



We talk to marine technology company Ecospray's Director, Marine Business Unit about the firm's approach to the marketing, supply and manufacturing of exhaust gas cleaning systems in today's tough marketplace



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## MEETING THE EGCS CHALLENGES

**"Ecospray has always been involved in the development of a wide variety of environmental solutions for many different industries," says Alberto Di Cecio, director Marine Business Unit at Ecospray. "This background gives us the possibility to implement and optimise cross-sector technologies, with significant advantages in terms of know-how. The current focus is mainly 'beyond compliance' technologies, that is systems aimed to further improve the exhaust and discharge water quality from several perspectives: particulate matter, hydrocarbons, CO, NOx and heavy metals."**

He explained that Ecospray can supply both complete packages, for both newbuildings and retrofits, and also specific technologies that can be integrated into existing EGCS. In general, all of the company's technologies are suitable for two-stroke and four-stroke engines, in a wide range of engines size and regardless of the ship's type.

Regarding size, when Ecospray's EGCS programme started in 2012, the main targets

were small- to mid-size four-stroke engines (4-16MW), but in the subsequent years, the market expanded and consequently the demand for larger systems to be fitted on large two-stroke engines for commercial vessels, such as capesize bulk carriers, VLCCs and 20,000 TEU container vessels.

This year has brought many challenges to the marine EGCS industry, partly depending on the reduced VLSFO/HFO fuel spread. However, Di Cecio says that this did not significantly affect the company's market share between newbuilding and retrofit projects. "There was a quite constant split of 15% and 85%, respectively," he explains.

For equipment installations, the company relies on both internal resources and on partnering with engineering companies, depending on the project's location, timeframe and technical specifications.

### SERVICE PACKAGE

Ecospray also offers a service package, that focuses on supporting customers both for operational needs and for the entire system's lifecycle once installed on board.



Service packages can be customised according to the customer's needs and even extended at a later stage, Di Cecio says.

"With a customer-orientated philosophy in mind – and thanks to the experience gathered during about 600 system installations worldwide – the range of services that we offer is quite broad, from technical assistance and real time assistance, that includes data collection and monitoring, to training activities and spares and consumables management," he says. "We think that our customers have just to focus solely on their core business. At Ecospray, we can cover the entire environmental value chain, and be the 'one stop shop' for training, upgrading, financing and maintenance needs."

One of the main development areas over the past five years has been the remote monitoring of the equipment using diagnostics when in operation, for instance for predictive maintenance purposes. "This has proved an efficient and cost-effective tool for our customers," Di Cecio stresses.

For example, the Ecospray Operation Centre (EsOC), uses a dedicated EGCS real-time monitoring and diagnostics software that collects, stores and analyses data from individual components, sub-systems and automation and is proactive with regards to the equipment's operation and maintenance.

Training is an important aspect of ECGS operations, Di Cecio says. Ecospray's objective is to allow its clients to focus just on their businesses. Therefore, the company provides a wide range of training courses to prepare the ship operators to manage an EGCS, increasing the systems' reliability, usage rates and their performances.

"We offer competence-orientated training programmes, including live training, available both in Europe and Far East, online – very convenient in 2020 due to the global pandemic situation – and training pills, which are short and efficient sessions focused on specific items.

"We have developed different training modules, covering basic aspects – regulations and compliance

rules, system overview, maintenance, troubleshooting, operations control with real-life scenarios, fine tuning, hands-on familiarisation with equipment, calibration, spares replacement, and so on," he adds.

Ecospray has dedicated spare centres covering the three main global maritime trade areas – Europe, North America, Asia – plus certified partners with available service engineers in many locations worldwide.

The company will also offer its customers the option of a full-scale maintenance programme to coincide with the five-year survey cycle.

However, Di Cecio says, "This is an option that we offer to our customers, even though we typically recommend more frequent health check surveys and item-specific maintenance in order to keep the EGCS in good shape."

To deal with the amount of cabling and piping maintenance, Di Cecio says that this does really depend on the quality of the engineering and the installation. "If both are carried out properly ensuring high quality standard, typically there are no particular maintenance problems," he explains.

Turning to the need for piping coatings, both externally and internally, this depends on the choice of materials. "With the most common ones (GRE-GRP, or high corrosion resistance stainless steels), usually there is no need for specific coating. Particular attention needs to be paid to the hull area surrounding the overboard(s), where a coating is definitely needed and must be carefully selected and applied," he explained.

Ecospray is also able to offer a customer a financial package. Di Cecio says: The company offers a range of financial solutions for clients, since we think that this can alleviate their financial burden (particularly during challenging times like 2020) and facilitate the choice of installing EGCSs on board their vessels.

"The current economic scenario has urged us to rethink our strategy from the ground up. The environmental technology market is very capital intensive. That's why we worked to offer innovative financing options

and positive cash-flow plans for our solutions. Those financial products were introduced to our clients starting from last summer, and we observed a constantly increasing interest towards this type of solution.

"At the same time, we are working to skip one generation of technological evolution, since our goal has always been to offer remarkable innovations ready in record time," he concludes.



An Ecospray scrubber is installed