ECONAR® PROPULSION





Removing 10 million tonnes of maritime greenhouse gas emissions by 2030.



Our Technology

Ecomar Propulsion specialise in maritime propulsion and energy systems. All products are built to meet regulatory standards.

Our KAIROS inboards and ÅRKA outboards are 100% clean machines with 90% recyclability.

KAIROS Inboard System

Bespoke electric and hydrogen hybrid systems available from 80kW - 1MW

ÅRKA Outboard System

Options for different battery and hydrogen configurations from 80kW – 200kW With a range of unique products which have been developed by our team of engineers, we hold a variety of patents.

We make driving the boats easier by using our own powertrains, tied into a complete "throttle to prop", network.

Our proprietary software and vessel control units can handle the skippers' demands with ease.

When you choose an Ecomar Propulsion product you get a reliable, cost effective, powerful, easily maintained and serviced system that reduces costs and increases profits from day 1.

For enquiries: info@ecomarpropulsion.com +44 (0)1329 230097



Ecomar Propulsion develop and produce zero emission marine propulsion systems exclusively for commercial operators. We specialise in complete propulsion systems including hydrogen and battery energy and control systems. We create our own designs and software configurations to meet the demands of our customers.

Our engineers develop products that can withstand the extreme conditions found in commercial maritime operations by working with ship owners and distributors to manufacture products that are reliable, robust and affordable.

With our adaptable approach we can provide both type certification and approval in principle solutions for individual vessels. We specialise in workboats and have extensive experience that reduces cost, time and maintenance.

Awards

- ISO9001 Certified
- Top 5 Maritime Global Emission
 Reduction Solutions, Startus Insights
- Eureka Global Stars Award
- EU Development Fund winners
- Maritime UK Solent, Clean Maritime
 Innovator 2022 Award



KAIROS Inboard

KAIROS inboard systems are exclusively designed for shipbuilders and volume boat builders.

Power Bands: 80kW - 1MW

Ecomar Propulsion inboards are aimed at efficiency and range extension. They are part of an integrated system which includes batteries (and hydrogen if required).

We have specialist products focused on the CTV and offshore windfarm support sectors with integrated design consultancy for coastal and inshore vessels.

With a range of batteries (including fixed installations and swappable options, which are suited to specific use cases), we can advise customers on the most appropriate choices.

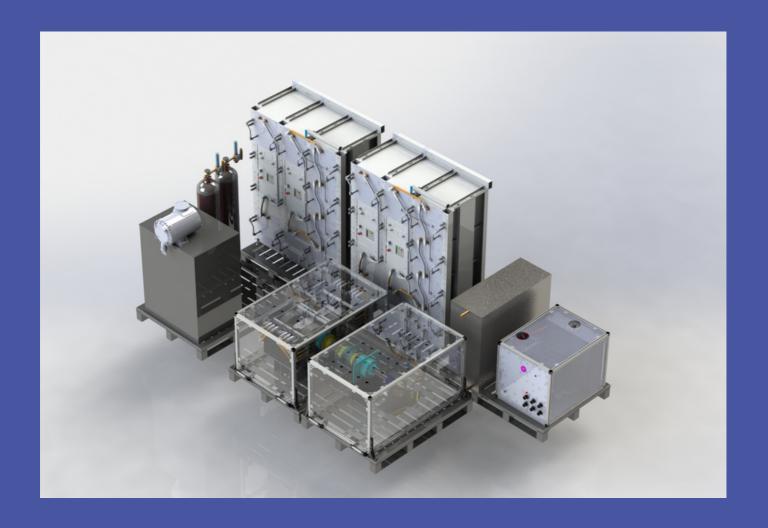
Our hydrogen and hybrid propulsion systems include integrated fuel cells, hydrogen (TPED) tanks and pipework.





KAIROS Inboard

- High torque
- Low propellor RPM
- Extended service intervals and engine life
- Maximimum efficiency of large propellors
- Lower energy use
- Efficient control management systems
- Remote monitoring solutions
- Choice of battery sizes, voltages and chemistry from 43kWh to 1MWh+
- Hydrogen integration







ÅRKA Outboard

Uniquely suited to commercial vessels with integrated safety to meet the highest standards.

Power Bands: 80kW - 150kW - 200kW

- 90% recyclable
- Reliable tested to destruction
- Robust designed for commercial environments
- Modular design easy to repair and replace all components
- Cost effective
- Higher torque than equivalent ICE engines
- Serviceable in even the most remote locations
- NMEA compatible readouts
- Patented automatic skeg protection that prevents grounding damage



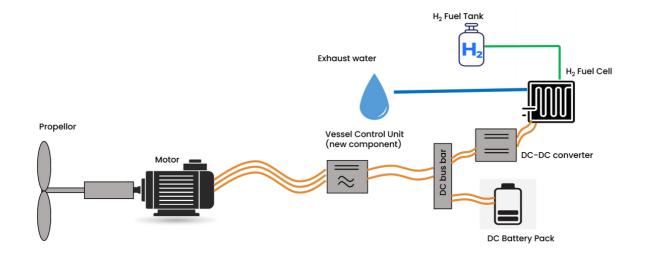
System Integration & Consultancy

For new build vessels Ecomar Propulsion offer system integration services. This includes optimisation of DC components and advisory services on choice of the best solutions.

For vessels that require powertrains of IMW and above we can supply suitable OEM powertrains. We offer advisory services and a degree of system integration (depending on prime mover selection) for these machines.

If you are a volume commercial builder we can help you to select the best machines for your vessels and design and integrate them to provide attractive propositions for your clients.







Hydrogen bunkering & shore power advisory service

We specialise in providing smaller ports with advisory services to allow rapid, cost effective transition to new fuels.

This includes feasibility, scope of works assessments and analysis of the most appropriate technology for the quayside and supporting infrastructure.

It is difficult for small ports to make the transition to hydrogen but we are able to provide long term lease options on mobile hydrogen bunkering and shore charge stations that are extremely attractive.

Planning reduces CAPEX and increases take up by vessels and land users.

Our aim is to create income sources for smaller ports who are otherwise unable to make the move to clean technology.

We do not currently work in Methanol or Ammonia.





Batteries

Produced under licence, we have a range of Lilon batteries that are specific to maritime use.

Ranging from 43kWh to multi MWh, the packs can be portable or fixed in the vessel. Each pack is designed to suit the vessel and modular configurations mean that it is possible to upgrade or replace units within a short time frame.

All our packs use NMC or LTO chemistry and are IP65 rated. Packs include state of the art BMS and remote monitoring capabilities. We are also able to advise and supply chargers and DC:DC components to suit the application.

Long term lease finance and recycling is available on specific battery packs. All packs come with warranties and are BV, DNV or Lloyds type certified.

Please note: not suitable for small leisure vessels or high performance rescue craft.



