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ESD and Sustainability Consultants  
Master Planning  
Resource Management  
Strategic Advice  
Governance  
Advocacy

# **dsquared Consulting**

## **Carbon Neutral Program Public Disclosure Summary**

### **2018 Calendar Year**

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green building council australia  
MEMBER 2018-2019





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## Document Control

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<b>Issue</b>	<b>Date</b>	<b>Change</b>	<b>Checked</b>	<b>Approved</b>
1	18/01/19	First DRAFT Issue	KL	PD
2	13/03/19	Final Issue	KL	PD

Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.

<b>Signature</b> 	<b>Date</b> 13/03/2019
<b>Name of Signatory</b> Ken K. Long	
<b>Position of Signatory</b> Senior Sustainability Consultant	

Carbon neutral certification category	Organisation
Date of most recent external verification/audit	24/09/2018
Auditor	Benjamin Jenkins - Conversio
Auditor assurance statement link	

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## 1 Introduction

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### 1.1 Introduction

Formed in 2012 by Paul Davy and Deborah Davidson, dsquared Consulting delivers innovative and independent sustainable solutions in the built environment.

dsquared provides Environmentally Sustainable Design (ESD) and Sustainability advice from the earliest stages of project master planning, through building design, construction and functionality. The consultancy works on projects spanning from precinct infrastructure planning right down to the selection of office furniture.

The dsquared has been operating out of their one office since 2014 in Adelaide, South Australia. The dsquared team currently consists of 4 personnel; 2 Directors and 2 ESD Consultants.

dsquared Consulting's work involves a wide variety of engagements, with the vast majority of work being completed in the company office or within the Adelaide CBD through face to face meetings, computer documentation and computer simulation. Specific services provided include:

- Sustainability consultancy for masterplanning and building developments
- Building certification submissions
- Organisational sustainability planning
- Building computer simulation
- Desktop analysis

The dsquared office was the first in South Australia to receive a 5 Star Green Star Interiors As Built rating, showcasing Australian excellence in sustainable development.

In 2016 dsquared Consulting was awarded a National City Switch Award for small businesses showcasing leadership in business operational sustainability.

Since 2015 the office has reached a 5.5 Star NABERS Office Tenancy rating annually, showcasing ongoing excellence in operational energy use reduction.

The company is a member of the Green Building Council of Australia since 2012 and a founding member of Carbon Neutral Adelaide program since 2017.

In September 2018, dsquared was officially recognised as a Carbon Neutral Organisation for the calendar year of 2017 by the National Carbon Offset Standard (NCOS).

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- National Carbon Offset Standard v3.0
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with 'Method 1' from the National



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Greenhouse and Energy Reporting (Measurement) Determination in force for 2016 (for first half of the year) and 2017 (for second half of the year).

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O). No synthetic gases – hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>), were detected within the operational boundary. These have been expressed as carbon dioxide equivalents (CO<sub>2</sub>-e) using relative global warming potentials (GWPs).

### 1.2 Emission Sources Within Certification Boundary

The following sources have been included within the carbon accounting for dsquared Consulting in the calendar year of 2018.

- Building Refrigerants
- Electricity Use
- Electricity – Transmission & Distribution
- Base Building Electricity Use
- Waste to Landfill
- Recycling
- Business Travel - Flights
- Business Travel - Taxis
- Business Travel - Hotels
- Paper
- Staff Commuting
- Water
- Base Building Services

The following sources are acknowledged as immaterial to our organisational carbon accounting and has not been quantified.

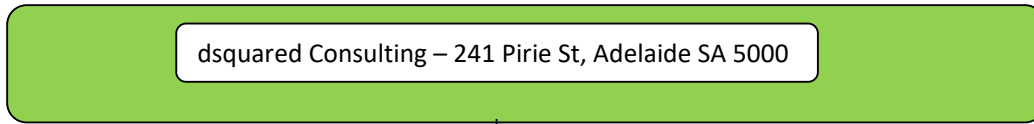
- Cleaning Services – the staff have deemed this item as immaterial because the office is only cleaned once a month (12 times a year)
- Stationery - the staff have deemed this impact as immaterial due to minimal stationery procurement throughout the year
- Food & Catering – the staff have deemed this impact as immaterial as no company catering is procured throughout the year

The following source is excluded from our organisational carbon accounting.

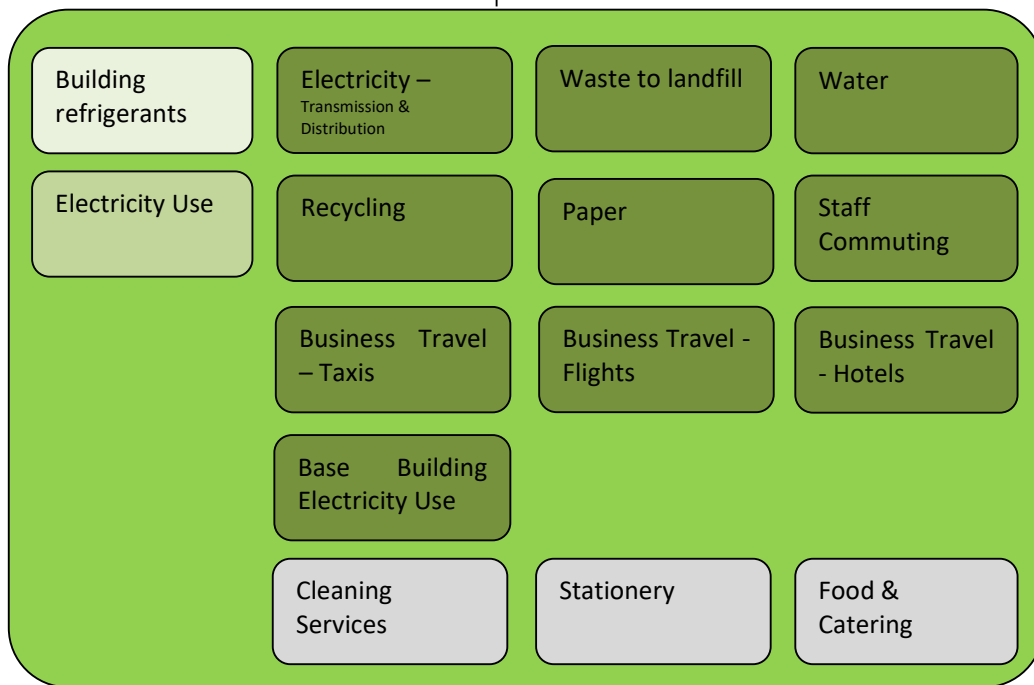
- Transport Fuels – company directors have indicated that dsquared Consulting will never procure company vehicles, therefore no transport fuel for the company to ever be accountable for.

1.2.1 Diagram of Certification Boundary

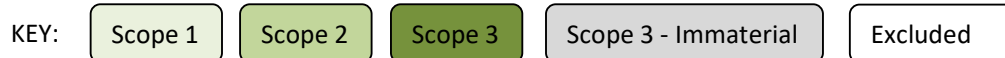
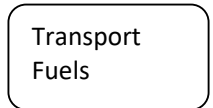
Organisational Boundary



Operational Boundary



Outside of certification



## 2 Emission Reduction Measures

### 2.1 Emissions Over Time

<b>Table 1. Emissions since base year</b>			
	Base Year: 2017	2018	2019
Scope 1	0.81 t CO <sub>2</sub> -e	0.81 t CO <sub>2</sub> -e	
Scope 2	1.83 t CO <sub>2</sub> -e	1.85 t CO <sub>2</sub> -e	
Scope 3	3.41 t CO <sub>2</sub> -e	4.94 t CO <sub>2</sub> -e	
<b>Total Gross Emissions</b>	<b>6.05 t CO<sub>2</sub>-e</b>	<b>7.60 t CO<sub>2</sub>-e</b>	
Green Power Purchase	-0.48 t CO <sub>2</sub> -e	-0.46 t CO <sub>2</sub> -e	
<b>Total Net Emissions</b>	<b>5.57 t CO<sub>2</sub>-e</b>	<b>7.14 t CO<sub>2</sub>-e</b>	

### 2.2 Emissions Reduction Strategy

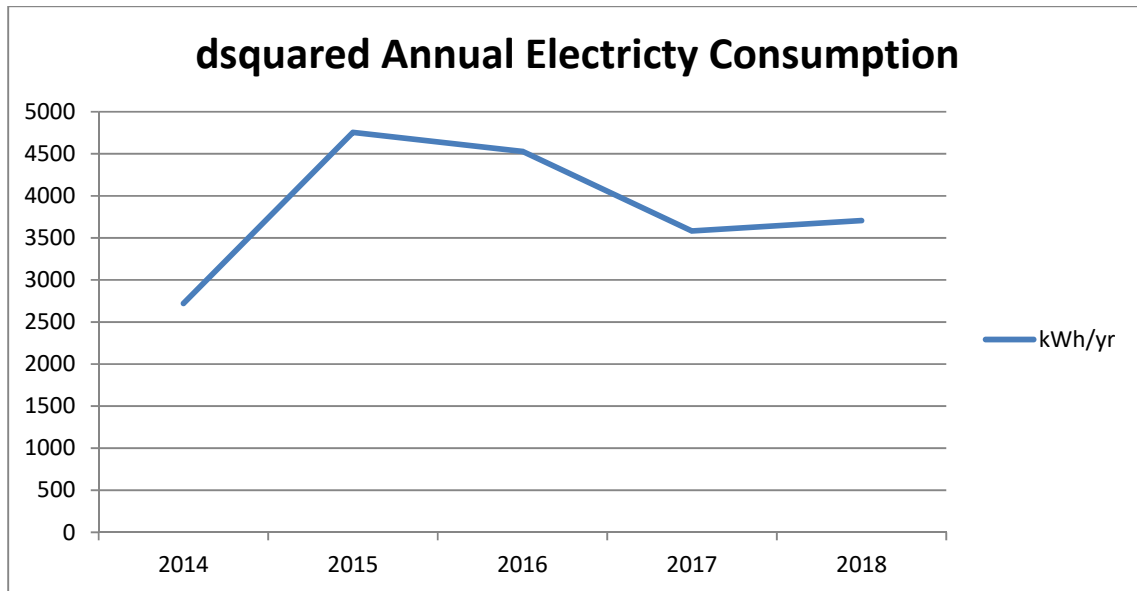
dsquared Consulting is dedicated to sustainability within their own business, not just for their clients and projects, and aims to ‘walk the walk’. The organisation’s emissions reduction strategy involves:

- Generating and utilising solar energy throughout the day and exporting excess
- Measuring and reporting our energy consumption and carbon footprint annually
- Promoting our commitments to our clients, project partners and associated programs to encourage sustainable change within the development industry
- Encouraging our staff to be minimise their impacts at the office and at home.

### 2.3 Emissions Reduction Actions

Since the 2014, electricity usage has been monitored and efforts have been made to reduce annual consumption, as illustrated in the following graph, and maintaining above a 5.5 NABERS Energy rating.





Our office fit out in 2014 included a switch of lighting to more energy efficient T5 lighting with daylight and motion sensors. In 2016 a 2kW solar array was added to the roof to improve energy savings and reduce operational costs.

In 2017 we have installed additional sub-metering to better understand where biggest energy consumption is coming from. This has helped inform us of what the next opportunities to reduce energy consumption is.

We are actively encouraging staff to utilise low carbon transport options such as public transport, cycling and car sharing to work.



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### 3 Emissions Summary

<b>Table 2. Emissions Summary</b>		
Scope	Emission source	t CO <sub>2</sub> -e
1	Building Refrigerants	0.81
2	Electricity Use	1.85
3	Electricity Transmission & Distribution	0.35
3	Base Building Electricity Use	0.00
3	Waste to Landfill	0.15
3	Recycling	0.00
3	Business Travel - Flights	1.57
3	Business Travel - Taxis	0.14
3	Business Travel – Hotels	0.23
3	Paper	0.07
3	Staff Commuting	2.37
3	Water	0.06
<b>Total Gross Emissions</b>		7.60
Green Power Purchase		-0.46
<b>Total Net Emissions</b>		7.14

## 4 Carbon Offsets

Table 3. Offsets Summary			
Offset type and registry	Year retired	Quantity	Serial numbers
Gold Standard VER – China Flue Gas Waste Heat To Energy  Markit: <a href="https://mer.markit.com/br-reg/public/index.jsp?name=dsquared&amp;entity=retirement&amp;entity_domain=Markit,GoldStandard">https://mer.markit.com/br-reg/public/index.jsp?name=dsquared&amp;entity=retirement&amp;entity_domain=Markit,GoldStandard</a>	2018	24.43 tonnes	GS1-1-CN-750-15-2010-262-16293 to 16322
Total offset units retired for CY 2018			24.43 tonnes
Net emissions for CY 2017 after offsetting			0 tonnes
Total offsets banked for use future years			17.29 tonnes

In addition, 30 tonnes of offsets from the Australian Yarra Yarra Biodiversity Project have been assigned to dsquared Consulting. Assigning is the activity with which a holder of Validated VERs may commit to retire those credits upon verification. Assignment is irreversible and assigned VER will be retired immediately upon verification. For more information, see the link below:

[https://mer.markit.com/br-reg/public/index.jsp?name=dsquared&entity=assignment&entity\\_domain=Markit,GoldStandard](https://mer.markit.com/br-reg/public/index.jsp?name=dsquared&entity=assignment&entity_domain=Markit,GoldStandard)

Serial numbers: GS1-1-AU-GS3039-22-2019-5301-14342 to 14371

### 4.1 Offsets Purchasing and Retirement Strategy

Our offsets have been purchased in 2017, in which banked offsets are retired against our carbon offset total at the end of each annual reporting period.

### 4.2 Offset Projects (Co-Benefits)

#### China Flue Gas Waste Heat To Energy

Hebei Yingxin Co., Ltd has four glass production lines with total daily melting capacity of 2000 tonnes. Purpose of this project is to utilize waste heat from exhaust gas of these glass production lines for power generation.



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Yarra Yarra Biodiversity Corridor (assigned for future retirement)

The *Yarra Yarra Biodiversity Corridor* is in Western Australia. This reforestation project more than removes carbon from the atmosphere now and every day, it has positive social, environmental and economic benefits, aligning with the United Nations Sustainable Development Goals (SDGs). This project removes in total 1.257 million tons of carbon from the atmosphere in an area where over 90% of the bushland has been cleared. Further social and economic benefits include:

- Located in a region where approx. 97% of the land has been cleared for agriculture and is now marginal or partly degraded.
- Links with 12 nature reserves and remnant vegetation sites, within the vision of a 200 km Yarra Yarra Biodiversity Corridor.
- A baseline biodiversity survey has discovered an amazing diversity of plant and animal species, with over 450 species identified. This included 13 bird species of conservation significance, one of which is listed as near-threatened in WA, the Crested Bellbird and 3 plant species listed as threatened and/or rare in WA. Further surveys are on-going this year and over the next 3 years in conjunction with Murdoch University.
- Up to 140 local companies have been utilised as part of the project – promoting and supporting local communities, including indigenous employment. The reforestation has enabled the development of further sustainable and economic benefits to the rural community through development of integrated new industries such as Australian sandalwood and commercial honey production.