



NAUTILUS[®]
DATA TECHNOLOGIES

Making a **Positive Impact**

Letter from the Chairman

At Nautilus Data Technologies, we believe that data center infrastructure should achieve the highest level of performance with the smallest environmental footprint and the greatest social gain. This principle informs everything we do from engineering and design to operations and the way we participate in the community.

Our company was created to deliver data centers that exceed the highest environmental, social, and governance (ESG) standards. We've designed our data centers from the ground up with sustainability in mind. By taking this approach, we identified new pathways that led to systems that are more efficient, more powerful, and more harmonious with nature.

Nautilus' patented, award-winning water cooling technology is at the core of what we do. Our infrastructure takes compute heat out of the equation because we can support your systems no matter how hot they get – all with zero water consumption, zero wastewater generation, zero chemicals, and a 30% reduction in energy related CO2 and air pollution. With a traditional air cooled data center, more heat drives all those metrics in the opposite direction.

At Nautilus Data Technologies, we believe that water cooling is the best way for the data center industry to live up to its responsibilities around sustainability. That's why our company metrics are our ESG metrics. To that end, rather than present you with a separate ESG report, we offer this snapshot of what we're doing to show you how we're doing.

Sincerely,

**Jim
Connaughton**
Chairman of the Board



Environment

We build and operate the most sustainable data centers on land or water. Using zero water with a system 75% more energy efficient, we're unleashing compute in the most sustainable way possible.

Five metric categories to measure sustainability efforts

The goal of environmental sustainability is to safeguard natural resources such as the atmosphere, water, and land for future generations. As a company, our very purpose is to support the highest performance computing, with the lowest environmental footprint, enabling the greatest social gain. We picked five key metrics to assess in order to help us plan for an ecologically responsible, digitally connected future.

Energy

High Performance and Ultra-Efficient

- 1.15 PUE max or less, no matter the time of day
- 80% more energy-efficient in cooling

GHG Emissions

Significant Reductions in Greenhouse Gasses

30%+ reduction in energy-related CO2 and air pollution

Water

Zero Water Consumption

- No evaporation, no consumption of drinking water
- Compared to a traditional chiller cooling system, the Nautilus 7MW data center saved nearly 179 million liters of water on-site in 2020.

Water Used per Year		
Traditional Chiller Cooling	7MW	178.85 Million Liters
Nautilus Cooling	7MW	0 Liters Used

Waste

Zero Use of Chemicals Equals Zero Wastewater

- We don't use water treatment chemicals or ozone-depleting refrigerants
- Data centers cooling systems such as the Condenser DX refrigerant, Indirect evaporative/Closed-loop, fluid cooler, using hazardous materials are challenged by chemical beings banned and regulated.



Land & Biodiversity

Zero Impact on Wildlife, Fish, or the Environment

- Our first data center in California was thoroughly evaluated and it was found to have no impact on the local wildlife, fish, or environment
- The cooling system removes the need for condensers/compressors and eliminates typical data center noise pollution

We Meet the Most Stringent Environmental Requirements in the World

- California Environmental Quality Act (CEQA) (160-page analysis finding no significant adverse impact to the environment)
- US National Marine Fisheries Service (endangered species protection)
- US Fish and Wildlife Service (endangered species protection)
- US Army Corps of Engineers (wetlands protections)
- California Department of Fish and Wildlife (state species protection)
- California State Lands Commission (public trust and natural resource protection)
- California Regional Water Quality Control Board (water quality protection)
- California Air Quality Management District (air quality protection)



CEQA

**NOAA
FISHERIES**

Community

We support our community by creating lifelong assets that bring new sustainable industry and opportunities to its people, by investing in local area efforts to spread knowledge about the sector, and by working holistically with businesses to improve the area.

Sustainable, Long-Life Assets

We have rethought material, labor, and fuel consumption both in standing up and decommissioning our data centers at the end of their lifecycle.

- Our large, functional prefabricated modules make deployment faster and decommissioning easier
- We use plastic pipes and stainless steel pumps because they last longer, won't corrode, and can be either reused or recycled at the end of their lives – rather than being sent to a landfill

Future Opportunities

Because a Nautilus Data Center has the ability to provide filtered warm water at the end of the cycle, we actively seek future partnerships to take advantage of the water to further improve their efficiencies:

- District heating
- Combined heat and power plants (CHP)
- Desalination plants
- Drinking water treatment plants
- Agricultural applications including greenhouses and aquaculture farms

Partners and Vendors

Our vendor's efforts around sustainably producing and delivering parts are just as important to us as their ability to deliver on spec.

- The Digital Climate Alliance: we're active members of this alliance which aims to inform public policy around the role digitalization can play in enabling climate solutions
- Bechtel Partnership: We have partnered with engineering, construction, and project management firm Bechtel to build our highly efficient data centers that eliminate the consumption of drinking water
- We partnered with U.S. CAD to create a custom training program that allows us to support high performance computing and collaborate with partners in real-time



Economy

We help grow and transform economies by supporting new jobs, sourcing from local vendors, and generating revenue for municipalities. With outstanding customer benefits, we become a part of the ecosystem that contributes to a location's economic progress.

Revitalization:

- Our data centers are placed in areas that need economic revitalization.
- We transform brownfields into greenfields, and neglected real estate into productive land.

Employment:

Our data centers provide good family-wage jobs for the community and ultimately attract other data centers and digitally dependent businesses to the area – which bring other good-paying jobs to the area.

Connectivity:

With fiber connectivity, our data centers are still connected to customers in the city center at the speed of light.

“ The environmental friendly nature of the data center fits right in with the County's established Green Policy to develop sustainable and environmentally friendly means of conducting County business. Having a Tier 3 datacenter located in Northern California that is secure, economical, and environmentally friendly is a game changer. ”

- David Newaj, Asst. Director
Information Systems
San Joaquin County

Customer Benefits

Rapidly meet the demand for data center capacity.

For the same market price, our customers get higher compute performance with a considerably smaller environmental footprint and faster delivery than industry average data centers.

Grow within the rack & enable AI/ML.

Because there is no limit to what we can cool, customers can grow within the rack capacity as needed. From 8kW to 55kW, the footprint can stay the same.

Lower energy bills over the life of the contract. 75% infrastructure efficiency improvement when compared to the industry average means savings over the long term.

Expand data capacity in hard to penetrate markets.

Our data centers on water located in ports can go where land isn't an option; plus, we're ready to deploy in any location in 9 months.

Data Center efficiencies our customers can claim:

They're using
30%
less energy and
greenhouse gases

They're consuming
NO WATER
as part of their mission
critical infrastructure

