

Enabling zero
emission zones

Geo-Fencing technology

Keeping our waterways clean is essential to the health and survival of our planet. BAE Systems is leading the way with clean, quiet, alternative propulsion systems. With more than 15,000 electric drive systems in service worldwide, our electric hybrid, battery electric, and fuel cell electric systems are now getting marine vessels to zero emissions. Utilizing geo-fencing technology, our proven HybriGen® power and propulsion system is now able to operate in zero emission zones.

gettozero.com

GPS enabled battery electric operation for zero emission zones.

BAE SYSTEMS

HybriGen Power and Propulsion with Geo-Fencing technology

BAE Systems is applying geo-fencing technology to our proven HybriGen power and propulsion system to enable zero emission zones. This intelligent geo-fencing technology allows the vessel to turn off the diesel engine and operate in full electric mode when entering ports, marinas, and other heavily-trafficked areas. Our packaged solutions offer an energy storage solution sized to suit the application and has on-board and shore-side charging capabilities. Our patented technology uses a diesel engine and lithium-ion batteries to offer nearly silent, vibration-free electric propulsion enhancing operator and passenger experience.

How it works:

Once the customer has identified the zero emission zones, the mapping is then programmed into the vessel's GPS. As the vessel enters the zone, it will automatically switch to all electric mode and then back to hybrid electric mode once it exits the zone.

Applications



Passenger ferries



Research vessels



Tug boats

Benefits:

- Provides operators with zero emissions operation in targeted areas where it matters most.
- Fully automatic, no additional controls required.
- Optional add-on feature for our HybriGen power and propulsion systems, completely retrofitable.
- No new hardware, uses the system data logger and vessel GPS.



Cities around the globe have developed air quality programs to decrease greenhouse gas emissions and limit the effect they have on climate change. To help mitigate the effects and meet emission reduction plans set forth, BAE Systems' geo-fencing technology can help to reduce emissions and noise for marine vessels around emissions corridors, ports, marinas, and conservation areas.