PRESS RELEASE

2 November 2026

Nautilus Project opposes data centre plan that would turn the Bay into a heat sink.

Forty-five years of satellite data show near-outfall waters would sit in marine heatwave conditions almost all year round

The Nautilus Project (TNP) has come out against the construction of the proposed 250MW Pelagos data centre at the Port of Gibraltar. Our main objection is the damage it would do to the marine environment. We understand that cooling the data centre with seawater is being considered. That would mean pumping the heat from the servers into the Bay of Gibraltar around the clock, for the life of the project.

Almost all the electricity a data centre uses ends up as heat. At full build-out, that is in the region of 250MW of heat, around three times the capacity of Gibraltar's North Mole power station. Sending that heat into the sea does not make it go away. It ends up in a semi-enclosed bay that is already getting warmer.

What our data shows

TNP runs the Gibraltar Ocean Observatory, which collects satellite and buoy data for the waters around the Rock. We analysed 45 years of daily sea surface temperature for the Bay of Gibraltar (1982 to 2026, over 16,000 days of Copernicus Marine satellite data).

- The Bay is already warming. Its hottest day each year has risen by about 0.33°C per decade. The record, 25.7°C, was set on 31 August 2024.

- In the last ten years the Bay spent around 48 days a year above the 90th percentile for the time of year, the threshold used to define marine heatwaves. By definition that should be about 36.

- Seawater cooling systems typically return water 3 to 5°C warmer than they take it in. If water near an outfall were 3°C warmer, it would sit above that heatwave threshold on around 349 days a year, and on 89% of summer days. At 5°C warmer, it would be above it every day.

- At 5°C warmer, near-outfall water would be hotter than anything recorded in the Bay in 45 years on around 35 days a year.

Seagrass, plankton and the life of the Bay

We are most concerned about Posidonia oceanica, the Mediterranean seagrass that TNP is working to bring back to Gibraltar through the Gibraltar Seagrass Restoration Project. Published research from Spanish meadows shows that its shoot mortality rises by about 3% a year for every 1°C increase in summer peak temperature (Marbà and Duarte, 2010). Applying that relationship to our Bay data, we estimate yearly shoot losses near an outfall of around 8 to 15%, compared with close to zero today. A healthy meadow adds new shoots at only around 3 to 4% a year (Díaz-Almela et al., 2009). Losses on that scale would outpace any regrowth.

A seawater cooling system of this size would need to draw in an estimated 12,000 to 20,000 litres of seawater every second. Plankton, fish eggs and larvae drawn into the system are killed by the pumps, the heat and the chlorine used to stop pipes fouling. Chlorine reacts with seawater to form by-products that are more toxic in warm water. Much of what lives in the Bay

arrives as larvae carried in from the Strait, so losses at an intake affect more than the water around it.

Building the intake and outfall pipes would also stir up harbour sediments and create underwater noise in waters where we regularly see dolphins.

Quote

Lewis Stagnetto BEM, Director and Lead Scientist of The Nautilus Project, said: "Using the sea to cool a data centre is not acceptable to us. Our own data shows the Bay is already warming. Put a permanent plume of warm water on top of that and the area around the outfall would be in heatwave conditions for most of the year. We are trying to bring seagrass back to Gibraltar. This would push in the opposite direction."

He added: "We have not seen a published Environmental Impact Assessment, thermal plume modelling, or the location and design of any intake or outfall. That information should be public, and checked independently, before anything goes ahead."

What TNP is calling for

- No use of seawater, once-through or otherwise, to reject heat from the data centre or its power plant into the Bay.
- Publication of a full Environmental Impact Assessment, including 3D thermal plume modelling, entrainment estimates and the chlorination regime, before any further work proceeds.
- Independent, long-term monitoring of the marine environment, with the results made public.

Grid and safety

We also share the public's worry about what a project this size means for Gibraltar's power supply. Gibraltar has had seven Rock-wide power cuts in the first half of 2026, and the Rock-wide outage of September 2025 was caused by a contractor working on the data centre site damaging three main high-voltage cables.

ENDS

Notes to editors

- The Nautilus Project is a Gibraltar-based marine science education and conservation charity, founded in 2015 and an IUCN Member. Its work includes the Gibraltar Seagrass Restoration Project, the NEMO citizen science platform and the Gibraltar Ocean Observatory.
- Temperature data: Copernicus Marine Service Mediterranean L4 foundation sea surface temperature (reprocessed and near real time), Bay of Gibraltar area, 1 January 1982 to 1 November 2026. Scenarios add a constant +1, +3 or +5°C to observed daily temperatures from 2016 to 2025 and represent water close to an outfall, not the whole Bay.
- Marine heatwaves are defined following Hobday et al. (2016). Seagrass mortality estimates apply the relationship in Marbà and Duarte (2010) to Bay of Gibraltar data and are indicative, not a forecast.

- Seawater flow is a TNP estimate for removing around 250MW of heat with a 3 to 5°C temperature rise.
- Media contact: Lewis Stagnetto BEM, The Nautilus Project. Email: info@thenautilusproject.co

References

Díaz-Almela, E., Marbà, N., Martínez, R., Santiago, R. and Duarte, C.M. (2009) 'Seasonal dynamics of Posidonia oceanica in Magalluf Bay (Mallorca, Spain): temperature effects on seagrass mortality', Limnology and Oceanography, 54(6), pp. 2170–2182.

Hobday, A.J. et al. (2016) 'A hierarchical approach to defining marine heatwaves', Progress in Oceanography, 141, pp. 227–238.

Marbà, N. and Duarte, C.M. (2010) 'Mediterranean warming triggers seagrass (Posidonia oceanica) shoot mortality', Global Change Biology, 16(8), pp. 2366–2375.