Hydro Tasmania Chooses Cisco SD-WAN to Connect Renewable Energy Sites, Improve Bandwidth

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Hydro Tasmania, Australia's largest generator of renewable energy, relies on Cisco SD-WAN and Starlink internet to deliver reliable network services to remote locations.

Executive Summary
Customer Name: Hydro Tasmania **Industry:** Renewable Energy **Location:** Hobart, Tasmania **Number of Employees:** 1200

Challenges	• High WAN costs and poor service • Delivering network bandwidth to remote locations • Improving risk management and reducing risks for staff in the field
Solutions	• Cisco SD-WAN • Cisco DNA Center • Cisco Integrated Service Router (ISR) 1100 Series (SD-WAN Edge)
Results	• Improved WAN bandwidth by 3x • Increased agility to deploy networking to remote locations • Achieved greater value for the same total spend

A more cost-efficient WAN

As Australia's largest generator of renewable energy, Hydro Tasmania is helping to create an energy future that's clean, reliable, and affordable. The company operates 54 dams, 30 hydroelectric power stations, and two major wind farms. Maintaining operations across far-flung and remote locations was creating significant networking challenges that required the flexibility of a software-defined WAN (SD-WAN).

"We made a decision to transition to SD-WAN to enable us to more easily stitch together different carriers in a way that best suited our business needs across diverse operating areas in Tasmania, the Bass Strait islands, southern Australia, and India," says Fletcher Davidson, manager of IT architecture for Hydro Tasmania. "With Cisco SD-WAN, we delivered a three times improvement in bandwidth across the entire

WAN without increasing spending. We're getting a lot more value for the same money which is a great outcome.

Vendor selection

Hydro Tasmania is an established Cisco customer, relying on a variety of Cisco equipment including Cisco Catalyst switches and access points plus Cisco ACI in its data center and Cisco DNA Center for network monitoring, troubleshooting, and assurance. Nevertheless, the team looked at multiple SD-WAN vendors before settling on Cisco SD-WAN.

"IT skills are hard to find in Tasmania. We already have a lot of experience with Cisco networking gear, so that made the transition to Cisco SD-WAN easier for our staff," says Davidson. "We wanted an SD-WAN provider that had the capability to deliver and to do it at scale. The relationship we have built with Cisco really helped drive our confidence."

"The proof was just how simple it was once the technical team started actually using Cisco SD-WAN capabilities," adds Davidson. "It revolutionized our thinking about what is possible. It is just so fast and easy to deploy equipment using templates in the cloud."

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Fletcher Davidson
Manager of IT Architecture, Hydro Tasmania

Improving bandwidth

At the company's remote Flinders and King Island locations, employees needed a faster, more efficient solution than the low bandwidth (around 4Mbps) provided by microwave links. This was also the case in other remote locations.

"We purchased several Starlink satellite terminals and integrated them using Cisco SD-WAN overlays. These now provide secure network service in two of our island locations," says Davidson. "The satellite internet solution is inexpensive, integrates seamlessly and securely via our SD-WAN, and provides up to 100Mbps instead of 4Mbps, a massive improvement. Our people on the islands are now able to easily access important business applications, documents, and files as well as seamlessly attend video meetings and communicate and collaborate in entirely different ways than they could before."

Boost efficiency, shrink risk

Many Hydro Tasmania facilities are in locations that are literally at the end of the road. Across-the-board improvements to network throughput are enabling the team to utilize the network and technology to improve how some tasks are performed, which can help better manage health and safety and improve productivity.

"Tasmania has extreme weather, and this technology helps us manage our remote locations and reduce time spent on the road. The improvements to our network have enabled us to plan broader access to remote security camera feeds," explains Davidson. "In the future when an operator receives a notification, they can review the video feeds and potentially resolve an issue without driving to the site."

Operational agility

Cisco SD-WAN capabilities will play a significant role as the company sustains existing infrastructure and explores new opportunities. "We're looking at using Cisco SD-WAN and Starlink to create pop-up satellite Wi-Fi solutions that are grab and go," explains Davidson. "Major works teams and field repair teams will be able to request network services in virtually any location, giving them much better connectivity and communications options than we have had in the past."

With interest in renewable energy growing in Australia and around the world, Hydro Tasmania's Battery of the Nation initiative is exploring opportunities for further hydropower expansion. Flexibility, agility, and automation are essential as the company's operations expand. "We already use Cisco DNA Center to help make network deployments plug and play," explains Davidson. "One of our goals is to standardize all of our networking—not just SD-WAN—and get everything into DNA Center, and Cisco Prime where we need to, simplifying management and improving visibility everywhere."

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Learn More

Learn more about Cisco SD-WAN and additional customer deployments.