

- Final design of Yara Birkeland, first zero emission autonomous container vessel, revealed
- Successful seawater testing of Yara Birkeland model
- Norwegian government (ENOVA) backs building of Yara Birkeland, covers about 1/3 of cost
- Private-public collaboration (Yara, Kongsberg, Marin Teknikk, SINTEF, ENOVA)
- Yara Birkeland revolutionizes seaborne transport, replaces 40,000 diesel truck journey a year

Trondheim (Norway) 29 September 2017: A six-meter long model of the final design of the autonomous and zero emission container vessel "Yara Birkeland" was launched in SINTEF Ocean's 80 meter long sea laboratory in Trondheim, Norway this week.

In May, Yara announced the partnership with technology company Kongsberg to build the world's first electric container ship. Its design, developed by Marin Teknikk, has now been revealed.

"With this new autonomous battery-driven container vessel we move transport from road to sea and thereby reduce noise and dust emissions, improve the safety of local roads, and reduce emissions," says President and CEO of Yara, Svein Tore Holsether. "It was a special moment in Trondheim when, together with our partners -- Kongsberg, Marin Teknikk, SINTEF and ENOVA -- we witness the design and demonstration of a miniature Yara Birkeland for the first time."

Yara Birkeland is a global milestone for seaborne transportation

The cutting edge, six meter long and 2.4 tonnes heavy model with technology destined for the real ship, including a fully working thruster system designed by Kongsberg, will now undergo comprehensive testing at SINTEF's test tanks before construction of the full-scale vessel starts. The ship yard will be selected by the end of 2017.

"Initial tests of the model were successful, proving both concept and the technology," says Geir Håøy, President and CEO of Kongsberg. "The testing at SINTEF Ocean marks an important milestone in the development. This vessel is important for the entire maritime industry, and Yara deserves praise for their initiative and commitment. Yara Birkeland is the start of a major contribution to fulfilling national and international environmental impact goals, and will be a global milestone for seaborne transportation."

Norwegian governments supports building of Yara Birkeland

The Norwegian government enterprise ENOVA has granted NOK 133.6 million to Yara towards the construction of the world's first electric and autonomous container ship. This will cover about one third of the estimated cost.

"For the private sector, it is essential to have the government's support when we develop new technology and deliver bold innovations. It allows us to be daring," says Holsether.

"The interest in autonomous transport is great, but at the same time, many are skeptical and question the safety. The key contribution from this project is to demonstrate that autonomous and electric sea transport is feasible, and will deliver the results we want," says Nils Kristian Nakstad, CEO of ENOVA, which is responsible for promoting and supporting environmentally friendly production and energy consumption.

Yara Birkeland will be named after Yaras's founder, Kristian Birkeland, and will transport fertilizer from Yara's production plant in Porsgrunn to the container ports in Brevik and Larvik. By moving this transport from road to sea, Yara will remove 40,000 journeys with diesel-powered truck transport every year.

The plan is to launch Yara Birkeland in the first quarter of 2019.

Short video clip available here:  
<https://youtu.be/l7jNYo2Cz6M>

For more information  
 Kristin Nordal, Head of External Communications, Yara  
 Cell: +47 900 15 550  
 Email: [kristin.nordal@yara.com](mailto:kristin.nordal@yara.com)

## About Yara

Yara's knowledge, products and solutions grow farmers', distributors' and industrial customers' businesses profitably and responsibly, while protecting the earth's resources, food and environment.

Our fertilizers, crop nutrition programs and technologies increase yields, improve product quality and reduce the environmental impact of agricultural practices. Our industrial and environmental solutions improve air quality by reducing emissions from industry and transportation, and serve as key ingredients in the production of a wide range of goods. We foster a culture that promotes the safety of our employees, contractors and societies.

Founded in 1905 to solve emerging famine in Europe, today Yara has a worldwide presence, with close to 15,000 employees and sales to about 160 countries.  
[www.yara.com](http://www.yara.com)

Yara Birkeland illustration  
Test drive Yara Birkeland  
Test model launch  
Minister and Yara at Sintef

---

This announcement is distributed by Nasdaq Corporate Solutions on behalf of Nasdaq Corporate Solutions clients.  
The issuer of this announcement warrants that they are solely responsible for the content, accuracy and originality of the information contained therein.

Source: [Yara International ASA](#) via Globenewswire