

succeed sustainably

Report 2018-2019

thinkstep anz



Our vision is for a **culture of sustainability** to be lived in every organisation.
Our mission is to turn this vision into reality so that **sustainability delivers value for organisations.**

about this report

This report is intended for all internal and external stakeholders including clients, employees, partners, and all parties interested in how thinkstep-anz approaches environmental, social and governance issues.

thinkstep-anz has evolved a great deal over the last two years. This report shares three key perspectives:

1. our changes, impacts, and growth in 2018 and 2019
2. global, regional and local developments in sustainability and how we demonstrate leadership through our services and internal operations
3. how we see thinkstep-anz and the sustainability sector continuing to grow in the future.

This report considers the topics raised in our recently completed materiality assessment and covers our most important and innovative activities in sustainability for the 2018-19 period.

We also address the ambitions laid out in our 2015-16 Sustainability Update, which included upskilling our staff to become Certified LCA Practitioners and improving our educational outreach through our webinar and workshop series (spoiler: we achieved both!).

Moreover, we have taken on board recommendations from the Sustainable Business Council in response to our 2015-16 Update, demonstrating our unwavering ambition to be an organisation that walks the talk.

Of course, an essential feature of this report is detailing how we measure and take steps to reduce our environmental impact. Herein we share our science-based target, B Corp certification, offsets and Zero Carbon Certification achieved through our partnership with Ekos, and the steps we're taking to further reduce emissions and waste in our operations.

This report has been inspired by GRI and <IR> guidelines, and sheds light on how we see the current state of sustainability practices and thinking. We want to go a step further as sustainability specialists by helping organisations in Australasia to move from measuring their negative impacts to enhancing their positive impacts. "Helping businesses succeed sustainably", after all, isn't just a tagline – it's our raison d'etre!

This report was made possible thanks to the enduring collaborative spirit of thinkstep-anz's dedicated team. We also wish to thank external stakeholders and clients who kindly contributed to our recent materiality assessment and whose own journeys and perspectives have helped to shape this report.

Questions or comments?

We would love to hear from you. Please send any feedback, thoughts or queries to our communications team at comms@thinkstep-anz.com

Cover image by Harli Marten on Unsplash

MORE TO EXPLORE

We have lots of additional information to share with you! Click on the icons below as you encounter them throughout the report to explore more:

Hyperlink to online content

Hyperlink to online video content

DISCLAIMER

This sustainability report covers the calendar years of 2018 and 2019. The report covers environmental, social and governance matters over this period and does not claim to cover financial reporting. The release date for this report is 22 October 2020. It has been approved by the Board and is signed on behalf of thinkstep-anz by Barbara Nebel, CEO, and Simon Whitehouse, Independent Director.

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Simon explains why sustainability and why thinkstep-anz

from our Chairman

"Walking the talk" is a fundamental principle of thinkstep-anz. This Sustainability Report for 2018-19 outlines our own sustainability credentials, demonstrating for our stakeholders our ambition to remain accountable and transparent in everything we do. It shows what we have done, how far we have come in our own journey, and how we will continue to work on our own footprint.

Our actions have included setting an ambitious science-based target approved by the Science Based Targets initiative. This is an important step to not only keep our own environmental impact in check, but also adds weight to our advice to our clients on frameworks to reduce their own emissions.

Over the past year, thinkstep-anz has grown significantly as an organisation serving the Australasian community. We are finding more companies are coming to us because they have heard great things about our reputation, our work, and our organisational principles. Our services range from assessing the complete environmental impacts of products for building and infrastructure organisations, to a materiality assessment for the whole red meat sector. In turn, we have valued and enjoyed working with you.

Writing this from home in Australia in 2020 gives an even sharper and greater perspective to sustainability. The major summer bush fires, followed in some areas by significant floods and then the COVID-19 pandemic, places greater focus on the importance of our work. It also highlights the need for all our leaders at every level of our community to grasp this great opportunity to do things differently. To give priority to sustainability in their decision making so that we can embed changes throughout our society to make our world a better place.

thinkstep-anz will carry on working towards these goals in Australia and New Zealand, while maintaining our contribution to numerous global organisations and networks. We will continue to volunteer our expertise to help shape decisions at all levels of Government and throughout our communities as part of our 'paying it forward' principles. The end goal for us all, at thinkstep-anz, our business and Government clients and partners, and our many community partners, is to help build a sustainable future for ourselves and our organisations.



Simon Whitehouse
Independent Director

from our CEO

Succeed Sustainably signals a milestone in our recent journey as an organisation. Here we reflect on thinkstep-anz's first two years as a company under our own governance structure – a change that has enabled us to better guide organisations to achieve their sustainability objectives while hitting our own ambitious targets too.

Indeed, it's important to put our own journey in the context of some really significant shifts in awareness of social responsibility, circular economy, and climate change. We've seen how grass-roots groups like the School Strike 4 Climate movement have raised significant awareness of the effects of climate change. The aspirations of such movements have also begun to meet up with the interests of corporate bodies. It feels like something has finally clicked.

In Australia, a first-time lawsuit has been filed against a pension fund for not taking climate risks seriously enough, while the passing of the Modern Slavery Act 2018 highlights today's expectation that large businesses be held accountable for their entire supply chains. Black Rock CEO Larry Fink summarised this trajectory in his 2019 letter to CEOs, outlining how fiduciary duty today no longer simply means financial growth, but rather the whole ESG framework.

As an independent company, we've had the opportunity to achieve greater financial results while raising the bar on what we can achieve in sustainability terms. In fact, as we've grown in numbers and increased the reach of our services, we've committed to stricter parameters by setting a science-based target and becoming a B Corp. We did this because we want to prove that a company's success can be bolstered by its commitment to sustainability, not hindered by it.

These initiatives also allow us to be better contributors to the business community, volunteering our time and expertise towards such educational platforms as workshops and webinars alongside our highly valued peers (and therefore also promoting SDG 17). It is this three-pronged approach of providing dependable services, walking the talk, and promoting collaborative environments, that we want to bring to you in this report.

While 2018-19 has been a period of positive growth for us, writing this foreword in 2020 offers some sobering, if illuminating, reflections. Through conversations with my peers, I was concerned that the pandemic would have negative impacts on the environment due to economic concerns taking priority. Instead, I see increasing requests for sustainability facts to support business decisions and organisations are poised to start their journey. My impression so far is that in spite of COVID-19,



"I am a translator. My languages are English, sustainability, and business."

"Perhaps the biggest takeaway of the current moment is that we can't afford trade-offs between economic recovery, social well-being, and environmental protection."

Barbara introduces Succeed Sustainably

sustainability has become firmly recognised as essential for businesses. Furthermore, as our 2018 transport sector report ***Creating a Positive Drive*** shows, we need to see behavioural change alongside technological advances. Achieving the former can often prove extremely difficult.

And yet while COVID-19 presents enormous challenges for companies and personal hardship for so many, it also proves changes at government, business, and the individual level, can happen if they need to. Pushing the boundaries in video conferencing and reducing commuting is really just the tip of the iceberg here.

Perhaps the biggest takeaway of the current moment is that we can't afford trade-offs between economic recovery, social well-being, and environmental protection. We must tackle all three together. Fortunately, many of the solutions already exist and the New Zealand government's latest initiative requiring large financial businesses and listed companies to report on climate related risks is an encouraging sign of things to come.

I'm looking forward to recovering better and we at thinkstep-anz are eager to work with you to bring about a brighter, healthier future. As our friend and partner Michael Braungart, co-founder of Cradle to Cradle has said, "we need to move on from doing less bad to be doing more good."

We hope you enjoy reading our report. It has been a truly collective effort and I want to acknowledge the amazing work the team has put in to complete it.

If it inspires any feedback, as always we'd love to hear from you!

Yours,



Barbara Nebel
CEO



Photo courtesy of WE-EF Lighting, a thinkstep-anz client

who we are

thinkstep-anz in 2018-19



we now work across
6 offices in **New Zealand**
and **Australia**



we represent
4 nationalities and
speak **10 languages**





we've grown from
11 to 17 people
(9.4 to 17.8 fte)

OUR TEAM



our scope 1 and 2 emissions
increased from 0.77 to 0.82 tonnes
in this period



1487 registrations
to our webinars
and workshops



we had our **GHG emissions target approved** by the Science Based Targets initiative
(see also p.17)



we've achieved a
B Corp score of 96.8



supported New Zealand's biodiversity by **trapping 61 rodents and possums, 2 mustelids, 1 hedgehog, 100 fowl, and 137 wasps!**

OUR ACTIONS

in this period we
completed **195 projects**





held over
200 stakeholder interviews for
materiality assessments

published **16 EPDs**





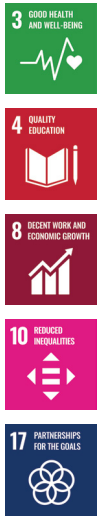
spent **211 hours**
contributing to **boards, technical advisory and working groups**

OUR WORK

At thinkstep-anz we're committed to integrating all 17 of the United Nations Sustainable Development Goals into our work.

This chapter is strongly focussed on the following 5 goals. These are reflected in all decision making and strategy to move the company forward sustainably.

Keep an eye out for the SDGs we focus on throughout the report



governance

Since a management buy-out in January 2017, thinkstep-anz has become an independent, locally owned company with sustainability experts based in Perth, Sydney, Auckland, Hamilton, Wellington and Christchurch.

A board of directors, including an independent Director Simon Whitehouse, oversees the governance of the company. The company is run by Barbara and Matthias Nebel (aka the SustaiNebels).

thinkstep-anz is registered as a business in Australia (thinkstep pty ltd) and in New Zealand (thinkstep ltd). Our future governance challenge will be to keep a horizontal structure and collegial team culture as the business grows, while supporting professional progression for our staff.



Barbara Nebel
Chief Executive Officer



Simon Whitehouse
Chairman and Independent Director



Matthias Nebel
Strategic Director

our culture

Our vision

At thinkstep-anz we want to see a **culture of sustainability** lived in every organisation. This means embedding sustainability within the goals and ambitions of every individual and group we work with, building on internal expertise, and delivering value.

This same vision extends to our team. We believe that in order to promote better sustainability practices we need to **empower our staff** to lead successful personal and professional lives. In turn, thinkstep-anz can lead with the transparency, integrity, and passion needed to shape the narrative of sustainability in Australasia.

Our mission

Our mission is to enable organisations to **succeed sustainably** through reliable data and a personalised approach. From our services to software, workshops to webinars, conferences and case studies, this mission underpins our every activity.

Our approach is environmentally focussed, socially conscious, and data driven. We provide the facts and figures to show the **business value** of sustainability initiatives, giving our clients and partners confidence to move forward in their sustainability journey.

Sustainability issues need to be understandable and the solutions accessible. We tailor our services to the needs and capabilities of a range of clients, whether SMEs (small and medium-sized enterprises), corporates, government agencies, associations, or not-for-profit organisations.

Watch our team tackle the beach house challenge



The thinkstep-anz team get together at Pukerua Bay

How we bring them together

thinkstep-anz's mission "helping businesses succeed sustainably" underpins our company's business thinking. Backed up by robust scientific methods and a well-established position in the sustainability sector, thinkstep-anz offers reliability and expertise to organisations big and small.

While we're a team of sustainability specialists, we also advocate for initiatives in business and industry that go beyond sustainability. Initiatives like the Science Based Targets initative, Cradle to Cradle®, B Corp, Gen Less, and regenerative practices, represent the future we're striving for.

Finally, the United Nations Sustainable Development Goals (SDGs) have become integral to our internal operations and service offerings. Accordingly, we help clients to translate strategy into a tangible contribution to achieving the SDGs.

thinkstep-anz joins Gen Less

our values

We want to promote responsibility, authenticity, and leadership across all sectors and at all levels. These values are fundamental to our vision for the sustainability sector:

Respect & Fairness: towards all internal and external stakeholders. Our employees are the lifeblood of the organisation, so we prioritise their wellbeing. Shifting to a sustainability focus can be a leap of faith for some clients—so we show understanding and respect towards organisations making this transition.

Honesty & Integrity: to stay true to our vision and values, we promote initiatives that work for greater environmental, societal, and governmental good. Ensuring the credibility of sustainability initiatives is key, so we are always on the lookout for inaccurate or misleading claims.

Empowerment: good leaders make those around them stronger. We look for opportunities to upskill staff and educate our stakeholders through digital channels and capacity building services. Our active participation in groups like the Sustainable Business Council (SBC), the Sustainable Business Network (SBN), and the Australian chapter of the UN Global Compact, provides opportunities to collaborate, grow our networks, and build expertise across sectors.

Transparency: holding ourselves to the standards we expect from others. We consult with our stakeholders, report on our emissions, and have our commitments regularly scrutinised by internationally recognised verifiers.

Accountability: each sustainability journey begins with an honest acknowledgment of what could be done better. We believe identifying risks and accepting assistance takes courage and humility. Setting a new course shows accountability.

Passion: doing our work with drive and conviction. We go to work every day with a determination to make a positive and lasting impact. We're extremely fortunate to be able to count on a team of devoted sustainability professionals to bring our organisational ambitions to life.

"While we have a very ambitious carbon reduction plan, our team felt that we also need to offset the emissions we cannot avoid. Investing in local projects that not only sequester carbon but also help with biodiversity, erosion control, water quality and community development was an additional bonus."

CEO Barbara Nebel

our certifications

We keep our skills and certifications up to date so that we're best prepared to help our clients and partners. Keeping up with the latest science, and with wider developments in the sustainability sector, are foundations to gaining the best-informed insights, offering reliable pathways forward, and knowing first-hand how to move with an ever-changing world.

Zero Carbon Certified

thinkstep-anz became certified as a "Zero Carbon Business" in 2019 by Ekos, offsetting the carbon emissions from our operations in New Zealand and Australia. Ekos is a social enterprise that provides certified carbon offsets from rainforest protection for the New Zealand carbon market.

The offsets support the Rarakau Rainforest Conservation Project and are Certified to ISO14064-2 and Plan Vivo carbon standard.

Learn more about how we "walk the talk"



Ekos CEO Sean Weaver presents Barbara Nebel with Zero Carbon certification



"The LCACP certification is important because it recognises that we have achieved a level of competence with LCA and are committed to comply with a professional code of conduct."

Sustainability Engineer Gaya Gamage

Get to know Gaya

LCA Certification

Emily Townsend and Gaya Gamage will become certified Life Cycle Assessment Practitioners in 2020 having completed their qualifications through the American Center for Life Cycle Assessment (ACLCA). The certification is recognised by the Australian Life Cycle Assessment Society (ALCAS), Life Cycle Association of New Zealand (LCANZ), and the ACLCA.

Emily is an experienced LCA practitioner and the current president of LCANZ, while Gaya has over a decade's experience working in LCA. Gaya is also Head of Quality Assurance at thinkstep-anz.

Emily and Gaya will be joining thinkstep-anz CEO and founder of LCANZ Barbara Nebel, Jeff Vickers (Technical Director), and Katharina Bauch (Team Lead) as certified LCA practitioners. Barbara and Jeff have both recently renewed their LCAP certification.

Climate Active Certification in 2020

In 2020, Emily Townsend and Katharina Bauch will seek to become Registered Consultants for Climate Active Carbon Neutral Certification for Organisations, the Australian Government's official carbon offset scheme. This means they can help organisations evaluate their carbon reduction needs and prepare for Climate Active certification, which offers a credible label recognising their net-zero carbon credentials.

Climate Active certified organisations contribute to Australia meeting its carbon reduction commitments by identifying, reducing, and where necessary, offsetting their emissions, producing benefits for business and government as well as the environment.

Registered consultants can help organisations to create their own carbon inventory and identify options for reducing and offsetting their emissions at an organisational level as well as for their products and services. Emily and Katharina, along with Jeff Vickers, are already Registered Consultants for Products and Services under the same scheme.

climate leaders coalition

Launched in July 2018, the Climate Leaders Coalition (CLC) provides a platform for ambitious business leaders in New Zealand to act across all sectors to reduce their emissions and with that, the harmful effects of climate change.

Signing up to the CLC was an easy decision for thinkstep-anz. Uniting businesses to reduce emissions through collaboration aligns perfectly with our vision of embedding a culture of sustainability in every organisation. Despite our small size, as sustainability specialists and members of Australasia's business community, we see ourselves as an equal partner and a ready advocate for the CLC's aims.

Examples of how we meet these aims:

- Setting a science-based target of keeping within 1.5°C of warming
- Regular emissions reporting
- Monitoring the emissions of our supply chain
- Having our emissions independently verified and offset

Our ambition is to go beyond the CLC 2017 pledge and meet the commitments in the 2019 pledge. In addition, we have achieved our aim of becoming a carbon neutral organisation, doing our part to see a carbon neutral New Zealand by 2050.

CLIMATE LEADERS COALITION

ON A MISSION TO REDUCE EMISSIONS IN NEW ZEALAND

All Coalition signatories commit to the following*:

We take climate change seriously in our business.

- We measure our greenhouse gas emissions and publicly report on them.
- We set a public emissions reduction target consistent with keeping within 2°C of warming.
- We work with our suppliers to reduce their greenhouse gas emissions.

We believe the transition to a low emissions economy is an opportunity to improve New Zealand's prosperity.

- We support the Paris Agreement & New Zealand's commitment to it.
- We support the introduction of a climate commission and carbon budgets enshrined in law.

* 2017 CLC statement, Climate Leaders Coalition website https://www.climateleaderscoalition.org.nz/about/statement Here the updated 2019 pledge, to which thinkstep-anz is one of 18 signatories in 2020, can also be found.

EPDs and Asaleo Care



Environmental Product Declaration for Tork®, Purex® and Sorbent® Toilet Tissue

Check out our specialised EPD webiste think-EPD.com

An Environmental Product Declaration (EPD) tells the environmental story of a product over its life cycle. It is accurate, independently verified, and globally recognised. For businesses looking to enhance their sustainability credentials, an EPD demonstrates to suppliers, consumers, and other stakeholders, a commitment to environmental sustainability.

thinkstep-anz has carried out EPDs for companies working in construction, timber and custom wood products, steel products, lighting installations, and architectural paint, among others. That amounts to over **50% of EPDs** currently registered under the Australasian EPD Programme. Our staff sit on technical expert groups for the Green Building Council Australia, Infrastructure Sustainability Council of Australia, and the Australasian and International EPD Programmes.

Developing and disseminating EPDs is integral to improving understanding of sustainable manufacturing across industries. Demonstrating transparency and accountability from clients who commission them, EPDs show the work manufacturers are doing to measure and mitigate environmental impacts. They also contribute to a growing body of documents communicating best practice across numerous sustainability indicators, including global warming potential, acidification potential, and water consumption. Manufacturers looking to assess and improve upon the impacts of their manufacturing processes can set a benchmark from which to build on with subsequent EPDs.

All in all, EPDs represent a win-win situation for producers and the planet.

thinkstep-anz and Asaleo Care

Together with thinkstep-anz, Asaleo Care developed the first non-building product EPD in Australasia for a selection of its tissue-based products manufactured in New Zealand under the Tork®, Purex®, Handee® and Sorbent® brands.

Asaleo Care is a market leader in Australasia for personal care and hygiene products with a strong focus on sustainable production and ethical sourcing. With some competitors now holding FSC or PEFC chain-of-custody certification, it was important for the company to further its commitment to environmentally conscious, science-based decision-making by producing the first EPDs for tissue products in Australasia.

The competitive advantage of EPDs according to Asaleo Care



"Environmental Product Declarations help everyone measure and improve - so ask for an EPD!"

Principal Consultant Steve Mitchell

Get to know Steve

Some key takeaways

- Pulp processed at Asaleo Care's Kawerau plant in New Zealand comes from certified sustainable sources. 100% of the virgin materials used meet the Forest Stewardship Council® (FSC®) standards promoting environmental and social responsibility. They also meet No Deforestation, No Peat, No Exploitation (NDPE) policies.
- Asaleo Care's paper products rely on a large share of renewable energy. Thanks to a partnership with Ngāti Tūwharetoa Geothermal Assets, most of the energy consumed at this plant is produced through geothermal steam. Coupled with an 84% renewable national electricity grid (MBIE, 2018*), Asaleo Care has been able to cut GHG emissions by more than half at its Kawerau facility since 2009.
- Since 2009, water consumption has decreased by over 30%, while the percentage of waste being recycled has nearly doubled.

These EPDs are especially important for Asaleo Care's customers who are increasingly identifying hotspots in their own procurement process. At a consumer level, Asaleo Care can also pull insights from its EPDs to better communicate the advantages of its products, along with an emphasis on local sourcing, manufacture, and energy generation.



Asaleo Care's Kawerau Plant. Photo courtesy of Asaleo Care

Given our ambition to encourage sustainable manufacturing, we're thrilled to see companies like Asaleo Care using Life Cycle Assessment to make decisions and be better placed to inform customers. We're also highly encouraged to see a circular economy cluster developing in Kawerau, with other manufacturers benefitting from renewable natural resources.

* https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/electricity-statistics/

how we implement the SDGs

The United Nations Sustainable Development Goals (SDGs) have been adopted by all 193 member states with the aim to end poverty, protect the planet, promote prosperity, and ensure peace for all.

We think about SDGs right from the first step in all of our projects and have been working hard to integrate the goals into our internal operations as well. We place the most focus on these nine SDGs, chosen by considering how their targets best relate to our client services, partnerships, emissions targets, and outreach.

It's an ambitious number, no doubt. However, our role as sustainability experts means leading with ambition. We will further strengthen our commitment to these SDGs by shaping future strategy around their targets.

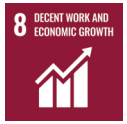
Watch our team dive into the SDGs at an interactive workshop in Wellington



SDG 3: Good Health and Well-being
Promoting healthy outcomes through our work with clients and physical and mental well-being for our team.



SDG 4: Quality Education
Growing capability in industry and our team through webinars, workshops, and support for universities.



SDG 8: Decent Work and Economic Growth
Translating sustainability into tangible business value to help businesses and their staff thrive.



SDG 9: Industry, Innovation and Infrastructure
Supporting sustainable innovation in key sectors by identifying hotspots and providing reliable data.



SDG 10: Reduced Inequalities
Leading by example by offering a stable and dependable work environment for our diverse team.



SDG 11: Sustainable Cities and Communities
Contributing to a low impact, energy efficient built environment through our EPDs and project LCA work.



SDG 12: Responsible Consumption and Production
Informing circular economy thinking and regenerative practices across diverse sectors through our LCAs.



SDG 13: Climate Action
Curbing our own emissions and working directly with organisations to measure and reduce their footprints.



SDG 17: Partnership for the Goals
Collaborating across industries, fostering partnerships, and playing an active role in the sustainability community.



Mount Whitfield Environmental Park, Cairns. Photo by David Clode on Unsplash

tracking our emissions

environmental impact

To advise others with integrity, we must reduce our own emissions while being **transparent** and **accountable**.

Key points:

- Our science-based target (SBT) has been approved.
- 2018 and 2019 footprints have been externally verified.
- We offset our emissions and have reduction strategies.
- Our emissions have increased as our business has expanded, a situation many of our clients also face.
- Our new office is energy efficient and was established on low-waste principles.

We have committed to

- robust and transparent disclosure of our emissions
- an ambitious carbon reduction target
- offseting our remaining operations emissions

Our emissions in 2018-19

Our carbon footprint covers operations in New Zealand and Australia. It is dominated by our scope 3 or indirect emissions (see table opposite), of which business operations are also included in our SBT (figure 1). Ekos has externally verified our 2018 and 2019 footprints.

Scope 1 and 2 emissions are our direct emissions and arise from energy used at our offices in Pukerua Bay, including purchased electricity, LPG used for cooking, and firewood used to heat the main office. The firewood also gives rise to biogenic carbon emissions. A summary of emissions is presented below:

GHG Emissions (tCO_2e)	2018	2019
Scope 1	0.27	0.27
Scope 1 (Biogenic)	3.61	3.10
Scope 2	0.51	0.55
Scope 3 – Business Operations	63.56	69.10
Scope 3 – Other	19.05	18.93

Our main sources of emissions (figure 2) are linked to personnel travel, including business travel and employee commuting. Purchased goods and services, such as our office paper and services from accountants, are also a significant source of emissions.

Other activities such as our use of leased office space, waste disposal, and our clients' use of our sold products (software licences), amount to just 3% of total emissions.

Figure 1: Emissions by scope (SBT only)

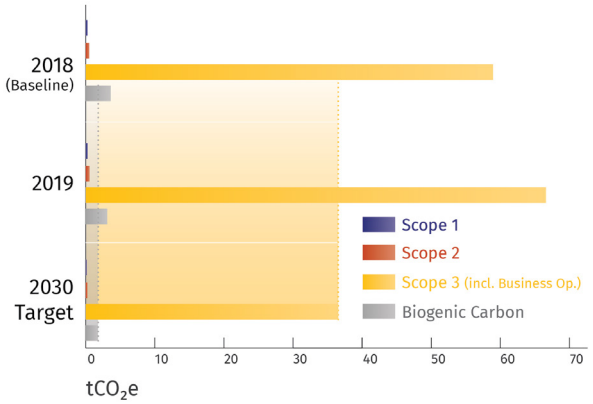
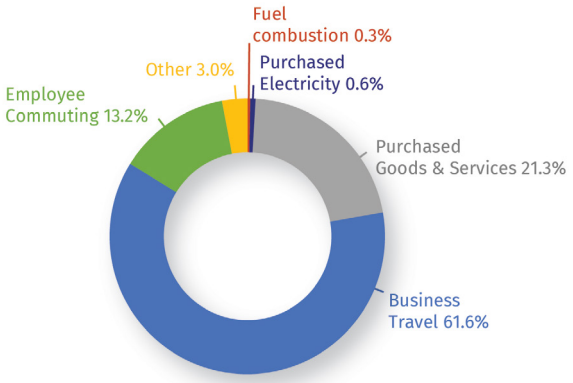


Figure 2: Emissions by activity 2019



What is a science-based target?

A science-based target is set to be in line with the decarbonisation needed to keep global warming increase below 1.5°C compared to pre-industrial temperatures. It is based on the latest climate science research on how to mitigate the worst effects of climate change. The target is also aligned with the Paris Agreement which unites all nations to tackle the issue of climate change as a collective.

Our science-based target

We commit to reducing absolute scope 1 and 2 GHG emissions by 51% by 2030 from a 2018 base year* (figure 3). We also commit to reducing absolute scope 3 emissions from business travel and employee commuting by 38% within the same time frame (figure 4). Our target has been approved by the Science Based Targets initiative.

*The target boundary includes biogenic emissions and removals associated with the use of bioenergy.

Meeting our science-based target

Business travel (mainly flights) and employee commuting still dominate our footprint. These emissions have increased from 2018 to 2019, with business travel increasing from 50.0 tonnes to 54.7 tonnes, and employee commuting increasing from 8.7 tonnes to 12.3 tonnes. Our increase in business travel is due partly to our growing business across the Tasman, with trips made to establish relationships with our Australian clients. This increase is reflected in revenue growth of 30% from 2018 to 2019, while business travel emissions rose by 9%.

Similarly, both our client base and educational outreach in New Zealand have grown considerably in this period, requiring more frequent flights to Auckland and other centres.

To limit our trans-Tasman flights, we have employed a principal consultant in Sydney. To reduce emissions in New Zealand, some of our staff have taken on more client-facing roles in their regions, especially our Christchurch-based employee who has helped us to reduce flights to the South Island. Finally, while most of our team are based in the Wellington region, our business model revolves around employing staff in different regions and working together remotely. We hold meetings at our Wellington offices a few times a year.

The increase in employee commuting is due to a higher number of staff now being based at our new Pukerua Bay office (near Wellington), with four staff members joining in the second half of 2019 alone. One result of this growth has been a car-pooling initiative started at the end of 2019. The benefits of this initiative will be seen in 2020.

Figure 3: Scope 1 and 2 Emissions (excluding biogenic carbon)

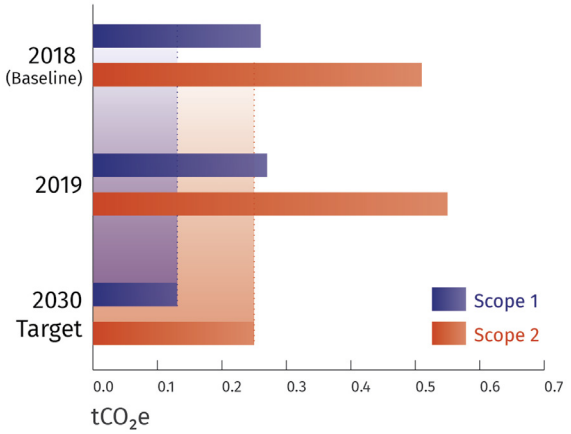
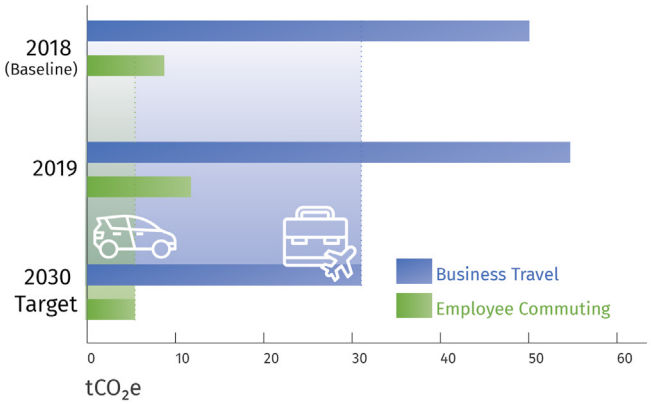


Figure 4: Scope 3 Emissions (SBT only)





Looking back

In our 2015-16 Sustainability Update we set ourselves two goals for our emissions: to include the emissions for commuting employees and estimates for home offices; and to offset our carbon emissions. We're proud to have achieved both goals in time for the current report.

Further emissions reduction measures

Our emissions reduction strategy is broader than our science-based target and covers all our scope 3 emissions. Many of our clients are also our suppliers, so the reduction opportunities we have identified in our projects with the likes of Asaleo Care, Dulux, and Fletcher, help to reduce our scope 3 emissions.

We have **offset** the business operations emissions we cannot avoid using New Zealand carbon offsets and are Zero Carbon certified with Ekos. This excludes our biogenic carbon emissions and the emissions arising from our purchased goods and services.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Supply chain and waste management

We have also recently moved to a new office to house our Wellington-based staff. This office has been renovated and fully insulated with an eye towards **energy efficiency**. To achieve our low waste goals, we repurposed or **refurbished materials** such as used carpet tiles and office equipment, except for monitors and chairs for ergonomic reasons and energy efficiency.

Reducing waste is natural for a team of sustainability specialists. Everyone brings reusable food containers to work and keeps the recycling and composting systems running smoothly. During our team gatherings, we choose sustainably produced New Zealand wines, and beer supplied by our clients Asahi and Lion.

David Tong from WWF speaks to Barbara Nebel about thinkstep-anz's science-based target

Next steps

As an SME, the influence we have on our suppliers remains relatively low. We target low-carbon goods and services and we encourage our suppliers, in some cases also SMEs, to develop their own carbon reduction strategies.

We have encouraged our advisors to start their sustainability journey, facilitating a strategy workshop for some of them using the SDGs. As a result, they're now looking at B Corp certification. Steps like these will help us to use real emission factors for our purchased goods and services in the future.

We are working on a live emissions reporting system through SoFi software to hone our reduction strategies. We've also recently conducted an internal materiality assessment to tie our carbon reductions with other sustainability measures.

For our scope 1 and 2 emissions, we are investigating more efficient heating sources for our offices to complement the insulation we have installed.

For our scope 3 emissions, the bottom line is to fly less. We already use videoconferencing heavily for internal meetings, and we will increase our use of online meetings with clients to reduce air travel.



Our new Pukerua Bay office



"Our B Corp journey has been one of building a better business by reflecting on and challenging ourselves"

Sustainability Economist Florian Nebel

Get to know Florian

B Corporation

In June 2018, we successfully achieved B Corporation certification — a significant milestone for us and a priority once we became an independent company. We are proud to be amongst the first 20 B Corps in New Zealand and actively promote the cause down-under.

Put through a rigorous assessment process, B Corps are businesses that are certified as meeting the highest standards of sustainability, transparency, and accountability. Rather than just certifying what we do, of equal importance is how we do it. B Corp helps us to show we're walking the talk on many of the same things we're helping our clients achieve.

B Corp status **inspires** and requires continual improvement — there's no time for resting on our laurels. When we renew our certification in 2021, the assessment will be even more challenging and our science-based target and carbon neutral status will be vital to success.

Barbara in conversation with Andrea De Almeida about the importance of becoming a B Corp



thinkstep-anz becomes a certified B Corp

set it like you mean it!

In September 2019 thinkstep-anz collaborated with the World Wide Fund for Nature (WWF) to host three workshops dubbed 'Set it like you mean it' to demystify the carbon target setting process for organisations.

The Auckland, Wellington and Christchurch workshop venues were close to capacity as attendees gained insight into both contextual and practical elements of carbon target setting.

The free sessions were supported by industry experts from Mercury, NZ Post, Contact Energy, Christchurch International Airport, New Zealand Merino Company, and SkyCity who shared their knowledge and experience in addressing corporate carbon challenges. As a founding member of the Science Based Target initiative (SBTi), WWF outlined the importance of companies setting ambitious and meaningful corporate GHG reduction targets.

We hope that the participants found the workshops as rewarding and stimulating as we did!



Successfully addressing climate change requires a collaborative, science-based approach.

"In each workshop, we were supported by leading organisations across New Zealand to upskill and build sustainability capability amongst their peers" says Barbara Nebel. "It was gratifying to bring together businesses and experts, sharing perspectives so that we can all contribute to a low carbon future".



George Street, Sydney — Photo by Laura Cros on Unsplash

our outlook

future perspectives



As part of our own foresight work (see p.29), we regularly look ahead at the changing landscape for sustainability to better prepare ourselves for future trends.

Sustainability is proving to be good for business across many industries, with growing demand among consumers and business clients for companies to "do the right thing". Investors are increasingly attracted to companies with a focus on sustainability, while **green finance** is becoming more prevalent with the rise of green bonds and sustainability-linked loans. At the same time, expectations around sustainability action are also growing.

Monitoring and reducing environmental impact is relatively well established via carbon footprinting among other indicators, and carbon neutral product lines are common. However, as ecosystems continue to be degraded, and as ever-greater numbers of species are pushed to the brink of extinction, there is increasing recognition that minimal or even neutral impact is not enough—business has to give something back.

Towards regeneration

Regenerative thinking, with an emphasis on mutually supportive systems of people and nature, is just one way in which companies and their investors are recalibrating their business goals to meet both their environmental obligations and customer expectation. While it represents a major paradigm shift for many sectors, momentum is building for this to become the new benchmark. The B Corp movement is on a similar mission to create a positive impact by weaving purpose in with profit for businesses. At thinkstep-anz, we believe that business can intrinsically **be a force for good**, and we act alongside other B Corps to transform this principle into a reality.



"Getting to "zero" is still the key goal in many sustainability circles: zero impact, zero waste, zero harm. However, everything we do has an impact on the environment around us. The challenge we face is to maximise our positive impacts, to minimise our negative impacts, and to build resilience into our systems. Our language is already changing. "Net-positive" demonstrates that impacts can be positive as well as negative. The next logical step is to define what "positive" looks like in your context."

Technical Director Jeff Vickers

Get to know Jeff

Forward looking

Much of what we do as sustainability practitioners—whether it be materiality assessment or carbon accounting—tends to be backward-looking. However, as the effects of climate change become increasingly 'baked in', businesses must imagine resilient futures that can **drive improvements** in decision-making today. This will enable us to create large-scale positive impacts to tackle pervasive global issues such as those highlighted by the UN Sustainable Development Goals, including climate action and social inequalities.

Linked to this is a broader recognition of the need for resilience for both business and society as a whole, in the face of climate uncertainty. The Task Force on Climate-related Financial Disclosures (TCFD) (more on page 28) has set a framework for reporting on climate-related risks, which is starting to see broad uptake internationally. Understanding risk is part of the fiduciary responsibility that company directors carry, along with today's responsibilities of ethical, environmental, and social values.

Businesses as change makers

Businesses are increasingly aware of their role as leaders, deploying their influence to drive government initiatives. In New Zealand, the collective voice of the **Climate Leaders Coalition** supported the unanimous passing of the Zero Carbon Act and creation of the Climate Change Commission.

Sustainability is no longer an 'add-on', with companies now aspiring to go beyond the status quo. Creating a positive impact will require business actions to be driven by credible data and consider the full life cycle impacts of products and services. Furthermore, decision-making should consider the health and wellbeing of the full value chain, from suppliers and workforce to clients and consumers, to ensure that no-one is left behind in the transition to a more **sustainable tomorrow**.

materiality assessment

Materiality assessments provide unique value and insights by systemically collating and prioritising topics or factors deemed important by stakeholders. We have used our assessment to ensure the topics that matter most to our stakeholders remain a central focus of our organisational thinking and reporting.

The topics presented on the matrix were identified through a consultation process, including open-ended discussions, with key thinkstep-anz stakeholders. This included clients, staff, industry bodies and thinkstep AG.

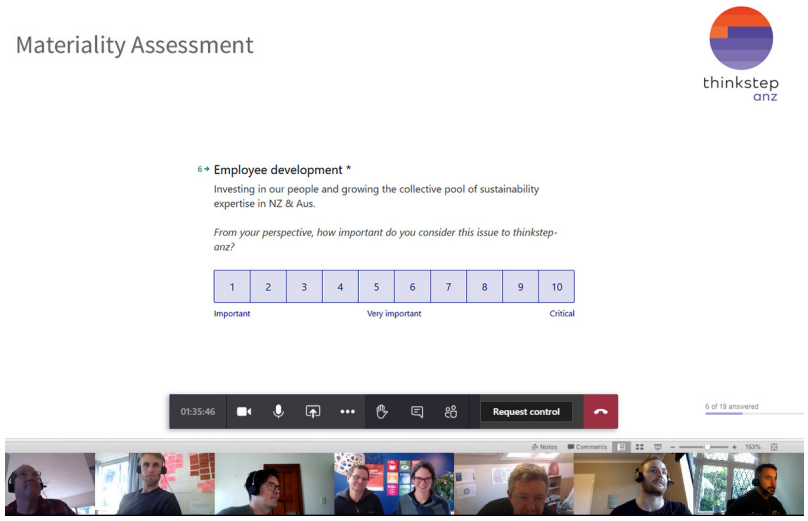
A second round of stakeholder engagement determined priorities by assessing each topic's importance to stakeholders and the potential business impacts. Stakeholder importance was assessed via a questionnaire and included both internal and external perspectives. The business impact was assessed in a workshop with thinkstep-anz team members and included evaluating the potential impact of each topic on criteria such as client experience and financial performance.

Results

The topics in our materiality matrix fall along a clear diagonal trendline. This suggests that what matters most to stakeholders also has the biggest impact on the business. This makes it easier to determine which ones to address first.

1. How we work

At the top, we have brought topics such as client relationships, thought leadership, science-based data, and employee development to life in this report through case studies and examples of our non-client related initiatives. The importance of these topics reflects the values we want to support through our work.



thinkstep-anz's Materiality assessment ranking process



2. Making a difference

Topics like sustainability leadership and handprint are of growing importance to stakeholders. While they may have less impact on the business, conversely they are areas where we can make the most impact by demonstrating leadership or using our **influence** to effect change in organisational behaviour. This makes leadership, communication and influencing skills crucial to the change we want to see.

3. Advancing sustainability concerns

While waste & circular economy and procurement & supply chain turn up as "lower priority", they are still important topics to us. We must also balance the position of topics with the ability thinkstep-anz has to influence each topic. For example, although capacity building, which refers to building sustainability capacity within client organisations, is positioned near the middle of the matrix, we have a unique opportunity to grow the pool of **sustainability expertise** in Australia and New Zealand. As a result, it has become a priority area for us and, where possible, our projects or project delivery contain an upskilling component.

climate-related financial risks

With a greater demand for transparency and accountability from stakeholders, government, and consumers, we believe that clearly understanding climate-related risks and opportunities will soon become a crucial, if not mandatory, practice across all sectors.

thinkstep-anz and TCFD

Our climate impact is currently assessed through our carbon footprint. Now we will go further to understand how climate change impacts thinkstep-anz as a business.

In 2020, we will become an official supporter of the Taskforce on Climate-Related Financial Disclosures (TCFD). The TCFD provides a framework for understanding and **disclosing risks** and opportunities. This complements classical sustainability reporting frameworks which focus on the impacts of businesses on environmental, social and governance issues.

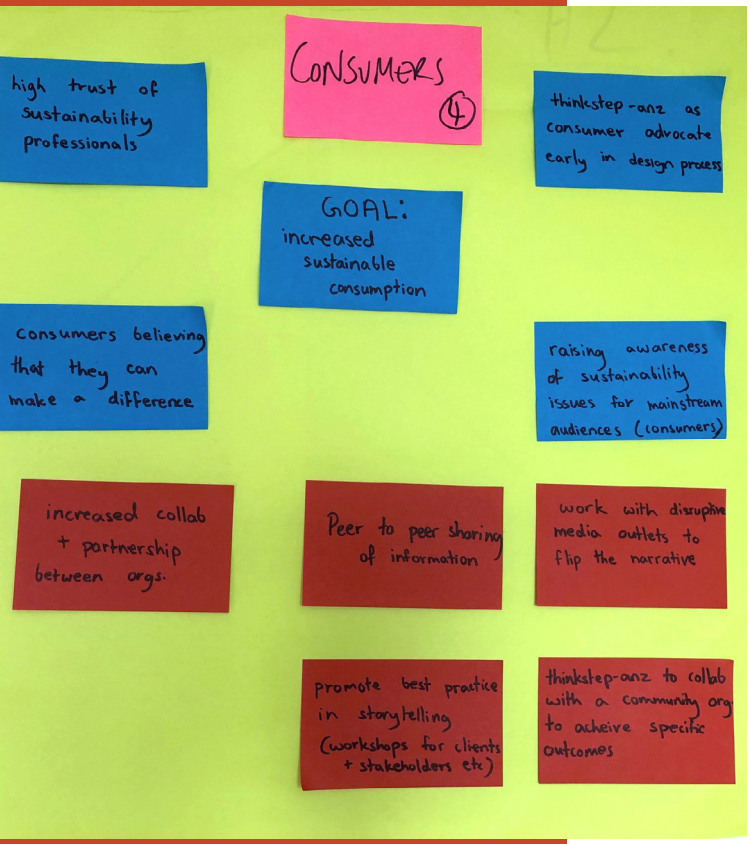
At this stage, our likely risks will include increased running costs due to rises in fuel prices, and the costs and impacts associated with business travel. Accordingly, we also know that a greater push for climate risk assessment and the transition to a low-carbon economy can result in more business opportunities for thinkstep-anz.

Because TCFD will become an important requirement for our clients and partners in the near future, we will cover climate-related financial disclosures in future webinars.

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

"We see TCFD reporting as an important piece of the puzzle in understanding the relationship between climate change and business. It fits with what we do as a business"

CEO Barbara Nebel



Foresighting session we carried out during thinkstep-anz's annual team days

strategic foresight

Regenerative Foresighting

In 2019, we broadened our forward-looking capabilities for clients with futurist Phil Tate joining our team. An experienced strategic foresight and regenerative practitioner, Phil adds significant value to our team of specialists already carrying out in-depth strategy and materiality projects.

Regenerative foresight helps teams to better understand complex environments through innovative tools and frameworks. At a time of unprecedented change and challenges for humanity, it enables more diverse thinking and opens our team to possibilities beyond the now and the obvious.

For our clients, **regenerative foresight** allows them to anticipate likely change, reducing unforeseen risks. By expanding the range of opportunities and options, our clients can prioritise actions and make more informed and **robust decisions**.

Phil has been an independent foresight consultant for ten years and is a member of the Association of Professional Futurists.

Read more about Phil and stategic foresight here

materiality with Sanford



"A materiality assessment is the ideal basis for setting strategy: stakeholders' opinions help to prioritise actions and the process itself develops stronger and lasting bonds with those stakeholders."

Sustainability Strategist Simon Love

When they wanted to carry out a broad engagement process with their stakeholders, one of New Zealand's largest seafood companies and thinkstep-anz's regular partner Sanford Ltd called on Phil to facilitate a series of materiality workshops. Internal and external stakeholders came together in Marlborough and Tauranga to deliberate on current and future challenges, as well as the values and opportunities for growth that actors in the local industry find most important.

Using Three Horizons framing, Phil helped Sanford's stakeholders to collectively generate future visions and the potential steps to achieve them.

Here are some inspiring visions that came out of the Marlborough workshop:

- **Local community:** a seamless integration of shared values and aspirations
- **Iwi:** A vision of the future that focuses on the long-term
- **"Generation Greta" and consumers:** In search of authenticity and transparency
- **Research community:** Using bold, open thinking to create new lines of business



Phil runs a materiality and foresighting workshop with Sanford

setting sector-wide priorities

In 2019, the Red Meat Profit Partnership (RMPP) engaged with diverse stakeholders of their industry. Priority issues identified by processors (works), farmers, leading companies like ANZCO and Alliance, and big international stakeholders inform and guide industry strategy.

thinkstep-anz ran the engagement process during the formation of the New Zealand Chapter of the Global Roundtable for Sustainable Beef, informing initial goals and policies.

Materiality assessment

We engaged internal and external stakeholders through interviews and focus groups to identify the top issues, which were then ranked by importance and business impact to form a materiality matrix. Stakeholders also identified priority areas for future work, and metrics that should be tracked and managed in the future.

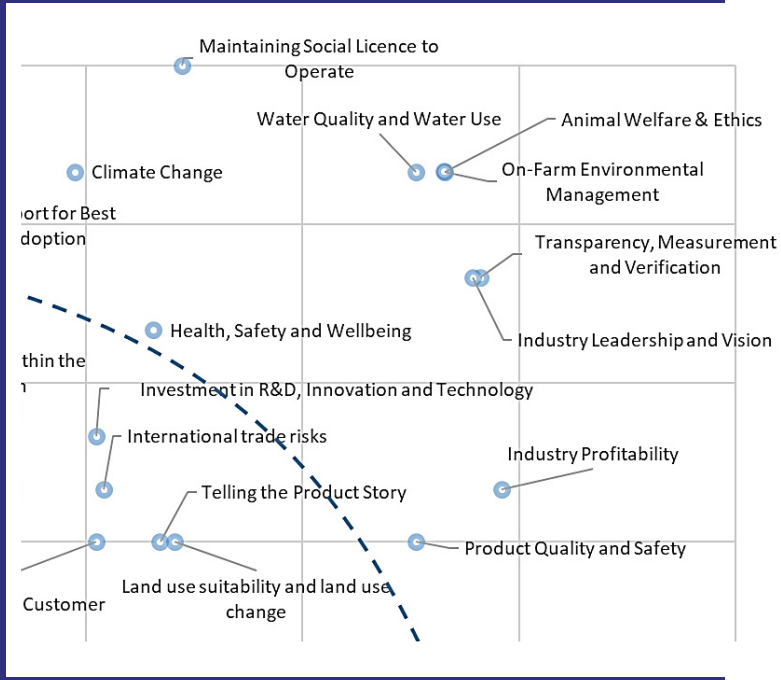
Results

In general, we found that the views of internal and external stakeholders aligned on many issues. The industry was seen as being well-positioned to make huge economic and environmental contributions to New Zealand and is currently developing knowledge that could have international significance. Stakeholders saw industry alignment, leadership, and strategic vision as key to taking advantage of these opportunities.

Transparency, measurement and verification as well as maintaining social license to operate, emerged as priority issues. These issues referred specifically to the areas of farm environmental management, water quality and quantity, animal welfare and ethics, and climate change.

Conclusions

This study shows how stakeholders from across a nationally significant and diverse industry can be engaged meaningfully. Highlights included engaging with potential critics (e.g. WWF, Forest & Bird, Environmental Defence Society) and with animal welfare groups, demonstrating that the red meat industry is interested and prepared to accept input from all directions. Strong engagement from the red meat industry followed, highlighting that industry actors are intent on having a deeper understanding of these results.



Key material issues of RMPP materiality matrix

Read the full report on the RMPP website



Kaikoura Dolphins - Photo by Pablo Heimplatz on Unsplash

thought leadership



ahead of the curve, together

When it comes to transitioning to a zero-carbon, regenerative world, the task and opportunities are bigger than any single organisation. We seek to maximise the impact of sustainability through reciprocal memberships and partnerships as well as collaboration with peers.

Staying ahead of the curve for us means striving for continuous improvement, as well as gathering and sharing knowledge with others, so that we can bring about meaningful change together.

We are active members in the organisations we join, and we lead collaborative workshops and webinars, contribute to submissions on government policy, and participate in steering groups and technical advisory services.

Membership organisations provide perhaps the best overall platform to collaborate with peers and to operate jointly as a sector rather than on an individual operator basis. Similarly, by establishing partnerships with our clients and like-minded organisations, we are practicing the tenets of circularity, ensuring that all actors remain transparent, accountable, and above all sustainable, across the whole supply chain.



Climate Leaders Coalition First Anniversary July 2019. Photo supplied by CLC

Banksia Awards

Barbara Nebel sits on the judging panel of the Banksia Sustainability Awards. The long running event hosted by the Banksia Foundation was established to “celebrate sustainable development by businesses, communities, individuals and governments”.

our memberships

thinkstep-anz belongs to a network of passionate sustainability experts and businesspeople. We actively engage with the sustainability community in New Zealand and Australia to share our knowledge and learn from some of the best innovators and business leaders in the region.

During 2018-2019 we have steadily increased our memberships in important Australian and New Zealand organisations across the areas of sustainable business, green building and infrastructure, Life Cycle Assessment, and more.

Our memberships align with our wish to develop our role as **collaborators** and thought leaders in sustainability. We place great emphasis on leveraging our expertise to build long-lasting and effective relationships, working together in the name of climate action, sustainable business, and the wellbeing of our employees and communities.

Life Cycle Association New Zealand

As life cycle specialists we are lucky to be able to call on the experience of CEO Barbara Nebel, founder and former president of the Life Cycle Association of New Zealand (LCANZ), and Emily Townsend, one of our senior Sustainability Engineers and **current president** of the association.

LCANZ was established in 2009, bringing together New Zealand’s Life Cycle Assessment and Management professionals to increase input towards government policy, enhance visibility of LCA and LCM outcomes, and better establish national and international guidelines and practices locally. LCANZ members can also offer technical advice where needed.

We consider a strong **LCA community** a crucial element to growing sustainability initiatives in New Zealand.

Driving our community forward

Our staff members act in a number of other leadership roles across the sustainability community. The following are some of the roles we fulfill:

Executive Committee
Barbara Nebel

AusLCI Database Committee
Barbara Nebel

Programme Manager
Emily Townsend

Steering Committee
Barbara Nebel

Technical Advisory Group
Barbara Nebel

Chair of the Board of Directors
Steven Mitchell

Technical Advisory Group
Barbara Nebel

LCA Expert Panel
Jeff Vickers

Technical Advisory Group
Barbara Nebel

Sustainable Materials Advisory Panel
Emily Townsend

New Zealand Working Group
Emily Townsend

President
Emily Townsend

Founder and Board Member
Barbara Nebel

Best Practice Working Group
Jeff Vickers and Gaya Gamage

We are proud members of and contributors to the following organisations:

cultivating partnerships

Since becoming an independent company in January 2017, we have maintained a fruitful relationship with former parent company thinkstep AG (now part of Sphera Solutions Inc.).

thinkstep AG's powerful LCA and footprinting software GaBi continues to have a central place in our projects. We are also a reseller of GaBi software and provide training for clients and at New Zealand and Australian universities. Additionally, we remain resellers and users of their SoFi software for sustainable management and reporting.

Being able to sell and implement software helps our clients to **build internal capacity** and be more independent from us. For this reason, we are proud to be able to help clients take on projects internally and track their progress over time.

thinkstep-anz and thinkstep AG continue to collaborate on projects like materiality assessments and strategy development. We provide thought leadership pieces for them to share with broader networks, playing our part in global sustainability conversations while expanding our reach beyond Australasia. Additionally, we continue to provide training on new service offerings such as consulting on the UN Sustainable Development Goals (SDGs).

A highlight for 2018 was delivering a client workshop on the SDGs at the >>think 2018<< Symposium and the invitation of Lisa Martin of Sanford as a keynote speaker. Finally, our Technical Director Jeff Vickers has a role on thinkstep's global quality assurance team, thereby receiving thinkstep AG support for our projects, and in turn, providing Quality Assurance support on projects for which we can offer specialist knowledge.



Lisa Martin and Barbara Nebel at the >>think 2018<< Symposium



“thinkstep are the ideal Cradle to Cradle® partner because they analyse the impact along the supply chain as well as the materials used in a product and can define it in a digital world using reliable data. This helps to understand the systems as nutrients.”

Professor Michael Braungart, co-founder of the Cradle to Cradle® methodology

Cradle to Cradle®

Cradle to Cradle® is a design and innovation concept based on the safe and potentially infinite use of materials in nutrient cycles. In September 2018, we established a strategic partnership with the Environmental Protection Encouragement Agency (EPEA) to accelerate the uptake of regenerative design through Cradle to Cradle® principles in Australasia.

By combining quantitative impact assessment using Life Cycle Assessment (LCA) and the Cradle to Cradle® design principles, EPEA and thinkstep-anz support businesses to improve existing products and adopt new approaches to product innovation, moving from a ‘take, make, waste’ economy to a beneficial circular economy.

“Including the Cradle to Cradle® concept in our projects allows us to create positive change by influencing products and services at the design stage instead of just reducing negative impacts—or in the language of Cradle to Cradle®—move from doing less bad to doing more good”, comments Barbara Nebel.

Jointly thinkstep-anz and EPEA help to facilitate step change by offering Cradle to Cradle® and LCA training, systematic methodology, certification of products, tracking of healthy materials, and calculating material circularity indicators.

cradle to cradle

EPEA
PART OF DREES & SOMMER

Michael Braungart sheds more light on our strategic partnership

handprinting with Beca

thinkstep-anz teams up with companies such as Beca to explore how the handprint concept can be better defined and used to evaluate the positive environmental outcomes of their work with clients.

If 'footprint' refers to the impacts a project or organisation has on society and the environment (e.g. carbon footprint and water footprint), 'handprint' is the positive contribution that can be made. This handprint can come from reducing someone else's footprint, or through active restoration of a system.

Professional services companies like Beca and thinkstep-anz often have footprints many times smaller than their clients and the projects they are involved with. Yet, the potential for these companies to have a positive influence by reducing a project's footprint can be significant.

Through this joint initiative, we sought to better define the handprint concept and to start to understand how it might be applied alongside more traditional footprint measures.

How the handprint works

At thinkstep-anz we have conceptualised the handprint as the difference between the actual footprint (for example, the carbon footprint of a building) and the expected footprint if the partner company were not involved (the baseline).

For example, if a manufacturing facility switches from using coal to renewablwe energy at the advice of their partner, the difference in emissions would be considered as that partner's handprint.

This calculation would be made through a life cycle assessment (LCA) (in this case, a carbon life-cycle assessment), with all inputs (energy, materials, natural resources) and outputs (waste, emissions) included alongside potential environmental impacts.



"Managing impact requires a holistic approach. That means not only taking a full life cycle perspective but understanding how your organisation can work with clients and partners to improve systems for collective benefit."

Team Lead Katharina Bauch

Get to know Katharina

sector-focused reports

We are proud to have contributed to critical discussions around the future of New Zealand's carbon emissions through three reports investigating the impacts of the construction and transport sectors.

The reports highlight how technological and behavioural shifts in transport, and attention towards the entire life cycle of construction projects, are required to meet New Zealand's' 2050 zero carbon ambitions. These reports represent our wider goal to promote innovation towards systems change in New Zealand and Australia by offering scientific insights that can go on to inform government policy.

Creating a Positive Drive: Decarbonisation of New Zealand's transport sector by 2050

The principle conclusion of this report was clear: transport has a key role to play in New Zealand's low-carbon future. ***Creating a Positive Drive*** presents four future visions for New Zealand in which the carbon footprint of transport is reduced by up to 90% of 2015 levels. This would mean a 17% reduction in New Zealand's total greenhouse gas emissions.

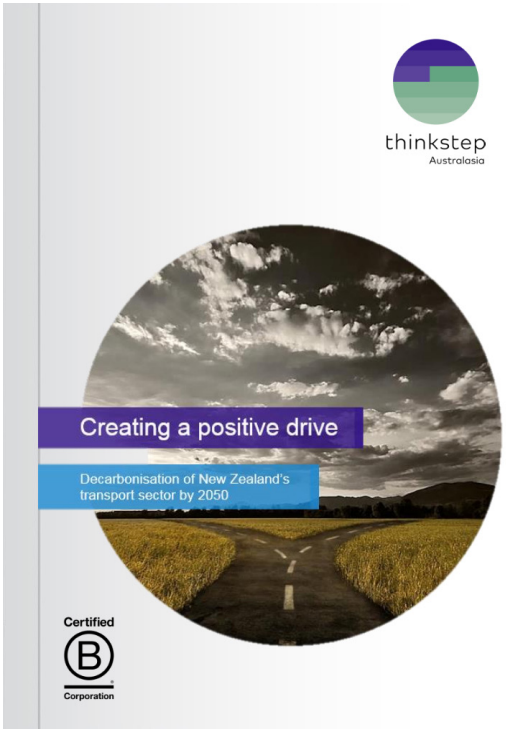
The scenarios considered in the report are deliberately optimistic, focusing on a complete transition away from fossil fuels towards renewable energy. While some of these suggestions, such as nearly doubling electricity generation, were ambitious in their scope, the good news is that many of these solutions already exist.

The report emphasises policy measures to encourage behavioural as well as technological changes, including promoting ridesharing and improving consumer access to electric vehicles. Investment in biofuels and renewable hydrogen, together with continued investment in renewable electricity generation, would be logical next steps.

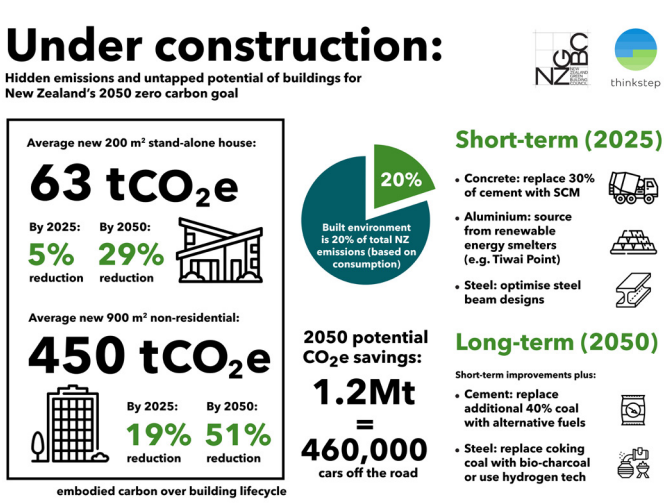
Hotspot or Not? The carbon footprint of New Zealand's built environment

This report was one of two major projects in 2018 investigating how the built environment contributes to New Zealand's overall greenhouse gas emissions. While the existing research showed figures as low as two to five percent, our findings suggest that the built environment could in fact be responsible for approximately 20 percent of New Zealand's total carbon footprint.

To reach these conclusions, we used a methodology applied by organisations such as the European Commission and Motu Economic and Public Policy Research. This approach allocates emissions to a sector



Download the full reports here



at the point of consumption rather than production. It also considers the entire life cycle of buildings from the extraction of raw materials to the building's energy use and treatment of construction waste. We are pleased to see our findings informing recent government and media reporting on building sector-related emissions.

Under Construction: Hidden emissions and untapped potential of buildings for New Zealand's 2050 zero carbon goal

Written on behalf of NZGBC, *Under Construction* identifies opportunities to decarbonise New Zealand's building and construction sector by 40%, with a focus on embodied emissions from now until 2050. We demonstrate strategies that could save approximately 1,200 kt CO_2e per year: equivalent to taking 460,000 passenger cars off the road permanently or 15% of New Zealand's total light vehicle fleet.

Other findings from the report include the key materials contributing to embodied GHG emissions in New Zealand with steel and concrete contributing more than 50% of the carbon footprint of both residential and non-residential construction. Aluminium was also very significant for non-residential construction, while for residential construction, timber framing was the next biggest contributor, followed by paint, aluminium, and plasterboard.



Image: Shuttershock

Download Under Construction here

webinars

Education and awareness of key sustainability issues are essential to get the ball rolling on pressing sustainability issues. Our free webinars cover a wide range of subjects, with topics in 2018 and 2019 including the benefits of Environmental Product Declarations, the circular economy, modern slavery, carbon reporting, and B Corps enabling businesses to be a force for good.

Through our webinars we communicate sustainability issues as well as creative solutions to give organisations and interested individuals the knowledge they need to take action for meaningful change.

Creative collaborations

Actively shaping the sustainability landscape for the better is a job that is best done in partnership with others. Our webinar series ***Straight from the horse's mouth*** features industry leaders and technical experts speaking alongside our own sustainability experts. Whether it is for organisations such as the beauty and lifestyle-based B Corporation Ethique or steel manufacturing giant InfraBuild, we provide a platform to share advice and insights gained from years of experience with the wider community.

Connecting with our audience

We gather feedback from audience members after webinar sessions, including suggestions for improvements and future topics. This feedback helps to guide our planning for future webinars, thereby continuing to meet audience demand and driving sustainability conversations into tomorrow.



Some of our most popular webinars from 2018-19

We are currently covering a range of really exciting sustainability topics with our partners. Keep up to date with our latest webinars here!

the love triangle

As scientists, storytellers, businesspeople, and environmental advocates, it is our responsibility to not only stay informed ourselves, but also help our stakeholders make the most of new directions in sustainable thinking.

Progressive businesses are now moving beyond the status quo concept of 'sustainability'—achieving balance between business success and reducing negative environmental and social impacts.

This balance, while good, isn't **good enough** in the long term. So, we emphasise the "love triangle" concepts of LCA, circularity, and Cradle to Cradle: each one complements the others. We don't simply minimise or eliminate environmental impact, but aim higher towards a positive environmental footprint.

Breakfast Session with Callaghan Innovation

In 2018 and 2019 we took our love triangle to Callaghan Innovation. At a breakfast session, Barbara Nebel discussed ways to approach life cycle thinking, circularity and Cradle to Cradle with attendees, sharing the conclusion that these concepts require ever-greater collaboration across the supply chain.

A life cycle approach

A life cycle approach considers environmental impacts such as carbon footprint and use of resources across all stages of a product's life cycle, from when the raw materials are grown or gathered to where the product ends up after it has been used. The life cycle approach highlights the overall environmental impact of a product and is a great starting point for identifying and improving on environmental hotspots in the manufacturing industry.

Circular Economy

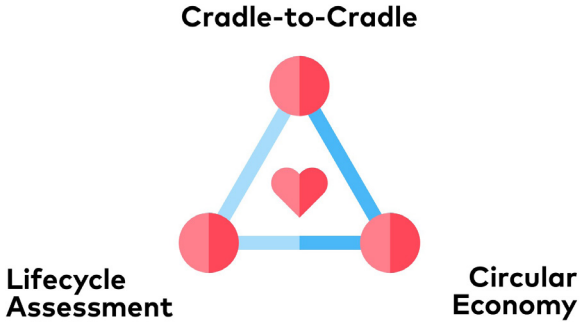
The circular economy system requires us to reconsider the entire life cycle of our products and resources by designing out waste, and is radically different from our standard linear models of extraction, use, disposal. Rather, these systems use materials and technologies that extend the lifespans and potential reuse value of the things we produce while minimising unintended waste and pollutants as far as possible.

Rethink material use

The Cradle to Cradle (C2C) concept goes one step further to ensure that all materials used in production can be reused as a nutrient. These nutrients are either returned without harm back into the biosphere, or the material is continuously reintroduced into the manufacturing process without losing its value. In the case of a car tyre, C2C looks not only at what happens to a tyre at the end of its useful life, but also at the rubber dust that is left behind from everyday use of the vehicle. This way, it accounts for the overlooked environmental impact of rubber as it leaves the product and re-enters the environment.

Do more good, not just less harm

Damaging practices don't become positive just because we do them less; they just serve to delay the inevitable. C2C and LCA complement eachother, with LCA studies focusing primarily on reducing negative impact and C2C on optimising positive impact. These approaches taken together can inform a wider circular economy.



getting interactive with SBN

The Sustainable Business Network's annual conferences in 2018 and 2019 offered unique opportunities to meet with leaders in business, government, and civil society to discuss future paths for a sustainable economy in New Zealand.



SBN's Lauren O'Connor on 2018 attendance

"At SBN's 2018 conference - 'HOMEGROWN – Inspiring local stories of sustainability success', Jeff Vickers' contribution to the 'Business Confidence Panel - What do we need for a sustainable NZ?' enlightened the audience about life cycle thinking, and contributed to robust discussion with Minister James Shaw and other business leaders about aspirations for a low-carbon circular economy in NZ.

thinkstep-anz's engagement piece invited businesses, individuals and future leaders to share their own stories and aspirations in an effort to "put New Zealand on the map" as a sustainable business leader. By engaging attendees during breaks over a large world map, participants were encouraged to contribute to the day's storytelling and reinforce the notion underpinning the conference that the sustainability journey takes a team and a community.

thinkstep-anz's contribution as a partner at this conference helped our attendees feel very much united in common goals and inspired to continue working towards a sustainable Aotearoa."

Get inspired by New Zealand's sustainability stories

SBN's Xan Hamilton on our attendance in 2019

"Barbara Nebel—and thinkstep-anz—were integral partners in the delivery of Sustainable Business Network's annual conference, "The End of Plastic as We Know It", in August 2019.

Barbara led a plenary session to 300 attendees, in addition to a well-attended break-out session on Cradle to Cradle, an important solution to the massive problems inherent in plastics. The presentation, coupled with the more personalised session, allowed participants to learn more in-depth the concepts in Cradle to Cradle, and how their businesses could review their use of plastic. The issue of plastics in the environment cannot be overstated, and in both Barbara's plenary and break-out sessions, there was a sea of nodding heads as people grasped the concepts she was explaining.

In addition, thinkstep-anz devised a clever participatory activity to end the conference, summarising the day's takeaways. It was a perfect ending to the conference."



"I'm excited by the change of pace in sustainability – time to not just do things better but to do better things."

Sustainability Engineer Emily Townsend

Get to know Emily

Circular Economy Summit

In 2018, we attended the Circular Economy Summit Aotearoa alongside our esteemed partners EPEA CEO Professor Michael Braungart, and designer David Trubridge.

At the summit, hosted by SBN and WasteMINZ, we held another brainstorming activity with our fellow attendees, this time using one of David Trubridge's much loved Coral Lamps as the interactive centrepiece. Participants wrote their ideas for a circular economy on a piece of the Coral Lamp, then added their piece to the growing ensemble. This activity symbolised the circular economy principles of modularity and collaboration, contributing individual insights to the common outcome. The light was assembled by David on the day and now features in our meeting room at Pukerua Bay, continuing to inspire us daily!

Thanks to all participants for your inspirational contributions and to SBN and WasteMINZ for hosting this amazing summit.

A network of ideas put together by David Trudbridge himself



David Trubridge with Barbara Nebel at the 2018 Circular Economy Summit Aotearoa

the big picture on packaging

Coca-Cola Amatil NZ (CCA) is an organisation proactively looking for opportunities to reduce waste and enhance its product stewardship capabilities. CCA recognised the need to better understand what happens to its packaging in New Zealand. The result was a full overview of materials: packaging options, labelling, and groups it could work with in the future.

To help complete the big picture on CCA's packaging, thinkstep-anz engaged with more than 20 stakeholders from the recycling industry, composting industry, and territorial authorities across the country.

Stakeholder feedback indicated that collection and sorting systems throughout New Zealand varied significantly, and consumers showed confusion and distrust regarding the recyclability of packaging. Some materials can be recycled onshore (paper/cardboard, glass, clear PET plastic), but only when contamination is kept to a minimum.

Other materials are sent overseas for recycling (aluminium, other plastics, low-quality paper), but tracking and reporting can be less rigorous.

Compostable plastics and serviceware were disliked by all recyclers and composters. These cause confusion in consumer decision-making around packaging.

The outcomes of this research shed light not just on our recycling capabilities in New Zealand, but also on how materials, messaging, and information can shape the behaviour of producers and consumers. Our ambition for increased accountability from producers was matched by CCA through this project.

key recommendations

- Maximise the use of clear PET (the most easily recyclable plastic)

  There is a unanimous preference towards clear PET because it is easily recyclable and holds its value. Using rPET in bottles also supports and encourages recycling.

- Avoid full-bottle shrink sleeve labels

  These labels confuse automated sorting processes and can result in bottles being sent to landfill or low-value mixed plastics streams.

- Consider assisting councils/recyclers with on-label messaging

  Widespread confusion exists amongst consumers around what to do with bottle caps, and which products can be recycled. An example could be to add, "Please remove the cap and put in the waste before recycling this bottle" on the label.

- Avoid compostable plastics
- Engage further with WasteMINZ and councils
- Consider how a product stewardship scheme would be implemented



Photo courtesy of Coca-Cola Amatil

afterword

This report has been prepared during a period of innumerable and unprecedented impacts due to the COVID-19 pandemic.

Businesses have been forced to reconsider how they operate and the day-to-day lives of millions globally have been affected. thinkstep-anz, and the sustainability community more broadly, have faced our own share of challenges. Nonetheless, our spirit of positivity and drive to create a better, more sustainable future has only become stronger. Never before has there been stronger evidence of the need to change our systems of production and consumption for the greater health and wellbeing of our planet.

To the essential workers, health professionals, researchers, community leaders, and breadwinners who have made sacrifices and worked so hard for the collective good throughout this crisis—we send our deepest appreciation and acknowledgements to you.

Finally, we would like to acknowledge the thinkstep-anz team who have worked many long hours to keep the organisation running throughout 2020, and for the many contributions that made this report possible.

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