Since 2013, Scandlines has invested more than EUR 300 million in building and retrofitting ferries from conventional diesel-driven ferries to hybrid ferries. With the addition of the rotor sail – a wind power propulsion technology developed by Norsepower Oy Ltd – the vessel further reduces its emissions.

Facts about rotor sail

- The rotor sail is a modernised version of the Flettner rotor – a tall cylinder, rotating around its own vertical axis driven by an electric motor. The technology is based on the Magnus effect: a pressure difference which creates a lift force that is perpendicular to the wind flow direction. The longitudinal component of this force helps to push the ship through the water, thereby reducing the use of the diesel motors.

- The technology has the optimum effect when it is windy and the wind comes from the side. The route between Rostock to the south and Gedser to the north is almost perpendicular to the prevailing wind from the west, giving Scandlines favourable conditions for using rotor sails on the crossing.

- Simulations of the current traffic pattern of the ferries and of the wind conditions indicate a reduction of the CO₂ emissions of 4 to 5 per cent.

- M/V Copenhagen was prepared for a rotor sail in autumn 2019. The actual rotor sail was installed in May 2020.