

Why is there a marine reserve around Heard Island & McDonalds Islands?

Recognition of the unique and largely unmodified nature of the marine environment within the Australian EEZ around Heard Island and the McDonalds Islands led to the proposal for a marine reserve in 2001.

Where are the Heard and McDonald Islands located?

The Heard and McDonald Islands are remote subantarctic volcanic features located in the Southern Ocean, halfway between Australia and South Africa. They are approximately 1700 km from the Antarctic continent and 4000 km southwest of mainland Australia (Australian Government 2016 ). Heard Island is 43 km long and 21 km wide.

What is The HIMI marine protected area (MPA)?

In the Australian EEZ, in the south, a similar management system was established in 1979 and was followed by the designation in 2002 of the Heard Island and McDonald Islands (HIMI) Marine Protected Area: one of the world's largest MPA with an area of 65,000 km<sup>2</sup> (Welsford et al. 2011). ...

Is there a tidal power system in the Maldives?

To date, several studies have been conducted on islanded power systems, mostly dedicated to specific locations, such as the case of Maldives or in the Canary Islands, or as in, seeking to classify islands by their potential to explore some renewable sources. However, these studies do not include wave and tidal.

Is surplus electricity stored or curtailed?

The model considers that any surplus of electricity generation is either stored and/or curtailed, depending on which is more cost-effective. These results are derived from a medium-cost scenario projection.

Does adding wave and tidal to offshore wind reduce storage capacity?

Adding wave and tidal to offshore wind decreases the necessary storage capacity by 30% in 2030 and approximately 35% in 2040 and 40% in 2050. However, the all-energies scenario always presents the lowest need of storage.

# HEARD AND MCDONALD ISLANDS GRID STORAGE SYSTEMS



Electric vehicles (EVs) are emerging as unexpected allies in bolstering grid resiliency as the United States grapples with increasing demands on its aging power infrastructure. Recent research conducted by the National ???



Public consultation paper 1 Purpose of this document The Proposal to expand Heard Island and McDonald Islands Marine Reserve ??? Public consultation paper ("proclamation proposal") has ???

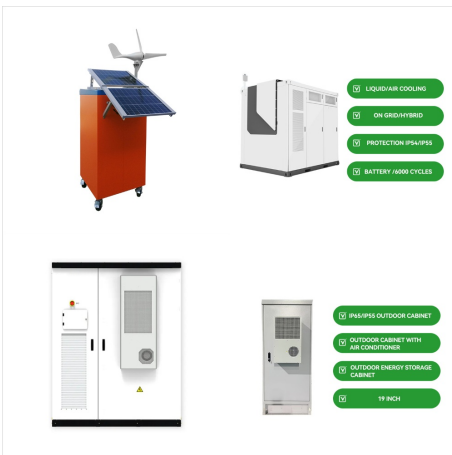


The McDonald Islands archipelago is a group of small, rocky volcanic islands that are situated approximately 44km to the west of Heard Island. The archipelago comprises McDonald Island, Flat Island, and Meyer Rock ???

# HEARD AND MCDONALD ISLANDS GRID STORAGE SYSTEMS



This paper presents a study on the system benefits and challenges of marine energy integration in insular power systems, focusing on the Orkney Islands as a case study. A microgrid modeling approach that optimizes ???



Heard Island and McDonald Islands is the only sub-Antarctic island group with almost no human-introduced species. Beyond "the shallows" ??? the case for expanding the reserve When the ???



The Australian subantarctic Heard Island and McDonald Islands (HIMI) Marine Reserve is among the world's most remote MPAs with notoriously harsh oceanographic conditions, and yet the region's rich mammal and fish ???