SOLUTION: Data

INDUSTRY: Energy

COUNTRY: Australia

Carnegie CLEAN ENERGY

A NEW WAVE OF RENEWABLE ENERGY

"The amount of energy landing on our shores is about five times what we consume. And it's really untapped."

– JONATHAN FIEVEZ
CEO, CARNEGIE CLEAN ENERGY

Carnegie Clean Energy is researching cost-effective ways to create energy from untapped, renewable sources. Using supercomputers to study the rhythms of nature could unlock unlimited supplies of clean energy. Carnegie teams up with the Pawsey Supercomputing Centre in Kensington, Western Australia for access to the HPE Cray Magnus—a petascale supercomputer.

OBJECTIVES

- Tap unused natural resources to produce renewable energy
- Study wave action to unlock its nearly limitless potential for energy creation
- Create floating structures to harness wave energy

REQUIREMENTS

- Test the buoy structures virtually before deploying in the ocean
- Analyze the physics of how the ocean and the buoys interact
- Fine-tune and scale the solution to convert that motion into electricity

SOLUTION

- HPE's Cray XC40 high-performance computing system

OUTCOMES

- Provides emissions-free sustainable and scalable energy
- Produces grid-ready electricity with zero visible impact
- Creates the ability to produce 5X the amount energy our planet needs

ADDITIONAL RESOURCES

- VIDEO

→ EXPLORE DIGITAL GAME CHANGERS

Hewlett Packard Enterprise

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