifies that Scope 3 emissions sources are relevant in the following circumstances:

- the Scope 3 emissions from a particular source are likely to be large relative to the precinct's Scope 1 and Scope 2 emissions;
- the Scope 3 emissions from a particular source contribute to the precinct's greenhouse gas risk exposure;
- the Scope 3 emissions from a particular source are deemed relevant by key stakeholders;
- the responsible entity has the potential to influence the reduction of Scope 3 emissions from a particular source; and/or
- the Scope 3 emissions from outsourced activities that were previously undertaken within the precinct's

boundary or from outsourced activities that are typically undertaken within a precinct's boundary for comparable precincts.

## Materiality threshold

An emissions source that constitutes one per cent or more of the total carbon account is considered to be 'material' under the Standard. If a Scope 1 or 2 emissions source or a relevant Scope 3 emissions source is estimated to be material, it must be quantified unless evidence can be provided to demonstrate that such quantification would not be technically feasible, practicable or cost effective relative to its significance.

Where a Scope 3 emissions source is determined to be relevant and estimated to be material, but accurate data is not yet available, a data management plan should be developed to outline how quantification will be achieved within a reasonable timeframe. This could include setting in place appropriate data collection processes or working out estimation methods to demonstrate that an emissions source is not material.

In applying the one per cent materiality threshold across all emissions sources, the total amount of emissions excluded must not exceed five per cent of the total carbon account.

Precincts are encouraged to include, measure and report as many relevant emissions sources as possible. Alternatives to excluding emissions under the one per cent materiality threshold include:

- taking an initial measurement of an emissions source as a basis for projecting future emissions from that source; or
- estimating and projecting the emissions from an emissions source.



Figure 2. Consideration of Scope 3 emissions through relevance and a materiality assessment

## Disclosing excluded emissions sources

Emission sources within the emissions boundary that are excluded on the basis of the materiality threshold, as well as emission sources that stakeholders may expect to be included, must be disclosed and justified.

A disclosure statement must be published as part of the public report (Section 2.6). It should include an explanation highlighting the rationale behind the exclusion of the emission source and be clear about the Scope category under which it is excluded.

This disclosure is in addition to the disclosure and justification of activities considered to be outside the emissions boundary (as per Section 2.3.1).

## 2.3.3 Step 3: Set a base year

Data must be collected to calculate the precinct's carbon account for a full calendar or financial year before a carbon neutral claim can be made. This is known as the base year. The base year carbon account must be independently audited.

The base year carbon account serves several purposes:

- It allows emissions to be compared over time.
- It provides a reference point and transparency for communicating the success and magnitude of emissions reduction efforts.
- When offsetting in advance, it provides a basis for estimating the number of offset units that must be cancelled to make the carbon neutral claim for the first year.

To establish a base year:

- Select the most recent year for which verifiable carbon emissions and carbon removals data are available, or use a multi-year average where a single year's data is unrepresentative of the typical emissions profile.
- Explain the selection of the base year.

According to the principle of consistency (Section 1.3.1), the carbon account must allow meaningful comparison of emissions over time. Significant changes ( $\pm 5\%$ ) in the carbon account between the base year and subsequent reporting years that are not attributed to emission reduction actions by the precinct's operations must be disclosed as part of the annual public report (Section 2.6).

Factors that may lead to significant changes in the carbon account between the base year and subsequent years might include changes in:

- operational boundaries;
- ownership and control of greenhouse gas sources and sinks; and/or
- calculation methods or changes in emission factors.

Significant errors discovered over time should also be disclosed and their impact on the previous year's carbon account should be calculated.

Transparent documentation of changes and errors is important to allow stakeholders to understand factors driving year on year emissions variation. This allows separating emissions reductions attributable to actions taken by the precinct from those caused by other factors.

Chapter 5 of the GHG Corporate Standard provides additional guidance on base year recalculation approaches that can be used as a guide for such disclosure.

## 2.3.4 Step 4: Collect data on identified emissions sources

Once the emissions boundary and emissions sources have been identified, the type of data available for different emissions sources must be identified, bearing in mind the emission calculations that will need to be undertaken (Section 2.3.5).

When considering calculating the emissions from identified sources, best endeavours must be used to meet the carbon accounting principles of relevance, completeness, consistency, transparency and accuracy (Section 1.3.1).

Actual measured data should be used whenever possible, with conservative estimates used only where data is unavailable. For example, operational energy data should be obtained from energy meters such as electricity and gas meters (from utility bills).

Appendix B: *Carbon Accounting Requirements and Guidance*, provides guidance on data collection.

### Data management and record keeping

Appropriate systems must be in place to monitor and record the greenhouse gas emissions within the emissions boundary.

The quality of data is key to the integrity of a carbon account. Quality control practices must be in place to ensure a high level of data quality. Assessing data quality during data collection allows data quality improvements to be made more efficiently than when data quality is assessed after the collection is complete.

The data required to create a carbon account, and the processes for establishing and maintaining those records, must be identified to ensure that the greenhouse gas emissions attributable to the subject of the carbon neutral claim, and any changes in these emissions, are recorded in a timely manner.

In line with the carbon accounting principle of completeness and accuracy (Section 1.3.1), all data collection procedures should be fully documented to ensure appropriate controls are in place and auditable. These procedures should reference the data collection and storage system, including:

- data collection, report format, reporting frequency, and length of time records are archived;
- data transmission, storage, and backup procedures and strategies for identifying and coping with lost or poor-quality data;
- entities responsible for measurement and data collection procedures;
- all quality control procedures to be implemented for measurement and data collection procedures e.g., central data control, site audits, calibration, site technician reminders, maintenance procedures, service sheets.

The responsible entity must ensure the existence, quality and retention of documentation in order to enable the creation of an audit trail of how the carbon account was created. Records must be kept for five years from the end of the reporting year in which the activities recorded took place.

Recommended records include but are not limited to:

- a list of all emission sources monitored;
- the data used for calculation of greenhouse gas emissions for each source, categorised by process and fuel or material type;
- documentary evidence relating to calculations, for example: receipts, invoices and details of payment methods;
- documentation of the methods used for greenhouse gas emissions and energy estimations;

- documents justifying selection of the monitoring methods chosen;
- documentation of the collection process for data for an activity and its sources; and
- records supporting business decisions.

A data management plan may be developed to ensure the collection of high quality carbon account data and the improvement of data collection procedures. A data management plan or quality management system are also useful in providing transparency when the carbon account is audited.

*Appendix B: Carbon accounting requirements and guidance* provides examples of recommended practices and tools for data management.

### 2.3.5 Step 5: Calculate the carbon account

Greenhouse gas emissions attributable to the precinct must be calculated using the data collected (Section 2.3.4), appropriate emissions factors (preference should be given to emission factors published by government entities) and approved accounting methods.

The carbon account should be set out to allow for easy interpretation. Emission sources within the boundary should be grouped according to Scope. The calculation methods and the emission factors used must be disclosed clearly and completely.

The use of renewable energy or carbon neutral certified activities must be recorded in the carbon account even if the emissions will be equal to zero (further details below).

*Appendix B: Carbon accounting requirements and guidance* provides examples and templates for calculating a carbon account.

#### Emission factors

Credible and reliable emission factors must be used when determining the carbon account. Where a factor is available in the National Greenhouse Accounts (NGA) that is applicable to the entity's circumstances, this factor must be used (unless as otherwise provided for by this Standard or its associated guidance material).

The current version of these factors is available on the Department's website: [www.environment.gov.au](http://www.environment.gov.au). This includes factors for Scope 1 and 2 emissions and Scope 3 emission factors for: waste; wastewater; solid, liquid and gaseous fuels; and electricity.

Further guidance on Scope 3 factors that are not available in the NGA Factors is provided in *Appendix B: Carbon Accounting Requirements and Guidance*.

Factors used must either be the most up to date available at the time of preparing the carbon account, or align with the relevant time period during which the emissions occurred (for example, a 2015 emissions factor should be used to calculate 2015 emissions).

#### Treatment of renewable energy

Renewable energy used or generated must be included in the carbon account even when considered as zero emissions. The emission factors applied must follow rules depending on various parameters, in particular where incentives have been received in the form of market based instruments.

*Appendix B: Carbon Accounting Requirements and Guidance*, explains the requirements when accounting for renewable energy and energy efficiency schemes under the Standard and details the rules that apply to renewable energy generated and used on site.

## Accounting for certified carbon neutral activities

If the precinct's carbon account includes an activity that has been certified as carbon neutral against the Standard (through the Carbon Neutral Program, Section 3), and that activity's emissions have thereby already been accounted and offset, this contributes zero emissions to the carbon account.

A carbon neutral activity could include:

- Use of products and services certified against the *National Carbon Offset Standard for Products & Services*; or
- Accommodation of organisations that are certified against the *National Carbon Offset Standard for Organisations* (also see Section 2.3.1 for carbon neutral tenancies).

While further offset units are not required to be cancelled for the emissions from the use of an activity that is already carbon neutral certified, the use of the activity must be reported to ensure transparency and completeness of the carbon account. To assist in the transparency of the carbon account, the activity data related to the use of the activity must be disclosed, but it can be recorded as having an emission factor of zero.

For example, if carbon neutral electricity is used that is certified against the *National Carbon Offset Standard for Products and Services*, the carbon account for the precinct would record the amount of electricity used, with an associated emissions factor of zero. Therefore, the emissions from the use of this electricity would also be zero.

The emissions associated with a product, service or organisation that claims to be carbon neutral but is not certified against the Standard is not considered to have zero emissions. It must be included in the carbon account and its emissions quantified. This ensures a conservative estimate of the carbon account.

## 2.4 REDUCE: Reduce emissions where possible

### 2.4.1 Emissions reduction activities

Maintaining a comprehensive carbon account can help a precinct to better understand its sources of greenhouse gas emissions and to identify the most cost-effective opportunities for reducing emissions. Once a carbon account has been measured, reductions in emissions can be calculated by comparing changes in the carbon account over time relative to the base year.

The Standard requires that emissions reduction activities are undertaken within the precinct where possible, before compensating for emissions through the purchase and cancellation of offset units (Section 2.5).

As such, a precinct seeking carbon neutrality should follow the carbon reduction hierarchy of energy efficiency, on-site renewable energy generation and off-site renewable energy generation, before undertaking carbon offsetting.

Since emission reduction activities will reduce the carbon account of the precinct, these will have implications on the quantity of offsets that need to be purchased to achieve carbon neutrality.

Disclosing emission reduction initiatives and reporting on achievements contributes to transparency and is in line with carbon management best practices.

Emissions reductions may be achieved in many ways, including by:

- increasing energy efficiency, for example by employing energy efficient technologies;
- process changes/improvements, for example upgrading equipment;

- substituting products or inputs with those that are less emissions intensive; and/or
- changing practices to replace emissions intensive activities with those that generate fewer emissions, for example replacing business-related flights with teleconferencing, and switching off lighting and air-conditioning when not in use.

## 2.4.2 Develop and maintain an emission reduction strategy

A precinct seeking to become carbon neutral must develop and maintain an emissions reduction strategy. The emissions reduction strategy must identify the emissions reduction measures to be undertaken and the quantity of emissions expected to be reduced over a specified timeframe, where this can be quantified.

At the end of each reporting year, the responsible entity should review its success in achieving emissions reductions. The emissions reduction strategy should be revised accordingly and plans made for emissions reduction actions for the following year.

In some cases, it may not be possible or practicable to achieve emission reductions every year. Recognising these circumstances, there is no mandatory requirement for year-on-year reductions or specific targets for reducing emissions. Nevertheless, the precinct should aim to achieve emission reductions wherever possible.

According to best practice, the emissions reduction strategy should be made publicly available, along with details of any activities leading to emission reductions that have been achieved or have commenced over time. Planned emissions reduction activities may also be included. The emissions reduction strategy may include Scope 3 emission sources that are difficult to quantify even if they have been excluded from the precinct's emissions boundary.

The Standard requires a summary or outline of the emission reduction strategy to be included in the annual Public Disclosure Summary or other public report (Section 2.6).

## 2.5 OFFSET: Cancel eligible offset units

Any remaining emissions must be compensated each year through cancelling (also known as retiring) an equivalent number of eligible offset units.

Adopting an upfront offsetting approach is recommended (termed 'offsetting in advance'), as this is considered best practice. Offsetting in advance must be followed by an annual true-up process to ensure that sufficient eligible offset units have been cancelled to cover the period of the carbon neutral claim (further details at Section 3.4.1).

Where offsetting in advance is not possible or practical, offsetting in arrears is also accepted under the Standard.

The responsible entity should develop and maintain a strategy for purchasing and cancelling eligible offset units for each year that is the subject of a claim of carbon neutrality. This strategy may include decisions regarding the types of offset units to be purchased. The strategy should also consider the timing of offset cancellation, especially if seeking certification (see Section 3.4.1).

### 2.5.1 Eligible offset units

Offset units eligible making a carbon neutral claim against the Standard are listed at Appendix A. Only these units can be used to make a carbon neutral claim under the Standard.

These units have met the offset integrity principles of the Standard (Section 1.3.2). Appendix A will be updated as new information or offset units become available. This may result in the addition of new offset units or the removal of existing ones.

Before choosing to use any units for offsetting purposes, the responsible entity should undertake its own due diligence assessment of the originating projects and underpinning methodologies.

## 2.5.2 Proof of cancellation of offset units

Offset units must be cancelled via a publicly available registry. The cancellation should be clearly attributed to the carbon neutral claim and the precinct making the claim. The cancellation and attribution of eligible offset units is important to prevent resale and double counting of offset units.

Proof of the cancellation of eligible offset units, including the name of the registry in which the units were cancelled and the serial numbers of the units, must be provided in the annual public report (Section 2.6).

There are several independently managed registers for offset units, as well as those set up by suppliers and the administrators of the various offset standards. Units may be purchased and cancelled by the responsible entity or by a consultant or carbon service provider.

Eligible offset units may be purchased and cancelled for immediate use or they may be banked for use against a future carbon neutral claim. Early purchase and/or cancellation of units allows the responsible entity to choose the timing of purchase to meet its needs, and to obtain a particular type of offset when it is available.

## 2.6 REPORT: Prepare a public report

An annual report must be made publicly available to communicate progress on emissions reduction activities and offsetting against a carbon neutral claim. Annual reporting keeps the public and other interested parties informed in an open and transparent manner, and communicates achievements in managing emissions.

The annual public report must include the following:

- the total gross and net greenhouse gas emissions of the precinct for the base year and current reporting period (taking into account any renewable energy and certified carbon neutral activities) and an explanation of any significant changes that are not attributed to emission reduction actions;
- disclosure of emissions sources excluded from the emissions boundary (especially from activities that stakeholders would expect to be included) and any plans to improve the consistency and completeness of the carbon account in the future;
- a summary of the emissions reduction activities undertaken in accordance with the emissions reduction strategy and the resulting quantity of emissions reduced (where this can be quantified); and
- details of the quantity and type of offset units cancelled and records to prove that sufficient offset units have been cancelled to offset the precinct's emissions (for example the name of the registry in which the units were cancelled and the project type and serial numbers of the relevant units).

The public report can be in the format of a Public Disclosure Summary (template is available from the Department's website at: [www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral)) or another document more suitable for communication with precinct stakeholders.

The level of detail and explanation required in a public report must ensure the reader has a clear understanding of what has been done to achieve carbon neutrality in terms of determining the carbon account, the actions to reduce absolute emissions or emissions intensity over time, and offsetting of remaining emissions.

The public report should be signed off by senior management, for example the appropriate business unit leader or chief executive officer, and must be published on the responsible entity's website.

For precincts that are certified against the Standard through the Carbon Neutral Program (Section 3), the public report will be automatically published on the Department's website when certification has been granted.

## 2.7 AUDIT: Independent audit

A considered and transparent audit model provides confidence in carbon neutral reporting. Independent auditing validates the accuracy and completeness of carbon calculations including the adequacy of emissions boundaries, methodologies and factors.

Carbon account calculations, reductions and offsetting activities must be reported and independently audited on a regular basis. A carbon neutral claim under the Standard must be subject to an independent audit at least once every two years. The audit report should identify any issues or discrepancies in the carbon account measurement, public report, emission reduction claims and/or offsetting arrangements against the requirements of the Standard. The independent auditor's report and/or assurance statement must be made publicly available.

The first audit (of the base year, Section 2.3.3) must include assessment of the adequacy and appropriateness of the emissions boundary setting, emissions methodologies and emissions factors.

As appropriate to the greenhouse gas account, the auditor may want to check, and therefore will need to have access to, the following:

- facilities, equipment and personnel required for the operations of the precinct;
- records, including monitoring records, utility bills, test reports, failure reports, internal audit and management review records, customer complaints and statistics related to the activities within the emission boundary; and
- any additional reporting or information source used to develop the carbon account.

An auditor may provide the entity with Corrective Action Requests (CAR) and Observations. The entity should be provided with the opportunity to resolve these prior to the closure of the audit activity. The auditor may wish to contact the Department to discuss any issues or interpretations concerning this Standard.

The responsible entity making a carbon neutral claim is responsible for maintaining appropriate records for auditing and bearing the associated costs.

Audit standards that should be applied are:

- ASAE 3000 Assurance Engagements other than Audits or Reviews of Historical Financial Information; or
- ISO 14064-3: Greenhouse gas specification with guidance for the validation and verification of greenhouse gas assertions.

If another auditing standard is to be applied, the auditor must confirm that it is as rigorous as those specified above.

An auditor must provide an assurance statement confirming whether the carbon account and other information relevant to the carbon neutral claim are presented fairly in accordance with the requirements of this Standard. The level of assurance achieved must be a reasonable level of assurance for Scope 1 and 2 emissions, and a limited level of assurance for Scope 3 emissions.

An audit of a carbon neutral claim under this Standard must be undertaken by a suitably qualified auditor. Suitably qualified auditors are individuals or bodies that:

- are included on the Register of Greenhouse and Energy Auditors, as established under section 75A of the NGER Act and maintained by the Clean Energy Regulator; or

- are accredited to the international standard ISO 14065:2013 or recognised international standards based on ISO 14040.

Where specialist skills are required that are not possessed by the auditor, the necessary skills can be provided by an independent expert (in line with AS ISO 14064.3 or the Clean Energy Regulator's *Audit Determination Handbook*). Such experts must be independent and cannot have been involved in the development of the carbon account that is the subject of the audit.

Records must be adequate to enable the independent auditor to ascertain whether activities have been conducted in accordance with requirements under this Standard. This includes information that can be used to verify the relevance, completeness, consistency, transparency and accuracy of reported data during an external audit. Record keeping requirements are outlined in Section 2.3.4.

Records can be kept in electronic or paper form. Records should be stored in a format that is accessible to the Department and external auditors, employed by the entity or appointed by the Department, if required.

## 3 Certification against the Standard

Carbon neutral certification against the Standard can be sought through the Australian Government's Carbon Neutral Program.

The Program is administered by the Department of Environment and Energy. The Department:

- Assesses applications for carbon neutral certification against the requirements of the National Carbon Offset Standard for Precincts (Section 2).
- Administers licence agreements and checks compliance against obligations.
- Grants certification.

### 3.1 Application

An application for carbon neutral certification must include:

1. A carbon account for the base year
2. A public report
3. An independent audit report of the above documents.

Applications should be lodged electronically through: [carbonneutral@environment.gov.au](mailto:carbonneutral@environment.gov.au).

If an application is unsuccessful, the Department will provide an explanation on the reasons for the failure.

#### 3.1.1 Carbon account for the base year

The responsible entity seeking carbon neutral certification must have all relevant data and must be able to calculate the precinct's carbon account for a full year before applying for carbon neutral certification. This is known as the base year.

The base year carbon account:

- Demonstrates an understanding of what must be included in the precinct's carbon account, and what data must be collected and reported annually to maintain certification.
- Sets the timing of the annual reporting obligations (either on a financial or calendar year cycle) that will have to be met to maintain carbon neutral certification.

Either a financial or calendar year can be chosen as the base year, depending on which best suits the timing for carbon account data collection or aligns with business processes.

The requirements for establishing a base year and the process for calculating the carbon account are described in Section 2.3.3 and Section 2.3.5.

The carbon account of the base year must be independently audited and submitted to the Department with the application for carbon neutral certification.

Appendix B: *Carbon Accounting Requirements and Guidance* provides examples and templates for calculating a carbon account.

#### Optional certification of the base year

Arrangements can be made to certify the base year. This can be accommodated by including the base year within the carbon neutral certification period of the licence agreement (Section 3.2).

If a precinct seeks to backdate the timing of certification so that it is certified as having been carbon neutral during its base year, offset units equivalent to the base year emissions must be cancelled before certification is granted (at the time of application).

Please contact the Department to discuss arrangements for back dated certification before signing the licence agreement.

### 3.1.2 Public report

Transparency of information is important for maintaining consumer confidence in carbon neutral claims. A precinct seeking certification through the Carbon Neutral Program must prepare a public report as described in Section 2.6 as part of the application for carbon neutral certification and on an annual basis thereafter.

The first public report submitted as part of the application (covering the base year), must include:

- A summary of the carbon account, including explanation of the emissions boundary and disclosure of any emissions sources excluded (Section 3.1.1).
- A summary of the emissions reduction strategy, including plans for reductions for the coming year (based on the Emissions Reduction Strategy as per Section 2.4).

### 3.1.3 Independent audit

A precinct applying for carbon neutral certification must have its carbon account (base year) and public report independently audited, as per the audit requirements in Section 2.7.

The independent audit must be arranged and paid for by the responsible entity, and the audit report must be submitted to the Department as part of the application. The Department may request clarification or further information to assist with the evaluation.

## 3.2 Obligations

### 3.2.1 Agreement with obligations

The Department will only grant certification after the responsible entity has agreed to the obligations for certification.

Obligations for carbon neutral certification are contained in the Certification Trade Mark Licence Agreement (the licence agreement) which must be signed prior to certification.

A blank licence agreement template can be requested from the Department at any time.

The licence agreement legally binds the responsible entity to the obligations for certification for the term of the licence.

### 3.2.2 Obligations for certification

The Standard requires measuring, reducing, offsetting and reporting of emissions to be conducted annually (Section 2). Maintaining certification against the Standard is based on this cycle.

The licence agreement specifies the annual reporting period and the dates by which obligations are due.

Obligations for certification are listed below:

1. **Annual carbon account report** to the Department which must include:

DRAFT National Carbon Offset Standard for Precincts

- the total emissions generated from the certified precinct during the reporting period and any changes to the carbon account calculation compared to the previous year;
- details of any activities leading to emission reductions achieved or commenced during the reporting period;
- details of the quantity and type of eligible offset units purchased and cancelled to justify the carbon neutral claim; and
- a summary of how the carbon neutral certification has been marketed and communicated, including the use of the certification trade mark.

2. **Annual public report** (as per Section 2.6)

3. **Payment of the annual licence fee** at the start of each reporting year.

Information on fees is available from the Department or via the Department's website at:

[www.environment.gov.au/climate-change/publications/factsheet-certification-trade-mark-licence-fee](http://www.environment.gov.au/climate-change/publications/factsheet-certification-trade-mark-licence-fee).

4. **Independent auditing** of the annual carbon account report and public report every second year (as per Section 2.7 and Section 3.1.3).

The Department may require a certified carbon neutral precinct to complete an audit in an interim year if circumstances have changed significantly. Examples of significant change include: changes in emissions boundary due to construction work, or change in calculation methodologies or improvements in the accuracy of emission factors or activity data that lead to an impact on the base year emissions data.

Templates for the annual carbon account report and public disclosure summary are available on the Department's website at: [www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral). Other formats can also be used.

## 3.3 Certification

### 3.3.1 Granting of initial certification

Certification may be granted by the Department upon:

- Approval of the application (Section 3.1), and
- Execution of the licence agreement (Section 3.2).

The Department will make a decision on the certification of the precinct and will advise the responsible entity of the decision in writing.

If certification is granted, the responsible entity will also receive a *notice of certification*. This allows the use of the certification trade mark (Section 3.3.2).

Details of the certification, including the public report, will be placed on the Department's website.

The carbon neutral certification and permission to use the certification trade mark is valid continually for the duration of the licence agreement, subject to all obligations being met (Section 3.2.2).

### 3.3.2 Permission of trade mark use

The *notice of certification* or *notice of continued certification*, allows for the use of the certification trade mark.

Use of the certification trade mark must be in accordance with the Trade Mark Rules of Use (the trade mark rules) and comply with the obligations for certification (Section 3.2.2).

The trade mark rules have been approved by the Australian Competition and Consumer Commission. Use of the certification trade mark in accordance with trade mark rules minimises risks of challenges in relation to the carbon neutral claim.

The trade mark rules can be found at: [www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral).

Digital versions of the certification trade mark and guidance on how the trade mark can be used will be provided to the responsible entity with the *notice of certification*.

### 3.3.3 Review and granting of continued certification

The Department will review and monitor ongoing reporting and offsetting obligations (Section 3.2.2) and evaluate whether the requirements of the Standard have been met.

A *notice of continued certification* will be issued when the Department approves certification of the precinct for the specified reporting period.

Certification and trade mark use may be suspended or terminated by the Department if the obligations of the licence agreement are not met. There will be the opportunity to rectify any issues before such action is taken.

## 3.4 Other Administrative Arrangements

### 3.4.1 Timing of offset unit cancellation

The responsible entity seeking carbon neutral certification is not required to proceed with the purchase and cancellation of offset units until after the application has been accepted by the Department and the licence agreement has been executed (Section 3.3.1).

Timing of offset unit cancellation depends on the approach chosen (either in arrears or up-front).

#### Offsets cancellation (in arrears)

A precinct offsetting in arrears must cancel offset units for the reporting year that has just finished, starting with the first year of certification.

Details of the cancelled offset units must be included in the annual carbon account report submitted to the Department at a time specified in the licence agreement (usually within four months of the end of the reporting period).

A summary must also be included in the annual public report (Section 2.6).

#### Offsets cancellation (upfront and true-up)

Upfront offsetting requires a sufficient quantity of eligible offset units to be purchased and cancelled to offset the total emissions expected to be associated with the certified precinct for the coming reporting year. A true-up (see below) is then performed at the end of the reporting year to ensure that a sufficient quantity of units has been cancelled.

For precincts offsetting in advance, the public report included in the application package must include an estimate of the number of eligible offset units to be cancelled for the first year of certification to support the carbon neutral claim. This estimate should be based on the carbon account of the activity for the previous or base year, adjusted as necessary to take into account any upwards or downwards changes to the carbon account that are expected for the coming year, such as organisational growth or more efficient production processes.

Once the application documents have been accepted by the Department, proof must be provided to the Department with details of the eligible offset units that have been cancelled to support the carbon neutral claim for the first year of certification. It is not necessary to cancel these units until after the application has been accepted by the Department.

For every subsequent reporting year, the precinct is required to:

1. Calculate the difference between the final carbon account for the year and the number of eligible offset units cancelled at the beginning of the year. If more eligible offset units have already been cancelled than needed to acquit the carbon neutral claim for the year, the excess may be carried over to be used against the carbon neutral claim for the next year. If the final carbon account has turned out to be greater than the number of units already cancelled, additional units will need to be purchased and cancelled to meet this discrepancy. This process is known as 'true-up'.
2. Estimate the emissions associated with the carbon neutral activity for the coming year. This should be based on the activity's carbon account from the previous year (i.e. as worked out as per Section 2), and adjusted upwards or downwards as necessary to account for anticipated changes to the carbon account over the coming year.
3. Purchase and cancel eligible offset units to achieve true-up of the previous year's estimated and final carbon account, as well as upfront cancellation of units equivalent to the estimate for the coming year's emissions.
4. Include information on each of these steps in the annual public report.

### 3.4.2 Licences period and renewal

Licence agreements executed under the Carbon Neutral Program usually cover a five-year period. If a precinct wishes to continue using the certification trade mark after the end of licence period, it must renew the licence agreement with the Department.

### 3.4.3 Review of decisions

If the responsible entity disagrees with a decision of the Department (either in relation to a certification decision or the granting and use of the certification trade mark) it may request an internal review of the decision.

See the Department's service charter for details on the internal review processes. The charter can be found at: [www.environment.gov.au](http://www.environment.gov.au).

If the responsible entity is dissatisfied with the way in which the Department handles a complaint, they may wish to complain to the Commonwealth Ombudsman. The Ombudsman will usually decline to investigate a complaint unless the matter has been raised directly with the Department first. Details of how to make a complaint to the Commonwealth Ombudsman can be found at: [www.ombudsman.gov.au](http://www.ombudsman.gov.au).

### 3.4.4 Confidentiality

Information that is provided to the Department that is 'confidential' will not be disclosed to any third party without the responsible entity's permission, except under limited circumstances that are required for the administration of the Program and set out in the licence agreement, or if required by law. This does not apply to the public reports, or Public Disclosure Summaries, which are public documents.

Confidentiality conditions are detailed further in the licence agreement. If there are any concerns about disclosure of confidential information, please discuss this with the Department.

Information is regarded as 'confidential' if it is information that:

- is inherently confidential and not in the public domain; and
- the responsible entity notifies the Department is to be treated in confidence; and
- is not in the possession or knowledge of the Department independently of its disclosure by the responsible entity.

## 4 References

### 4.1 References that form the basis of the Standard

The following existing Australian and international standards and Australian legislation provide the basis for the Standard. These documents also provide further detailed information on how to develop a carbon account.

- Australian Standard (AS) ISO 14064 series, including:
  - AS ISO 14064.1:2006 – *Greenhouse gases Part 1: Specification with guidance at the organisation level for the quantification and reporting of greenhouse gas emissions and removals*
  - AS ISO 14064.2:2006 – *Greenhouse gases Part 2: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements*
  - AS ISO 14064.3:2006 – *Greenhouse gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*
- International Standard ISO 14040 series, including:
  - ISO 14040:2006 – *Environmental management – Life cycle assessment – Principles and frameworks*
  - ISO 14044:2006 – *Environmental management – Life cycle assessment – Requirements and guidelines*
  - Other international standards that are based on the ISO 14040 series, including PAS 2050:2011 – *Specification for the assessment of the life cycle greenhouse gas emissions of goods and services*
- ISO 14065:2013 – *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation of other forms of recognition*
- The British Standards Institution's (BSI) Specifications, including:
  - BSI's PAS 2060:2014 – *Specification for the demonstration of carbon neutrality*
- The Greenhouse Gas (GHG) Protocol standards, including:
  - GHG Protocol – *A corporate accounting and reporting standard (GHG Corporate Standard)*
  - *The GHG Protocol for Project Accounting*
  - GHG Protocol – *Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)*
  - GHG Protocol – *Product Life Cycle Accounting and Reporting Standard (2011)*
  - GHG Protocol – *Scope 2 Guidance*
- The National Greenhouse and Energy Reporting Act 2007 (NGER Act) and supporting legislation and documentation, including:
  - *National Greenhouse and Energy Reporting Regulations 2008*
  - *National Greenhouse and Energy Reporting (Measurement) Determination 2008*
  - *National Greenhouse and Energy Reporting (Audit) Determination 2009*
  - *National Greenhouse and Energy Reporting Technical Guidelines*
  - *National Greenhouse Accounts Factors*

All standards and legislation are subject to revision. Responsible entities must use the most recent version or editions of any listed standards, guidance material or legislation.

## 4.2 All references

- BSI. (2011). *PAS 2050:2011 – Specification for the assessment of the life cycle greenhouse gas emissions of goods and services*. London, UK: British Standards Institute.
- BSI. (2014). *PAS 2060:2014 – Specification for the demonstration of carbon neutrality*. London, UK: British Standards Institute.
- Bureau of Meteorology. (2016). *National performance report 2014–15: urban water utilities, part A*. Melbourne: Bureau of Meteorology.
- Department for Business Energy & Industrial Strategy. (2016). *Greenhouse gas reporting - Conversion factors 2016*. London.
- Department of the Environment and Energy. (2016). *National Greenhouse Accounts Factors*. Canberra, ACT: Australian Government.
- International Organisation for Standardisation. (2006). *ISO 14040:2006 – Environmental management – Life cycle assessment – Principles and frameworks*. Vernier, Geneva: International Organisation for Standardisation.
- International Organisation for Standardisation. (2006). *ISO 14044:2006 – Environmental management – Life cycle assessment – Requirements and guidelines*. Vernier, Geneva: International Organisation for Standardisation.
- International Organisation for Standardisation. (2013). *ISO 14065:2013 – Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation of other forms of recognition*. Vernier, Geneva: International Organisation for Standardisation.
- LGNSW. (2010). *Module 5 - Undertaking and Interpreting Greenhouse Gas Inventories*. Sydney, NSW: Local Government NSW. Retrieved from <http://www.lgnsw.org.au/files/imce-uploads/35/module-5-undertaking-and-interpreting-GHG-inventories.pdf>
- National Greenhouse Accounts Factors. (2016). Retrieved from <https://www.environment.gov.au/climate-change/greenhouse-gas-measurement/publications/national-greenhouse-accounts-factors-aug-2016>
- National Greenhouse and Energy Reporting (Audit) Determination . (2009).
- National Greenhouse and Energy Reporting (Measurement) Determination. (2008).
- National Greenhouse and Energy Reporting Regulations. (2008).
- National Greenhouse and Energy Reporting Technical Guidelines. (2016). Retrieved from <https://www.environment.gov.au/climate-change/greenhouse-gas-measurement/publications/nger-technical-guidelines-reporting-year-2016-17>
- Standards Australia. (2006). *AS ISO 14064.1:2006 Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*. Sydney, NSW: Standards Australia.
- Standards Australia. (2006). *AS ISO 14064.2:2006 Greenhouse gases Part 2: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements*. Sydney, NSW: Standards Australia.
- Standards Australia. (2006). *AS ISO 14064.3:2006 Greenhouse gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*. Sydney, NSW: Standards Australia.
- WBCSD and WRI. (2003). *The GHG Protocol for Project Accounting*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2011). *GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2011). *GHG Protocol – Product Life Cycle Accounting and Reporting Standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2013). *A corporate accounting and reporting standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

World Resources Institute C40 Cities Climate Leadership Group and ICLEI. (2014). *Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories - An Accounting and Reporting Standard for Cities*. World Resources Institute.

WRI. (2015). *GHG Protocol – Scope 2 Guidance*. Conches, Geneva: World Resources Institute.

WRI/WBCSD. (2006). *Allocation of GHG Emissions from a Combined Heat and Power (CHP) Plant*. World Resources Institute and World Business Council for Sustainable Development.

## 5 Glossary

**Activity data:** Source data that quantifies an emissions generating activity, such as fuel usage and electricity consumption, and that can be used to determine greenhouse gas emissions.

**Additionality:** A requirement that a project or activity results in carbon abatement that is unlikely to occur in the ordinary course of events in the absence of the project or activity, including due to any existing commitment or target publicly agreed by the entity responsible for issuing the units. Abatement must not be double counted under another system.

**Australian Carbon Credit Unit (ACCU):** An emissions unit issued under the Carbon Credits (Carbon Farming Initiative) Act 2011, resulting from an Emission Reduction Fund project.

**Base year:** The reference year (calendar, financial or other) from which changes in emissions can be tracked over time. This is usually a year's worth of emissions data that is audited before certification is granted.

**Cancellation:** Transfer of a unit to a cancellation account so that it may not be used for any further purpose. Also known in some schemes as 'retirement'.

**Carbon account:** A measure of the carbon dioxide equivalent emissions attributable to an activity. A carbon account can relate to the emissions of an individual, household, organisation, product, service, building or precinct. This can also be known as a carbon footprint or emissions inventory.

**Carbon dioxide equivalence (CO<sub>2</sub>-e):** A standard measure that takes account of the global warming potential of different greenhouse gases and expresses the effect in a common unit.

**Carbon neutral:** Refers to a situation where the net emissions associated with an activity are equal to zero because emissions have been reduced and offset units cancelled to fully account for all emissions.

**Carbon Neutral Certification Trade Mark (certification trade mark):** A trade mark that signifies that a carbon neutral claim against the National Carbon Offset Standards has been certified by the Department.

**Carbon Neutral Program (or the Australian Government's Carbon Neutral Program):** The mechanism by which an organisation, product & service, building or precinct can be certified as carbon neutral against the National Carbon Offset Standards.

**Carbon sink:** A natural or manmade reservoir, such as a forest, that stores carbon.

**Certification trade mark:** see Carbon Neutral Certification Trade Mark.

**Certified Emission Reduction (CER):** A Kyoto Protocol unit corresponding to one metric tonne of carbon dioxide equivalent emissions, and issued for verified emission reductions or removals achieved by a project approved under the Clean Development Mechanism (CDM). CDM projects undertaking afforestation and reforestation activities are issued temporary (tCERs) and long term units (lCERs), which expire and must be replaced after a specified period.

**Clean Development Mechanism (CDM):** A carbon offset mechanism established under Article 12 of the Kyoto Protocol. Countries with emissions targets under the Kyoto Protocol can meet their obligations using credits from greenhouse gas abatement projects established under Article 12 in countries that are Party to the Protocol but do not have an emission target.

**Department (the):** Australian Government Department of the Environment and Energy.

**Emission factor:** A factor that specifies the kilograms of CO<sub>2</sub>-e emissions per unit of activity.

**Emissions abatement or carbon abatement:** means either (a) the removal of one or more greenhouse gases from the atmosphere; or (b) the avoidance of emissions of one or more greenhouse gases.

Facility:

(a) For any organisation already reporting under the NGER Act, means an activity or a series of activities (including ancillary activities) that involves the production of greenhouse gas emissions, the production of energy or the consumption of energy, and that forms a single undertaking or enterprise and meets the requirements of the National Greenhouse and Energy Reporting (NGER) Regulations.

(b) For any organisation not currently reporting under the NGER Act, means any building or land together with any machinery, plant, appliance, equipment, implement, tool or other item used in connection with any activity carried out at the facility, and includes an offshore facility. The facility may be located on a single site or on adjacent or contiguous sites owned or operated by the same person.

Functional unit: A means of expressing the greenhouse gas emissions of a product in a way that is meaningful for the product being investigated (for example kilograms of CO<sub>2</sub>-e per unit of product).

Green Building Council of Australia (GBCA): The Green Building Council of Australia (GBCA) is the nation's authority on sustainable buildings and communities. The GBCA's mission is to accelerate the transformation of Australia's built environment into one that is healthy, liveable, productive, resilient and sustainable. The GBCA works with industry and government to encourage policies and programs that support its mission. The Council educates thousands of people each year on how to design and deliver sustainable outcomes for Australia's buildings and communities. And it operates Australia's only national, voluntary, holistic rating system for sustainable buildings and communities – Green Star.

Greenhouse gases (GHG): The atmospheric gases responsible for causing global warming and climate change. The Kyoto Protocol currently lists six greenhouse gases -carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro-fluorocarbons (HFCs), per-fluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>). Emissions from additional greenhouse gas types, for example Nitrogen Trifluoride (NF<sub>3</sub>), may be included in future editions of Australia's national greenhouse gas inventory. The list of gases to be reported under this Standard may therefore also be updated.

GreenPower product: Any product or service that enables customers to voluntarily contribute financially to Renewable Energy generation from GreenPower Generators, and has been accredited under the National GreenPower Accreditation Program.

Green Star: Green Star is an internationally recognised holistic sustainability rating system that provides that provides independent verification of sustainable outcomes throughout the lifecycle of the built environment. It is composed of four rating tools: Green Star – Communities (for precincts in development), Green Star – Design & As Built (for new buildings), Green Star – Interiors (for new fitouts), and Green Star – Performance (for buildings in operation).

Kyoto protocol: An international treaty which was created under the United Nations Framework Convention on Climate Change (UNFCCC) in 1997 and entered into force in 2005. The Kyoto Protocol sets binding targets for the reduction of greenhouse gas emissions by developed countries and countries in transition. It includes individual emission reduction targets for those countries ('Annex I countries') to be met within the first commitment period of 2008-12.

Kyoto unit: Emissions units created under the Kyoto Protocol. Kyoto units include Assigned Amount Units (AAUs), Certified Emission Reductions (CERs, including tCERs and ICERs), Emission Reduction Units (ERUs) and Removal Units (RMUs).

Life cycle assessment (LCA): The compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its production, use, transport and disposal (the product's "life cycle").

Limited assurance: A level of assurance defined in the *National Greenhouse and Energy Reporting (Audit) Determination 2009* whereby the auditor finds that there is no evidence to suggest that a report is not accurate. This is a lower level of assurance than 'reasonable assurance'. Is distinguishable from a reasonable level assurance in that there is less emphasis on detailed testing of greenhouse gas data and information supplied to support the greenhouse gas assertion.

**Material discrepancy:** An error (for example from an oversight, omission, or miscalculation) that results in the reported quantity being significantly different to the true value to an extent that will influence performance or decisions. (Definition taken from *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*)

**National Australian Built Environment Rating System (NABERS):** NABERS is a national rating system that measures the environmental performance of Australian buildings and tenancies. Put simply, NABERS measures the energy efficiency, water usage, waste management and indoor environment quality of a building or tenancy and its impact on the environment.

**National Administrator for the National Australian Built Environment Rating System (the NABERS Administrator):** NABERS is a national program managed by the NABERS National Administrator, NSW Government's Office of Environment and Heritage, and overseen by a National Steering Committee. The NSW OEH manages the operation and development of NABERS throughout Australia on behalf of the National Steering Committee.

**National Carbon Offset Standard:** A standard for making carbon neutral claims; maintained by Australian Government Department of the Environment and Energy; sets rules for measuring, reducing, offsetting and reporting emissions. The standard is available for:

- Organisations: National Carbon Offset Standard for Organisations
- Products and Services: National Carbon Offset Standard for Products & Services
- Buildings: National Carbon Offset Standard for Buildings
- Precincts: National Carbon Offset Standard for Precincts

**National Carbon Offset Standard for Precincts (the Standard):** Is a standard for making carbon neutral claims for precinct operations. The Standard is maintained by the Australian Government Department of the Environment and Energy. It sets the rules for measuring, reducing, offsetting and reporting emissions as required to make a carbon neutral claim for a precinct.

**National Greenhouse and Energy Reporting (NGER) Scheme:** The national reporting framework for information related to greenhouse gas emissions, energy production and use by corporations operating in Australia. The framework is established under Commonwealth legislation, which makes registration and reporting mandatory for corporations whose greenhouse gas emissions or energy production or use meet certain thresholds.

**NCOS:** see National Carbon Offset Standard.

**NGER Act:** *National Greenhouse and Energy Reporting Act 2007*.

**Offsetting:** The activity of cancelling offset units.

**Offset unit:** Represents reductions of greenhouse gases or removals of greenhouse gases from the atmosphere by sinks, relative to a business-as-usual baseline. Offset units are tradeable and can be used to negate (or offset) all or part of another entity's emissions.

**Operational control:** The highest authority within a corporate group to introduce and implement any or all of the following for the Facility: (i) operating policies; (ii) health and safety policies; (iii) environmental policies. Only one corporation can have operational control over a Facility at any time.

**Organisation:** A company, corporation, firm, enterprise, authority or institution, or a combination thereof, whether incorporated or not, public or private, that has its own functions and administration. This may also include an organisation that shares functions and/or administration with another organisation.

**Permanence:** A requirement that offset units represent reductions in emissions or an increase in carbon sequestration that is permanently maintained and is not re-released into the atmosphere.

**Precinct:** A precinct or district is "more than a building and less than a city" and is primarily defined by its geographical boundaries, which, at a minimum, must incorporate public infrastructure beyond a single building.

**Product:** Physical goods produced for sale.

**Rating period:** The continuous 12-month period covered by the data used for NABERS Energy and Water ratings.

**Reasonable Assurance:** A level of assurance defined in the National Greenhouse and Energy Reporting (Audit) Determination 2009 meaning that the report is accurate in all material respects. The auditor provides a high, but not absolute, level of assurance that the responsible party's greenhouse gas assertion is materially correct.

**Removal Unit (RMU):** A unit created under the Kyoto Protocol corresponding to one metric tonne of carbon dioxide equivalent emissions sequestered and issued for removals of carbon dioxide from the atmosphere by eligible land use, land-use change and forestry activities.

**Responsible entity:** The organisation or person (with appropriate delegation to sign on behalf of the organisation) that has taken responsibility for making a carbon neutral claim or seeking carbon neutral certification. The responsible entity should be clearly identified and must be able to meet the requirements of the Standard, including carbon accounting, regular reporting and purchasing of offset units as required to make the carbon neutral claim.

**Scope 1 emissions:** The release of greenhouse gas into the atmosphere as a direct result of activities at a facility.

**Scope 2 emissions:** The release of greenhouse gas as a result of electricity generation, heating, cooling or steam that is consumed by a facility.

**Scope 3 emissions:** Greenhouse gases emitted as a consequence of a facility's activities but emitted by another facility.

**Sequestration:** The removal of atmospheric carbon dioxide, either through biological processes (for example, photosynthesis in plants and trees), or geological processes (for example, storage of carbon dioxide in underground reservoirs).

**Sink:** See carbon sink.

**Standard (the):** see National Carbon Offset Standard for Precincts.

**Trade mark rules:** *The Rules for using the National Carbon Offset Standard Certification Trade Mark*, which outline the conditions under which the certification trade mark may be used.

**Verified Carbon Unit (VCU):** A unit corresponding to one metric tonne of carbon dioxide equivalent emissions reduced or avoided, as certified and issued under the Verified Carbon Standard.

**Voluntary Emissions Reduction (VER):** A unit corresponding to one metric tonne of carbon dioxide equivalent emissions reduced or avoided, as certified and issued under the Gold Standard, a global standard for abatement projects under the Kyoto Protocol and in the voluntary carbon market.

# Appendix A: Eligible offset units

This Appendix A: *Eligible offset units*, provides information on carbon offset units that are eligible for use in offsetting emissions under the National Carbon Offset Standards (the Standards).

The Standards are available for organisations, products & services, buildings and precincts.

- National Carbon Offset Standard for Organisations
- National Carbon Offset Standard for Products and Services
- National Carbon Offset Standard for Buildings
- National Carbon Offset Standard for Precincts

The Standards set the rules for measuring, reducing, offsetting and reporting emissions as required to make a carbon neutral claim. This Appendix A should be read in conjunction with the Standard relevant to the carbon neutral claim being made (organisations, products & services, buildings or precincts).

The information contained can be applied to all categories of the Standard (organisations, products & services, buildings and precincts).

Any questions? – Please check out the FAQs at: [www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral) or contact the Department of the Environment and Energy:

- via email to: [carbonneutral@environment.gov.au](mailto:carbonneutral@environment.gov.au)
- or phone 1800 057 590 and ask to talk to the Carbon Neutral Team.

# 1 Eligible offset units

The following offset units are eligible under the National Carbon Offset Standard:

- **Australian Carbon Credit Units (ACCUs)** issued by the Clean Energy Regulator in accordance with the framework established by the *Carbon Credits (Carbon Farming Initiative) Act 2011*.
- **Certified Emissions Reductions (CERs)** issued as per the rules of the Kyoto Protocol from Clean Development Mechanism projects, with the exception of:
  - long term (ICERs) and temporary (tCERs); and
  - CERs from nuclear projects, the destruction of trifluoromethane, the destruction of nitrous oxide from adipic acid plants or from large-scale hydro-electric projects not consistent with criteria adopted by the EU (based on the World Commission on Dams guidelines).
- **Removal Units (RMUs)** issued by a Kyoto Protocol country on the basis of land use, land-use change and forestry activities under article 3.3 or 3.4 of the Kyoto Protocol.
- **Voluntary Emissions Reductions (VERs)** issued by the Gold Standard.
  - VERs may be subject to the possibility of double counting, for example where the abatement occurs in a host country or region that is affected by international or national emissions trading, cap and trade or carbon tax mechanisms. Please see the Gold Standard's Double Counting Guideline for full details.
  - Where the additionality of a VER is ensured through the cancellation of an 'Eligible Cancellation Unit' (as defined by the Gold Standard), that VER is only eligible for use under the National Carbon Offset Standard where the applicable 'Eligible Cancellation Unit' would also have been eligible under the National Carbon Offset Standard\*.
- **Verified Carbon Units (VCUs)** issued by the Verified Carbon Standard.

This list of eligible offset units will be updated as new information or new offset units become available. This may result in the addition of new offset units or the removal of existing ones.

A decision framework based on the offset integrity principles (Section 1.3.2) is used to determine the eligibility of new offset units and to review the eligibility of existing units.

## 2 Cancellation and reporting

The Standard requires any carbon neutral claim to be supported by units that have been cancelled at the time of the claim. Units that have been purchased or allocated, but not yet cancelled on behalf of the carbon neutral claimant, cannot be used in a carbon neutral claim against the Standard.

All offset units that support a carbon neutral claim against the Standard must be recorded and reported transparently. To do so, the units used should be clearly attributed to the particular carbon neutral claim in the publicly viewable section of the relevant registry. For example, this could be done via a note explaining that the units have been "cancelled on behalf of Company XYZ to meet its carbon neutral claim against the National Carbon Offset Standard for FY2016-17".

*\* Where VERs are used to support a carbon neutral claim under the Carbon Neutral Program and those VERs are backed-up by 'Gold Standard-approved Eligible Cancellation Units', the details of the Eligible Cancellation Units must be reported to the Department. If it were not for the cancellation of the Eligible Cancellation Units, the carbon neutral claim would be based on non-additional (and therefore ineligible) offset units. The information reported on the Eligible Cancellation Units is thereby crucial for ensuring the integrity of the carbon neutral claim.*

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## Appendix B: Carbon accounting requirements and guidance

This Appendix B: *Carbon accounting requirements and guidance* provides information on common emission sources and the treatment of renewable energy use, when preparing a carbon account under the National Carbon Offset Standards (the Standards).

The Standards are available for organisations, products & services, buildings and precincts.

- National Carbon Offset Standard for Organisations\*
- National Carbon Offset Standard for Products and Services
- National Carbon Offset Standard for Buildings
- National Carbon Offset Standard for Precincts

\*For organisations that are preparing a carbon account, additional guidance on Scope 3 emission sources and emissions factors is available in *Guidance on Scope 3 Calculations* found at [www.environment.gov.au/climate-change/publications/guidance-scope-3](http://www.environment.gov.au/climate-change/publications/guidance-scope-3).

The Standards set the rules for measuring, reducing, offsetting and reporting emissions as required to make a carbon neutral claim. This Appendix B should be read in conjunction with the Standard relevant to the carbon neutral claim being made (organisations, products & services, buildings or precincts).

The information contained can be applied to all categories of the Standard (organisations, products & services, buildings and precincts), however, some emission sources may be more relevant to a particular category.

Some of the information in this document is likely to change over time, as practices evolve and improved estimation techniques become available. The Department will use its best endeavour to update the information. This may include adding information on other emission sources, or modifying calculation approaches.

Any questions? – Please check out the FAQs at [www.environment.gov.au/carbon-neutral](http://www.environment.gov.au/carbon-neutral) or contact the Department of the Environment and Energy:

- via email to [carbonneutral@environment.gov.au](mailto:carbonneutral@environment.gov.au)
- or phone 1800 057 590 and ask to talk to the Carbon Neutral Team.

# 1 Calculations for typical emissions sources

## 1.1 Transport

Transport vehicles and mobile equipment or machinery generate greenhouse gas emissions either directly by combusting fuel or indirectly by consuming grid-delivered electricity.

This section has been written with reference to the *Greenhouse Gas Protocol – Global Protocol for Community-scale Greenhouse Gas Emissions Inventories* (World Resources Institute C40 Cities Climate Leadership Group and ICLEI, 2014).

### 1.1.1 Emissions sources

The relevance and completeness principles (Standard: Section 1.3.1) apply to the identification of the transport activities falling within the emissions boundary.

Any mode of transport may be relevant. Different modes of transportation link back to specific sources of emissions, mostly fuels and grid-distributed electricity (for public transport). Modes of transport may include:

- **On-road transportation:** Fuel and electricity powered automobiles e.g. cars, trucks, taxis, buses.
- **Railway:** Trams, urban railway subway systems, regional (inter-city) commuter rail transport, national rail system.
- **Marine navigation:** Domestic inter-city vessels, international water-borne vessels; sightseeing ferries.
- **Air travel:** Domestic inter-city flights, international flights, helicopters.
- **Off-road transportation:** Airport ground support equipment, agricultural tractors, forklifts.

#### Emissions by Scope

**Scope 1** emissions arise from the consumption of transport fuels in vehicles and machinery directly controlled by the responsible entity or affiliated entities.

**Scope 2** emissions arise from the use of electricity from the grid for similar transport activities directly controlled by the responsible entity or affiliated entities.

When a transport service or activity is outsourced to, purchased or leased from a third party then it falls under **Scope 3** emissions. Similarly, transport needs induced by the activities within the boundary, but which are not directly within the boundary itself, are considered as Scope 3.

Transport occurring entirely within the responsible entity's defined emission boundaries and controlled by the responsible entity (e.g. shuttle buses for precincts, material transport for a product certification) are typically Scope 1 and 2 emissions.

Scope 1 and 2 emissions from transport must be included in the carbon account for organisations, products & services, buildings and precincts when making a carbon neutral claim against the Standard.

Scope 3 emissions from transport must be included if relevant and material.

## Examples of transport activities

These examples are provided to illustrate potential transport activities that should be included. They are not exhaustive.

For an **organisation**, examples of transport activities include:

- Fleet operation (Scope 1 and 2), including the reimbursement of private vehicle use to employees;
- Transport of goods and products manufactured by the organisation (Scope 1 or 2 or 3);
- Transport service purchased from a third party: flights, taxi and train trips (Scope 3);
- Employee commuting (Scope 3).

For a **product or service**, examples of transport activities include:

- Fleet operation (Scope 1 and 2) for the distribution of product or supply of materials;
- Transport service purchased from a third party: freight (Scope 3).

For a **precinct**, examples of transport activities include:

- Intra-precinct public transport (Scope 1 and 2);
- Transport induced by precinct maintenance or management activities (Scope 1 and 2, or possibly 3);
- Transport generated by the activities of the tenants / occupants of the precinct (Scope 3), including employee commuting to and from the precinct.

For a **building**, examples of transport activities include:

- Forklifts and other within-building transport that uses fuel (Scope 1) or electricity (Scope 2);
- Transport generated by the activities of the tenants / occupants of the building (Scope 3), including employee commuting to and from the building.

### 1.1.2 Collecting activity data

Information and data collection will depend on the type of transport activity considered for inclusion and the mode of transport.

- For Scope 1 and 2 emissions, it is usually possible to collect data on the units of energy (amount and type of fuel or electricity) consumed by the transport activities directly controlled.
- For Scope 3 emissions, while the exact units of energy are not known, it is usually possible to estimate emissions from the distances and the mode of transport, or the split between modes of transport for an activity. It may also be possible to ask for a report from the service provider.
  - For example, when assessing commuting in a metropolitan city, an estimation of the proportion of people commuting by train, road or active transport (walking or cycling) can be obtained through specific surveys or derived from existing surveys.
  - Similarly, for freight, the modes of transport for broad categories of goods (such as food, agricultural products and mining) are known at the national or state levels and can be used as a basis for estimates.

In looking for appropriate data for transport such as commuting or freight or material transport, the order of preference is as follows:

1. Specific data, such as can be obtained through direct reporting or staff or site surveys
2. National/state statistics
3. Research papers

Available data for commuting includes the following:

- The EPA Victoria provides a calculator aimed at households, but valid Australia-wide, which contains a section on public transport. <http://www.epa.vic.gov.au/agc/home.html>
- The EPA Victoria report which provides estimates of commuters' travel mode and travel distance in metropolitan areas. [http://economicdevelopment.vic.gov.au/data/assets/pdf\\_file/0003/1269291/VISTA-2013-Travel-in-metropolitan-Melbourne.PDF](http://economicdevelopment.vic.gov.au/data/assets/pdf_file/0003/1269291/VISTA-2013-Travel-in-metropolitan-Melbourne.PDF)
- Sydney Trains provides a carbon calculator for specific trips: <http://www.sydneytrains.info/about/environment/index.htm>
- The NSW Bureau of Transport Statistics provides information based on surveys on the modes of travel and frequency of travel in NSW. <http://www.bts.nsw.gov.au/Statistics/Journey-to-Work/default.aspx?FolderID=217#top>
- The QLD Department of Transport and Main Roads provides analysis of the methods and frequency of travel in QLD for each major city. <http://www.tmr.qld.gov.au/Community-and-environment/Research-and-education/Queensland-Household-Travel-Survey-summary-reports.aspx>
- The SA Department of Environment, Water and Natural Resources provides transport GHG emissions for Adelaide Transport Carbon Emissions – Projections as well as current data (p23, 31, 34). [https://www.adelaidecitycouncil.com/assets/FINAL\\_REPORT\\_-\\_CARBON\\_NEUTRAL\\_ADELAIDE\\_-\\_FOUNDATION\\_REPORT\\_-\\_27\\_November\\_2015.pdf](https://www.adelaidecitycouncil.com/assets/FINAL_REPORT_-_CARBON_NEUTRAL_ADELAIDE_-_FOUNDATION_REPORT_-_27_November_2015.pdf)
- Aurizon (Australia's largest rail freight operator) provide an emissions calculator for long distance freight. <http://www.aurizon.com.au/sustainability/environmental-management#carbon-tool>
- The Climate Change Authority provide data on emissions intensity by mode of transport, currently and projected over time. <http://climatechangeauthority.gov.au/reviews/light-vehicle-emissions-standards-australia/opportunities-reduce-light-vehicle-emissions>

Note that in some cases (e.g. air travel) the transport service provider is able to provide a calculation of emissions related to a specific trip (through a calculator) or to provide a carbon neutral service. If such a carbon neutral service is certified against the Standard (under the Carbon Neutral Program), then the emissions for the trip can be directly considered as zero emissions (Standard: Section 2.3.5). For emissions calculators, the methodology must be transparent and able to be interrogated during the course of the independent audit.

### 1.1.3 Emission factors

For Scope 1 and 2 emissions, the fuel's emission factors can be directly sourced from the latest National Greenhouse Accounts' (NGA) publication (Department of the Environment and Energy, 2016).

For Scope 3 emissions, the quantity of fuel consumed may not be known. It is possible to convert transport activity (e.g. distance travelled or tonne.km or passenger.km) to a quantity of fuel, from which the NGA Factors can then be applied. Emissions factors for different modes of travel can also be used.

Note that wherever possible, the 'full fuel cycle' emission factors should be used. 'Full fuel cycle' emission factors incorporate the extraction, production and transportation of the transport fuel that are added to the total emissions from the combustion. Refer to the table in the NGA Factors document for 'Scope 3 emission factors – liquid fuels and certain petroleum based products'.

When fuel quantity data is not available, generic emissions factors exist based on distance travelled and vehicle type. The emission factors come from the UK Government's Department for Business, Energy & Industrial Strategy (Department for Business Energy & Industrial Strategy, 2016) which cover the following modes of travel:

- Passenger vehicles;
- Business travel – air;
- Business travel – sea;
- Freight goods; and

- Managed assets – vehicles.

### 1.1.4 Emissions calculation

When the quantities of fuel (or electricity) used in transport vehicles are collected to account for Scope 1 and 2 emissions, a direct emissions calculation can be done using the relevant NGA emission factor:

$$\text{Fuel quantity (kL/yr)} \times \text{emissions factor for relevant fuel (tonne CO}_2\text{-e/kL)}$$

In cases where various modes of transport can be used, the ASIF (Activity, mode Share, Intensity, Fuel factor) framework (Figure 3) can be used (World Resources Institute C40 Cities Climate Leadership Group and ICLEI, 2014).

This bottom-up approach must begin with detailed activity data in order to develop a carbon account for transport. It can be simplified, in particular by sourcing emission factors that are a mix of energy intensity for the mode of transport considered and fuel factor.

The ASIF framework for determining total emissions is as follows:

$$\text{Emissions} = \text{Activity} \times \text{Mode Share} \times \text{Intensity} \times \text{Fuel}$$

Where:

- **Activity (A)** is measured as VKT (vehicle kilometres travelled), which reflects the number and length of trips.
- **Mode Share (S)** describes the proportion of trips taken by different transport modes (e.g. public transport, private car) and vehicle types (e.g. car, bus, truck, motorcycle). As mentioned above, the Mode share for an activity can be either: measured directly; estimated through surveys undertaken directly for that purpose; or estimated by reference to secondary sources (surveys undertaken for other purposes but publicly available).
- **Energy Intensity (I)** is the energy consumed per VKT. This is a function of vehicle type, characteristics (e.g., the occupancy or load factor, represented as passengers per km or tonnes freight per km) and driving conditions.
- **Fuel factor (F)** is the carbon content of the fuel, and is based on the composition of the fuel stock.

Figure 3 was adapted from Figure 7.1 in the *Greenhouse Gas Protocol – Global Protocol for Community-scale Greenhouse Gas Emissions Inventories* (World Resources Institute C40 Cities Climate Leadership Group and ICLEI, 2014) and shows how on-road transport emissions should be calculated under the Standard for all categories.

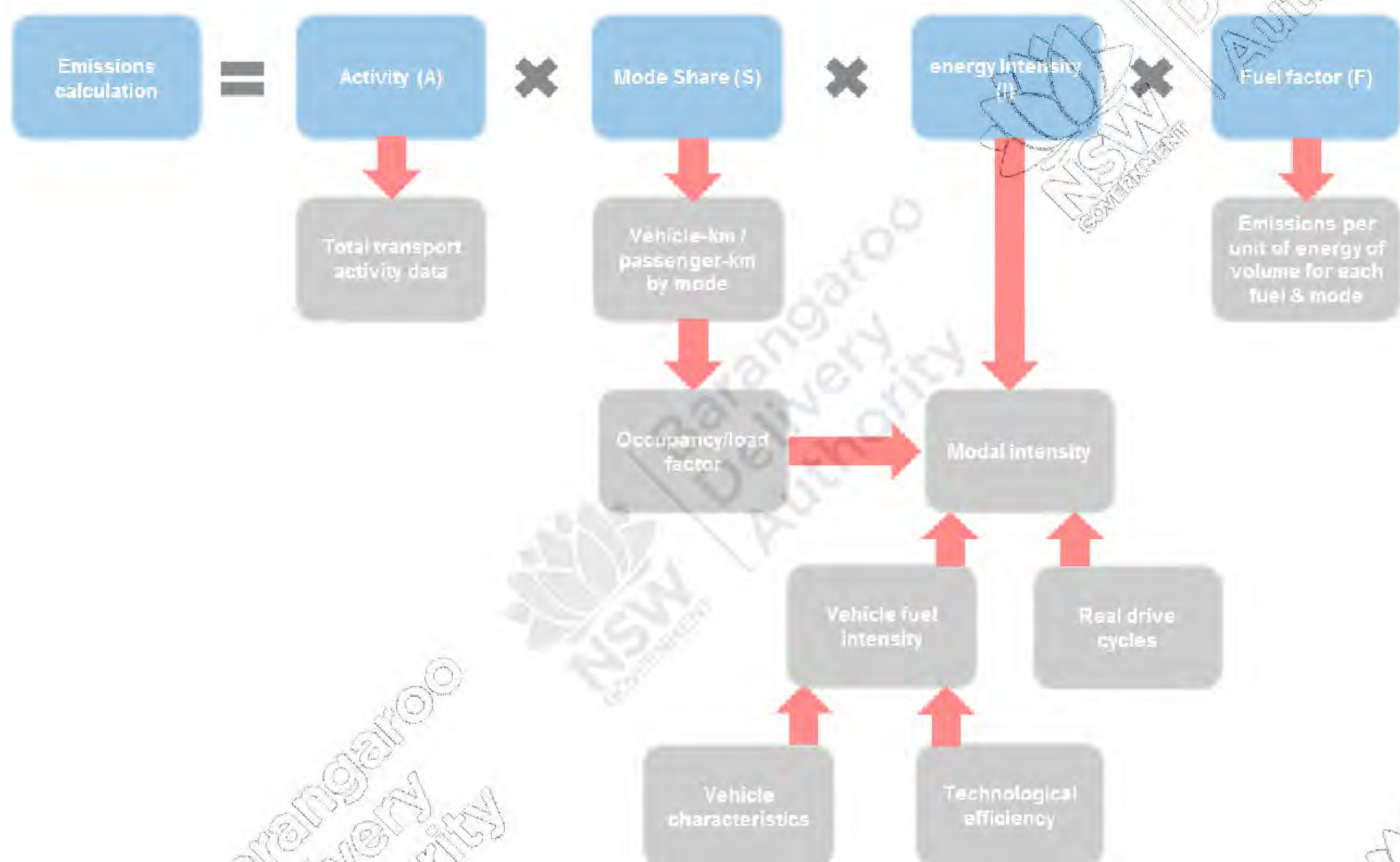


Figure 3. ASIF Framework showing data and calculations to determine transport emissions

### 1.1.5 Worked example

To estimate Scope 3 emissions from staff travel to work (1 specific site, 1,000 employees), company ABC organised a simple staff survey, asking staff to simply provide their usual mode of transport from home to work (active / car / train) and the estimated number of kilometres travelled (one way). Such a survey can easily be organised for multiple sites.

Combined with the number of employees, this provided input for the Activity (A) and Mode Share (S) in the diagram above.

The results were as follows:

- 75% of employees used the train, with a one-way trip averaging 25 km
- 15% of employees travelled by car, with a one-way trip averaging 40 km
- 10% of employees walked or cycled (average trip irrelevant)

Assuming all the trips were for a Melbourne site, the GHG calculations are as follows (for a year)

#### Assumptions:

- 1,000 employees
- Metropolitan train transport emission factor: 0.150 kg CO<sub>2</sub>-e per passenger.km (EPA Victoria)
- Car transport emission factor: 0.210 kg CO<sub>2</sub>-e per km for a medium car (EPA Victoria)
- No emissions for active transport
- 45 weeks and 5 days a week work period (excluding holidays, professional trips interstate, sick leave, etc.)

#### Calculations:

- Number of days per employee per year:  $45 \times 5 = 225$
- Number of commuting trips overall per year:  $1,000 \times 225 \times 2 = 450,000$
- Emissions from train commuting:  $75\% \times 450,000$  (trip number)  $\times 25$  (km)  $\times 0.150$  (emission factor) / 1,000 (conversion into tonnes) = 1,266 tonnes
- Emissions from car commuting:  $15\% \times 450,000$  (trip number)  $\times 40$  (km)  $\times 0.210$  (emission factor) / 1,000 (conversion into tonnes) = 567 tonnes
- Overall commuting emissions = 1,833 tonnes CO<sub>2</sub>-e per year

## 1.2 Stationary energy – co & trigeneration

### 1.2.1 Emissions sources

This section addresses emissions from the following activities:

- **Co-generation:** Emissions from production of both heat and electrical power from main activity producers for sale to the public, at a single Combined Heat and Power (CHP) facility.
- **Tri-generation:** Emissions from the simultaneous generation of electricity, heat, and cooling

In a co- or tri-generation system, multiple forms of energy (most often electricity and steam) are generated simultaneously in an integrated system, from the same input fuel supply. Emissions from these systems occur from the combustion of fossil fuels such as natural gas, in the plant to generate the different energy streams. The greenhouse gas emissions produced are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. The most popular type of fossil fuel used for co- or tri-generation in Australia is natural gas.

#### Emissions by Scope

**Scope 1** emissions arise from the consumption of fossil fuels in the co- or tri-generation system directly controlled by the responsible entity or affiliated entities.

**Scope 2** emissions arise from the use of electricity from the grid or steam supplied to the responsible entity or affiliated entities.

Scope 1 and 2 emissions from co and tri-generation must be included in the carbon account for organisations, products & services, buildings and precincts when making a carbon neutral claim against the Standard, if relevant and material.

#### Co- or tri-generation scenarios

Table 1 provides an overview of the methods used for accounting for import / export of electricity or other energy products.

Table 1. Co- or tri-generation scenarios

| No. | Generation scenario                                                                                                                                                                                                                 | Approach                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Co- or trigeneration system is located <b>within</b> a precinct, building, organisation, and all usable energy generated is consumed <b>within</b> that precinct, building or organisation.                                         | Include in the carbon account as Scope 1 (fuels) and Scope 2 (electricity, if and where ancillary electricity is used).                                                                                                                                                                                                                                                                                                            |
| 2   | Co- or trigeneration system is located <b>within</b> a precinct, building, or organisation's emissions boundary, and thermal energy or electricity is exported <b>outside</b> the precinct, building, or organisation's boundaries. | Include in the carbon account as Scope 1 (fuels) and Scope 2 (electricity, if and where ancillary electricity is used), for completeness.<br><br>Allow the deduction from the carbon account of emissions corresponding to the energy exported to users outside of the emission boundary.<br><br>However, users may find it more practical to simply account for all Scope 1 and 2 emissions from the co- or tri-generation plant. |

| No. | Generation scenario                                                                                                                                                                                                               | Approach                                                                                                                                                                                                                                                                                                                                                                                     |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3   | Co- or trigeneration system is located <b>outside</b> a precinct, building, or organisation's emissions boundary; and thermal energy or electricity is <b>imported into</b> the precinct, building, or organisation's boundaries. | <p>Use grid Scope 2 emission factors for electricity consumption unless a strong case can be made to use a different emission factor (e.g. audited carbon accounts for the co- or trigeneration plant).</p> <p>For steam or other thermal energy (hot or chilled water, consumption), the vendor must provide a site-specific Scope 2 emission factor (e.g. 400 kg CO<sub>2</sub>-e/GJ).</p> |

## 1.2.2 Collecting activity data

Data to be collected includes:

- The quantity of fuel combusted on a volume, mass or energy basis. This can come in the form of fuel receipts, purchase records or metered amounts of fuel entering the combustion system.
- Fuel characteristics such as density, calorific value, heating values, moisture content.

## 1.2.3 Emission factors

The emission factors for fuel combusted and electricity consumed can be directly sourced from the latest National Greenhouse Accounts (NGA) publication.

## 1.2.4 Emissions calculation

### Generation scenario 1

If the responsible entity is consuming all of the usable energy generated from a co- or tri-generation system within its boundary (Generation Scenario 1 in Table 1), then GHG emissions should be calculated based on the quantity of fuel combusted and the specific emission factors given in the NGA. Emissions from this combustion are reported as Scope 1 emissions. For added transparency, reporting entities should identify the proportion of these Scope 1 emissions attributable to heat/steam vs. electricity production. The equation used to calculate emissions is:

**GHG emissions of gas type = [Fuel use (kL)] x [energy content factor of fuel type (GJ/kL)] x [emission factor for each GHG type e.g. CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O (kg CO<sub>2</sub>-e/GJ)]**

### Generation scenario 2

In cases where a portion of the electricity and steam outputs are exported outside the boundaries of the responsible entity (Generation Scenario 2 in Table 1), then it is necessary to allocate total emissions to each output stream. This is done by determining separate emission factors for the electricity and steam outputs and multiplying those emission factors by the output sold from its respective energy stream. In order to do this, the efficiency method as outlined in the GHG Protocol's "Allocation of GHG Emissions from a CHP Plant" (WRI/WBCSD, 2006), is used. This is the preferred approach under NGERs. Specifically, the energy efficiency method allocates GHG emission to energy inputs based on the relative steam and electricity generation efficiencies. This method assumes that conversion of fuel energy to steam energy is more efficient than converting fuel to electricity, and assumed efficiency values are used for both outputs.

There are six main steps for calculating emission under Generation Scenario 2 using the efficiency method:

1. Determine the total direct emissions (E<sub>T</sub>) from fuel combustion and the total steam and electricity outputs (GJ) for the co- or tri-generation system.

2. Estimate the efficiencies of steam and electricity production. The use of source specific efficiency factors is recommended. However, if source specific factors are unavailable, default values can be used.
3. Conduct a check to ensure the energy balance constraints have not been violated, using the following equation:

$$\text{Assumed energy input} = \frac{H}{e_H} + \frac{P}{e_P}$$

Where:

- H = steam output (energy – GJ)
- $e_H$  = assumed efficiency of steam production
- P = delivered electricity production (GJ)
- $e_P$  = assumed efficiency of electricity generation

The assumed energy input should be less than the total fuel energy (LHV GJ) used to fire the plant.

4. Determine the fraction of total emissions to allocate to steam and electricity production, using the following equation:

$$E_H = \left( \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} \right) \times E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

- $E_H$  = emissions allocated to steam production (tonnes CO<sub>2</sub>-e)
- H = steam output (energy – GJ)
- $e_H$  = assumed efficiency of steam production (%)
- P = delivered electricity production (GJ)
- $e_P$  = assumed efficiency of electricity generation (%)
- $E_P$  = emissions allocated to electricity production (tonnes CO<sub>2</sub>-e)
- $E_T$  = Total direct emissions of the co-generation system (determined from Step 1) (tonnes CO<sub>2</sub>-e)

5. Calculate emission rates for steam and electricity production. This is done by dividing the total emissions from steam production ( $E_H$  – tonnes CO<sub>2</sub>-e) by the total amount of steam produced (H – GJ) to get an emissions rate (t CO<sub>2</sub>-e/GJ). This is also done for electricity production.
6. Estimate emissions from sales. This is calculated by multiplying the total amount of electricity or steam sold/exported outside the system boundaries by the electricity emission rate determined in step 5. This is also done for steam production.

The worked example below shows how to use the efficiency method to allocate emissions correctly to allow the deductions of emissions relating to exported energy from the responsible entity's carbon footprint.

It should be noted that for buildings, the NABERS cogeneration calculator can be used to determine the allocation of emissions from the operation of the plant between the various output streams of energy.

### Generation scenario 3

If the responsible entity is consuming electricity and steam imported from outside its boundaries (Generation Scenario 3 in Table 1), then GHG emissions from electricity should be calculated based on the quantity of grid derived electricity consumed and the specific emission factors given in the NGA; while GHG emissions from steam consumption should be calculated based on the quantity of steam consumed and the vendor's steam emission factor.

## 1.2.5 Worked example

This worked example is based on the Generation Scenario 2 described in the table above

Consider the cogeneration plant XYZ, which consumes 10,000 GJ (LHV) of natural gas to produce electricity and steam as shown in the table below.

|             | Total energy produced (GJ) | Total energy exported outside boundaries (GJ) | Steam Temp. (°C) |
|-------------|----------------------------|-----------------------------------------------|------------------|
| Electricity | 490                        | 441                                           | n/a              |
| Steam       | 6,410                      | 5,128                                         | 400              |
| Total       | 6,900                      | 5,569                                         |                  |

The plants exports approximately 90% of the electricity produced and 80% of the steam produced onsite outside its boundaries. As the plant manager wishes to participate in the NCOS Program, they allocate their GHG emissions from the co-gen plant based on the sale of energy using the Efficiency Method. The plant operates at a 30% efficiency for electricity production and 85% efficiency for steam production.

**Step 1. Determine the total direct emissions from the system:**

*Direct emissions = Energy content of natural gas × NGA Emission Factors for natural gas*

$$\text{Direct emissions} = \frac{(GJ \times CO_2 EF) + (GJ \times CH_4 EF) + (GJ \times N_2O EF)}{1000}$$

$$\text{Direct emissions} = \frac{(10,000 GJ \times 51.4 kg \frac{CO_2e}{GJ}) + (10,000 GJ \times 0.1 kg \frac{CO_2e}{GJ}) + (10,000 GJ \times 0.03 kg \frac{CO_2e}{GJ})}{1000}$$

$$\text{Direct emissions} = 515.3 t CO_2e$$

**Step 2. Estimate the efficiencies of steam and electricity production:**

$$e_H = 85\%, e_P = 30\%$$

**Step 3. Conduct a check to ensure the energy balance constraints have not been violated:**

$$\text{Assumed energy input} = \frac{6410}{0.85} + \frac{490}{0.30}$$

$$\text{Assumed energy input} = 9175 GJ$$

This is ok as 9175 GJ < 10,000 GJ

**Step 4. Determine the fraction of total emissions to allocate to steam and electricity production:**

$$E_H = \left( \frac{\frac{6410}{0.85}}{\frac{6410}{0.85} + \frac{490}{0.30}} \right) \times 515.3$$

$$E_H = 423.6 t CO_2e$$

$$E_P = 515.3 - 423.6 = 91.7 t CO_2e$$

## 1.3 Water

### 1.3.1 Emissions sources

This section describes the calculation of emissions associated with the consumption of reticulated water.

Emissions arise from processes such as the extraction, storage, treatment and distribution of freshwater through the reticulated system, services typically provided by a water authority or corporation. While there are a range of emission sources associated with these treatments and processes, they can typically be captured under the carbon account of the water supply authority or corporation and summarised into a single emission factor.

The water consumed within a building, precinct, or in the manufacture of a product, or associated with the activities of an organisation typically carries these embodied **Scope 3** emissions.

Note that wastewater from the building, precinct, organisation or manufacturing process is treated separately in this document but is often rolled into one calculation, along with reticulated water distribution, when the emission factor used represents both reticulated water treatment and distribution and wastewater treatment (see Section 1.3.3 for an example of this).

Scope 3 emissions from water must be included in the carbon account for organisations, products & services, buildings and precincts when making a carbon neutral claim against the Standard, if they are relevant and material.

### 1.3.2 Collecting activity data

The key activity data to be collected is the volume of reticulated water consumed by activities or processes within the emissions boundary. Refer to the relevant Standard for a detailed description of how to establish the emissions boundary.

Water usage data can be measured directly (preferred option) or estimated using robust data sources. These data sources could include the average water consumption of a piece of equipment as detailed in the technical specifications for the product. Direct measurement includes:

- data logging from water meters e.g. for a production chain for a specific product.
- the invoices from water retailers e.g. for a building or specific site.
- reporting from tenants, corporate sustainability managers, property managers (for precincts), or landlords (for organisations renting premises).

All water usage data obtained should be converted to a volumetric unit (e.g. kL) to which an emission factor can then be applied.

### 1.3.3 Emission factors

Some supply water companies calculate their own emissions factors (kg CO<sub>2</sub>-e/kL reticulated water) and include them in their annual report or make them available on their websites. Another way to obtain this information is by requesting it directly from the company. It is recommended that these emissions factors are used when available.

Otherwise, it is recommended to use the emission factors provided in the "*Bureau of Meteorology's National performance report 2014-15: Urban water utilities*" (Bureau of Meteorology, 2016), Table 2.6, to develop emission factors with the correct format e.g. kg CO<sub>2</sub>-e/kL reticulated water. These emission factors are reported as net tonnes CO<sub>2</sub>-e per 1,000 connected water properties for the major urban centres across Australia and correspond to both distributed reticulated water and wastewater collection, all in one factor. Table 2.3 of the same report also provides the median annual consumption of water per household. In order to determine the kg CO<sub>2</sub>-e per kL of reticulated water consumption, simply divide the net tonnes CO<sub>2</sub>-e per 1,000 connected water properties by the median water consumption value:

Emission factor (kg CO<sub>2</sub>-e per kL) = [net greenhouse gas emission (t CO<sub>2</sub>-e/kL) for 1,000 connected properties x 1,000<sup>(\*)</sup> / 1,000<sup>(\*\*)</sup>] / Average annual residential water supplied (kL/property)

(\*) to obtain kg instead of tonnes

(\*\*) to obtain a value per property rather than 1,000 properties

Other sources are also available that may allow benchmarks and comparisons:

- Emission factors from Victoria can be also obtained from the EPA Victoria's greenhouse gas inventory management plan: 2012–13. [www.epa.vic.gov.au/~media/Publications/1562.pdf](http://www.epa.vic.gov.au/~media/Publications/1562.pdf)
- Melbourne Water emission factors (for water and wastewater) were used by the City of Melbourne and are reported on page 7 of the following document. <https://www.melbourne.vic.gov.au/SiteCollectionDocuments/climate-neutral-water-saving-schemes.pdf>

The two sources listed above provide emission factors which take into account emissions from both water supply and wastewater. Other references may use separate emissions from the supply of water and the treatment of waste water. Separated emissions factors for supply and waste water may be more appropriate if a user's water is supplied and treated by different water companies (or treated on site).

### 1.3.4 Emissions calculation

The use of the following formula allows for the estimation of emissions associated with the use of reticulated water (in kg CO<sub>2</sub>-e/year):

$$\text{Reticulated water use (kL/yr)} \times \text{Water treatment \& pumping emissions factor (kg CO}_2\text{-e/kL)}$$

Note that to convert the emissions in tonnes of CO<sub>2</sub>-e/year, the result of the previous formula must be divided by 1,000.

### 1.3.5 Worked example

This example is based on a hypothetical site located in WA that uses 89,000 kL/year. Out of the amount of water consumed, 15,000kL are collected on site through a rain harvesting system, and the rest is supplied by a local water provider.

- Possible source of data: invoices from the water supply provider.
- Activity data:  $89,000\text{kL} - 15,000\text{kL} = 74,000\text{ kL/year}$

Emission factor estimation:

- Net greenhouse gas emissions 2014-15 for Perth: 738 t CO<sub>2</sub>-e/year for 1,000 connected properties
- Average annual residential water supplied (kL/property): 244

Calculation:  $738 / 244 \times (1,000/1,000) = 3.024\text{ kg CO}_2\text{-e/kL}$

- Emission factor: 3.024

GHG Emissions (t CO<sub>2</sub>-e/year):  $74,000 \times 3.024 / 1,000 = 224\text{ tonnes of CO}_2\text{-e/year}$

It is recommended that the following information be kept for auditing purposes:

- Invoices from the water supply company.
- Emission factors for wastewater supply and treatment including the source of data (e.g. information directly requested to the water supplier, or found on the invoice or website; emission factor from a local authority found on an official website/report).

Note that any electricity used in pumping and treating water collected onsite will be included through site energy use collection.

## 1.4 Wastewater

### 1.4.1 Emissions sources

Total greenhouse gas emissions from wastewater generated by a site, organisation or during the manufacturing of a product, are produced during the wastewater treatment process required to treat the effluent before returning it into the environment. The emissions produced from wastewater treatment plants come from the use of energy or electricity, and from the biological or chemical activities undertaken during the treatment process.

The range of emission sources associated with these treatments and processes is typically captured under the carbon account of the water supply authority and summarised into a single emission factor including both water supply and treatment. Where this is applicable to the user's supply and treatment situation and emissions information is available from their water authority, the calculation guidance in Section 1.3 should be used instead of this section. This section is relevant if a user's water is supplied and treated by different water companies, or otherwise treated onsite. In some cases, for trade waste for example, when the effluent is considered unsuitable for discharge to sewer, a specialised contractor may be taking charge of the wastewater to treat it appropriately before discharge to sewer.

The wastewater generated from a building, precinct, or in the manufacture of a product, or associated with the activities of an organisation typically carries these embodied **Scope 3** emissions.

Note that reticulated water supply for the building, precinct, organisation or manufacturing process is treated separately in this document but is often rolled into one calculation, along with wastewater treatment, when the emission factor used represents both reticulated water treatment and distribution and wastewater treatment.

Scope 3 emissions from wastewater must be included in the carbon account for organisations, products & services, buildings and precincts when making a carbon neutral claim against the Standard, if they are relevant and material.

### 1.4.2 Collecting activity data

The main activity data to be collected is the quantity of wastewater generated by activities or processes within the emissions boundary. Refer to the Standard: Section 2.3.1, for a detailed description of how to establish the emissions boundary.

Wastewater quantity data can be measured directly or estimated. Direct measurement includes:

- Data provided on the invoices or the service provider.
- Measurement through a meter data logging for a specific process.
- Data provided by a contractor, when the wastewater needs to go through such a process (for an industrial site for example).

Estimations or calculations may be required in some cases; if the activity data reported corresponds to activities both within and outside the emission boundary, it will need to be apportioned. For example:

- For an organisation sharing premises with other tenants, wastewater data for a complete building should be divided by the number of occupants and then multiplied by the number of people employed by the reporting organisation.
- For a product produced on a production line in a factory also manufacturing other products, the best allocation method must be determined through analysis of the process. If it is not practical to determine, and the overall significance of the emissions is likely to be low, it is acceptable to use a conservative allocation of the whole site's wastewater into the product's carbon account.
- If it is not feasible to obtain the amount of wastewater produced, the activity data of the water consumed can be used, assuming that the wastewater is equivalent to the water supplied or estimating a sewerage usage

discharge factor, based on the analysis of the activities onsite.

If wastewater is treated onsite, the energy used in the process must be accounted for and other emission sources (fugitive emissions) from the wastewater treatment plant must be estimated as best as possible (for example by using industry benchmarks).

### 1.4.3 Emission factors

As in the case for water supply, some wastewater treatment operators calculate a specific emissions factors from their processes and make them available on their website, annual reports or on request.

If it is not possible to obtain emissions factors from the provider or the operator of the wastewater treatment plant it is recommended to look for emissions factors calculated by local water or environmental authorities as a benchmark.

When the emission boundary includes an industrial process that produces a highly concentrated wastewater (e.g. distillation, refining) it is suggested that the emissions are calculated using a methodology that includes the BOD (Biological Oxygen Demand) and/or COD (Chemical Oxygen Demand).

As indicated for reticulated water supply, the emission factor available sometimes covers the whole water distribution and wastewater disposal processes, in which case it is acceptable to join both calculations, on the assumption that reticulated water used is also treated by the same water company after disposal through the sewer system.

### 1.4.4 Emissions calculation

The following formulas should be used to estimate the emissions from treating wastewater.

Wastewater discharge (ML/yr) x [wastewater treatment & pumping emissions factor (kg CO<sub>2</sub>-e/ML)/1000]

or

Water use (ML/yr) x sewerage usage discharge factor (%) x [wastewater treatment & pumping emissions factor (kg CO<sub>2</sub>-e/ML)/1000]

The sewerage usage discharge factor is the ratio of wastewater discharged to water used, based on the way water is used at a particular site: for example, water used for watering plants or in water features will not make its way to the sewerage system.

### 1.4.5 Worked example

A company located in Melbourne that has only administrative activities, has a generation of 110,000kL per year.

- Possible source of data: invoices from the wastewater provider, data collected from the real estate agency.
- Activity data: 110,000 kL/year
- Emission factor: 0.875 kg/kL (based on Melbourne Water 2004-05 emission factor)

Greenhouse gas emissions (t CO<sub>2</sub>-e/year):  $110,000 \times 0.875 / 1,000 = 96$  tonnes of CO<sub>2</sub>-e/year.

It is recommended that the following information be kept for auditing purposes:

- Invoices with amount of wastewater treated from the wastewater company.
- Emission factors for wastewater treatment including the source of data (e.g. information directly requested to the wastewater supplier, or found on the invoice or website; emission factor from a local authority found on an official website/report).

## 1.5 Waste

### 1.5.1 Emissions sources

The following waste management activities are likely to be the main types of waste management processes:

- Disposal to landfills
- Recovery for recycling
- Biological treatment or composting

Typically, all these activities occur off-site, the waste being collected and transported to the treatment site by a private operator or as part of a service provided by the municipality.

When occurring offsite, the waste management process is considered as **Scope 3** emissions. These should be accounted for if they are relevant and material.

If occurring on site, energy input into the treatment process and fugitive emissions must be accounted for in the carbon account (as **Scope 1, 2 or 3 emissions**), if they are relevant and material.

There are different methods for calculating emissions from waste management. If possible, it is recommended to use the waste-type specific method which is based on the emissions produced by the process of disposal or treatment of each type of waste.

Emissions that arise from the transport, storage and treatment of waste generated by activities within the emissions boundary must be included in all carbon accounts for organisations, products & services, buildings and precincts when making a carbon neutral claim against the Standard, if they are relevant and material.

### 1.5.2 Collecting activity data

Reporting entities should identify specific waste composition and waste generation data if possible. The key activity data required to produce the most accurate emission calculations are:

- Amount of waste produced (kg, m<sup>3</sup>, tonnes) (Note: the mass/volume of waste produced is generally not available to waste contractors as they do not have calibrated weighing scales to measure the waste. The charges are usually based on 'bin lift', or 'bin volume' multiplied by an industry accepted density (kg/m<sup>3</sup>), which has a large uncertainty margin).
- Breakdown of these amounts by type of waste management activity (disposed, recycled, treated, composted).

Typically, different waste management providers will deal with specific types of waste. These waste managers are usually able to provide the amount of waste collected and treated over a period and sometimes also the emission factors for the treatment.

Should the information not be available from the contractors, the responsible entity can estimate the amount of various types of waste by undertaking waste surveys or audits throughout the year. Data from these audits can be extrapolated to provide annual waste quantities for each waste type. For a product, measurements can be taken on site over a specific production cycle and then extrapolated appropriately.

If none of the previous methods are available, some estimates can be made, for example:

- Typical amount of office waste per employee (for an organisation or a building);
- Estimated food and packaging waste for an event based on sales of food and beverages;

- Estimated waste based on the manufacturing process for a product.

If it proves impossible to account separately for the different types of waste, it should be assumed that all the waste is going to landfill and it should be accounted for using the most conservative emission factor.

### 1.5.3 Emission factors

Reporting entities should find emission factors for each type of waste that is generated. As mentioned above, emission factors may be available from waste management contractors, in which case they can be used, once the rigour of the calculations have been assessed.

If this is the case, reporting entities that have estimated their own emission factors from their waste streams and waste mix should use that data.

Otherwise, NGA factors (Department of the Environment and Energy, 2016) reported in Table 42 and Table 44 are available for various categories of waste, including a generic municipal waste emission factor that can be used as a default factor.

### 1.5.4 Emissions calculation

The following formula should be used to estimate the emissions from each type of waste:

$$[\text{Waste produced (t/year)}] \times [\text{Waste emission factor (t CO}_2\text{-e/t waste)}]$$

Overall emissions from waste are calculated as shown in Figure 4:

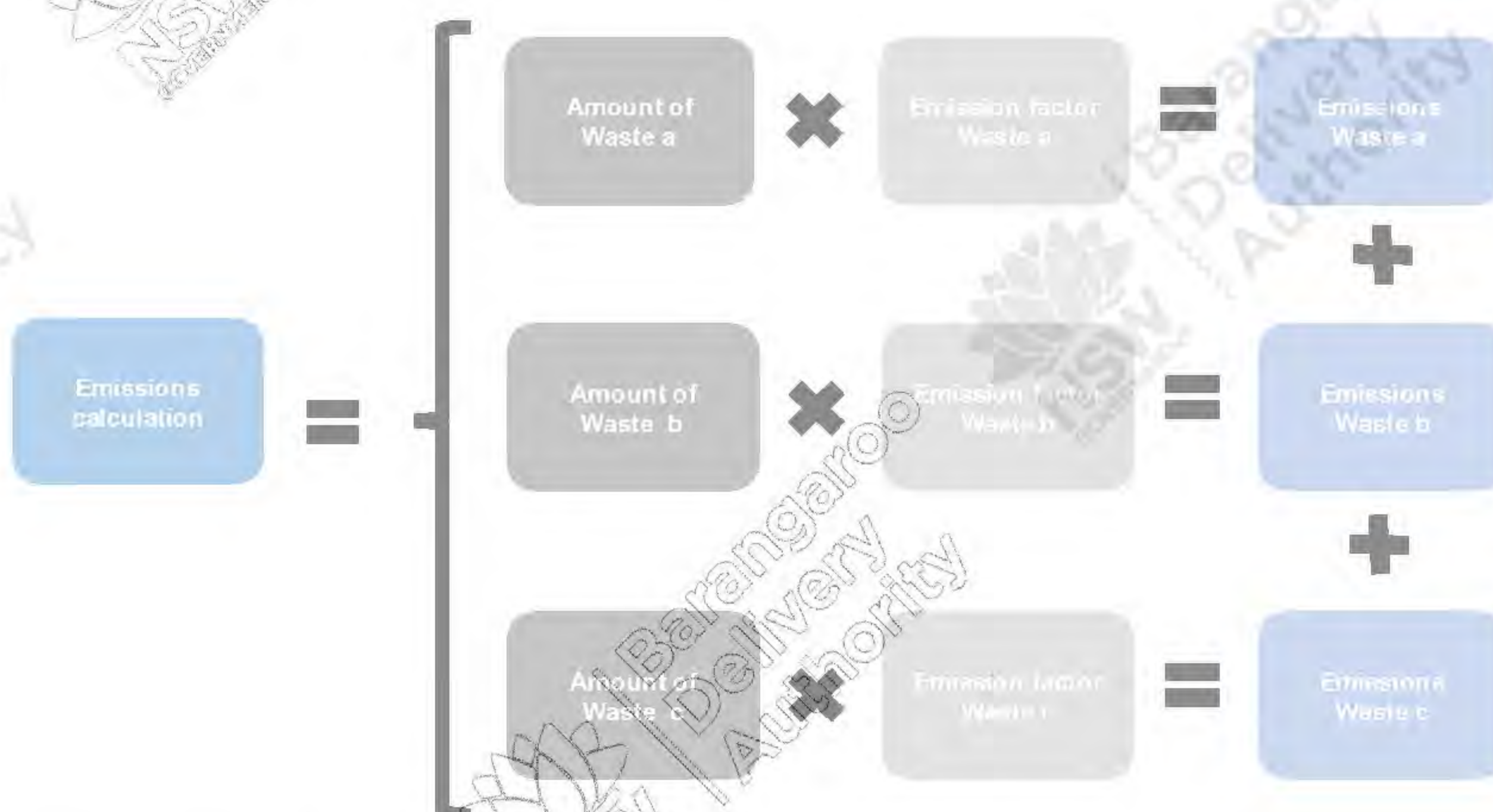


Figure 4. Emissions from waste

When an industrial process that produces waste with special characteristics is included within the emission boundary, it is suggested that the emissions are calculated using a methodology that includes the Degradable Organic Carbon (DOC) and methane emissions from possible anaerobic reactions coming from the waste treatment activity.

## 1.5.5 Worked example

A higher education facility produced a total solid waste stream of 240 tonnes. This waste comprises 180 tonnes of waste disposed of in the local landfill as municipal waste, 50 tonnes of paper recycled by a local provider, and 10 tonnes of garden and park waste composted on site.

- Possible source of activity data: invoices from providers for municipal waste and paper recycling, and the operator of the composting facility.
- Possible source of emissions factors: waste management providers and the operator of composting facility
- Calculation:

Emissions factors (from Table 42 and 44, Department of Environment and Energy 2016)

- Municipal Waste – 1.4 t CO<sub>2</sub>-e/t waste (Table 44)
- Paper – 2.9 t CO<sub>2</sub>-e/t waste (Table 42)
- Garden – 1.4 t CO<sub>2</sub>-e/t waste (Table 42)

As each waste stream needs to be treated separately, greenhouse gas emissions (GHG) are calculated as follows:

GHG emissions (t CO<sub>2</sub>-e/year) = [Waste produced (t/year)] x [Waste emission factor (t CO<sub>2</sub>-e/t waste)]

Municipal waste = 180 x 1.4 = 252 tonnes CO<sub>2</sub>-e

Paper = 50 x 2.9 = 145 tonnes CO<sub>2</sub>-e

Garden = 10 x 1.4 = 14 tonnes CO<sub>2</sub>-e

Total Waste GHG emissions = 411 tonnes CO<sub>2</sub>-e

It is recommended that the following information be kept for auditing purposes:

- Invoices with amount of waste collected/disposed by different providers.
- Data management system from the composting facility with the amount of compost produced.
- Emission factors for waste including the source of data (e.g. information directly requested to the provider; emission factors from a local authority found on an official website/report).

## 1.6 Other emission sources

Scope 3 emissions from other typical activities or products consumed must be included in the carbon account if relevant and material (Standard, Section 2.3.2: Identify emissions sources).

For organisations that are preparing a carbon account for use under the National Carbon Offset Standard for Organisations, additional guidance on Scope 3 emission sources and emissions factors is available in *Guidance for calculating Scope 3* ([www.environment.gov.au/climate-change/publications/guidance-scope-3](http://www.environment.gov.au/climate-change/publications/guidance-scope-3)). Some of the emissions sources and activities described may also be relevant to other carbon neutral categories, such as products and precincts.

## 2 Accounting for renewable energy and energy efficiency schemes

### 2.1 Context

The approach adopted for the treatment of renewable electricity has been developed with consideration to the mechanics of the Renewable Energy (Electricity) Act 2000, and specifically, the interaction between the Renewable Energy Target (RET), Large-scale Generation Certificates (LGCs) and Small-scale Technology Certificates (STCs).

It has been designed to eliminate, where possible, the risk of double-counting emission abatements. The use of market based instruments to incentivise the production of renewable energy makes such situations where double-counting may occur possible.

Double counting may occur if the carbon emission reduction impact of certain actions (or pieces of equipment) can be claimed by both the generator of the reduction and a third party to whom the generator may have sold an emission reduction certificate.

The accounting treatment described below (Section 2.2) must be applied in all carbon accounts when making a carbon neutral claim against the Standard. It gives consideration to the principles of rigorous carbon accounting and the practical applications of potential rules.

### 2.2 Treatment

A description of the different types of renewable energy certificates and their treatment under the Standard is provided in Table 2. Worked examples are provided in the next section.

Table 2 Treatment of renewable energy certificates under the Standard

| Scheme and certificates                                                                                                       | Description                                                                                                                                                                                                                                                                                                                | Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Renewable Energy Target (RET) Small Scale Renewable Energy Scheme (SRES)<br><i>Small Technology Certificates (STCs)</i>       | The Small-scale Renewable Energy Scheme creates a financial incentive for individuals and small businesses to install eligible small-scale renewable energy systems. STCs can be created following the installation of an eligible system, and are calculated by the amount of electricity a system produces or displaces. | Under the Standard, organisations, buildings or precincts with on-site generations systems within their boundary can account for behind-the-meter usage of energy generated by the renewable energy system as zero-emissions energy.<br><br>This may be done regardless of whether the STCs have been created, sold or transferred to any other party.                                                                                                                                           |
| Renewable Energy Target (RET) Large-scale renewable energy target (LRET)<br><i>Large Scale Generation Certificates (LGCs)</i> | LGCs are created based on the amount of eligible renewable electricity produced by a power generator, and can be sold or traded to Renewable Energy Target liable entities to assist them in meeting their obligations.<br><br>LGCs can effectively be used to make electricity from the grid “zero-emissions”.            | Under the Standard, organisations, buildings or precincts with onsite generations systems within their boundary can account for behind-the-meter usage of energy generated by the system as zero-emissions energy <b>only if</b> they voluntarily retire the equivalent amount of Large Generation Certificates (LGCs).<br><br>Behind-the-meter energy usage that is not matched by an equivalent amount of voluntarily retired LGCs must be accounted for in the same way as grid based energy. |

| Scheme and certificates                                                                                                                                                                                                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Renewable Energy Target<br><i>Green Power</i>                                                                                                                                                                                                         | GreenPower is a voluntary government accredited program that enables electricity providers to purchase renewable energy on behalf of households or businesses using the same mechanism of voluntary LGC retirement, as described above.                                                                                                                                                                                                                         | The purchase of GreenPower is considered to be equivalent to the direct use of renewable energy. GreenPower is treated as a zero-emissions electricity source in a carbon account under the Standard.                                                                                                                                                                                                                                        |
| The Emission Reduction Fund (ERF)<br><i>Australian Carbon Credit Units (ACCUs)</i>                                                                                                                                                                    | <p>The ERF is a voluntary scheme that aims to provide incentives for a range of organisations and individuals to adopt new practices and technologies to reduce their emissions. Participants can earn ACCUs for emissions reductions.</p> <p>The ACCUs can be sold to the Commonwealth under a carbon abatement contract with the Clean Energy Regulator, or they can be sold on the voluntary market and are eligible as offset units under the Standard.</p> | <p>Under the Standard, users generating ACCUs from emission reduction projects occurring within their boundary, can claim the reduction as part of their carbon account <b>only if</b> the ACCUs from the projects are voluntarily retired.</p> <p>If the ACCUs are not retired, users are required to account for their emissions without the reductions associated with the projects (i.e. as though the projects had never occurred).</p> |
| State based energy efficiency schemes, including: the Victorian Energy Efficiency Target (VEET), the New South Wales Energy Savings Scheme (ESS) and the South Australian Retailer Energy Efficiency Scheme.<br><i>Energy Efficiency Certificates</i> | These energy savings schemes reduce electricity consumption by creating financial incentives for organisations to invest in energy savings projects. Energy savings are achieved by installing, improving or replacing energy savings equipment. This generates tradable white certificates.                                                                                                                                                                    | Under the Standard, users are not required to account for State based energy efficiency schemes. Emission reductions resulting from activities supported by these schemes can be used to lower the total carbon account.                                                                                                                                                                                                                     |

## 2.3 Worked examples

Note that the following notations and assumptions have been used in the examples presented below:

1.  $BTM_{use}$  = Behind the meter electricity consumed
2. Grid factor (Scope 2) – simplified to 1t CO<sub>2</sub>-e/MWh

### 2.3.1 On-Site Generation (LGCs)

| <b>Scenario: LGCs are created and retired by the responsible entity</b> |                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data                                                                    | Scope 1: 40t CO <sub>2</sub> -e<br>Scope 2: 15 MWh<br>Scope 3: 40t CO <sub>2</sub> -e<br>LGCs: 10<br>$BTM_{use}$ : 5 MWh                                                                                                                                                                                                                                                        |
| Calculation                                                             | Total = Scope 1 + Scope 3 + [Scope 2 (in MWh) + $BTM_{use}$ - LGCs] x grid factor                                                                                                                                                                                                                                                                                               |
| Result                                                                  | $\begin{aligned} \text{Total} &= 40t + 40t + [15 \text{ MWh} + 5 \text{ MWh} - 10 \text{ LGCs}] \times 1 \text{ t/MWh} \\ &= 80t + [20 \text{ MWh} - (10 \text{ MWh})] \times 1 \text{ t/MWh} \\ &= 80t + 10t \\ &= 90t \end{aligned}$                                                                                                                                          |
| Note                                                                    | <ul style="list-style-type: none"> <li>• Behind the meter use is added to the amount of electricity supplied by the grid</li> <li>• Any LGCs voluntarily retired by the user can then be used to 'zero' (or subtract) the corresponding amount of electricity (in MWh), whether it is electricity from behind the meter or electricity that is supplied by the grid.</li> </ul> |

| <b>Scenario: LGCs are created and sold or traded by the responsible entity</b> |                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data                                                                           | Scope 1: 40t CO <sub>2</sub> -e<br>Scope 2: 15 MWh<br>Scope 3: 40t CO <sub>2</sub> -e<br>LGCs 10<br>$BTM_{use}$ : 5 MWh                                                                                                                                                                                                                                                                  |
| Calculation                                                                    | Total = Scope 1 + Scope 3 + [Scope 2 (in MWh) + $BTM_{use}$ ] x grid factor                                                                                                                                                                                                                                                                                                              |
| Result                                                                         | $\begin{aligned} \text{Total} &= 40t + 40t + (15 + 5 \text{ MWh}) \times 1 \text{ t/MWh} \\ &= 80t + 20t \\ &= 100t \end{aligned}$                                                                                                                                                                                                                                                       |
| Note                                                                           | <ul style="list-style-type: none"> <li>• Electricity from behind the meter use is added on top of the electricity supplied by the grid.</li> <li>• LGCs sold or traded may <b>not</b> be used to 'zero' (or subtract) either electricity from behind the meter or electricity that is supplied by the grid. Effectively, the LGCs are not taken into account in the equation.</li> </ul> |

### 2.3.2 On-Site Generation (STCs)

| <b>Scenario: Irrespective of whether STCs are sold or not by the responsible entity</b> |                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data                                                                                    | Scope 1: 40t CO <sub>2</sub> -e<br>Scope 2: 15 MWh<br>Scope 3: 40t CO <sub>2</sub> -e<br>STCs: 10<br>BTM <sub>use</sub> : 5 MWh                                                                                                                                        |
| Calculation                                                                             | Total = Scope 1 + Scope 3 + [Scope 2 (in MWh)] x grid factor + BTM <sub>use</sub> x 0                                                                                                                                                                                  |
| Result                                                                                  | Total = 40t + 40t + [15 x 1t/MWh]<br>= 80t + 15<br>= 95t                                                                                                                                                                                                               |
| Note                                                                                    | <ul style="list-style-type: none"> <li>Behind the meter use of electricity is considered to be zero emissions</li> <li>But STCs voluntarily retired may <b>not</b> be used to 'zero' (or subtract) the emissions associated with grid supplied electricity.</li> </ul> |

### 2.3.3 Green Power

| <b>Scenario: An organisation purchases 100 per cent GreenPower™ or voluntarily cancels GreenPower™-eligible RECs equivalent to all its electricity consumption.</b> |                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Electricity consumption                                                                                                                                             | 50 MWh                                                                                              |
| Green Power eligible RECs                                                                                                                                           | 100% green power or 50 RECs                                                                         |
| Scope 2 electricity emissions included in carbon account                                                                                                            | 0 tCO <sub>2</sub> -e                                                                               |
| Note                                                                                                                                                                | <ul style="list-style-type: none"> <li>GreenPower use is considered to be zero emissions</li> </ul> |

### 2.3.4 Emissions Reduction Fund

| <b>Scenario: An organisation generates and retires 50 ACCUs from onsite ERF activities</b> |                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emissions                                                                                  | Scope 1 (with ERF project): 30t CO <sub>2</sub> -e<br>Scope 2: 15 tCO <sub>2</sub> -e<br>Scope 3: 5t CO <sub>2</sub> -e<br>Total = 50t CO <sub>2</sub> -e                                                                                                                                            |
| ACCUs                                                                                      | 50 ACCUs                                                                                                                                                                                                                                                                                             |
| Total Emissions                                                                            | 50 tCO <sub>2</sub> -e                                                                                                                                                                                                                                                                               |
| Note                                                                                       | <ul style="list-style-type: none"> <li>Emissions reductions from the ERF activity may be counted if the corresponding amount of ACCUs generated by that activity has been voluntarily retired.</li> <li>The voluntary retirement of ACCUs must not be double-counted as a further offset.</li> </ul> |

| <b>Scenario: An organisation generates and sells or trades 50 ACCUs from onsite ERF activities</b> |                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emissions                                                                                          | Scope 1 (with ERF project): 30t CO <sub>2</sub> -e<br>Scope 2: 15 tCO <sub>2</sub> -e<br>Scope 3: 5t CO <sub>2</sub> -e<br>Total = 50t CO <sub>2</sub> -e      |
| ACCUs                                                                                              | 50 ACCUs                                                                                                                                                       |
| Total Emissions                                                                                    | 100 t CO <sub>2</sub> -e                                                                                                                                       |
| Note                                                                                               | <ul style="list-style-type: none"> <li>The corresponding amount of emissions represented by the ACCUs sold must be added back to the carbon account</li> </ul> |

## 3 Recommended practices and tools

### 3.1 Additional guidance for preparing a carbon account

Requirements for preparing a carbon account against the Standard are detailed in the Standard: Section 2.3. Additional guidance below relates to Step 4 (Collect data) and Step 5 (Calculate the carbon account).

#### 3.1.1 Data collection

In most cases, primary data should be collected for all relevant processes included within the defined emissions boundary. The Standards provide a detailed description of the requirements for collecting data relevant to identified emissions sources.

Examples of primary data include:

- Scope 1 emissions: Direct emissions data determined through direct monitoring, stoichiometry, mass balance or similar methods, or modelled emissions data based on purchased quantities (invoices) of commercial fuels such as natural gas, diesel, unleaded petrol and LPG.
- Scope 2 emissions: Metered electricity or steam consumption, or data based on purchased quantities (invoices).
- Scope 3 emissions: Invoiced contractor fuel use, employee air travel reports, invoices for the purchase of paper.

#### Steps to preparing a carbon account:

- Step 1: Establish the emissions boundary
- Step 2: Identify greenhouse gas emissions sources within the boundary
- Step 3: Set a base year
- Step 4: Collect data on identified emissions sources
- Step 5: Calculate the carbon account

Data collection can be one of the most resource intensive steps in the development of the carbon account. In addition, the robustness of the data collection process can have a significant impact on the overall carbon account quality. Knowledge of the responsible entity's data management systems and discussion with appropriate internal data custodians are important to ensure efficient and successful data collection.

The responsible entity should consider what methodologies and emissions factors are available, and choose the type of data based on the expected accuracy of the results and the ease of calculation. Consideration should be given to whether the data would need to be converted and if so how many times this would need to be done, as this would likely decrease the accuracy of the carbon account.

For example, if the chosen emissions factor relates to weight of product consumed but the only available data is financial data, the entity would need to find a means to convert its data from financial to weight-based. This conversion could decrease the accuracy of the final figures.

Figure 5 shows an example of a simple lay-out for collecting and presenting data on emissions sources. This is a basic example, and most carbon account data sheets will be more detailed (it is recommended to include a field to document the origin of the data, i.e. which system it is taken from and who provided it).

## Carbon account - Data collection sheet

|                            |                        |  |
|----------------------------|------------------------|--|
| <b>General information</b> |                        |  |
| Data collection period     |                        |  |
| Entity/Process Covered     | e.g. organisation name |  |

|                                      | Units          | Data source |
|--------------------------------------|----------------|-------------|
| <b>Scope 1 emissions</b>             |                |             |
| On-site stationary fuel use (diesel) | L              |             |
| On-site stationary fuel use (LPG)    | L              |             |
| Transport unleaded petrol use        | L              |             |
| Transport fuel (diesel) use          | L              |             |
| Natural gas use                      | m <sup>3</sup> |             |
| <b>Scope 2 emissions</b>             |                |             |
| Electricity consumption              | kWh            |             |
| <b>Scope 3 emissions</b>             |                |             |
| Employee commuting - Car             | km             |             |
| Employee commuting - Bus             | km             |             |
| Employee commuting - Train           | km             |             |
| Business travel (flights)            | km             |             |
| Waste (organised by streams)         | tonnes         |             |
| Water                                | ML             |             |
| Wastewater                           | ML             |             |

**Comments**

Figure 5. Data collection sheet\*

\*This is based on an example from a module for undertaking and interpreting greenhouse gas inventories developed by the Local Government NSW (LGNSW, 2010)

#### Recommended actions for data collection:

- Explain to data providers the purpose of why the data is being collected. This gives the data providers an appreciation for the importance of the data that they are collecting and an understanding on where the priorities should be placed. Such engagement can also lead to improvements in data collection processes and paves the way for including other sources as data becomes available.
- Give data providers a data collection form or tool (a spreadsheet laid out as in Figure 5) that specifies the data required and the preferred reporting units. This collection tool should be relatively simple to fill out, and it should be designed so that data can be easily transferred to the final carbon account. The collection tool should be designed in collaboration with data providers to ensure layout and units are suitable for accurate input of data.
- Negotiate a timeline for data delivery with data providers.
- Where applicable, include data collection requirement as part of supply contracts.

### 3.1.2 Carbon account calculation

Calculating the greenhouse gas emissions within to the emission boundary to determine the total carbon account requires:

- the data collected on emission sources;
- appropriate emission factors; and
- approved methodologies.

An emissions calculation sheet should be used to assist with the emission calculations. The sheet should be set out for easy interpretation and should group emissions according to Scope.

An example of an emissions calculation sheet is shown in Figure 6. This sheet includes a cell for entering the data, a cell for the emissions factor and these two are multiplied to produce the emissions for each input in a separate cell.

A calculation sheet clearly documents the calculations undertaken to determine the total carbon account. It allows for identification of potential savings, and comparison between years of the same sources.

**Carbon account - Emissions calculations sheet**

|                                      | Data input |                | Emission Factor | Emissions factor source            | Emissions            |
|--------------------------------------|------------|----------------|-----------------|------------------------------------|----------------------|
| <b>Inventory period</b>              |            |                |                 |                                    |                      |
| <b>Scope 1 emissions</b>             |            | Units          |                 | Units                              | Units                |
| On-site stationary fuel use (diesel) |            | L              |                 | t CO <sub>2</sub> -e e.g. NGA 2016 | t CO <sub>2</sub> -e |
| On-site stationary fuel use (LPG)    |            | L              |                 | t CO <sub>2</sub> -e e.g. NGA 2016 | t CO <sub>2</sub> -e |
| Transport Unloaded (petrol use)      |            | L              |                 | t CO <sub>2</sub> -e e.g. NGA 2016 | t CO <sub>2</sub> -e |
| Transport fuel (diesel) use          |            | L              |                 | t CO <sub>2</sub> -e e.g. NGA 2016 | t CO <sub>2</sub> -e |
| Natural gas use                      |            | m <sup>3</sup> |                 | t CO <sub>2</sub> -e e.g. NGA 2016 | t CO <sub>2</sub> -e |
| <b>Total</b>                         |            |                |                 |                                    | t CO <sub>2</sub> -e |
| <b>Scope 2 emissions</b>             |            |                |                 |                                    |                      |
| Electricity consumption              |            | kWh            |                 | t CO <sub>2</sub> -e/kWh           | t CO <sub>2</sub> -e |
| <b>Total</b>                         |            |                |                 |                                    | t CO <sub>2</sub> -e |
| <b>Scope 3 emissions</b>             |            |                |                 |                                    |                      |
| Employee commuting - Car             |            | km             |                 | t CO <sub>2</sub> -e/km            | t CO <sub>2</sub> -e |
| Employee commuting - Bus             |            | km             |                 | t CO <sub>2</sub> -e/km            | t CO <sub>2</sub> -e |
| Employee commuting - Train           |            | km             |                 | t CO <sub>2</sub> -e/km            | t CO <sub>2</sub> -e |
| Business travel (flights)            |            | km             |                 | t CO <sub>2</sub> -e/km            | t CO <sub>2</sub> -e |
| Waste (organised by streams)         |            | tonnes         |                 | t CO <sub>2</sub> -e/t waste       | t CO <sub>2</sub> -e |
| Water                                |            | ML             |                 | t CO <sub>2</sub> -e/ML            | t CO <sub>2</sub> -e |
| Wastewater                           |            | ML             |                 | t CO <sub>2</sub> -e/ML            | t CO <sub>2</sub> -e |
| <b>Total</b>                         |            |                |                 |                                    | t CO <sub>2</sub> -e |
| <b>Comments</b>                      |            |                |                 |                                    |                      |

Figure 6. Emissions calculation sheet\*

\*This calculation sheet is based on a similar example in a module for undertaking and interpreting greenhouse gas inventories developed by Local Government NSW (LGNSW, 2010).

## 3.2 Additional guidance for reporting on emission reductions

The Standard requires that an emission reduction strategy is developed (Section 2.4), and that emission reduction activities and the resulting quantity of emissions reduced are reported annually via a public report (Section 2.6).

Table 3 provides an example for reporting on emissions reduction activities against the Standard. A table similar to this should be provided as part of the Public Disclosure Summary or public report at the end of the reporting period, with the status updated to “Implemented” and the actual emissions reductions communicated, if applicable.

Table 3. Emissions reduction measures to be implemented for the 2016 Reporting Period (1 July 2015 to 30 June 2016) – **Example only**

| Emission Reduction Activity Type                                                                      | Reduction Measure                                                                                                                                  | Emission source and scope                | Status                                                                                                                                | Expected annual GHG reduction tCO <sub>2</sub> -e |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Low carbon energy installation                                                                        | Installation of solar PV panels at offices to generate renewable electricity and reduce reliance on grid derived electricity                       | Electricity consumption<br>Scope 2 and 3 | Proposed                                                                                                                              | 300                                               |
| Low carbon fuel alternatives                                                                          | Requesting that facilities use biodiesel where feasible                                                                                            | Diesel consumption<br>Scope 1            | Proposed                                                                                                                              | 12,000                                            |
| Energy efficiency: building services                                                                  | Implementation of various energy efficiency works across network sites including measures such as timer controls, motion sensors and fan upgrades. | Electricity consumption<br>Scope 2 and 3 | Proposed                                                                                                                              | 2,700                                             |
| Energy efficiency: building services                                                                  | Tender to replace the most energy inefficient lighting luminaires to reduce energy and emission consumption                                        | Electricity consumption<br>Scope 2 and 3 | Installation in progress, negotiations completed and contract was executed. Three year roll out of program covering 5,000 luminaires. | 3,500                                             |
| Vehicle fleet                                                                                         | A three year program to replace 50% the organisation's fleet with hybrid and plug-in hybrid vehicles.                                              | Petroleum consumption Scope 1            | Completed in May 2016 and replacement target of 50% exceeded (62%)                                                                    | 2,800                                             |
| Total expected emission reduction in this reporting period                                            |                                                                                                                                                    |                                          |                                                                                                                                       | 21,300                                            |
| Total expected emission reduction in future reporting periods from currently identified opportunities |                                                                                                                                                    |                                          |                                                                                                                                       | 50,000                                            |

## 4 References

- BSI. (2011). *PAS 2050:2011 – Specification for the assessment of the life cycle greenhouse gas emissions of goods and services*. London, UK: British Standards Institute.
- BSI. (2014). *PAS 2060:2014 – Specification for the demonstration of carbon neutrality*. London, UK: British Standards Institute.
- Bureau of Meteorology. (2016). *National performance report 2014–15: urban water utilities, part A*. Melbourne: Bureau of Meteorology.
- Department for Business Energy & Industrial Strategy. (2016). *Greenhouse gas reporting - Conversion factors 2016*. London.
- Department of the Environment and Energy. (2016). *National Greenhouse Accounts Factors*. Canberra, ACT: Australian Government.
- International Organisation for Standardisation. (2006). *ISO 14040:2006 – Environmental management – Life cycle assessment – Principles and frameworks*. Vernier, Geneva: International Organisation for Standardisation.
- International Organisation for Standardisation. (2006). *ISO 14044:2006 – Environmental management – Life cycle assessment – Requirements and guidelines*. Vernier, Geneva: International Organisation for Standardisation.
- International Organisation for Standardisation. (2013). *ISO 14065:2013 – Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation of other forms of recognition*. Vernier, Geneva: International Organisation for Standardisation.
- LGNSW. (2010). *Module 5 - Undertaking and Interpreting Greenhouse Gas Inventories*. Sydney, NSW: Local Government NSW. Retrieved from <http://www.lgnsw.org.au/files/imce-uploads/35/module-5-undertaking-and-interpreting-GHG-inventories.pdf>
- National Greenhouse Accounts Factors. (2016). Retrieved from <https://www.environment.gov.au/climate-change/greenhouse-gas-measurement/publications/national-greenhouse-accounts-factors-aug-2016>
- National Greenhouse and Energy Reporting (Audit) Determination . (2009).
- National Greenhouse and Energy Reporting (Measurement) Determination. (2008).
- National Greenhouse and Energy Reporting Regulations. (2008).
- National Greenhouse and Energy Reporting Technical Guidelines. (2016). Retrieved from <https://www.environment.gov.au/climate-change/greenhouse-gas-measurement/publications/nger-technical-guidelines-reporting-year-2016-17>
- Standards Australia. (2006). *AS ISO 14064.1:2006 Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*. Sydney, NSW: Standards Australia.
- Standards Australia. (2006). *AS ISO 14064.2:2006 Greenhouse gases Part 2: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements*. Sydney, NSW: Standards Australia.
- Standards Australia. (2006). *AS ISO 14064.3:2006 Greenhouse gases Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*. Sydney, NSW: Standards Australia.

WBCSD and WRI. (2003). *The GHG Protocol for Project Accounting*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2011). *GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2011). *GHG Protocol – Product Life Cycle Accounting and Reporting Standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

WBCSD and WRI. (2013). *A corporate accounting and reporting standard*. Conches, Geneva: World Business Council for Sustainable Development and World Resources Institute.

World Resources Institute C40 Cities Climate Leadership Group and ICLEI. (2014). *Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories - An Accounting and Reporting Standard for Cities*. World Resources Institute.

WRI. (2015). *GHG Protocol – Scope 2 Guidance*. Conches, Geneva: World Resources Institute.

WRI/WBCSD. (2006). *Allocation of GHG Emissions from a Combined Heat and Power (CHP) Plant*. World Resources Institute and World Business Council for Sustainable Development.

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