The world is becoming autonomous

As vice president for sales and marketing for Norway-based Massterly, the world's first company to exclusively concentrate on autonomous ships, **Pia Meling** believes the firm is sailing in the proper direction.

"We are quite positive that we are on the right track, that there will be a lot more automation in shipping," she said. "The only question is how fast this development will go."

Massterly, the result of a collaboration between Kongsberg and Wilhelmsen, is involved with the Yara Birkeland, an 80-meter container ship that is scheduled to go fully autonomous this year. It entered service in 2019 with a crew carrying chemicals and fertilizer between its Norwegian production facilities at Herøya and the ports of Brevik and Larvik. Powered by electric motors, the ship cost \$25 million and was partially funded by the Norwegian government.

With its carbon-neutral footprint, the ship could replace the need for about 40,000 trucks a year running the same route, said Meling, who hopes the Yara "The world is becoming autonomous," Pia Meling said in Breaking Waves -conference in Helsinki. Why should it not happen in maritime?

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Birkeland will help create a path for autonomous shipping as a viable emerging technology.

"Right now it's still quite slow, but it's our opinion that as soon as these first vessels start hitting the water, then the market will understand the potential of it and you will see an exponential increase," she said. "The main focus for us is not to go global now, but to prove it in Norway, in a smaller area between three ports and take out a lot of complexity."

Meling said the Norwegian government is offering incentives for zero-emission solutions, but the technology to make it happen is still evolving. "That's why we don't see a lot of people doing it right now," she said. "But this will pave the way. When it's proved, tested and works, you will see a rush of people to start moving into that area."

The primary challenge for autonomous shipping, of course, is safety, which will be based on object-detection technology.

"Societal acceptance will require a zerofailure tolerance (for accidents)," she said. "We cannot afford that with an autonomous ship."

Societal acceptance also involves what crewless ships will mean for the future. While some might object to a loss of jobs, Meling sees autonomous shipping as a way to create new land-based opportunities, as well as flexible, less physically demanding labor.

"There are not enough people to take the jobs in the maritime industry," she said. "It's hard to get skilled staffs. There are aging crews in many countries. I think in Japan the average age is 55 or 60, and they don't have new recruits. They don't want those jobs. It's a tough job."

"If you can work ships on the land, it's a different job. It's closer to your family. It's creating better jobs. And it's opening up jobs for women and the disabled."

And while society at large may not currently associate autonomy with the shipping industry, Meling sees it as part of the evolvement of machines.

"The world is becoming autonomous," she said. "In the grocery shop I scan my own goods. It's happening. Why should it not happen in maritime?"

