

Per Fenger, CEO

2023 was yet another busy year for Liftra, marked by big achievements and milestones, including the celebration of our 20th Anniversary.

20 years ago, Liftra emerged as a startup founded by two Danish engineers. Today, we have 500+ employees, a global reach spanning 30 countries, and a portfolio of 1000+ completed projects.

With offices in Denmark, Spain, Poland, the US, China, Vietnam, Australia, and Brazil, Liftra will continue to deliver quality solutions for the wind industry worldwide.

Please enjoy a selection of News from 2023.

NEW JOINT VENTURE BETWEEN ESTEYCO AND LIFTRA

Liftra remains committed to forging strategic alliances that drive groundbreaking and innovative initiatives forward. Our most recent collaboration involves a joint venture with Esteyco that will unite their proven ATOMS technology with our proven Liftra Self-Hoisting Crane.

Together, we offer a solution that efficiently tackles the complexities of offshore wind turbine Operations and Maintenance.

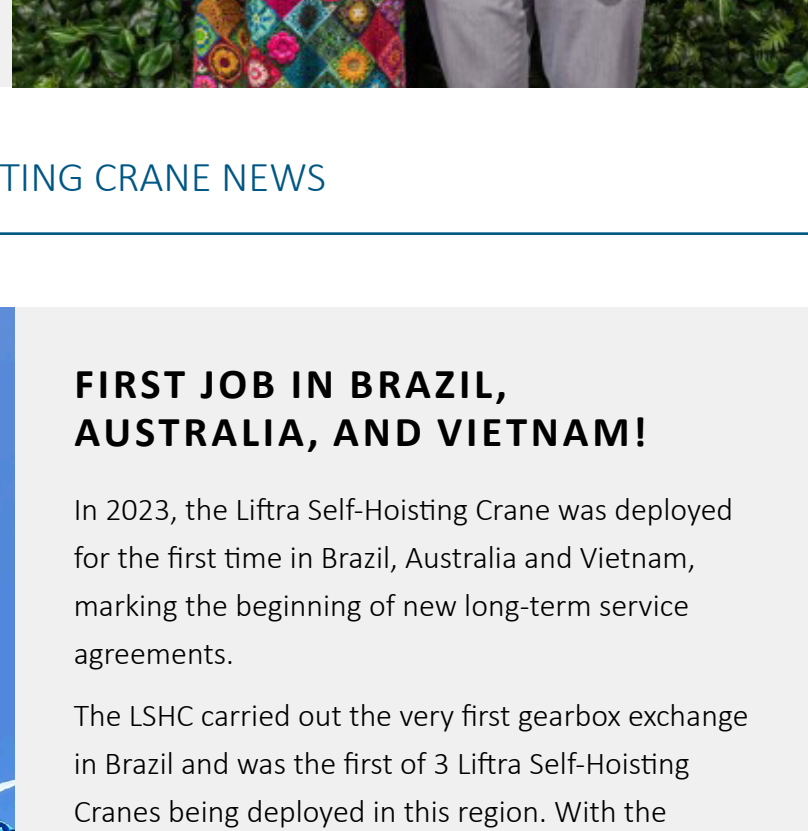
We are excited to embark on this journey, and to continue setting new standards for the wind industry.

AWARDS RECEIVED

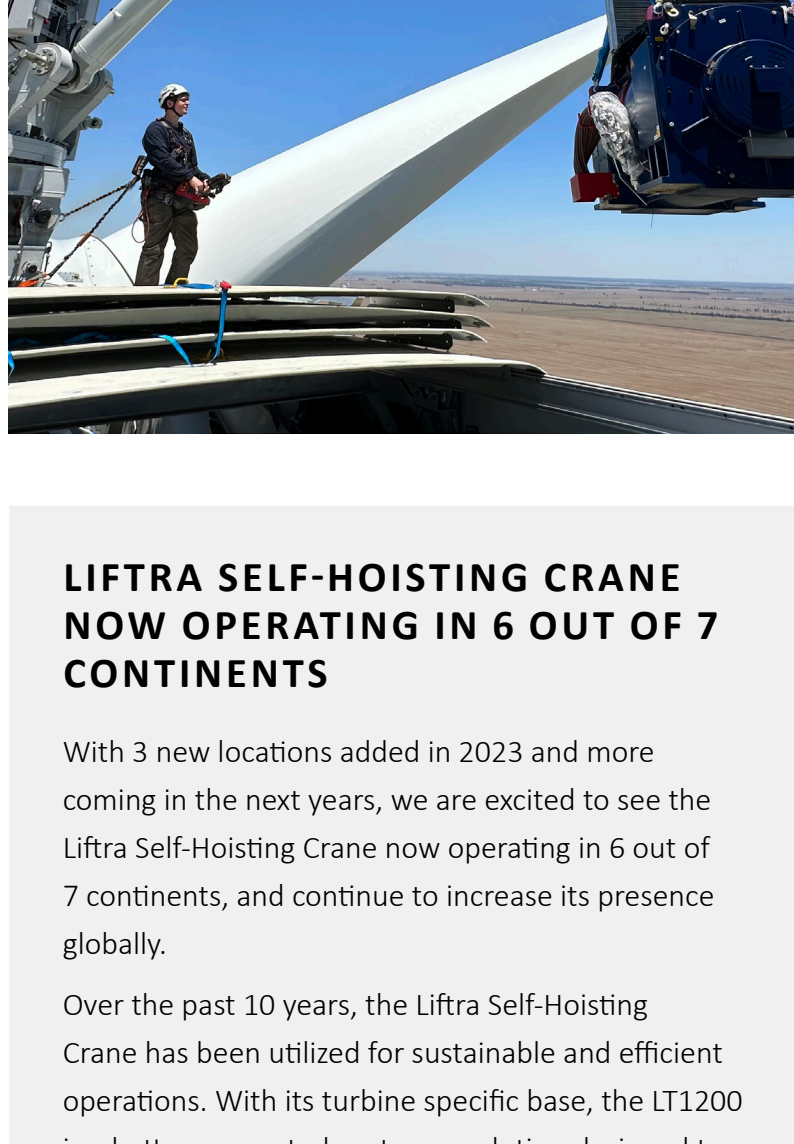
In November, we were awarded with 3 prizes:

- Vestas supplier Business Development award 2023.
- EY Entrepreneur Of The Year 2023 growth creator award in the Danish North Jutland region.
- EY Entrepreneur Of The Year 2023 in the Export and Globalization category in Denmark.

We were honored by this recognition and strive to continue our growth and to provide more innovative solutions all over the world to support sustainable and efficient wind turbine installation and maintenance!



LIFTRA SELF-HOISTING CRANE NEWS



FIRST JOB IN BRAZIL, AUSTRALIA, AND VIETNAM!

In 2023, the Liftra Self-Hoisting Crane was deployed for the first time in Brazil, Australia and Vietnam, marking the beginning of new long-term service agreements.

The LSHC carried out the very first gearbox exchange in Brazil and was the first of 3 Liftra Self-Hoisting Cranes being deployed in this region. With the majority of prospective wind turbines in Brazil being compatible with our LSHC, Liftra is planning to deploy many more in the coming years.

The first operations in Australia and Vietnam were carried out with success. The first operation in Vietnam, in addition to a major component exchange, was also used to test Liftra C hook for intertidal purposes.

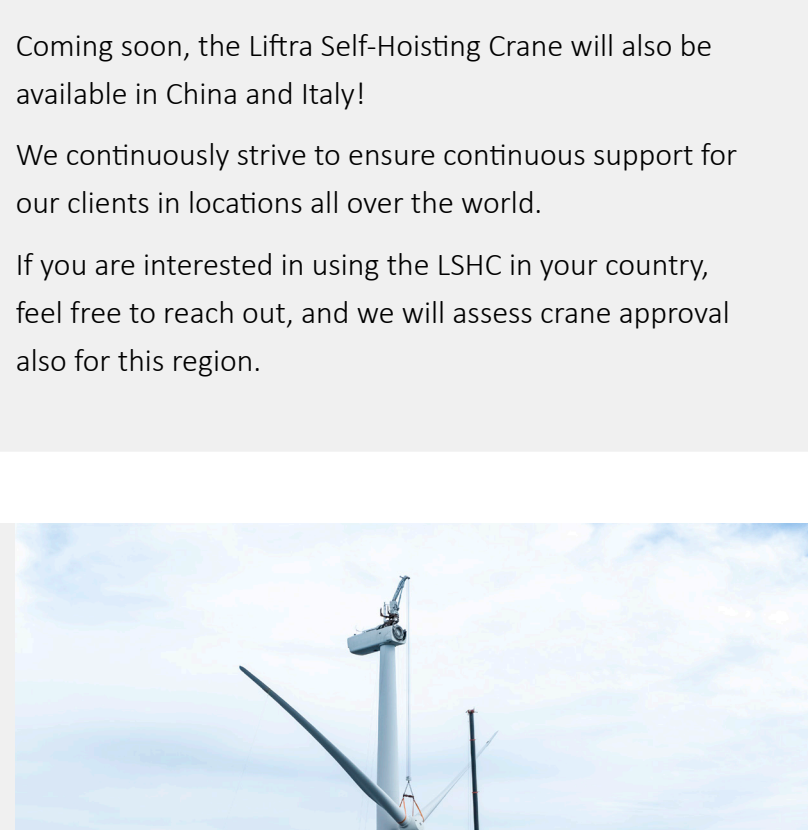
LIFTRA SELF-HOISTING CRANE NOW OPERATING IN 6 OUT OF 7 CONTINENTS

With 3 new locations added in 2023 and more coming in the next years, we are excited to see the Liftra Self-Hoisting Crane now operating in 6 out of 7 continents, and continue to increase its presence globally.

Over the past 10 years, the Liftra Self-Hoisting Crane has been utilized for sustainable and efficient operations. With its turbine specific base, the LT1200 is a battery-operated up-tower solution designed to exchange all major components weighing up to 78 tons.

The crane is designed to provide its users with:

- Multi-brand compatibility
- Minimal mobilization scope
- Faster operations
- Low emission solution



Coming soon, the Liftra Self-Hoisting Crane will also be available in China and Italy!

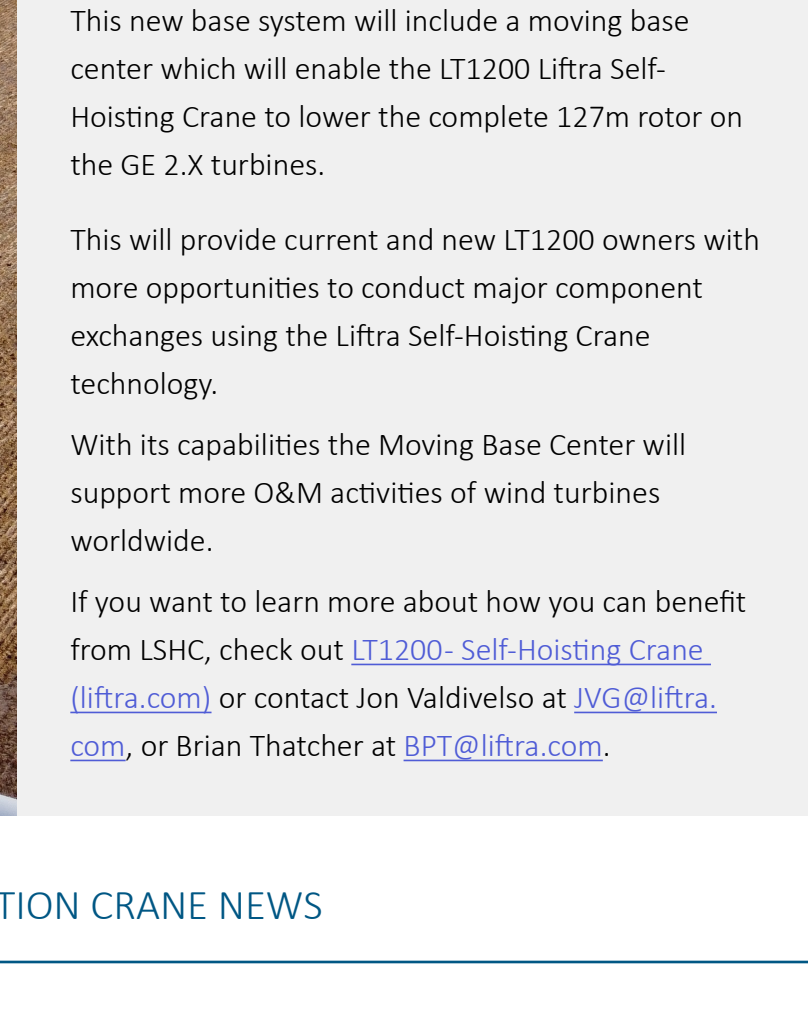
We continuously strive to ensure continuous support for our clients in locations all over the world.

If you are interested in using the LSHC in your country, feel free to reach out, and we will assess crane approval also for this region.

3 OFFSHORE MAIN COMPONENT REPLACEMENT OPERATIONS WITHIN JUST 4 WEEKS OF JULY.

During July, the LSHC carried out 3 offshore operations in 4 weeks for InnoVent on their 3MW wind turbines in lake Vänern, Sweden. Despite of challenging weather conditions, the LT1200 LSHC flawlessly conducted 3 gearbox exchanges including rotor lowering.

The crane was operated by our team of experienced technicians.



NEW GE 2.X BASE SYSTEM FOR MAIN BEARING EXCHANGE (127M ROTOR)

This new base system will include a moving base center which will enable the LT1200 Liftra Self-Hoisting Crane to lower the complete 127m rotor on the GE 2.X turbines.

This will provide current and new LT1200 owners with more opportunities to conduct major component exchanges using the Liftra Self-Hoisting Crane technology.

With its capabilities the Moving Base Center will support more O&M activities of wind turbines worldwide.

If you want to learn more about how you can benefit from LSHC, check out [LT1200- Self-Hoisting Crane \(liftra.com\)](#) or contact Jon Valdivelso at [JVG@liftra.com](#), or Brian Thatcher at [BPT@liftra.com](#).

LT1500 INSTALLATION CRANE NEWS

Liftra LT1500 lifting technology increases efficiency and sustainability of wind turbine installation beyond the tower crane technology.

Currently in development, the LT1500 Turbine Installation Crane will be able to install the new generation wind turbines.

With the Liftra LT1500 Turbine Installation Crane you can:

- Reduce time and costs of windfarm installation
- Reduce mob-/demobilization time
- Lift 120T in high wind speeds
- Work at remote and complex sites
- Reduce CO2 footprint created during wind turbine installation



SUCCESSFUL TEST OF TOWER ATTACHMENT MECHANISM

The LT1500 is developed based on the Self-Hoisting technology, connecting to the tower and hoisting itself up, while installing the turbine.

In 2023 we successfully tested the tower attachment mechanism for the LT1500 Turbine Installation Crane!

The attachment mechanism is easy to add to any tubular tower design and applies for all types of wind turbines.

Here you can see the flange in ratio 1:1 with a hand. Hand/flange illustration visualize crane-flange interface and direction of applied forces to the flange.

This small flange provides secure support for the LT1500 crane with a lifting capacity of 120tons.

The LT1500 is competitive for onshore installation and major component replacements from around 140m hub height and it works up to 250m.



LIFTRA AND DEME GROUP JOINING FORCES

2023 were marked by the establishment of many new partnerships, and we were particularly thrilled to share that Liftra and DEME Group are joining forces to develop innovative offshore turbine installation methodology.

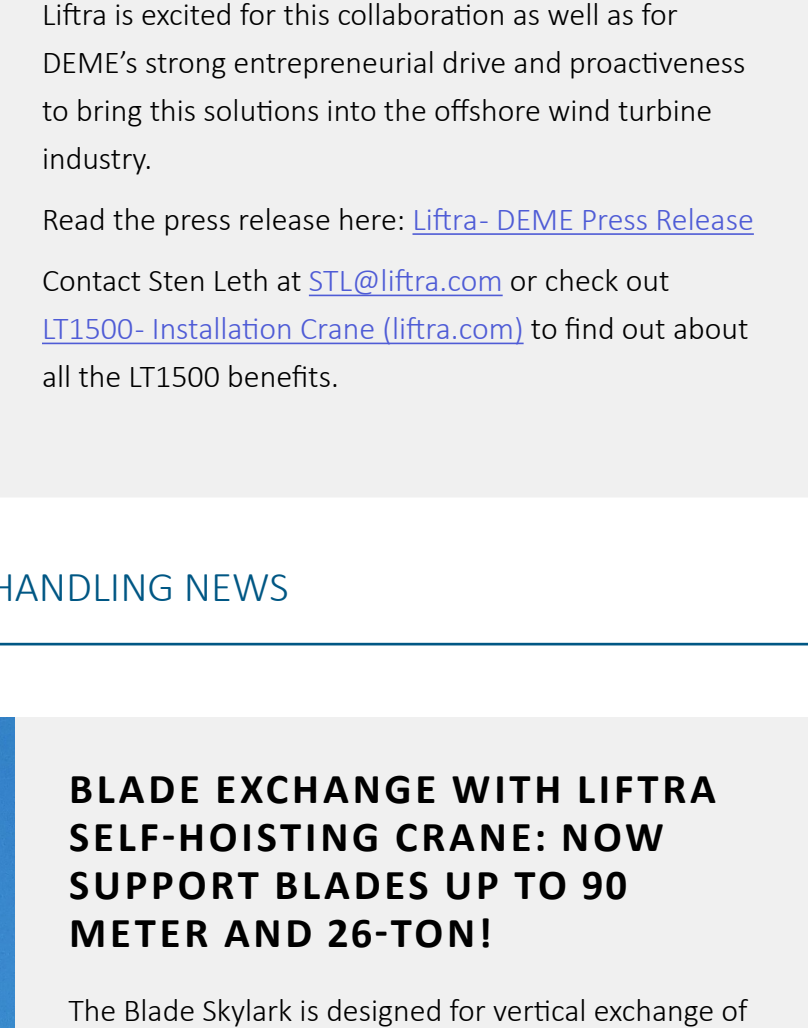
Liftra is excited about the continuous recognition from major wind industry stakeholders in connection with the Liftra LT1500 technology as the wind turbines increase in size.

In addition to Liftra's current onshore collaboration with the leading crane player BMS Heavy Cranes, now Liftra will start collaboration with the leading offshore turbine installation stakeholder DEME on offshore exclusive terms.

This collaboration will bring offshore turbine installation to a next level enabling more efficient installation of the new generation wind turbines, expanding Liftra's product portfolio significantly.

The benefits of this technology include:

- Utilization of existing fleet
- No water depth and lifting restrictions
- Ability to install on floating foundations



Liftra is excited for this collaboration as well as for DEME's strong entrepreneurial drive and proactiveness to bring this solutions into the offshore wind turbine industry.

Read the press release here: [Liftra - DEME Press Release](#)

Contact Sten Leth at [STL@liftra.com](#) or check out [LT1500- Installation Crane \(liftra.com\)](#) to find out about all the LT1500 benefits.

LIFTRA BLADE HANDLING NEWS

BLADE EXCHANGE WITH LIFTRA SELF-HOISTING CRANE: NOW SUPPORT BLADES UP TO 90 METER AND 26-TON!

The Blade Skylark is designed for vertical exchange of blades, making it ideal for O&M at onshore turbines, even beyond 5MW size.

The battery powered Blade Skylark yoke comes with various benefits such as:

- It connects fast and easy to different blades
- It provides tilt and pitch functionality
- It brings the blade from vertical to horizontal and places it on the ground
- It picks up the blade from horizontal and tilts it into vertical position

The Blade Skylark ships in a single 40ft container and together with the Liftra Self-Hoisting Crane it eliminates the need for conventional cranes reducing cost and increasing sustainability of blade exchange.



LIFTRA BLADE EAGLE READY TO INSTALL NEXT GENERATION BLADES OFFSHORE

In June, a significant milestone was reached as two Liftra Blade Eagle yokes successfully completed the site acceptance test.

Since then, the yokes have been deployed to install the first blades at two of the largest offshore wind farms in the UK and US. The first turbines are already operational, and the ongoing operation continues to progress with more turbines to be installed.

The Blade Eagles offer a range of benefits, including:

- Proven technology.
- Turns the rotor without the need for any additional rotor turning system.
- Fast and easy offshore operation.
- Handles +100m blades.
- Battery-powered.

If you are interested to hear more about the Liftra Blade Handling Solutions, feel free to contact Alexander Besøi Christiansen at [ABC@liftra.com](#) or check out [LT5094- Blade Eagle \(liftra.com\)](#).



LIFTRA TEST FACILITY IN NAKSKOV, DENMARK

LIFTRA'S 2000T LOAD TEST FACILITY IS BUSY AND ALREADY WELL BOOKED FOR QUITE SOME TIME AHEAD.

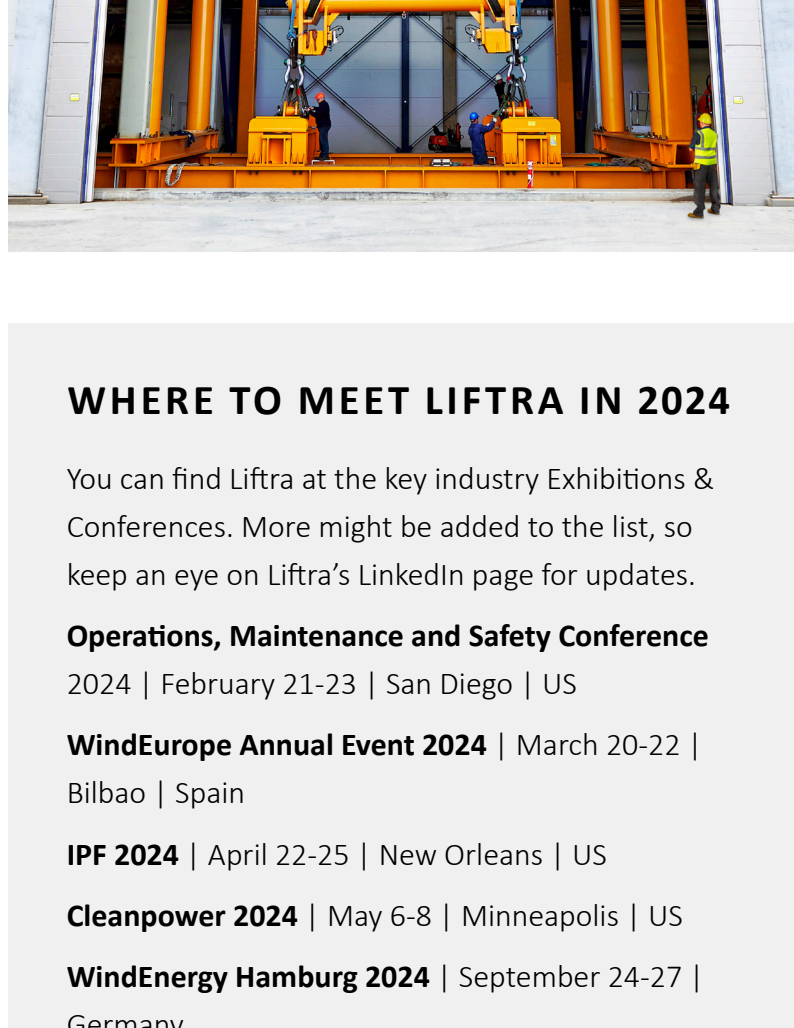
This test facility is unique due to its significant load capacity, in addition to its size and the ability to test long and wide test items.

We conduct testing of wind related lifting and transportation equipment, including:

- Spreaderbeams
- Tower Lifting Yokes
- Crane Blocks

The test rig was fully booked in 2023 and even for the start of 2024, there is always an opportunity to reserve a time and request load testing.

To find out more, send a request at [Liftra Test Facilities](#) or contact Sten Leth at [STL@liftra.com](#).



WHERE TO MEET LIFTRA IN 2024

You can find Liftra at the key industry Exhibitions & Conferences. More might be added to the list, so keep an eye on Liftra's LinkedIn page for updates.

Operations, Maintenance and Safety Conference 2024 | February 21-23 | San Diego | US

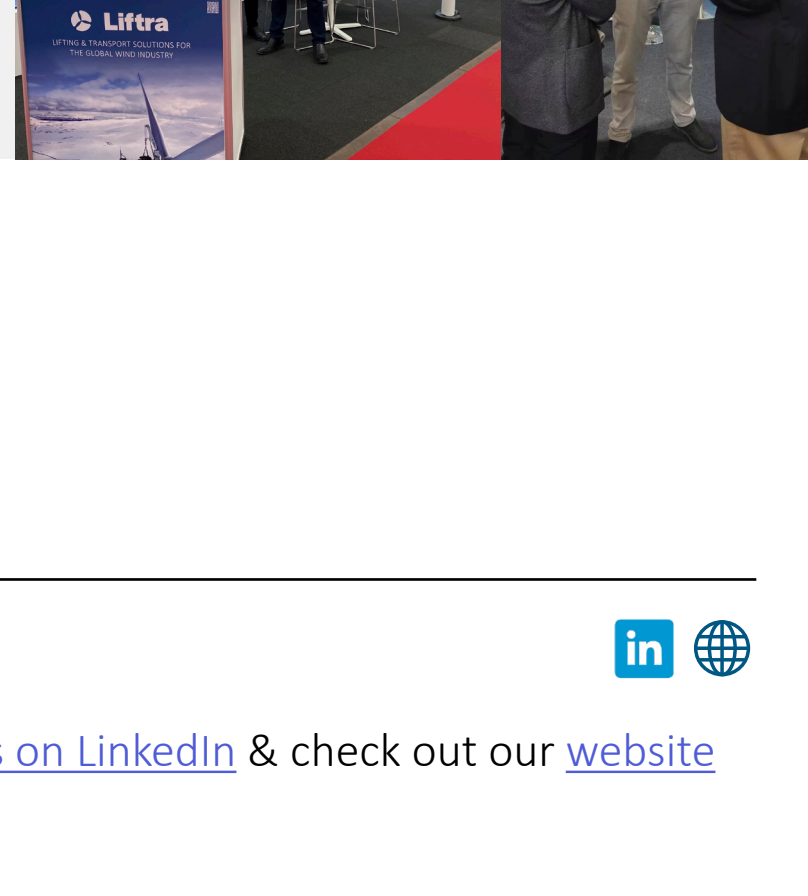
WindEurope Annual Event 2024 | March 20-22 | Bilbao | Spain

IPF 2024 | April 22-25 | New Orleans | US

Cleanpower 2024 | May 6-8 | Minneapolis | US

WindEnergy Hamburg 2024 | September 24-27 | Germany

China Wind Power 2024 | October 16-18 | Beijing | China



Best wishes,

Per Fenger, CEO

PEF@liftra.com



For more news and updates, [follow us on LinkedIn](#) & check out our [website](#)