The Journey to Becoming

Carbon Neutral

for a Small to Medium Enterprise

www.dsquaredconsulting.com.au

NATIONAL CARBON OFFSET STANDARD
CARBON NEUTRAL ORGANISATION

Founding Partner
CARBON NEUTRAL ADELAIDE

CITY SWITCH
GREEN OFFICE SIGNATORY

Commitment to Sustainability

Our team at dsquared Consulting believes the road to sustainability is as much about the journey as it is about the destination.

dsquared is a specialist consultancy for integrating sustainability into the design and operation of built environments, and as an organisation we have been constantly refining how we embed sustainable practices in our business.

Moving into our office at 241 Pirie Street, Adelaide in 2013, we created a work place with natural daylight and ventilation, built with low emission, recycled materials, and energy efficient lighting systems. We installed solar panels to generate renewable energy on site and also metering to help us monitor consumption behaviour.

Our journey so far has been about reducing our environmental impact within our physical office. However, as much as we have optimised our office environment and business processes, we acknowledge the fact that we will always have some environmental impact as an organisation.

dsquared Consulting has always wanted to be a net positive contributor to the environment.

Giving back as much as you take is part of being a good steward of the land. Therefore, we felt the need to account for more than just energy use in our business and evaluate our environmental footprint holistically by accounting for the greenhouse gas emissions from staff commuting, business travel, stationary procurement, and more.

We decided to target an organisational Carbon Neutral Certification under the National Carbon Offset Standard (NCOS), as an accredited pathway to measure and take action for a business's environmental footprint. In October 2018, we became the first Small to Medium Enterprise (SME) in South Australia to become NCOS certified and by far have the smallest carbon footprint of any certified carbon neutral organisation in Australia.

This paper tells our story, and shares our experience in negating our carbon footprint using NCOS.

Read on for some insight on what to consider if you are looking to take your organisation down the path of becoming carbon neutral.

The Roadmap for Becoming NCOS Certified

The following is a roadmap of our journey in becoming NCOS Certified. The journey was not a straight line, but as we reflect on the process we believe it could be approached in the following stages.

Getting Started

Considering the following early on will set you on the right path.

Assemble Your Team

Much like any journey, having the right companions make the experience smoother and more enjoyable. There are various aspects within the NCOS submission that will require specialist services, like aligning calculations with accepted measurement factors, auditing methodologies and accepted carbon offset standards. Hence, selecting with the right personnel to work with early will be necessary for a successful outcome.

Find yourself the following:

A Platform or Consultancy to Calculate Carbon Account

To calculate your carbon account the organisation will need to have access to carbon emission factors for many business operational items (i.e electricity, water, flights, paper, etc). These factors get updated every year in alignment with the National Greenhouse and Energy Reporting (NGER) Determination.

To help us perform these calculations we utilised an online platform developed by Trellis Technologies Pty Ltd, which can calculate carbon emissions associated with various scope items.

Alternatively, if you would like to have a more hands-off approach, a carbon accounting consultancy could assist in building up your carbon account.

An Auditor

Your carbon account will need to be certified by an appropriately qualified auditor. We engaged Conversio to be our auditor.

A list of accredited auditors can be found here.

Carbon Offset Provider

Finding a carbon offset provider willing to sell offsets to organisations with a small carbon footprint can be difficult, therefore it is important to find a provider early on and investigate what offsets are available to meet NCOS certification.

As an organisation, if you are not concerned about the type of offsets you purchase, your search will be much easier. If you are like us and want to support Australian biodiversity regeneration offsets, it would be best to be prepared for multiple conversations. We purchased offsets from Carbon Neutral Pty Ltd.

Building the Carbon Account

This part of the journey will take up the most time, so be patient with the process.

Define Time Period

Identify what reporting time period is most conducive for the organisation, an annual account per calendar year or per financial year. There isn't a better or worse case, just select what is the best way forward for your organisation and aligns with timing of annual reporting already being done.

Outine What to Measure

Make sure to download the NCOS Standard for Organisations and read through section '2.3 Measure: Prepare Carbon Account' to help define the organisations emissions boundary and also identifying what items the organisation will need to measure and account for.

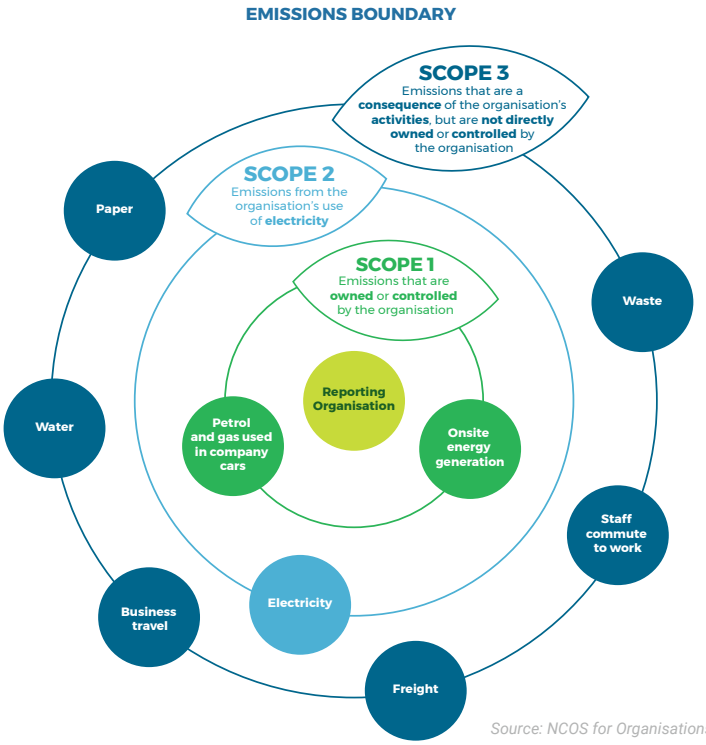
As defined by the NCOS standard, the following sources are relevant to all organisations:

Scope 1 *– Defined as all direct emissions. i.e Fuels used for company cars or onsite energy generation and refrigerants.*

Scope 2 *– Defined as emissions from generation of electricity, heating cooling and steam purchased by the organisation.*

Scope 3 *– Defined as indirect emissions occurred by business activity. i.e electricity loss in transmission, waste generation, business related travel and accommodation, base building services, paper consumption, water consumption, staff personal commuting, communication, paper, etc.*

Scope 1 and 2 items are quite straight forward and non-negotiable, but Scope 3 will vary with the type of business activities that are performed.



Source: NCOS for Organisations

Accumulate Data

Once you know what to measure, start accumulating the data to verify consumption. This includes energy, fuel and water bills, confirmation of type of vehicles in company fleet or used in staff commuting, invoices for business trip flights, taxis and accommodation and also invoices for stationary purchase. Where verifiable data is not available, accurate calculations of consumption will need to be performed, which might be necessary for things like base build electricity use and volume of waste (if a waste audit is not performed).

Develop Key Reporting Documents

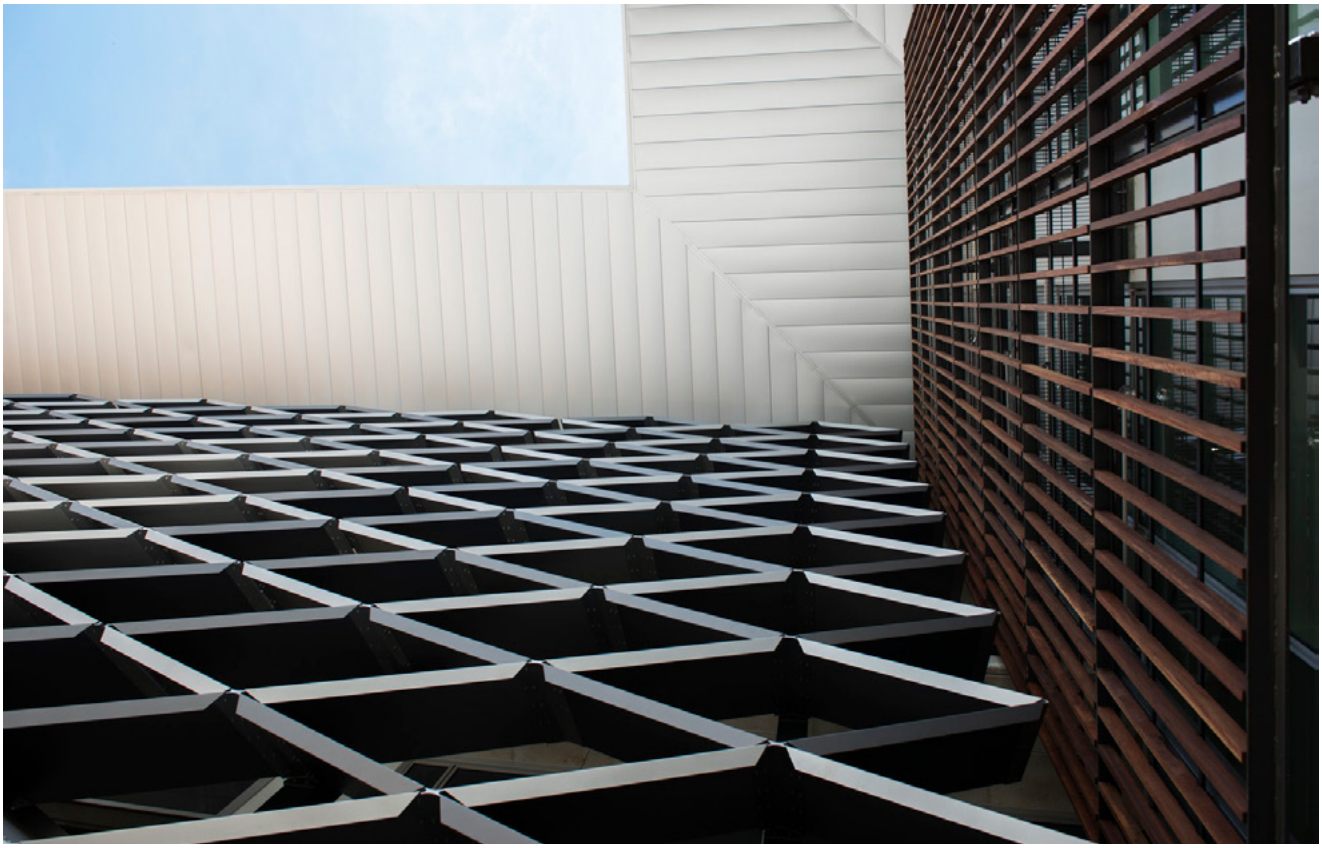
To prepare for the audit and NCOS certification, you will need to develop two key reporting documents essential for the audit and subsequent NCOS certification.

The first is the Annual Carbon Account and the second is a Public Disclosure Summary. Templates are available from the NCOS website.

The Annual Carbon Account will largely outline what the organisational boundary is, what scope items will be measured and calculated and carbon emission factors which have been utilised and total amount of organisational carbon emissions incurred. This will be an essential document for the auditor.

The Public Disclosure Summary will include summary points from the Annual Carbon Account and disclose which offsets have been purchased. This will become a publicly accessible document for transparency purposes.

In addition to developing reporting documents for NCOS certification, we would strongly encourage the development of internal data collection spreadsheet which could be set up and updated for every reporting period.



Getting Toward the Finish Line

Just need to close it out.

Commence the Audit

Once the Annual Carbon Account and Public Disclosure Summary is nearly complete, commence the third-party audit. The auditor will come back with 1 or 2 rounds of comments to pick up on any inconsistencies or omissions in the data collection, calculations or report format, which will allow you to address accordingly.

While the audit cannot be fully complete until carbon offsets are purchased, we would encourage you to get a couple rounds of the audit complete so you are fairly certain of the organisation's carbon footprint and know the number of tonnes to offset.

Purchase Offsets

Secure the relevant type and amount of carbon offsets for the organisation. Carbon offsets can vary from renewable energy projects, social enterprises or environmental restoration. If you have a small carbon footprint, you may need to over purchase carbon offsets and bank them for future years, as the minimum purchase amount is 27 tonnes.

Carbon offsets do not need to be Australian based to count for NCOS certification, however as an organisation we were adamant to support local projects. We have learned that the Australian carbon offset market is still developing, so it can be difficult to purchase currently verified and retired local carbon offsets. They are also more expensive than carbon offsets from overseas.

To invest in an Australian biodiversity regeneration project we have had to purchase future carbon credits, with currently verified and retired overseas credits attached to the purchase. This methodology essentially has us in carbon credit for the next 10 years, effectively making us a carbon positive organisation for the foreseeable future.

Submit to NCOS

With the carbon offsets purchased and audit complete, submit documentation to the NCOS administration team and follow their protocol to becoming certified Carbon Neutral.

Rinse and Repeat

Now that all the reporting and data collection systems are set up, make sure to repeat the process annually. A Public Disclosure Summary will need to be submitted annually, with the third party audit performed every three years.

Reflections on the Journey

Through the process of becoming certified Carbon Neutral, we can proudly say that our organisation has responsibly accounted for our environmental footprint and can showcase environmental leadership as a business following an accredited pathway.

Below is our carbon footprint for the 2017 calendar year. While other SMEs might have similar emission scope items as us, overall the amount of emissions will vary depending on company size and activities.

dsquared Consulting Carbon Emissions Summary

Scope	t CO_2-e	Emission Source
1	0.81	Building Refrigerants
2	1.83	Electricity Use
3	0.36	Electricity Transmission & Distribution
3	0.00	Base Building Electricity Use
3	0.15	Waste to Landfill
3	0.00	Recycling
3	0.54	Business Travel - Flights
3	0.03	Business Travel - Taxis
3	0.09	Paper
3	2.21	Staff Commuting
3	0.00	Water
	6.05	**Total Gross Emissions**
	-0.48	**Green Power Purchase**
	5.57	**Total Net Emissions**

For most SMEs, the cost of becoming NCOS certified will be the driving force on whether it is feasible. The following are actual and in-kind costs we have incurred in becoming NCOS certified.

Costs of NCOS Certification

	Budgeted Costs
$4,000 - $5,000	NCOS Certification & Audit
($4,000)	Data collection and documentation prep (in-house)
OR	-
($5,000 - $6,000)	Data collection and documentation prep (external consultant)
$30/tonne	Carbon Offset
	Actual Costs
$2,500	NCOS Certification Fee *The lowest carbon emission threshold for certification pricing is at 1000 tonnes.*
$1,485	Auditor Fee *Auditor must be independent and have NGER accreditation.* *This cost was to perform audit only.*
$891	Carbon Offset Purchase Price *Price per tonne of Australian based offsets, inclusive of GST and admin fees, is roughly $30/tonne. Because we could not find a carbon offset provider that would sell us less than 27 tonnes for one purchase, we purchased 30 tonnes.*
$4,876	**Actual Total Cost**
	In-Kind Costs
$1,000	Trellis Carbon Accounting Platform *Trellis provided in kind access to their online carbon accounting platform and support with data input as a test to gauge whether SME's could utilise the platform.*
$3,150	Data Collection and Documentation Prep *We built our carbon account in house, with our ESD Consultant, Ken Long, collecting all necessary data performing calculations to measure organisation carbon footprint and preparing the necessary documentation to submit for auditing and NCOS certification.* *The estimated time to perform all of this was 60 hours.*
$4,150	**In-Kind Total Cost**
$9,026	**Combined Total Cost**

In reflection of this journey toward becoming a Carbon Neutral business, we feel there are positives and challenges of going through the process.

Positives

- Our organisation has now completed a carbon footprint benchmark which we can hold ourselves accountable by monitoring our performance across business activities.
- Becoming knowledgeable about carbon offsets allows us to responsibly invest in organisations whom are active in combating climate change.
- By undergoing this process, we have been able to set up systems to improve internal reporting and management.

Challenges

- To undergo the building of a carbon profile, have an audit performed, purchase carbon offsets and pay certification fees are all quite costly for an SME. *To encourage more SMEs to become certified carbon neutral organisations, certification costs could be revaluated, and streamlining the process will be necessary.*
- Sourcing up to date emission sources can be difficult unless utilising platforms like Trellis or specialist consultancy.
- Building up carbon account and reporting is not straight forward unless given hints from experienced organisations or auditors. *The process of building up a carbon account could be more streamlined and aided to be more consistent.*
- Purchasing carbon offsets can be difficult for organisations with small carbon footprint, which can lead to wasted time finding a compatible offset provider. Some carbon offset providers would not return inquiries after we disclosed we wanted under 10 tonnes of carbon offsets.

We hope our journey not only inspires your organisation to become carbon neutral, but also gives you insight on what to anticipate if wanting to go down the same path.

About dsquared Consulting

dsquared Consulting delivers innovative & independent sustainable solutions in the built environment.

We work with our clients to create more sustainable spaces, places and communities where people want to work, rest and play. We provide Environmentally Sustainable Design (ESD) and Sustainability advice from the earliest stages of project master planning, through building design, construction, and operation. We add real value to projects of all sizes, from precinct infrastructure planning right down to the selection of office furniture. We are Australian leaders in the management and delivery of Green Star, LEED, the Living Building Challenge, WELL Building and zero carbon buildings.

Need help in creating a Carbon Neutral future? Connect with us:

www.dsquaredconsulting.com.au

Suite 5 / 241 Pirie St, Adelaide SA 5000

ABN 38 159 612 067

Disclaimer: This information tells our story. Every organisation will have a unique approach to carbon accounting and offsetting. No liability is accepted, or should be inferred, for the use of this document.