




Climate Active
to Net Zero.

Welcome.



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- A blurred background image of a modern office interior with glass walls, showing people moving through the space.
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Greenhouse Gas Emissions Inventory.

What is an Emissions Inventory?

An emissions inventory or carbon account is the measurement of all greenhouse gas emissions, commonly referred to as carbon emissions, that your organisation emits throughout its value chain over a specified period of time.

Generally, carbon footprints are measured over the period of one year. Emissions are measured in tonnes of carbon dioxide equivalent or tCO₂e and can be categorised into three scopes.

The emission scopes are defined by the Greenhouse Gas Protocol (GHG) Corporate Standard.

Scope 1

Direct emissions that occur from owned or controlled sources by an organisation. This can include: company owned vehicles, on-site energy consumption, and refrigerants.

Scope 2

Indirect emissions from the generation of purchased electricity, steam, heating, or cooling.

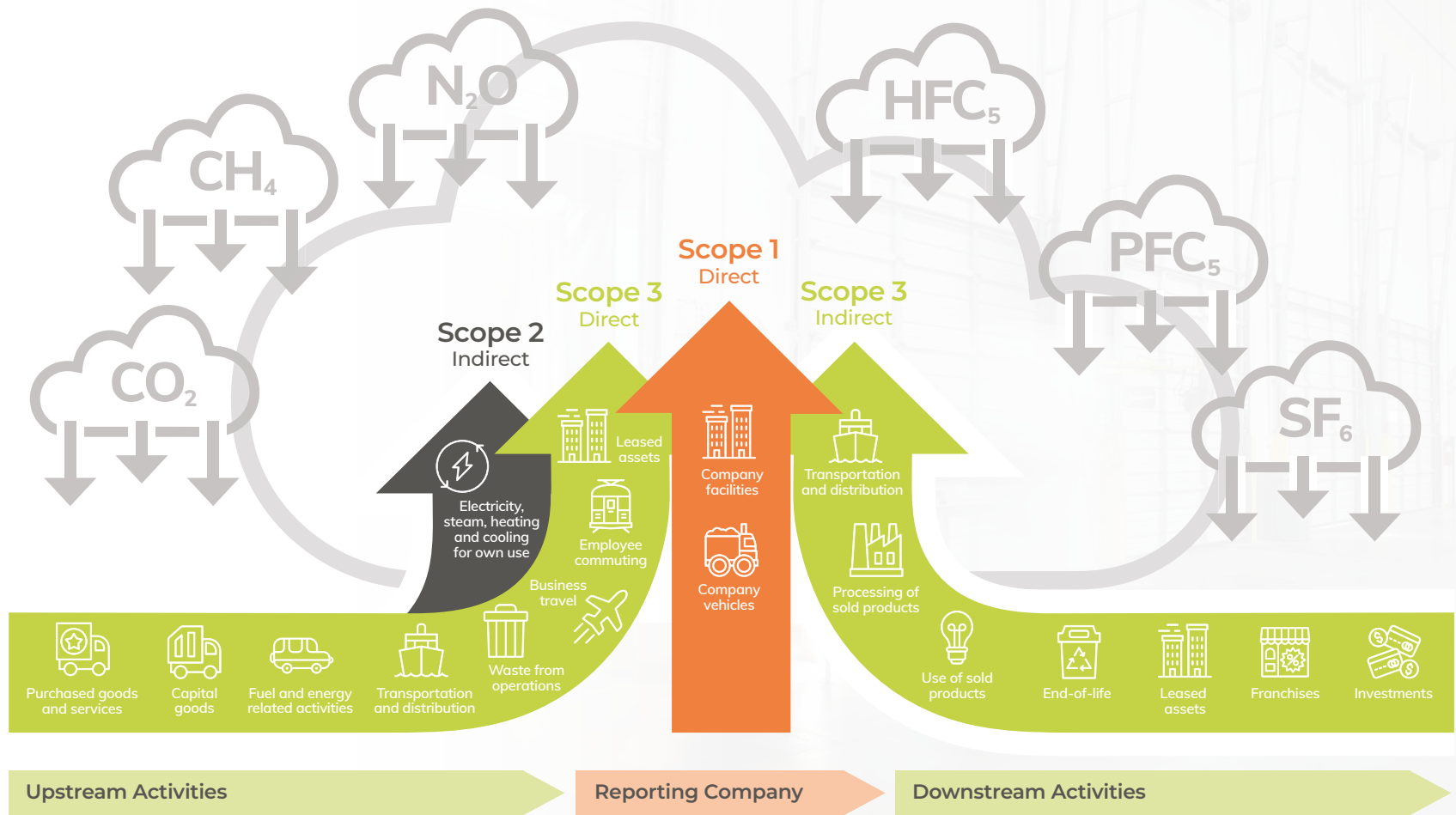
Scope 3

Indirect emissions that occur within the organisation's value chain including all upstream and downstream sources. This can include: staff travel, professional services, and purchase of goods and services.

Depending on your organisation's objectives, you may choose different pathways to measuring your carbon emissions. This can include:

- Measuring your Scope 1 and 2 emissions initially and working towards measuring Scope 3 emissions;
- Measuring and reporting emissions internally to begin with and working towards reporting against an external framework; or
- Using estimates to calculate emissions and working towards better data management and collection systems.

Working with a sustainability consultant can allow your organisation to create a viable pathway for measurements going forward, depending on your specific requirements.



What Information do you Need?

When completing an emissions inventory the type of data required may vary. At a high level the following information will be required.

Scope 1 Emissions

1. Invoices for any stationary combustion including natural gas, diesel, or LPG Invoices for fuel used from company owned vehicles or logged kilometres travelled
2. Records of refrigerant usage (if applicable)

Scope 2 Emissions

1. Invoices for all electricity consumption

Scope 3 Emissions

1. Organisation P&L sheet for the reporting period
2. Staff survey data on employee commuting and working from home
3. Leases for any office spaces
4. Business flights including origin and destination data as well as accommodation records
5. Waste and water records

Step	Requirements
1 Establish the emissions boundary	With the support of a carbon consultant, the emissions boundary for your organisation will be determined. This will include an analysis of all emission sources that must be included. The emissions boundary can be reported using the operational control, financial control, or equity share approach.
2 Collect data	Engage relevant staff to collect all required data. All data will be provided to your carbon consultant who will complete an emissions measurement on behalf of your organisation. Actual data is required for all Scope 1 and 2 emissions, and preferred where available for Scope 3 emissions. Estimates may be used for some Scope 3 emissions.
3 Measure emissions	Measure Scope 1 and 2 emissions. Scope 3 emissions can also be measured and quantified for the reporting period. Note that although Scope 3 emissions are not required to be measured for an inventory, many climate frameworks require reporting against all three emission scopes. This measurement is completed by a carbon consultant in line with the GHG Protocol.
4 Validate (Optional)	Work with your carbon consultant to engage an external third-party to validate the underlying inventory data. This process is similar to a financial audit, where supporting documentation and evidence will be used to confirm reported emissions and assumptions.
5 Report (Optional)	The emissions inventory can be used to support further climate action within your organisation. You may choose to report the inventory publicly, use the inventory for a carbon neutrality engagement, develop strategy to reduce your top emission sources, or set emission reduction targets.



Organisation Boundaries Guide.

What is an Organisation Boundary?

When organisations are looking to report on their greenhouse gas emissions, they must first establish their organisation boundary. This boundary will determine which emission sources should be included in their greenhouse gas account.

Business operations can vary quite significantly with legal and organisational structures. As such, organisations must determine the best approach to consolidate greenhouse gas emissions. Per the Greenhouse Gas Protocol, there are two main approaches that can be used to account for greenhouse gas emissions. If your organisation wholly owns all operations, the organisation boundary will be the same regardless of the approach chosen.

Equity Share Approach.

Using the equity share approach, an organisation will account for all greenhouse gas emissions from operations per the share of its equity in the operations. Equity share is represented by economic interest. This represents the economic risk and rewards an organisation has in operations. Equity share is calculated by the percentage of ownership that the organisation has over the operation.

Control Approach.

With the control approach, an organisation will report for 100% of the greenhouse gas emissions from all operations over which it has control. In this case, control can either be defined as financial or operational.

Financial Control

Financial control is established when an organisation has the ability to direct financial and operating policies with a view to gain economic benefit from these activities. Under this approach, the economic substance of the relationship takes precedence over the legal ownership status. This means that an organisation may have financial control over operations even if it has less than 50% interest. This approach follows those of financial accounting standards.

Operational Control

This approach should be selected if an organisation or one of its subsidiaries has the full authority to introduce and implement operating policies. All emissions from operations over which the organisation has operational control are included in the organisation boundary under this control approach. The operational control approach is the most commonly used approach in greenhouse gas accounting.



RE100.

What is RE100?

RE100 is a global initiative which supports business commitments for obtaining 100% renewable electricity. Through this initiative, organisations set consumption targets to work towards consuming 100% renewable electricity by a target date.

Led by the Climate Group in partnership with the Carbon Disclosure Project (CDP), RE100 aims to accelerate change towards zero carbon grids at scale. Further to this, the program has outlined six policy measures to support the sourcing of renewable electricity globally.

Organisations in sectors from manufacturing and pharmaceuticals, to fashion and technology are currently participating in RE100. By committing to the initiative, organisations send powerful signals to both markets and governments alike to demand increased renewable electricity supply. When making commitments towards RE100, organisations further agree not to undertake activities that will undermine the goal of accelerating zero carbon grids by 2040, whether directly or indirectly.

RE100 is a great first step for organisations who are starting off on their sustainability journey. Taking tangible steps to obtain 100% renewable electricity signals your commitment to sustainability, which can be followed by additional action going forward.

How to Become Certified.

Organisations looking to join and commit to RE100 must follow these steps:

1. The organisation must have significant annual electricity demand and consume more than 0.1TWh or greater of electricity a year.
2. A public commitment to sourcing or already having 100% renewable electricity must be declared including a target year. Companies are required to have a strategy to achieve the following renewable energy targets:

60% by 2030	90% by 2040	100% by 2050
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3. All Scope 2 emissions and any Scope 1 emissions related to the generation of electricity by the company must be included in the target.
4. Progress must be reported on annually and is validated by RE100.
5. Organisations must follow RE100's technical criteria including being from accepted sectors.

At this time RE100 does not consider companies that generate the majority of their revenue from renewable or non-renewable power as corporate members. This includes directly (power companies) or indirectly (technology providers, developers, etc). Further, organisations from the following sectors are not considered for membership:

- Fossil fuels
- Airlines
- Munitions
- Gambling
- Tobacco



Carbon Neutrality vs Net Zero.

What is Carbon Neutrality?

Carbon neutrality is the process of measuring your organisation’s carbon footprint for a period of time in the past (usually one year) and purchasing carbon credits to neutralise emissions from this period. Carbon neutral standards further require organisations to develop emission reduction targets and actively decarbonise their operations. Carbon neutrality is only valid at a point in time where emissions have been measured, reduced, and offset.

In Australia, Climate Active is a federal government initiative administered by the Department of Industry, Science, Energy and Resources, which provides carbon neutral certification. Climate Active requires organisations to measure an organisation’s emissions inventory, develop an emission reduction plan, offset any residual emissions, and have the inventory validated by a third-party.

What is Net Zero?

Net Zero commitments represent a long term strategic approach for organisations to actively decarbonise emissions as much as possible. Residual emissions can be neutralised through the purchase of carbon removals. Purchasing carbon credits to offset all emissions is not required; however, beyond value chain mitigation is recommended to support emissions reductions. Net zero means that any emissions that are still being released into the atmosphere are being displaced by an equal amount of carbon removals.

The Science Based Targets Initiative (SBTi) is the world’s first Net Zero standard. Organisations commit to reduce carbon emissions as much as possible and develop targets in line with science to limit global warming to 1.5°C. Under SBTi, emphasis is placed on deep emissions cuts in line with obtaining 50% reductions by 2030 and 90-95% reductions by 2050.

Quick Comparison Guide.

Requirement	Climate Active	SBTi
Measure	Climate Active Carbon Neutral Standard	GHG Protocol Corporate Standard
Reduce & Targets	Emission reduction strategy with at least 30% reduction by 2030	Deep emission cuts including 50% reductions by 2030 and 90-95% reductions by 2050
Offsets	Offset all residual emissions using credible carbon credits (VERs, VCUs, ACCUs)	Emphasis on decarbonisation. Last 5-10% of unavoidable emissions neutralised using carbon removals only



Climate Active Carbon Neutral Certification.

What is Climate Active?

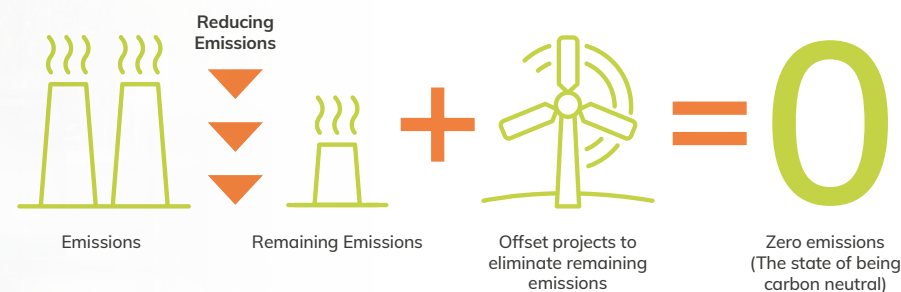
Climate Active is a federal government initiative administered by the Department of Industry, Science, Energy and Resources, which provides carbon neutral certification to Australian businesses. Under the Climate Active Carbon Neutral Standard, certification can be obtained by organisations, precincts, products, services, and events.

All carbon neutral claims must be in line with the technical requirements as set out by Climate Active. This includes the completion of a greenhouse gas inventory and technical assessment by a Registered Consultant. The inventory must further be validated or verified by an external third-party. Organisations are required to also complete a Public Disclosure Statement which includes an emission reduction strategy.

What is Carbon Neutral?

Carbon neutrality is the term used to verify that an organisation has measured, reduced, and offset its emissions for a point in time, usually a one year period. Under Climate Active, organisations may choose to measure their emissions across a Financial Year or a Calendar Year.

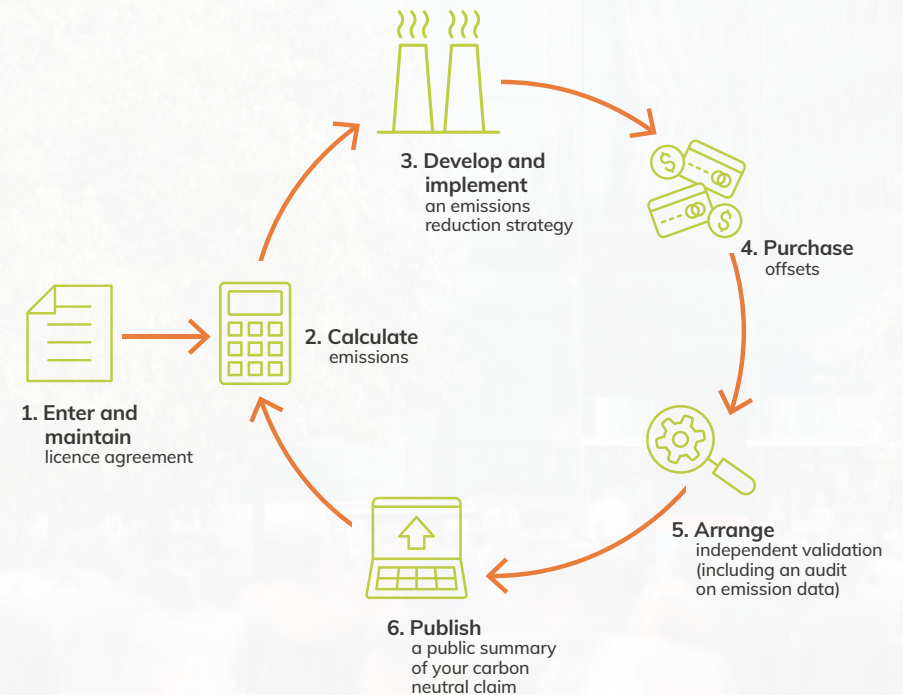
Emissions must be reduced to the highest extent possible and all residual emissions offset through the purchase of carbon credits. It is through this process that an organisation becomes carbon neutral, when all emissions have been either reduced or offset.



Why Climate Active?

Climate Active is the only federally administered Carbon Neutral Certification program internationally. Organisations must work with a Registered Consultant to meet Climate Active's requirements for certification.

Climate Active Certification is renowned in Australia and over 500 organisations have achieved certification to date.



Certification Process.

The Climate Active certification process is cyclical where each step must be completed on an annual basis. Organisations are required to enter and maintain a license agreement with Climate Active, including an annual fee payable to maintain certification.

The above process must be followed each year to maintain your Carbon Neutral certification. Note that the independent validation is only required for the first reporting year and every three years thereafter.

Deadlines for submissions are outlined in the following table. All documents must be submitted to Climate Active on or before the deadline.

Ecovantage will liaise closely with your organisation to prepare all documentation for submission. We recommend beginning this process two months prior to the deadline to ensure the process is seamless.

Reporting Period	Initial Reporting Year Deadline	Annual Deadline
Calendar Year	15 October	31 October
Financial Year	15 April	30 April

Science Based Targets Initiative.

What is SBTi?

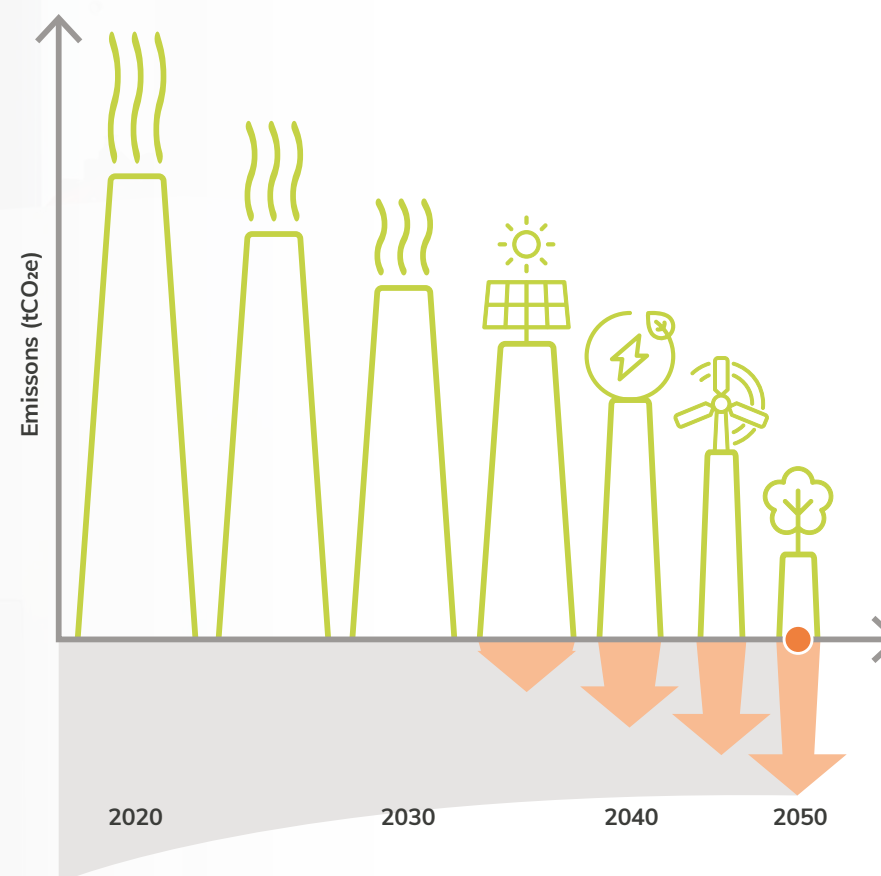
The Science Based Targets Initiative (SBTi) is a partnership between the Carbon Disclosure Project (CDP), United Nations Global Compact, World Resources Institute (WRI), and the World Wide Fund for Nature (WWF). This initiative focuses on driving ambitious climate action in the private sector by allowing organisations to set emissions reduction targets in line with science. SBTi defines best practice in decarbonisation by showing companies how to reduce their carbon emissions to avoid further climate change.

Target setting with SBTi has been developed in accordance with science. This supports organisations in setting net zero targets in line with limiting emissions and achieving a 1.5°C future. In October 2021, SBTi released the world's first Corporate Net Zero Standard, a framework to enable organisations to achieve net zero by no later than 2050.

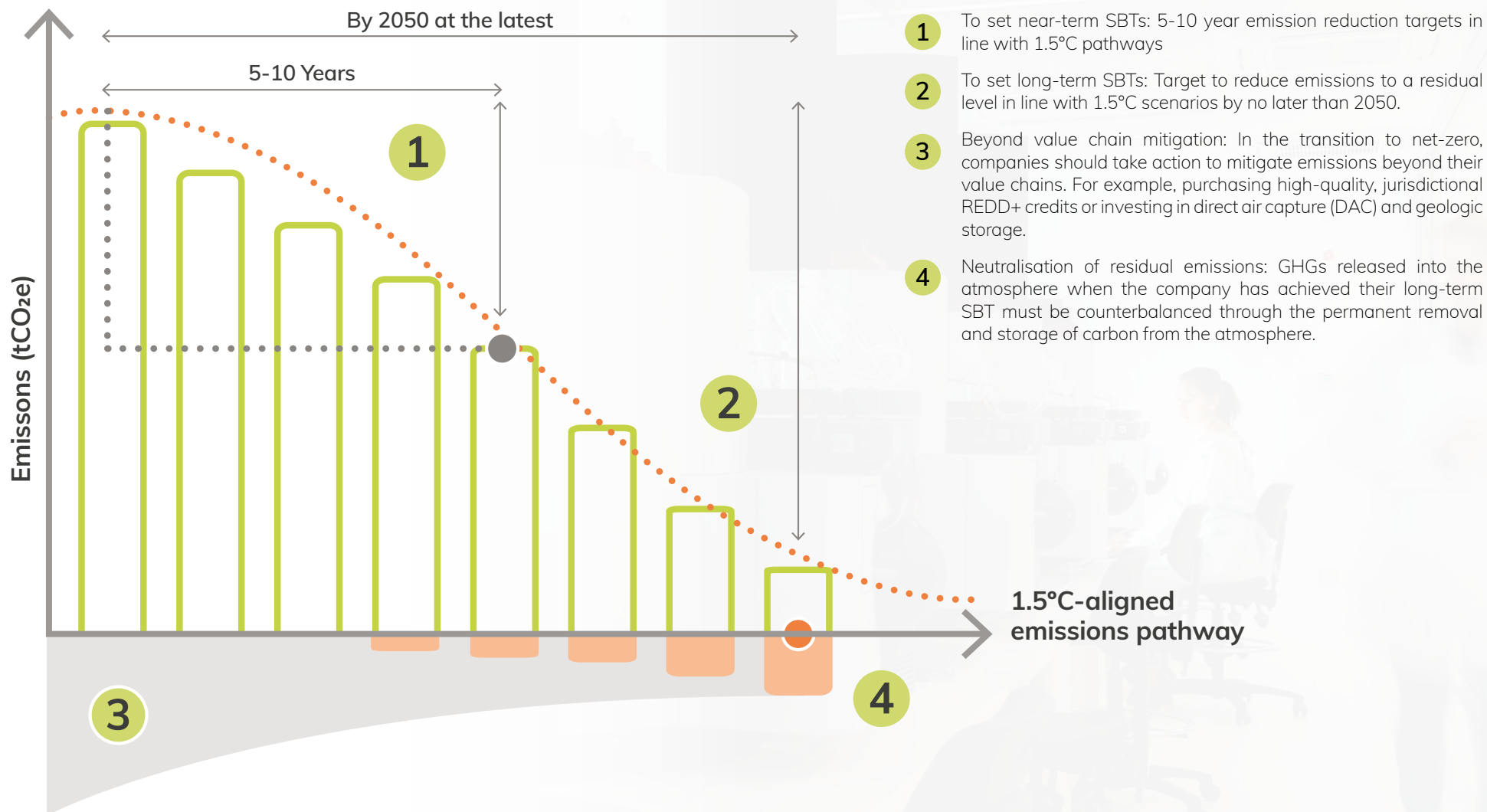
What is Net Zero?

Net zero is the balance of the generation of greenhouse gas emissions into the atmosphere with the simultaneous removal of emissions. Achieving net zero emissions requires organisations to focus on rapid and deep emission cuts. Organisations must set near-term targets to achieve at least 50% reductions by 2030 and long-term targets to achieve at least 90-95% reductions by 2050.

When no further emission reductions can be achieved, organisations may purchase carbon removals to balance any residual emissions. Within SBTi, emphasis is placed on organisations working to reduce emissions from within their own value chains, rather than mitigating externally.



- Reducing emissions your enterprise and value chain generates
- Balancing remaining emissions with permanent carbon removals
- Enabling reduction and removal of emissions in the wider society
- Net-zero emissions



- 1** To set near-term SBTs: 5-10 year emission reduction targets in line with 1.5°C pathways
- 2** To set long-term SBTs: Target to reduce emissions to a residual level in line with 1.5°C scenarios by no later than 2050.
- 3** Beyond value chain mitigation: In the transition to net-zero, companies should take action to mitigate emissions beyond their value chains. For example, purchasing high-quality, jurisdictional REDD+ credits or investing in direct air capture (DAC) and geologic storage.
- 4** Neutralisation of residual emissions: GHGs released into the atmosphere when the company has achieved their long-term SBT must be counterbalanced through the permanent removal and storage of carbon from the atmosphere.

- Abatement within the value chain** (Green circle)
- Abatement or removals beyond a company's value chain** (Grey circle)
- Removals** (Orange circle)
- Net-zero emissions** (Red circle)

Why SBTi?

The Intergovernmental Panel on Climate Change flagged a 'code red' for humanity in its Sixth Assessment Report. There is an urgent need for climate action in order to avoid further catastrophic breakdown. Businesses and governments around the world must take action and must actively work to decarbonise emissions. **Leadership on climate action is needed now.**

SBTi is the only initiative that uses science to translate scenarios and provide organisations with resources to develop net zero targets. Organisations who set targets under SBTi are seen as industry leaders and are committing to reducing emissions as much as possible. Further, SBTi has developed separate reporting standards by industry, to ensure that reductions across sectors are in line with requirements to limit global warming to 1.5°C by 2050.

In a net zero world we must work to decarbonise emissions across all organisations. Real and tangible action is needed to support this transition, which goes above traditional mitigation mechanisms. SBTi provides the framework required for organisations to achieve tangible emission reductions.

Beyond Value Chain Mitigation.

Purchasing carbon offsets to neutralise all emissions is not required under SBTi. Instead, the initiative recommends beyond value chain mitigation where organisations may participate in mitigation actions or investments that fall outside of the organisation's value chain. SBTi focuses on a mitigation hierarchy where emissions within an organisation's value chain should be reduced as much as possible. Only after this should an organisation choose to mitigate emissions beyond their own value chains.

This means that under SBTi, organisations should focus on actual emissions reductions through energy efficiency upgrades and climate technology solutions for Scope 1 and 2 emissions. Where Scope 3 emissions are relevant, an organisation may implement additional policies and work within their value chains to reduce these emissions.

Climate Statements.

Making Statements to Represent Your Climate Action.

Many organisations are taking positive action to mitigate future climate change and want to share their positive momentum towards a greener and safer future with their stakeholders, clients, and business partners.

So what exactly can your organisation say once it has taken action? We have outlined some common pathways and what you can claim when you have achieved certain milestones.

Note: *it is always advisable to work with your sustainability consultant, such as Ecovantage, to confirm the exact language best suited for your organisation's accomplishments. This article has been written for informational purposes only and may not be specific to your organisation's circumstances.*

Energy Efficiency.

Under some state-based schemes, homeowners and businesses are provided with rebates to undertake energy efficiency upgrades and improvements. Regardless of the creation of certificates from these programs, undertaking energy efficiency upgrades is a great way to reduce your emissions.

When you complete energy efficiency upgrades, you are signalling your commitment to decarbonisation initiatives. Not only are you able to reduce your overall energy consumption which reduces your energy bills, but you are simultaneously reducing your Scope 1 and 2 carbon emissions.

What can I claim?

If you are able to measure your consumption before and after upgrades are completed, you can claim the amount of energy reductions the initiative has led to.

Example 1: *Your annual pre-upgrade electricity consumption was 1,000 kWh and your annual post-upgrade consumption is 750 kWh. You may claim that you have reduced your electricity consumption by 250 kWh or 25%. Note that you must measure your pre and post-upgrade consumption in order to make this claim.*

You can further claim any associated emission reductions from the upgrades performed.

Example 2: *Your annual pre-upgrade electricity emissions was 100 tonnes CO₂e and your annual post-upgrade electricity emissions are 75 tonnes CO₂e. You may claim that you have reduced your electricity emissions by 25 tonnes CO₂e or by 25%. Note that you must measure and calculate your pre and post-upgrade emissions to make this claim.*

Renewable Energy Generation.

Many organisations are taking steps to reduce their emissions by installing on-site renewables including solar panels. Solar systems under 100 kW are able to generate small-scale technology certificates or STCs. Systems larger than 100 kW generate large-scale generation certificates or LGCs.

What can I claim?

Energy generators that create STCs are able to claim the renewable energy consumption from any behind the meter electricity use. This also includes if the STCs from this consumption have been transferred or sold to other organisations. For any exported electricity, this is converted into an emission reduction equivalent and netted from gross emissions.

Example 3: If you have a 50 kW solar system on your rooftop and generate and consume 100 kWh of behind the meter electricity, you are able to claim 100 kWh of energy consumption as renewable. The 100 kWh of electricity produced and consumed will also be classified as zero emissions.

Energy generators that create LGCs are able to claim renewable energy consumption only if these LGCs are retired in the name of the organisation. Any LGCs that are sold to another organisation are not eligible for renewable energy claims. This is to ensure that no double counting of renewable energy occurs. In addition to this, if LGCs are sold, the organisation that created those LGCs is unable to claim the emissions reduction benefit.

Example 4: An organisation creates 100 LGCs from its renewable energy project and doesn't consume any grid electricity. All of these LGCs are used for internal compliance. This organisation may claim 100% renewable energy as well as zero Scope 2 emissions.

Example 5: An organisation creates 100 LGCs from its renewable energy project and consumes 100 MWh of additional grid electricity. If the organisation consumes 200 MWh total of electricity and retires all LGCs in its name, it may claim 50% renewable energy and a 50% reduction in its Scope 2 emissions.

Example 6: An organisation purchases and voluntarily retires 100 LGCs from a renewable energy project to offset its 100 MWh of grid electricity consumption. This organisation may claim 100% renewable energy consumption as well as zero Scope 2 emissions.

Renewable Energy Attributes.

There are many opportunities available for organisations to procure renewable energy. This can be through a power purchase agreement, the purchase and retirement of renewable energy certificates (including large-scale generation certificates or LGCs), or procurement of GreenPower.

In general, your organisation must retire renewable energy attributes in its name to be able to claim any benefit from this use. If your organisation creates certificates and sells these to another entity, you are no longer able to claim the renewable energy benefit.

What can I claim?

If your organisation purchases and retires renewable energy attributes such as LGCs, you may claim the percentage of renewable power that you have used.

Example 7: *If you consume 10 MWh of electricity in a year, and purchase and retire 5 LGCs (equivalent to 5 MWh), you may claim that you are using 50% renewable electricity.*

To make claims of using 100% renewable energy your organisation must procure all of its electricity from GreenPower, or purchase renewable energy certificates for all of its electricity consumption. You may also make claims relating to emission reductions from the use of renewable energy.

Example 8: *If you consume 10 MWh of electricity, and purchase and retire 10 LGCs (equivalent to 10 MWh), you may claim that you have zero Scope 2 emissions.*

Note that the purchase of carbon offsets for electricity consumption does not allow you to make a renewable energy claim. Instead you are able to claim that your electricity is carbon neutral.

Carbon Neutrality.

In Australia, organisations are able to obtain carbon neutral certification through the federally administered Climate Active program. Under Climate Active, organisations must measure, reduce, offset, and report on their Scope 1, 2, and 3 carbon emissions. All emissions under the organisation's control must be included.

What can I claim?

Climate Active certification occurs on an annual basis, where reporting is finalised after the designated period (either calendar or financial year). While an organisation is awaiting its initial certification, it can claim that it is under the process of obtaining Climate Active Carbon Neutral Certification.

Example 9: *An organisation is in the process of obtaining carbon neutral certification for FY 21/22. It is expected that certification will be finalised in December 2022. Until certification has been obtained, the organisation may only claim that it is in the process of obtaining Carbon Neutral Certification for FY 21/22 through Climate Active. Once the certification has been approved, the organisation may claim its Carbon Neutral status for FY 21/22 in line with the Climate Active guidelines. This includes use of the Climate Active badge per the Licence Agreement.*

Once an organisation obtains Climate Active certification, it is only valid for the period of one year. For ongoing claims, organisation's must continue to measure, reduce, offset, and report their emissions annually.

Example 10: *An organisation obtained Carbon Neutral certification in FY20/21. It is currently in the process of obtaining its certification for FY 21/22. The organisation may claim its carbon neutral status for FY 20/21, but must make sure that it only continues to claim certification once FY 21/22 has been completed.*

Net Zero.

The Science Based Targets Initiative Net Zero Standard is the only international standard for setting net zero targets. Organisations must commit to reducing emissions by 50% by 2030 and 90-95% by 2050.

What can I claim?

Organisations who set SBTi Net Zero targets are only able to claim that they are net zero, when they have reduced their emissions by 90-95% and all remaining emissions are being removed through the purchase of carbon removals. Net zero requires deep emission cuts and without internal decarbonisation initiatives, the status of net zero emissions is not met.

The Net Zero Standard does not require organisations to purchase carbon offsets. Instead, priority should be given to reducing emissions through internal decarbonisation initiatives or by influencing your organisation's value chain. This means that organisations who are Carbon Neutral Certified have not yet achieved net zero emissions.

Organisations may claim that they have set net zero targets in line with the SBTi Net Zero Standard. The target dates may be included in these claims as long as they have been validated by SBTi.

Example 11: An organisation has set a net zero target for 2040 following the SBTi Net Zero Standard. The organisation may announce that it has set a net zero target for 2040 and that it is working on a decarbonisation strategy to support this plan.

Speak to the Industry Leaders.

Ecovantage is an industry leader in climate solutions and supports organisations on their journey to 100% renewable energy, carbon neutrality, and net zero.

Our Decarbonisation Unit can provide the expertise required to support your organisation on its Climate Journey including supporting the development of marketing material on claims that can be made. From emissions inventories to strategy development and target setting, our team of specialists can provide support. Contact our Decarbonisation Specialists to find out more.

Contact Us.

1300 721 335

info@ecovantage.com.au

ecovantage.com.au

16/71 Victoria Crescent, Abbotsford VIC

Suite 903 Level 9, 213 Miller St, North Sydney NSW

74-76 Sir Donald Bradman Drive, Hilton SA

Suite 5.14 Tower 2 KonTiki Building 55 Plaza Parade, Maroochydore QLD



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