



MEDIA RELEASE

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New research confirms fibre as the greenest broadband technology

Research released today by Chorus, Enable, Tuatahi First Fibre and Northpower Fibre has confirmed that fibre is the best broadband option for consumers concerned about carbon emissions.

The research, completed by Sapere Research Group, finds fibre as the lowest emission broadband technology compared with copper-based VDSL, Hybrid Fibre Coaxial (HFC) and 4G and 5G fixed wireless.

Chorus CEO JB Rousselot – speaking on behalf of the four fibre network operators – said, "This is the first research completed in New Zealand that assesses the carbon generated by different broadband technologies. It's an important step in empowering consumers to make communications buying decisions based on what's best for the planet."

According to the research, a fibre broadband service outperforms other broadband technologies in terms of its sustainable carbon footprint.

An entry-level fibre plan, operating at 50 Mbps, is up to 41 per cent more efficient than copper VDSL and up to 56 per cent more efficient than 4G fixed wireless. For higher speed plans, around 300 Mbps, fibre is up to 29 per cent more efficient than HFC, and up to 77 per cent more efficient than 5G fixed wireless.

The research clarifies that the emissions profile of fibre stays consistent as speeds increase while the emissions for alternative technologies increase with speed.

"What this says is that fibre is the most sustainable of the broadband options available today. It will likely continue to be the best option in the future as consumers increasingly demand high-capacity broadband services to do all the things they want online," added Mr Rousselot.

"New Zealand fibre broadband users are about to benefit from the largest ever broadband performance upgrade in New Zealand, so these sustainability benefits are about to be even more important."

The emissions research highlighted that equipment in the home is a significant source of power usage for a fibre broadband service and contributes up to 65 per

cent of its emissions. There are future opportunities for emissions reduction in fibre networks.

The research focused explicitly on broadband connections to homes and smaller businesses. It examined the emissions during the access network use and includes the shipping and disposal of equipment, such as optical network terminals and Wi-Fi routers but not the activity in building copper, fibre, HFC or the mobile networks.

The research used real-world network data to assess the emissions impact of fibre and VDSL. For other technologies, it used a mix of actual and theoretical data.

EY's 2021 Future Consumer Index highlights that 90 per cent of New Zealand consumers engage with sustainability as an issue that needs to be addressed. Half of these people will make conscious, sustainable purchasing decisions at a cost to them. EY's research also highlights the need for companies to make it easy for consumers – with 56 per cent of people needing more information to help make better sustainability choices when they shop.

"Our research is a starting point to help consumers better understand the environmental impact of their communications purchasing decisions so they can make an informed choice," said Mr Rousselot.

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