

IN SEARCH OF A GREEN BALANCE

“PORT OF KOPER IS CONTINUING WITH THE ELECTRIFICATION OF PORT MACHINERY AND OTHER VEHICLES, AND IS ALSO MONITORING TECHNOLOGICAL DEVELOPMENTS AND THE POSSIBILITY OF USING ALTERNATIVE FUELS (HYDROGEN, LNG) TO POWER PORT CARGO-HANDLING EQUIPMENT.”





Boštjan Pavlič,
Head of Health Protection and
Ecology in the Port of Koper

Since port activities have an impact on the people who work in the port and live in its surroundings, and on the natural environment, Luka Koper plc, the operator of the Port of Koper, has been seeking to balance the interests of the company and the natural environment for many years. The business environment itself is increasingly environmentally conscious and more and more global logistics companies with which we work emphasise environmental concerns. A good reputation among our customers, development support from the local communities, committed employees – all of these increase our company's competitiveness and lead to a successful business and sustainable development. This is also the goal that the Port of Koper has set itself in its strategic documents.

Over the last two decades, the Port of Koper has been developing its green port concept and has made great strides in the environmental field. Today it can be an example to other ports. The port has been ISO 14001 certified since 2000, and in 2010 we upgraded it to EMAS registration, thus reaching the high standards of sustainable development under the EU's environmental management system. Our environmental protection system is continuously improving. Through the sustainable Living with the Port portal, we provide transparent information and online measurements of noise and dust particles, thus maintaining an open dialogue with the local and wider public and actively involving employees in the process.

COMPREHENSIVE MONITORING OF PORT IMPACTS

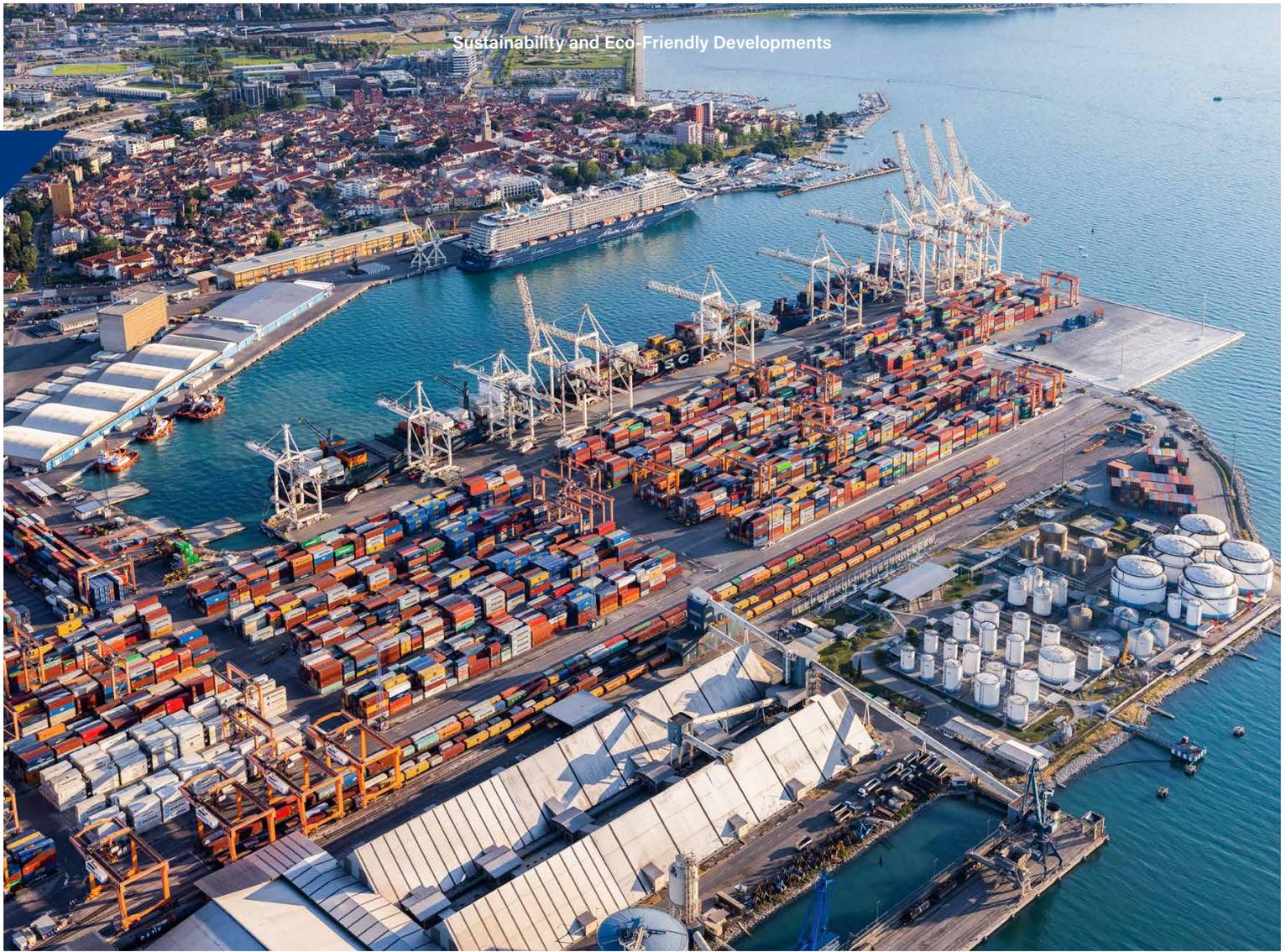
In the environmental protection area, the main focus of Luka Koper in recent years has been on noise from ships and port activities. Other impacts of port activities, such as dust particles, were effectively addressed at the port several years ago when a system for covering piles of coal with cellulose was introduced. This is a system that prevents dust from rising from the bulk piles even in strong winds, by applying cellulose.

Noise remains a challenge, but it is not solely a port issue: "Some vessels are a problem, especially when moored near settlements," said Boštjan Pavlič, Head of Health Protection and Ecology, Port of Koper. "There is no regulation on the Slovenian or European level to limit ship noise, so we have partnered with other European ports to try to set minimum standards. Furthermore, we are working with every ship-owner present in Koper. In cooperation with shipping agents, we have adopted a protocol on where the noise sources of ships should be directed when they are moored close to populated areas."

TOWARDS ENERGY SELF-SUFFICIENCY

In line with its strategic environmental orientation, the Port of Koper is continuing with the electrification of port machinery and other vehicles, and is also monitoring technological developments and the possibility of using alternative fuels (hydrogen, LNG) to power port cargo-handling equipment. By 2025, we are planning to build photovoltaic power plants with a capacity of 7 Megawatt peak (MWp), which could cover up to 20 per cent of the port's own annual electricity consumption, and by 2030 a capacity of 10 MWp, which could cover approximately 30 per cent of the total annual electricity consumption. The biggest challenge will be the establishment of an onshore power-supply infrastructure system, which, based on a European Directive, Member States are required to provide by 2030. To this end, a project is underway with ELES (as the operator of Slovenia's electric power transmission network) to build a more powerful transmission line and electrical substation near Koper. Procedures are underway to

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“THE BIGGEST CHALLENGE WILL BE THE ESTABLISHMENT OF AN ONSHORE POWER-SUPPLY INFRASTRUCTURE SYSTEM.”

obtain the design and environmental documentation required for the national land-use plan for the construction of a transmission line.

GREEN OASIS NEAR THE HARBOUR

The Škocjanski Zatok Nature Reserve (123 hectares), located in the immediate vicinity of the Port of Koper, coexists with the port, and the port has actively supported its development since 2000. It is the largest Slovenian brackish wetland of exceptional importance because of its rich fauna and flora. In 2021, an agreement was signed with the operator of Škocjanski Zatok Nature Reserve, the Bird

ABOVE
Port of Koper

Watching and Study Association of Slovenia (DOPPS), under which the signatories cooperate in the conservation and management of its ecosystem. For many years, the Port of Koper has had a joint notification system in place for uncontrolled spills that could affect water quality in Škocjanski Zatok.

ABOUT THE AUTHOR

Boštjan Pavlič, MBA, B.Sc. in Mechanical Engineering, is an expert in energy efficiency and energy management in industry with more than 20 years of experience in energy related projects. Since 2014 he is Head of Health protection and Ecology in the Port of Koper and is also

responsible for the maritime protection and energy sector.

ABOUT THE ORGANISATION

Luka Koper, port and logistic system, d.d. is a public limited company which develops and manages the Port of Koper, the only Slovenian seaport of very strategic interest. The company operates all 12 specialised terminals in the multipurpose port, handling all types of cargo.

The total throughput of the port in 2021 was 20.8 million tons, including 997,570 TEU and 617,157 car units, making Koper the largest container terminal in Adriatic and one of the most important car terminals in Europe.