



TROPICAL CYCLONE DATA FUTURE-PROOFING AUSTRALIA'S ENGINEERING

Future-proofing Australia's engineering structures against catastrophic weather events is a challenging and ambitious task – but by connecting with the Industry Growth Centres Initiative, the Australian Government Bureau of Meteorology has done exactly that, becoming an international leader in objective tropical cyclone analysis.

With recent advances in data analysis, the Bureau of Meteorology saw an opportunity to revisit more than 35 years of data collection to learn more about cyclone intensity in Australian waters.

As an industry-led organisation operating within one of Australia's six growth sectors, the Oil, Gas and Energy Resources Growth Centre, NERA (National Energy Resources Australia) worked with the Bureau of Meteorology to fund a new analysis platform to improve understanding of extreme weather conditions.

Through working with key industry partners, including Shell and Woodside, the re-analysed data is expected to lead to greater certainty in engineering design, not just across the oil and gas sector but across all tropical cyclone-related engineering. This certainty will deliver efficiencies in construction, maintenance and operating costs for a wide range of infrastructure and built assets.

The Bureau of Meteorology and NERA are working together to the benefit of industry.

LEARN MORE AT
Industry.gov.au/IndustryGrowthCentres

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“Offshore operators will be able to use this improved cyclone database to get a better insight into the highest wind and wave conditions that could be experienced at a location. A better understanding of cyclone risk will enable improved engineering for offshore and coastal assets; giving Australian industry a competitive edge.”

— Andrew Burton, Bureau of Meteorology