

Raising Ambition: The Role of Business in Getting to Net Zero

Natural Capital Partners' Talanoa Dialogue
Final Submission to the UNFCCC

October 2018



Letter to Talanoa Dialogue co-chairs

H.E. Mr. Inia B. Seruiratu

Minister for Agriculture, Rural and Maritime Development,
National Disaster Management and Meteorological Services, Fiji.

Mr. Tomasz Chruszczow

Special Envoy for Climate Change, The Ministry of Environment, Poland.

29th October 2018

Dear Sirs,

Natural Capital Partners is very pleased to respond to your invitation, as the High-Level Champions of the Marrakech Partnership, to make this, our second, contribution to the Talanoa Dialogue.

We are deeply appreciative of this unique opportunity to explore how to accelerate collective efforts to secure the long-term ambition of the Paris Agreement. As we established in our first submission in April 2018, we are convinced that the private sector has an important role to play.

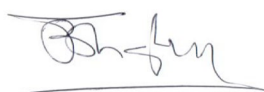
Since our first submission we have held seven three-to-four-hour Talanoa Dialogues, each bringing together a range of companies. In total, senior sustainability and business leaders of over 60 companies with collective revenues of over \$1.3 trillion – approximately the annual GDP of Spain – gave their considered input to explore private sector pathways to net zero.

We learned that many businesses are already charting their way to net zero through a new relationship amongst business, government, society and the environment. It is clear that policy makers can rely on private sector leadership, finance and innovation to contribute to the goals of the Paris Agreement, but must act to unleash its full potential. To this end we have set out ten recommendations to guide the UNFCCC and negotiating Parties towards the fullest possible role for business in delivering the goals of the Paris Agreement. Our recommendations cover three key areas:

1. Financing the transition
2. Accounting for net zero
3. Enhancing the value and impact of net zero

We trust that this report, which presents the consolidated input of our Talanoa participants, will inform the next important phase in activating the Paris Agreement through the 'Rulebook' being developed for adoption at the upcoming Conference of the Parties in Katowice, Poland in December 2018.

Yours sincerely,



Jonathan Shopley, Managing Director, Natural Capital Partners

Contents

4	Acknowledgements
6	About our Talanoa Dialogues
10	What we heard in our Talanoa Dialogues
14	Imprinting Net Zero
24	Our key messages to the UNFCCC
29	References

Acknowledgements

This report was produced by Natural Capital Partners. It was based solely upon findings from our Talanoa Dialogues, which brought together 61 leaders from business and finance between May and October 2018 across Europe and the United States.

Hosts, participants and partners of our Dialogues should not be taken as agreeing with every word or number in the report. They attended one Dialogue and were asked to contribute their ideas, not to agree to the recommendations we drew out from all seven discussions. The institutions with which they are affiliated have therefore not been asked formally to endorse the report's recommendations and should not be taken as having done so.

Participants

We thank all of our participants for attending our Talanoa Dialogues and for contributing to the ideas that follow in this report. Some of the participants and their organisations are listed below.



Adrienne Williams (ABB), Dr. Alexander Pfeiffer (McKinsey), Anders Hallström (EcoNow), Andrea Abrahams (BP Target Neutral), Andreas Follér (Scania), Ashley Myers (IKEA), Barry O'Donovan (ABP Food Group), Bernhard Mauritz Stormyr (Yara), Bianca Wong (Kingspan), Birgitta Resvik (Fortum), Björn Roberts (TFT), Brian Gilmore (Irish Cement), Chris Isaac (AgDevCo), Cristina Ramsay (Wessanen), Daniel Abbasi (GameChange Capital), David Magid (YSG), Ella Grimshaw (Stripe), Ellen Cathrine Rasmussen (Yara), Emily Adams (Metlife), Erin Walsh (Metlife), Floske Kusse (ING), Gunnela Hahn (Church of Sweden), Håkan Nordin (håkan nordin ab), Harry Verhaar (Signify), Helena Mueller (Ålandsbanken), Jacqui Hemery (PwC Global), Dr. Jamal Miah (Unilever), Janet Peace (Center for Climate and Energy Solutions (C2ES)), Jan-Willem van den Beukel (PwC NL), Jenny Fransson (Nordea), Joanne Tracey (Arup), Johan Thyse (Sasol), Josh Weiner (Metlife), Kanja Thuku Mwangi (Kenya Tea Development Agency), Lars Holm (Dentsu Aegis Network), Lene Mi Ran Kristiansen (LM Wind Power), Lorraine Fitzgerald (Bank of Ireland), Lorraine McCann (EY), Max Scher (Salesforce), Mia McCarthy (SSE), Michael Pennant-Jones (James Finlay), Michaela Wright (HSBC), Niall O'Hara (ChangeX), Nick Reynolds (Business In The Community Ireland), Nicola Accut (VMware), Oliver Dudok van Heel (Freshfields Bruckhaus Deringer LLP), Paula Kirk (Arup), Pavel Miller (SSE), Peggy Brannigan (LinkedIn), Philip Wilson (Ecofiltro), Preben Munch (ECOHZ), Rachel Cracknell (Ethical Tea Partnership), Rachel Horwat (Ivanhoé Cambridge), Richard Bond (Mars Drinks), Robert Metzke (Philips), Sam Boileau (Dentons), Sarah Roberts (Ethical Tea Partnership), Sean Kinghorn (Intuit), Sergio Zelaya (The Food and Agriculture Organization of the United Nations), Simon Hotchkin (Bettys and Taylors of Harrogate), Siva Niranjana (Sopra Steria), Stephanie Thery (Mondelez), Stephen Hibbert (ING), Therése Lennehag (EQT), Dr. Tina Dettmer (Volkswagen AG), Tomás Sercovich (Business In The Community Ireland), Toyooki Matsumura (Fujitsu).

Hosts and partners

We thank the following companies for hosting and partnering with us:



Arup (Dublin Talanoa Dialogue host), Business In The Community (Dublin Talanoa Dialogue partner), ECOHZ (Stockholm Talanoa Dialogue partner), Ethical Tea Partnership (Smallholder Agriculture Talanoa Dialogue partner), Freshfields Bruckhaus Deringer LLP (London Talanoa Dialogue host), ING (Amsterdam Talanoa Dialogue host), MetLife (New York Talanoa Dialogue host), Nordea (Stockholm Talanoa Dialogue host) and Salesforce (San Francisco Talanoa Dialogue host).

About our Talanoa Dialogues



1 San Francisco, 30th May



2 London, 9th July



3 New York, 24th September



4 Stockholm, 24th September



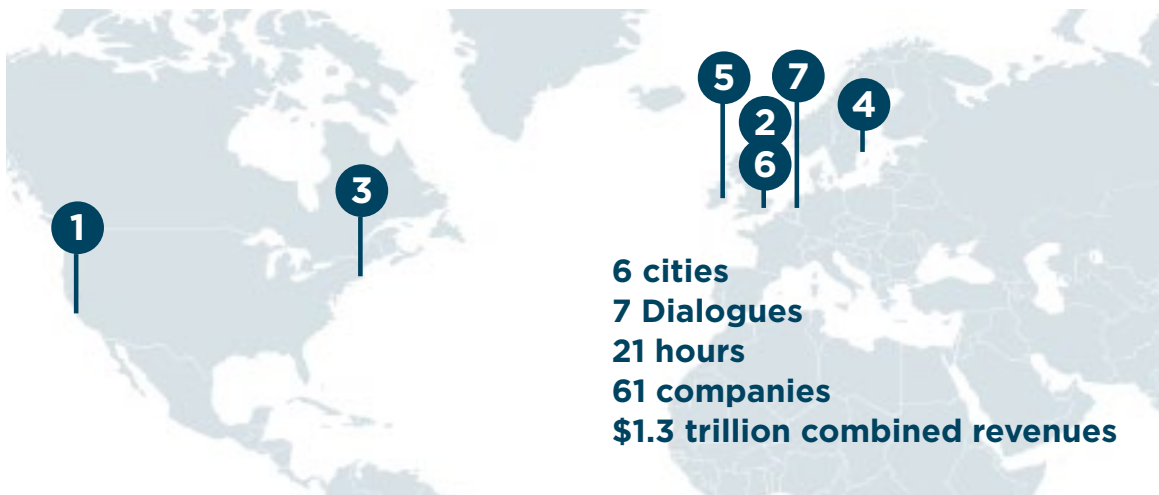
5 Dublin, 26th September



6 Smallholder Agriculture, London, 3rd October



7 Amsterdam, 8th October



The original mandate of the Talanoa Dialogue was to “mobilize stronger and more ambitious climate action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other sub-national authorities, local communities and indigenous peoples”.

We have focused on the private sector and, specifically, on how to achieve a “balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century”. In other words, we focused on how to accelerate private sector progress towards net zero.

We chose this focus because of our experience helping businesses become carbon neutral.

In 2002 we launched The CarbonNeutral Protocol as an open standard to help companies certify their operations, products, services and events as CarbonNeutral®.

We have contracted more than 28 million tonnes of carbon credits and secured 10 million MWh of renewable energy for our clients – with 50% of the carbon credits and 100% of the renewable energy delivered to our clients in the last five years. We work with more than 300 corporate clients ranging from Microsoft, to Marks & Spencer, to ING.

The second reason we have focused on net zero is because we believe that it is the part of the Paris Agreement that has greatest clarity and therefore is a goal on which business can take direct and meaningful action.

Despite its simplicity as a concept, the challenge of making net zero happen is hugely complex of course. We set out some of these challenges in our first submission to the Talanoa Dialogue in April and are pleased to return with a submission that directly inputs the views of the businesses we have engaged since April.

The Rugby Ball

We chose a rugby ball to introduce our participants to Talanoa Dialogue and put it at the centre of the round-table discussions.

Firstly to remind participants of the Fijian origins of the Talanoa Dialogue. Fiji - a rugby-obsessed nation - set up the Talanoa Dialogue during its Presidency of the United Nations Framework Convention on Climate Change (UNFCCC) in 2017. Fiji is also one of many island nations highly vulnerable to climate change impacts.

Secondly, rugby serves as a reminder that small numbers of committed individuals can achieve a lot together. The Fijian Rugby team - representing the island nation of 900,000 people - beat Great Britain, New Zealand, US, Argentina and others on its way to its first Olympic gold medal in the rugby sevens at the Rio Olympics in 2016.

And finally, because rugby also reminded those present of the ability to achieve rapid social change: in the 1970s and 1980s the sport became the focus of the anti-apartheid movement and helped spark sweeping social change across South Africa, with the nation later uniting in victory in the 1995 Rugby World Cup.

We hosted seven Dialogues in the U.S. and Europe with each bringing together six to 12 companies for three- to four- hour-long discussions. In total the 61 companies have collective revenues totalling over \$1.3 trillion. In addition, we were pleased to include representatives from five NGOs, and the United Nations Food and Agriculture Organisation (FAO).

Our Talanoa discussions included companies from many sectors including advertising, agriculture, automotive, construction, consumer goods, creative industries, energy, financial services, food and beverage, information technology, media, petrochemicals, professional services and property. They ranged from pioneering leaders to ‘smart followers’: a term we use to define the segment of businesses looking to adopt leading practices rather than lead in the development of those practices. The roles of our attendees were primarily sustainability or supply chain directors or the equivalent, and each attendee brought in-depth knowledge of their organisation’s sustainability and climate journey, including projects that are active or planned, as well as experience from interacting across their businesses.

Personal stories

We wanted to hear the personal stories of how our participants came to work on their companies’ sustainability efforts. Here are the stories of six participants.



Peggy Brannigan, Global Program Manager – Environmental Sustainability, [LinkedIn](#)

“I was working as a strategy consultant in Houston near the refineries and really got a sense of what the environmental impacts are like when your economy depends on fossil fuels. At that same time, my husband was an astronaut and one of my main inspirations for getting more involved in sustainability were the images he took looking back at the Earth that showed the changes caused by humans. He was involved in the Hubble telescope too, which gave us a perspective on how our little blue marble is so fragile.”



Kanja Thuku, Head of Agriculture and Logistics, [Kenya Tea Development Agency](#)

“I have worked with farmers for the last 26 years supporting them in production and quality improvement. Initially we were never thinking about sustainability until 2006 when we partnered with IDH and Rainforest Alliance and we brought sustainability into farming and we have started now looking at the farm holistically and how sustainability affects production and through that journey I’ve been able to certify quite a number of factories and seen our farmers’ knowledge increase.”



Robert Metzke, Chief of Staff Innovation & Strategy and Head of Sustainability, **Philips**

"My journey started in the 1970s and 1980s in East Berlin which got me interested early in social and environmental issues. I still remember being 10 or so and travelling into these forests along the border with Czechoslovakia. The trees were bare because of acid rain. Officially this was not discussed at that time; but it was definitely a topic. After the wall fell I studied physics, I thought I would try to start somewhere fundamental. Then around 2000 someone said 'it's the economy stupid' and I joined management consulting in the Netherlands and got an executive MBA. I joined Philips when they launched their ambitious new program to scale eco-design to 30% of global revenues and were looking for someone crazy enough to get it done."



Ella Grimshaw, Executive Operations, **Stripe**

"My journey to sustainability started last year. I worked very closely with our CEO to get the program off the ground. He wanted Stripe to have an impact. Ever since I've been learning by doing. Stripe itself is a minimal carbon emitter, but we think we can have a positive impact by setting an example for others of our size, our partners and vendors."



Dr. Tina Dettmer, Researcher, **Volkswagen**

"I'm a geo-ecologist and after my studies I did my PhD in mechanical engineering because I thought 'let's start solving the problems where they are produced'. For the next 10 to 15 years I worked in life-cycle engineering research developing products in a way that they are environmentally sound – from taking the resources out of the ground to the end of life. I found I wanted to be more directly involved and so I left university and went to a company where I had two interesting years working with Greenpeace on a closed-loop concept. Then I got the offer to lead the de-carbonisation project of Volkswagen, working with our six biggest light duty vehicle brands, and it's really a great challenge."



Andrea Abrahams, Global Director, **BP Target Neutral**

"I got involved in sustainability and the climate challenge when I was working on our strategic relationships with some of our major Downstream global customers. As we discussed their strategic challenges, I saw that more and more people were talking about the challenge of carbon and how the private sector could get involved in addressing the climate challenge. Increasingly we saw this as a really good opportunity to collaborate in the right way, for mutual benefit as well as to help tackle this massive challenge - that could be an opportunity for us all."

What we heard in our Talanoa Dialogues

Where do we want to go?

Each of our Talanoa dialogues took as its starting point the hypotheses that we set out in our first Talanoa submission in April:

“We are working towards a world where the action by businesses to set and achieve net zero targets becomes “business as usual”. We see this as a highly effective way to bring forward the reduction in carbon emissions and the point at which the world is net zero. We see the provisions of Article 6 in the Paris Agreement playing a critical role in enabling a next generation of market-based instruments. The net-mitigation objectives for Article 6’s new market mechanism will make a powerful contribution to the draw-down of greenhouse gases concentrations in the atmosphere.

...a groundswell of action by corporates will enable governments to raise ambition. The playbook for the path to net zero is for governments to report and ratchet over time, namely: set targets, report results and then increase the ambition of the next cycle of targets. The collective mass of corporates going further than a government’s existing targets will give governments the confidence and political headroom to increase the ambition of their targets and to put in place stronger measures to ensure they achieve them.”

Talanoa participants viewed the Paris Agreement’s call for net zero emissions as early in the second half of the century as possible as a powerful, unambiguous call to action and the clearest statement of a global objective on climate as one can get. However, many participants found that when applied at a business level, setting emission boundaries and establishing approaches to the treatment of historic responsibility for impacts introduces complexities that can make it a difficult concept to frame and communicate both internally and externally.

While the IPCC’s 1.5°C report was only published on the day of our last Talanoa Dialogue, its recommendations were broadly in line with expectations. It brought further clarity to the net zero goal by proposing the target date of 2050; and, by highlighting the need for carbon sequestration to further de-risk the potential impact of climate change.

With little to debate on the “Where do we want to go?” question, we were able to focus the majority of our discussions on the “Where we are now?” and “How do we get there (private sector to net zero)?” questions.

Where are we now?

Across our Talanoa Dialogues there was general recognition that the Paris Agreement combined with early action in both the public and private sectors of the economy has established a solid platform for meaningful action. However,

the baseline from which that action begins is substantially 'in the red'.

While the last 150 years of fossil fuelled economic growth has radically transformed the human condition – mostly for the good – it has had substantial unintended consequences:

- Global debt (across all sectors - government, households, financial and non-financial) has risen steadily over the past three decades to a record US\$233 trillion in 2017¹;
- Rockstrom et al's analysis of planetary boundaries, updated in 2015, suggests that four of nine planetary boundaries have been breached (Biosphere integrity – genetic diversity; Land-system change; Biogeochemical flows – phosphorous and nitrogen; and Climate Change)²; and,
- Recent work by economist Kate Raworth highlights significant fractures in the social foundation – most notably the unequitable distribution of the impacts of climate change to communities least able to adapt and least responsible for the breaching of safe climate boundaries³.

Concerns were expressed about the recent challenges of the Paris Agreement as some nations, notably the US, withdrew support. Further, the Green Climate Fund's difficulties in raising and dispersing finance to least developed economies most at risk from climate change is seen to be putting those disadvantaged countries' commitments to the Paris Agreement severely to the test. The US\$500 million of fossil fuel subsidies still in place across the G8 severely questions the ability of some of the largest nations to align policy with climate goals. Further, it was widely acknowledged that private sector finance for the innovation needed is critical to complement limited, and in many countries, inadequate public sector funds. However, businesses by their nature thrive on uncertainty, risk and opportunity and so, despite these systemic challenges, there was a prevailing tendency to optimism across the discussions. It was noted that some countries, including Costa Rica and Sweden, have made medium-term commitments to carbon neutrality.

Further, the way in which the United States' stated intent to withdraw from the Paris Agreement ignited a countervailing response at a sub-national level evidenced growing support for the Paris Agreement's goals. The Global Climate Action Summit convened in San Francisco in September evidenced stretching climate goals adopted in states, cities and across the business community. The We Are Still In and America's Pledge initiatives are providing substantive evidence that those commitments are being underpinned by detailed action plans which are being monitored and publicly reported.

The dialogues surfaced many examples of how leading businesses, individually or in partnership with supply chain partners, IGOs, NGOs and government agencies are already carbon neutral or putting net zero plans in place. These pioneers set internal emission reduction commitments, increasingly using Science Based Targets. They use market-based instruments, such as carbon credits and Energy Attribute Certificates (including Renewable Energy

Certificates, Renewable Energy Guarantees of Origin and I-RECs) to reach net zero emissions and 100% renewable energy commitments encouraged under the RE100 initiative. They select carbon credits from a wide range of emission reduction projects across the world to put a price on carbon, and to deliver substantial social, environmental and economic benefits that contribute to the Sustainable Development Goals. They address their Scope 3 emissions with collaborative supply chain programmes to extend their reach and impact. They are committed to transparent reporting of verified outcomes following guidance from the Task Force on Climate-related Financial Disclosures (TCFD), and through independent platforms including the CDP, the UNFCCC's NAZCA, and the B-Team's "Net Zero by 2050" initiative.

Pioneers capture value directly from cost savings and returns on investment in energy efficiency, often finding routes to decouple business growth from carbon emissions. There are also a variety of indirect 'returns on investment' when clear and compelling sustainability strategies which deliver meaningful progress help companies attract and retain the best talent; build and motivate high-performance teams; drive low-carbon innovation; increase sales and revenue from their products and services; build brand reputation; drive efficiency in the business; and, manage climate risk and opportunity for competitive advantage.

Critical to the growth of net zero strategies adopted by pioneers has been the emergence of highly credible standards and infrastructure to ensure the highest environmental integrity. British Standard International's Publicly Accessible Standard 2060 for carbon neutrality and Natural Capital Partner's CarbonNeutral Protocol have been able to reference an increasing number of third-party standards including the emission reduction project standards of the Clean Development Mechanism, Gold Standard, Verified Carbon Standard (recently renamed Verra), American Carbon Registry, Climate Action Reserve and emissions accounting standards developed by the International Standards Organisation and the World Resources Institute's Greenhouse Gas Protocol.

The optimism surrounding these encouraging developments was tempered by a number of challenges to scaling these progressive initiatives:

- Returns from energy efficiency and the other indirect sources of business value from proactive climate action diminish as 'low hanging fruit' becomes difficult to find
- Few compliance regimes recognise, endorse or reward voluntary action ahead of or beyond regulatory requirements
- Leading businesses capture first mover advantages that are not available to the many 'smart followers' that are responsible for a substantial proportion of the corporate footprint
- The necessary partnerships that are needed to leverage corporate commitments to net zero can be difficult to establish across complex supply-chains that stretch around the globe
- Focusing on mitigation in regions where the impacts of a changing climate

are becoming a priority put commitments to net zero to the test as resources are redirected from mitigation to adaptation

- For many businesses, their largest emissions occur in supply chains where their ability to influence change is more complicated.
- The large emitting companies (including oil and gas, metals and mining, cement) with long-lived, high-carbon capital assets do not see easy routes to net zero without clearly defined policy and regulation.

How do we get to net zero?

Our dialogue around the third Talanoa question focused upon the opportunities to scale net zero within the private sector.

Over successive dialogues we built a framework for opportunity analysis that extends corporate focus from the measurement and reduction of carbon footprints to a wider set of 'climate-prints'. It is these climate prints which offer the opportunity to release exponential scaling of net zero ambitions. 'Imprinting Net Zero' model that emerged is made up of seven components in two distinct ambition categories – 'to Net Zero' and 'and beyond', which combined are considered effective in designing breakthroughs to scale net zero across the private sector.

Imprinting Net Zero

The Climate Imprint Model

Step 1: To Net Zero...



Foot-print For the majority of companies, managing Scope 1 and 2 footprints is the main focus for climate action. Diminishing returns from incremental energy and resource efficiency improvements tend to limit reductions unless access to renewable energy can be secured.



Tail-print Upstream Scope 3 emissions can be substantial, particularly in commodity supply-chains. Reducing tail-print emissions is challenging in complicated supply chains where businesses do not have direct control. 'Insetting' approaches have been used to establish opportunities for corporates to fund tail-print reductions.



Hand-print Reductions in downstream Scope 3 emissions that arise from use of products and services by customers can be secured when products and services radically improve emissions in the use phase (for example, information technology displacing business travel) or when these can be made carbon neutral and still remain competitive in their markets.

Step Two: ...And Beyond



Brain-print The limits of incremental improvements to foot-, tail-, and hand-prints are best addressed by putting the transformation to net zero at the heart of business strategy, advocacy, brand positioning, product and service innovation.



Finger-print With much of the transformation to net zero dependent upon changing behaviours within and across an organisation, successful initiatives find ways to make their strategies personally relevant to all staff and management so that each individual has an opportunity to make an imprint or contribution.



Blue-print It is quite common for companies to start a net zero programme with a commitment or aspirational goal. These become effective when a blue-print details the investments, partnerships, management processes and reporting metrics that underpin the plan to deliver against the goal.



News-print Communicating beyond the boundaries of a company is critical to earning customer preference, securing and deepening partnerships, engaging key influencers, and advocating for aligned policy and regulation. Realising the full value of net zero strategies requires comprehensive communications that set climate strategies free from the confines of sustainability and corporate responsibility reports.

Step 1: To Net Zero...

Foot-print

For the majority of companies, managing Scope 1 and 2 footprints is the main focus for climate action. Diminishing returns from incremental energy and resource efficiency improvements tend to limit reductions unless access to renewable energy can be secured.

Case studies:

- Through its carbon neutral commitment **Microsoft** actively manages its operational emissions through intense focus on efficiency, expansion of renewable energy on the grids within which it operates, and an industry leading commitment to a diverse portfolio of carbon finance-enabled projects. Microsoft supports a portfolio of over 60 emission reduction projects that includes one of the largest portfolios of forestry and land-use projects in the world, as well energy access and household devices in the developing world. Microsoft's carbon fee programme has added a budget line item into each department to reflect the financial value of their emissions. This money then goes into the carbon fee investment fund for new sustainability initiatives and to finance its extensive carbon offset project portfolio. In the first three years the programme led to \$10 million in annual energy savings, emissions reductions of around 7 million tonnes of carbon dioxide equivalents and 10 billion kilowatt-hours worth of new renewable energy investments. The programme won a United Nations Momentum for Change Award in 2016.
- Now extended up to 2020, **Marks & Spencer's** carbon neutral programme is a key element of the retailer's Plan A climate commitment, which includes 30% renewable gas and 100% renewable electricity consumption, and offsetting unavoidable carbon emissions with projects located in global value chain countries. Since Plan A was launched in 2007, M&S is 40% more energy efficient, has achieved 33% absolute carbon reductions, hosts the UK's largest roof mounted solar PV array, and has supported over 35 carbon offsetting projects across 12 countries, including UNICEF's first carbon project; and saved £750 million in related operating costs.

"When we put out a press release about reaching net zero... we worded it as 'We're going to do everything we can to help the world transition to a low-carbon economy, use our voice, engage policy makers, engage our supply chain etc. but the world needs action now and so we're going to offset our carbon now.'" **Max Scher**, Manager – Sustainability, **Salesforce**

"The internal carbon fee has been very effective. It raises the visibility of our sources of carbon emissions, for example, highlighting that business travel was a large part of our total footprint. Now a carbon fee rolls out to every traveler when they book a ticket, so it generates conversations about when it's important to travel, and when it's not. I can say, 'We're offsetting now, but want to continue to implement solutions to reduce the emissions in the first place.'"

Peggy Brannigan, Global Program Manager – Environmental Sustainability, **LinkedIn**

"It's a matter of credibility and leadership. If you want to get anyone to follow you, you need to start walking the talk." **Robert Metzke**, Chief of Staff Innovation & Strategy and Head of Sustainability, **Philips**

"I increasingly see companies... trying to develop a purpose. That is a good thing. That is the future of many businesses. And having a purpose makes it inevitable [that you want] to solve the problems that you are contributing to yourself. By adopting that purpose, we made it inevitable that we set a net zero target... as a proof point or test case... for whether we take our purpose seriously or not." **Jan-Willem van den Beukel**, Senior Manager and Global Circular Economy Lead, Sustainability, **PwC**

"Offsetting is an important part of the total strategy. We are going to renewables and working toward decarbonizing our Scope 3 but we recognize that it's a journey and choose to take action where we can, rather than wait until there's a better solution. We know that getting there involves lots of pieces – big and small – and at VMware, our ethos is that every action matters, no matter how small. Our offsets are driving market demand and supporting critical low-carbon sustainable development projects – I'm proud to be part of this positive impact."

Natasha Tuck, Senior Sustainability Manager, **VMware**

"[Offsetting] created an implicit internal tax, helping focus on the other things that will take longer. It has been integral: we just got approval for a green tariff for our data center team – what would have been a 12% growth in energy costs of our data centers was only like a 5% growth." **Max Scher**, Sustainability Manager, **Salesforce**

"The proposed goal for our carbon reduction was 'do a little bit less bad'. I said, 'How does this 'less bad' goal align to how we solve for our customers?' That changed the conversation and we started asking, 'How do we become carbon-neutral now?'" **Sean Kinghorn**, Senior Sustainability Program Manager, **Intuit**

"There's no point to try for an 80% reduction, since everyone in the business thinks they are in the 20%." **Ashley Myers**, Sustainability Specialist, **IKEA**

"Carbon neutrality is extremely motivating for employees. When we made the commitment to be carbon neutral by 2020 and I sent it around they were saying they were super proud. The remark was not 'will we move in this direction or not' it was 'we need to increase the speed'." Participant from a major consumer electronics company

Tail-print

Upstream Scope 3 emissions can be substantial, particularly in commodity supply-chains. Reducing tail-print emissions is challenging in complicated supply chains where businesses do not have direct control. 'Insetting' approaches have been used to establish opportunities for corporates to fund tail-print reductions.

Case studies:

- Carpet manufacturer **Interface** has been a pioneer in understanding the upstream life cycle impacts of its products. Backed by a robust life-cycle analysis and Environmental Product Declarations, the company has used this data to offer carbon neutral products since the early 2000's and had been one of the largest historical buyers of voluntary carbon offsets in the world.
- **Taylors of Harrogate** recognises that climate change will have a disproportionate impact on the smallholder farmers that provide much of its tea and coffee and that many supplier locations will be threatened. In 2019 all Taylors tea and coffee products will be certified CarbonNeutral®, using carbon finance to support emission reduction projects across its supply base in Kenya, Uganda and Malawi. Using community reforestation and improved cookstove projects, the company is able to reduce the climate impact of its products from farm to retail shelf to net zero.
- Emulating the sectoral approach to carbon neutral growth in the aviation sector as proposed by ICAO, the United Nations Food and Agriculture Organisation (FAO) is promoting carbon neutral supply-chain initiatives in tea, rice and other agricultural commodities

"We were surprised by how quickly subsidiaries get it." Participant from a major food and beverage company

"We want to make sure their next generation can farm." **Kanja Thuku**, Head of Agriculture and Logistics, **Kenya Tea Development Agency**

Hand-print

Reductions in downstream Scope 3 emissions that arise from use of products and services by customers can be secured when products and services radically improve emissions in the use phase (for example, information technology displacing business travel) or when these can be made carbon neutral and still remain competitive in their markets.)

Case studies:

- **BP Target Neutral** provides customers and partners with carbon neutral products and services, making it easier for them to tackle their own low-

carbon strategies and sustainability strategies. Since 2006 it has offset 3 million tonnes of carbon on behalf of its customers.

- **Elopak** – a leading global paper-based packaging company – offer its customers the choice of purchasing CarbonNeutral® packaging, taking full account of the cradle-to-retail shelf impacts of its products. This has enabled some of Europe’s largest beverage brands to promote carbon neutrality to consumers, from milk to orange juice. It does this through purchasing 100% renewable electricity and offsetting unavoidable emissions via high-impact emission reduction projects that relate to its core raw material – trees.
- Part of the world’s largest B2B coffee and water services company, and Europe’s largest, **Eden Springs** takes full responsibility for the lifecycle impacts (cradle-to-grave) of every water and coffee machine it procures, and the usage of its machines for the first year of operation in customers’ premises.

“We realise that we have more than 1000 times the number of customers than we have staff.”
Max Scher, Sustainability Manager, **Salesforce**

“We have to think about the tools, the knowledge and the skills-sets that we can use to provide our customers with choices.” **Andrea Abrahams**, Global Director, **BP Target Neutral**

Step 2:... And Beyond

Brain-print

The limits of incremental improvements to foot-, tail-, and hand-prints are best addressed by putting the transformation to net zero at the heart of business strategy, advocacy, brand positioning, and product and service innovation

Case studies:

- **Microsoft**’s AI for Earth programme puts its cloud and AI tools in the hands of those working to solve global environmental challenges. AI for Earth works to empower people to solve the world’s most pressing environmental issues around climate change, biodiversity and water. Its internal carbon neutral programme and carbon fee is aligned directly with its business and product strategy around these issues.
- **ING** recently announced its commitment to steer its full lending portfolio towards the well-below two degrees goal of the Paris Agreement with an approach called Terra, based on an open-source tool and co-created with Two Degrees Investing Initiative. Using detailed scenarios for each sector developed by independent organisations, the methodology assesses the technology shift needed for each sector and evaluates how the technology

clients are currently using or are planning to use is adequate when compared to what a stable climate needs. By using this forward-looking, open source methodology, ING is not only supporting its clients in this transition but also enabling its peers in the banking sector to scale this approach.

“As advertising companies, our footprint is not necessarily the environmental footprint, it’s the brain-print that we have on people’s values and norms and behaviours. How can we use our advertising spend for our clients and make people behave differently? That mission-driven advertising that some clients do... I want to see much, much more of that.” **Lars Holm**, Global Senior Manager Corporate Responsibility, **Dentsu Aegis Network**

“What really helps to get stuff going at scale is if you find a link to the core strategy of the company. If you can show that it helps you to differentiate in the market, if you show that it is essentially a boundary condition to survive as a company. It was very clearly connected to our core strategy to be one of the leading healthcare providers. You cannot on the one hand take the Hippocratic oath as a doctor and on the other hand destroy the planet.” **Robert Metzke**, Chief of Staff Innovation & Strategy and Head of Sustainability, **Philips**

“It has to be a commitment from the top... [either] that my business is threatened within a short period or it could be that he/she sees climate change as an existential threat – to his/her daughters.” **Andreas Follér**, Group Sustainability Manager, Corporate Relations, **Scania**

Finger-print

With much of the transformation to net zero dependent upon changing behaviours within and across an organisation, successful initiatives find ways to make their strategies personally relevant to all staff and management so that each individual has an opportunity to make an imprint or contribution.

Case study:

- Global IT company **LinkedIn** has not only made and met a commitment to carbon neutrality but has also made it possible for its employees to join the company and offset the emissions associated with their personal activities. LinkedIn uses its buying power in carbon markets and intranet to make employee participation easy and affordable.

“We have tens of thousands of employees who need to be convinced that we are actually doing something and walking the talk. We talk about small internal things as not having a [big] impact [on footprint]... but they are really, really big things if you look from a motivational perspective. When our advisors sell our [sustainable investment products] and they are asked ‘Okay, so what is our company doing?’, they want to be able to turn around and say ‘We’re doing this. We’re doing that’ some proof points that we are doing our own things also.” Participant from a major financial services company

"I'm obsessed with the fingerprint because that's the challenge I felt every day when I was working with farmers in Cote D'Ivoire: how to reach farmers with knowledge, how to get people to connect [over sustainability], and how to get knowledge that sticks in people's minds. For smallholder farmers, I believe that digital tools can be a game changer in this."

Ellen Cathrine Rasmussen, VP Sustainability Programs and Global Projects, **Yara**

"In my company there are the finance people and the sustainability people and it's like we speak two different languages." Participant from major financial services company

Blue-print

It is quite common for companies to start a net zero programme with a commitment or aspirational goal. These become effective when a blue-print details the investments, partnerships, management processes and reporting metrics that underpin the plan to deliver against the goal.

Case study:

- "Commercial transport can be fossil-free by 2050" is the conclusion of **Scania's** 2018 pathways study. Scania identified four key areas for action – Smarter logistics, Electrification, Biofuels and Fuel Cells – and drew up scenarios for delivering on them. With the range of companies and stakeholders involved in transport, this approach ensured that it laid out its intentions, commercial and regulatory needs for others in the system.

"We started with the Paris Agreement. Then we back-casted for our sector. We ended up with four scenarios that all look a bit different... We showed not only what we believe can be done but what we expect from other adjacent sectors and other partners in the ecosystem. We put our cards on the table and asked 'Here we are, what's your role in this?' then we started a coalition with [other companies]. I think we need to enter a new era of transparency towards each other. Leaders should show where we are going so we can all chip in on each other's journeys, then I think we can make it [to limit temperature rises to 2°C]." **Andreas Follér**, Group Sustainability Manager, Corporate Relations, **Scania**

"It's becoming rather unethical to not have a path to carbon neutral." **Jan-Willem van den Beukel**, Senior Manager and Global Circular Economy Lead, Sustainability, **PwC**

"Building stepping stones is very important to help senior management feel confident. Just showing that you can execute on a strategy to manage down your CO₂ emissions year-on-year is a great track-record to build on." **Robert Metzke**, Chief of Staff Innovation & Strategy and Head of Sustainability, **Philips**

“The time is ripe to deepen our collaboration and accelerate our impact, not only between companies, but also with governments to achieve a carbon neutral tea sector. Ethical Tea Partnership is ready to help lead this engagement.” **Sarah Roberts**, Executive Director, **Ethical Tea Partnership**

News-print

Communicating beyond the boundaries of a company is critical to earning customer preference, securing and deepening partnerships, engaging key influencers, and advocating for aligned policy and regulation. Realising the full value of net zero strategies requires comprehensive communications that set climate strategies free from the confines of sustainability and corporate responsibility reports.

Case studies:

- Business and financial software company **Intuit** has partnered with local energy companies in Texas to offer its small business customers the opportunity to switch to renewable energy at neutral cost.
- **Intel Corporation** has been an active climate advocate in the investment community and in politics. Its Corporate Responsibility Director Suzanne Fallender has taken to a number of platforms and forums to call on investors to factor environmental, social and governance (ESG) risks into decision-making and to ask their investees to tie executive compensation to environmental performance - something Intel has done since 2008. In terms of political advocacy, the company was one of the lead collaborators with NGOs C2ES and Ceres encouraging the federal government to increase its climate action.

“We are told over and over again that the human brain is not wired to deal with long-term existential threats. True. Then why do we keep using two degrees, a long-term existential threat, as a way to motivate? We are trying to go into a locked back door to human understanding. The front door is wide open. The front door conforms to how the human brain actually does work, which is that is concerned with short term issues like security, food, warmth, jobs, income, community, self-respect. This is our way in.” **Paul Hawken**, Founder and Writer, **Project Drawdown**

“Net zero is the engine, but we must market the car.” **Siva Niranjana**, Head of Environmental Sustainability, **Sopra Steria**

“In humanity we are very good at crisis management: once disaster strikes, we address it. But this is the first time we have to address a disaster before it fully unfolds.” Participant from a major consumer electronics company

The climate imprint model surfaced a number of key issues:

- Discussions under the 7th element (News-print) explored the power of net zero as a means to focus and communicate climate ambition. There was support for the framing of net zero as an inflection point rather than the end point – an important marker that signals the point at which an abundance of affordable solutions replaces climate risk with opportunity – the ‘beyond zero’ zone.
- Exploring the options for large emitters to align with net zero highlighted the importance of the compensation dimension implicit in net zero. In this context compensation covered greenhouse gas concentration draw-down approaches through biological sequestration or large-scale technical approaches to carbon capture, storage and reuse. This echoed a key message in the IPCC’s 1.5°C report – that climate stability cannot be reached without the development and deployment of large-scale sequestration – which may need to combine natural sinks with technical approaches to carbon capture, storage and use.
- Successive dialogues grappled with the conundrum of diminishing returns from incremental improvements in energy and resource efficiency. That surfaced the concept of ‘value at risk’ – a measure of the extent to which investments that protect natural capital assets from climate change deliver risk mitigation returns to a business.
- A recurring theme throughout the discussions was the importance of a price on carbon to accelerate the transition to a low carbon economy, and how to best establish a global pricing mechanism. Against the background of a strengthening political swing from global to national interests, the relative merits of taxes and market-based pricing mechanisms was debated. Limited international experience with both approaches made it difficult to establish a clear preference. However, business has a natural bias in favour of the cost containment benefits and flexibility of market-based approaches. Many participants represented companies using offset-inclusive carbon management. They highlighted the value of carbon finance to projects in developing economies delivering emission reductions along with measurable co-benefits that strongly align with the SDGs.
- Throughout the Dialogues, there was never a question that the private sector can make progress without sound government policy and regulation. This was particularly the case with large emitters which require clear policy guidance to protect them from competitive disadvantage as they transition their focus from high to low carbon assets, products and services. Less carbon intensive businesses and sectors look to government to set out common carbon reporting frameworks, define incentives for early action or action ahead of and beyond regulation, and in some instances, to establish pre-compliance reporting frameworks that support transparency and comparability in corporate level reporting.

“We are high emitters. But we are not the enemy, we are in fact part of the solution. We are not climate change deniers. We believe that there is something that can be done but we need to find ways to do it together and policy plays a big role in that.” **Johan Thyse**, Vice President Group Regulatory Services, **Sasol**

“When I look at the emissions within our own industry [and] the [Science-Based Targets Initiative] and their two degree pathways... I can tell that it is beyond what can be done on a chemical physical reality of the process. Meaning that we will need to revamp the entire technological platform of our industry. I do not see that it is feasible to have as rapid investments into this industry in order to achieve that. I believe that the same is probably likely for quite a few industries. There is a level of de-carbonisation that is incredibly challenging if not impossible to make without some sort of regulatory support.” Participant from a major agriculture company

The rich discussions about ‘how the private sector can get to net zero’ allowed us to identify a set of ten recommendations to assist the UNFCCC and Parties to implement the Paris Agreement in ways that can unlock the full potential of the private sector to raise climate ambition.

Our key messages to the UNFCCC

The last of our seven Talanoa Dialogue events in Amsterdam on the 8th October coincided with the release of the IPCC's special 1.5°C report. The report's overarching message is that to limit warming to 1.5°C we will need to decarbonise the global economy with great urgency. While the challenges around this are enormous, the message is simple, clear and powerful.

We know from the “Imprinting Net Zero” model that emerged from our dialogues that the building blocks to net zero are in place and that climate leaders already deliver on that challenge. The opportunity to scale the achievement of net zero across the private sector is tantalisingly real, despite the two most oft quoted challenges:

1. Diminishing returns from energy efficiency investments: Climate leaders act ahead of or beyond regulation to differentiate net zero operations, products and services in the small but growing market sectors that place emphasis on environmental and social attributes. If net zero is to become mainstream, the rewards and drivers to business need to extend beyond first-mover advantages.
2. Need to establish widely applicable compensation mechanisms for heavy emitters: Most large-emitter, legacy sectors (agriculture, aviation, cement and oil & gas, for example) have long-lived assets that take time to fully depreciate and replace with low-carbon innovations. If net zero is to be adopted in these sectors, large-scale drawdown programmes will be needed to support and accelerate the transition to net zero.

Our Dialogue discussions highlighted the importance of the “Rulebook” currently being developed to operationalise the Paris Agreement to the delivery of net zero in the private sector. In advance of COP24 in Katowice in December this year, we take this opportunity to present a summary of participants' views about what will enable deeper private sector participation in accelerated progress to net zero.

Finance the transition

Carbon pricing helps big emitters develop credible, competitive blue-prints to low carbon and net zero futures. Market-based mechanisms help companies with material emissions in their upstream and down-stream supply chains finance real, immediate and cost-efficient Scope 3 emission reductions. Offsetting by corporates with voluntary carbon neutral commitments delivers substantial sustainability benefits when emission reduction projects also work closely with communities and local organisations to deliver health, livelihood and biodiversity benefits that align with the Sustainable Development Goals.

Recommendation 1

Operationalise Article 6 to encourage carbon market development to price carbon and enable the trade in emission reductions in support of net zero targets. Effective carbon markets direct finance to the most cost-efficient emission reduction opportunities and, as these are captured and the costs of mitigation rise, that price signal accelerates low carbon transformation

“The project mechanisms designed under Kyoto [CDM and JII], when they were effective, they mobilised hundreds of billions of investment in emissions saving activities in emerging markets where it simply would not have happened before. I think the lesson learned is the effectiveness of a universal and consistent price in carbon. We as a bank were able to start lending debt into the markets because it had consistency and predictability. It’s less about the underlying mechanisms and it’s more about the price on carbon. I’m not bound to cap and trade or tax... by whatever means, a consistent, realistic, high price on carbon is what has to be achieved and it is the policy makers who set the scene for that.” **Stephen Hibbert**, Global Lead Energy Transition, **ING**

“[Tea, coffee and cacao] are low margin products so the finance is crucial. We need a financial stimulus to make these industries regenerative.” **Michael Pennant-Jones**, Group Head of Sustainability, **James Finlay Ltd**

“Carbon pricing: we definitely need it.” **Dr. Tina Dettmer**, Researcher, **Volkswagen**

“Incentivising banks and other financing bodies in one way or another to finance [companies with plans for net zero] – that might be a price on carbon, it might be tax incentives for certain projects – is in my mind something that parties can do.” Participant from a major professional services company

“We stand behind even more ambitious climate policy... supported by meaningful transfer of emissions rights in an international system. That will be a very powerful enabler for international companies to take even more firm climate action. We have knowledge to help farmers put more carbon into the soil. If global society were to put together an incentive mechanism that actually provides payments for rural communities in Africa to sequester carbon, that would... increase the resilience of farming operations, increase the economic opportunity in rural areas and alleviate risks of larger-scale migration crises. There is a triple win there.” **Bernhard Mauritz Stormyr**, Head of Sustainability Management, **Yara**

Recommendation 2

Promote drawdown (i.e. sequestration) projects and programmes within the Paris carbon market architecture, specifically those that deploy natural climate solutions at scale (for example, landscape-scale Reduced Emissions from Deforestation and Degradation (REDD+), agriculture management, and afforestation) alongside projects that deliver verified climate, social and environmental benefits.

“We know from WBCSD’s Natural Climate Solutions that afforestation, reforestation and stopping land use change... combined, can contribute 37% of the mitigation or sequestration that’s needed by 2030 in a cost effective way.” **Bernhard Mauritz Stormyr**, Head of Sustainability Management, **Yara**

Recommendation 3

Accelerate the wind-down of perverse incentives, such as subsidies to fossil fuels and high greenhouse gas emitting practices in agriculture, by including these in Nationally Determined Contribution (NDC) reporting and the five yearly stocktakes.

Recommendation 4

Fund and empower The Green Climate Fund to better support public-private financing of mitigation and adaptation projects in those parts of the economy that are unduly exposed to climate impacts and which are most exposed to the “climate equity” conundrum - predominantly least developed economies.

Account for net zero

Net zero’s rising importance within the Paris Agreement brings a simple and compelling clarity to its overarching objective of a stable climate. That simplicity needs to be complemented with global greenhouse gas emission budgets and transparency and timeliness to reporting variances against those budgets. The private sector is ahead of nations in the art and science of measuring, verifying and reporting internal emissions and reductions. Further, digital data innovations being driven by the information technology sector have the potential to drive transformations that were not possible during the Kyoto Protocol era.

Recommendation 5

Evolve NDCs to comparable, reportable, blue-prints for net zero with clear incentives to the private sector to move ahead of and beyond regulation and policy to accelerate progress to net zero.

Recommendation 6

Translate net-zero into global, country and sector carbon greenhouse gas emission budgets to 2050 and beyond to further clarify and simplify the concept of net-zero.

“The UN talks about 2 degrees or 1.5 degrees but instead it should be talking about CO₂ budgets for companies and people to understand. Everyone understands a budget when talking about money. We need the equivalent for CO₂. If we stay within our carbon budgets then we reach 1.5 degrees.” **Håkan Nordin**, former sustainable business expert climate at **H&M**

“Companies should be required to have a roadmap to net zero... that doesn't mean you have to know exactly how to get there, but at least an indication of idea how they might get there... Many of the companies around the table are driven more by stock markets than local or national governments because of their international business footprint. So having transparency about carbon risks along the entire value chain [as requested by TCFD]... can be done, even though it might be complicated in companies with different value chains. Enforcing that risk assessment and enabling that risk [to be factored in by finance] is something that governments can facilitate.” Participant from a major professional services company

Recommendation 7

Encourage other sectors to emulate ICAO (CORSIA) and FAO in developing sectoral accounting that can support the delivery of net zero or carbon neutral products and services to consumers and customers. This will better reflect the realities of a global economy structured around international supply-chains and trade; and enable citizens and companies to make purchasing decisions in favour of climate stability.

Recommendation 8

Design the Paris Rulebook with innovative IT and other new technologies in mind; and, create 'safe space' for disruptive businesses to develop and test new approaches to climate mitigation and adaptation. Doing so will drive transparency, efficiency and deep transformation.

Enhance the value and impact of net zero

Article 2 of the Paris Agreement calls for efforts to “limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change”. Article 4 of the Agreement calls for “a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty”. The IPCC’s 1.5°C report appropriately frames its scientific research around the risks and costs of inaction.

We found, however, that much our discussion throughout the Dialogues framed the private sector’s engagement with climate change as a journey from risk to opportunity; and, sustainable development as “another word for innovation”.

Recommendation 9

Re-position net zero (balance between anthropogenic emissions by sources and removals) not as an end-point but rather the inflection point beyond which an abundance of affordable solutions replaces climate risk with opportunity.

Recommendation 10

Build upon the excellent Talanoa Dialogue initiative and formalise, to the fullest extent possible, direct engagement with sub-national agencies, cities, private sector, environmental NGOs, and academia to inform the implementation of the Paris Agreement, inviting business and civil society to contribute ideas to increase the ambition of Parties’ plans as part of the review and ratchet of NDCs.

References

- 1 Institute of International Finance, Global Debt Monitor – Hidden vulnerabilities, 4th January 2018, https://images.magnetmail.net/images/clients/IIF_2/attach/GDM_Jan4_vf.pdf
- 2 Will Steffen, Johan Rockström, et al, Planetary Boundaries: Guiding human development on a changing planet, Science, 15 January 2015, <http://science.sciencemag.org/content/early/2015/01/14/science.1259855>
- 3 Kate Raworth, Exploring Doughnut Economics, <https://www.kateraworth.com/doughnut/>, referenced 16 October 2018

About Natural Capital Partners

Natural Capital Partners is a world-leading provider of innovative solutions for positive impact on the world's natural capital. With more than 300 clients in 34 countries, the company delivers high-quality solutions for renewable energy, carbon emissions measurement and reductions, water stewardship, building supply chain resilience and protecting biodiversity.

[Email us to find out more about the Natural Capital Partners Talanoa Dialogue.](#)

London: 167 Fleet Street, London, EC4A 2EA +44 20 7833 6000

New York: 1732 First Avenue, New York, NY 10128 +1 212 390 8835

info@naturalcapitalpartners.com | naturalcapitalpartners.com

Natural Capital Partners Europe Limited Registered in England No: 02979872
Registered Office: 167 Fleet Street, London EC4A 2EA, United Kingdom