Achieve sustainable growth with Connectivity 4.0

Your road map to building tomorrow's networks and connected technologies to help you realise your ESG objectives





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Recognise climate change risks

Corporate philosophies have changed dramatically over the past few years as business leaders recognise rising employee, customer and investor expectations of enterprises' environmental, social and governance (ESG) obligations.

Having evolved from conventional notions around community engagement and charitable giving, ESG has become intrinsic to the way companies operate and position themselves as socially and economically responsible entities.

ESG initiatives are continuing to mature as they include concerns around climate change, sustainable development and operations, net-zero emissions, socially responsible growth, employee wellbeing, and diversity and inclusion (D&I).



In the United States, McKinsey & Co has noted, more than 90% of S&P 500 companies now publish ESG reports. True ESG, McKinsey concludes, "is consistent with a company's well-considered strategy and advances its business model ... to ensure that their business endures, with societal support, in a sustainable, environmentally viable way".

It's a wave of change that's rolled across the globe, with a key driver being the broad recognition of financial risk associated with climate change. And Australian companies are leading the world when it comes to acknowledging that risk. One recent KPMG analysis noted that 78% of Australian companies now acknowledge climate change as a financial business risk — well above the 56% average across the global 250 largest companies.

In fact, the Financial Stability Board highlighted the financial risk posed by climate change back in 2015, when it established the Taskforce on Climate-related Financial Disclosures (TCFD). The taskforce issued recommendations in 2017 to "help companies provide better information to support informed capital allocation".

In 2018, just 16% of Australian companies were following TCFD guidelines, but that figure has increased to more than 60% in intervening years.

TCFD "really is raising the bar on the response of business to climate change, by enabling very consistent disclosure against key themes of interest to investors including governance, strategy, risk management, metrics and targets," notes Andrew Tipping, General Manager — Clients and Business Development at climate risk and energy transition consultancy Energetics. And while in 2018 just 16% of Australian companies were following TCFD guidelines, that proportion has increased to more than 60% in intervening years.

Four pillars of a climate change strategy

A typical business climate change strategy has the following four 'pillars', according to Tipping:

- Purchase (and invest in) clean energy.
- Pursue net-zero emissions reduction targets.
- Invest in data analytics to support decision-making disclosures.
- Build resilience as the climate destabilises.

Together, these pillars bolster a significant program of change that will lean heavily on pervasive connectivity to build the new energy-efficient, clean energy-powered operations required in today's enterprise.

What's more, robust connectivity is vital for operational resilience, as explained in our companion paper, Build resilient mission-critical services with Connectivity 4.0.

Unlock data to measure ESG success

"Climate change is with us, and we need to prepare for a changed environment with a different risk profile," Tipping says. "Accordingly, the pace of the business and governmental response is accelerating, in terms of mitigation and adaptation measures."

For business leaders, this starts with making meaningful internal change at a systemic level, such as creating and acting on net-zero emissions reduction targets through measures like purchasing clean energy. But increasingly, corporations are also looking up and down their value chains to manage their carbon footprints. They are building renewable-energy mandates into commercial contracts to help them meet their ESG mandates.

Reporting on these initiatives has become essential, and requires data from multiple sources, and platforms to measure and analyse that data. ESG data-sharing platforms are needed to support contracts with suppliers and customers.

To implement these platforms, organisations must first address critical issues such as how to connect and integrate large quantities of data from widely distributed applications and systems, both in the cloud or on-premises.

Enter Connectivity 4.0, a new era in which network technologies and business needs have evolved and come together to make fast, resilient and ubiquitous connectivity a reality.

In this paper, we explain how embracing Connectivity 4.0 can help organisations build the future-proof networks and connected technologies needed to achieve sustainable growth and their ESG objectives.

What is Connectivity 4.0?

Just as the transition to Industry 4.0 is revolutionising business by integrating digital services and processes into every aspect of operations, Connectivity 4.0 can revolutionise the way those services connect with each other and the world around them.

Connectivity technologies have evolved through several eras, from the original public switched telephone network to early computer networks, the internet and beyond. And as businesses have become more connected, they have adopted an increasing range of technologies. However, choosing those technologies has traditionally involved balancing performance with flexibility and availability.

Connectivity 4.0 is a new era in which these technologies have evolved to the extent that organisations no longer need to compromise. Together, these technologies can provide ubiquitous connectivity across terrestrial and subsea fibre, regional 4G and 5G mobile services, satellite coverage, and private long-term evolution (LTE) campus networks.

What's more, you can choose a mix of technologies that provides fibre-like performance and unprecedented resilience, along with the network flexibility and availability your business needs.

Connectivity 4.0 is paving the way for high-speed, low-latency applications like autonomous vehicles and widespread sensor networks. But it's also driven by the need for ubiquitous connectivity for core business needs right now — including building mission-critical services, enhancing the employee experience, and achieving ESG objectives. It does this by unlocking a new level of pervasive connectivity, enabling organisations to reimagine what's possible like never before.

For more details about this new era in connectivity, see Connectivity 4.0: the new business imperative. In this paper, we explain Connectivity 4.0 in-depth — the technologies driving it, how it works and why you need to embrace it, so your organisation can reimagine what's possible like never before.



Putting ESG at the heart of business

Setting and reaching ESG targets can help organisations to address workforce challenges, such as labour and skills shortages. Corporate commitments to objectives such as D&I, emissions targets and employee well-being are fundamental to ensuring that businesses have the skills they need.

The reverse is also true, as the increasing integration of multiple ESG strategies into operations means that all employees play a significant role in ensuring the business achieves its environmental and social objectives.

"To serve our customers best, our people need to be at the centre of every decision we make," explains Louisa Harris-Baxter, Head of ESG at Vocus.

"ESG has gone from being a nice-to-have to being a must-have, very quickly, and the employee value proposition is an important reason why. They are the conduits to our customers and the people working with them day in and day out."

Under Harris-Baxter's lead, Vocus has been expanding an ESG framework that includes the company's approach to topics like D&I, modern slavery, climate change and community investment.

That framework will vary depending on each organisation's industry and specific circumstances.

As Tipping says: "Some sectors of the economy have limited emissions reduction options available to them, because the renewable and low-emissions technologies aren't there yet.

But the telecommunications space is a relatively easy sector to decarbonise because its emissions profile is dominated by electricity use — and you can decarbonise this dramatically by using or buying renewable energy. With the extraordinary wind and solar resources across Australia, you are supporting a nation-building opportunity."

As such, net-zero emissions targets have become a particular focus for telecommunications providers and other companies in data-intensive industries. It is also a subtext to everyday work with customers, who are increasingly looking to the expertise of companies like Vocus to help consolidate their infrastructure as a way of achieving their own net-zero targets.

Understand how telcos and IT providers can help

As this change continues to reshape the way telecommunications and data infrastructure operates, connectivity will become more important than ever. Power generation and consumption will be intrinsically linked to self-monitoring, self-managing networks of Internet of Things (IoT) sensors that tap artificial intelligence (AI) capabilities to monitor usage and manage increasingly automated assets.

"As we move from a highly centralised energy generation and distribution system to a decentralised system with millions of connected devices, it's a data-rich environment," Tipping says.

"There's a lot of opportunity to create value from collecting and analysing the data and information that's available and using the insights to build resilience — we're going to see a huge transformation in that space." Already a hot, dry continent prone to extremes of weather, Australia faces both known challenges and, as the climate destabilises, uncertainty.

"We need to adapt and build resilience across communities and all parts of the economy. At the heart of this response is communications infrastructure that enables everything from disaster and emergency services, resilient transport, water and energy systems, as well as a plethora of industrial-scale data processes."

In a digitally transformed world, investments in hybrid cloud computing are allowing businesses to shift their energy efficiency obligations to cloud service providers. The resulting surge in net-zero activity is proof that Connectivity 4.0 will be fundamentally transformative for the modern workplace.

By leaning heavily on hybrid cloud platforms, this transformation will support the shift to a cleaner and more energy-efficient operating mode than ever before.

In this vein, Vocus has been working since 2019 to improve the energy efficiency of our data centres. We have also committed to a business-wide net-zero target that will drive our environmental investments in coming years.

"We are setting our ESG ambitions, particularly in relation to net zero, with a very clear mind to the part we can play in helping our customers to meet their ESG objectives," Harris-Baxter explains. She notes that Vocus has worked closely with major suppliers and customers to ensure that the firm's targets align with customer expectations.

"We are all working towards a common goal with respect to climate change," she says, "and there's a lot we can learn from each other to help us get there."



Next steps for achieving sustainable growth



Better connectivity means lower consumption

As you look for ways to improve your sustainability credentials, better connectivity will enable you to collect and aggregate real-time performance data from across the business — enabling you to run smarter and consume less.



Address diversity

Better connectivity helps turn business ESG goals into achievable change, so work to tap new data sources to improve your organisational diversity and inclusion — and your workers will be happier, more efficient and more likely to stay.



Track progress against objectives

Make sure that your transition to Connectivity 4.0 includes appropriate methods to measure and track your progress. In today's market, such information is useful not only for operating your business, but also in strengthening its brand and reputation.

Build a culture that delivers sustainable success

ESG initiatives that focus on one or two business silos are destined to fail. Success requires engaging every part of the business — not just the executive team or an isolated sustainability team — to drive the employee experience and cultural change that transformation requires.

"Companies that have a mature ESG practice often find that it helps to drive innovation and strengthen governance across the board," says Harris-Baxter. "But it's not possible to achieve true sustainability integration unless everybody feels like it's their job to drive the agenda forward."

However, while succeeding in ESG objectives largely depends on having the best people and the right culture in place, that must be underpinned by data-rich platforms that provide

your people with the insights they need to deliver and measure success.

By transitioning to Connectivity 4.0, you'll have the fast, resilient, ubiquitous network needed to support these platforms. Furthermore, robust connectivity will help ensure your operations have the resilience needed to mitigate the disruptive effects of climate change, such as natural disasters.

What's more, embracing Connectivity 4.0 will help your organisation meet other fundamental business challenges, such as building resilient mission-critical services and transforming the employee experience. With a new level of pervasive connectivity, your organisation can reimagine what's possible like never before.



We thank the industry experts and Vocus experts for their contribution to our report.



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