Path to Ecolifting

# The right technology at the right time

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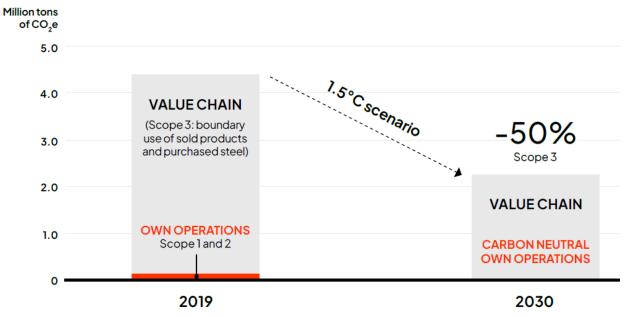
KONECRANES



#### Leading the way

- Mega trends globally are pointing out our direction. Taking part in a sustainable future is not an option, but a must.
- Future legislation will force us, as well as our customers, into fossil-free cargo handling solutions.
- In many regions and countries, especially in sawmills and forestry segment, a full electric equipment fleet has become essential.

## Reaching the Target



- By seeking **new technological innovations to reduce dependency on fossil fuels** and increase energy efficiency.
- By electrifying our offering
- The electrification of our customers' industries is a prerequisite for Konecranes to reach its climate ambition – let's do this together!

### KONECRANES ecolifting

## The path to Ecolifting: the viable technologies

### **Conventional** diesel



## Optimized diesel



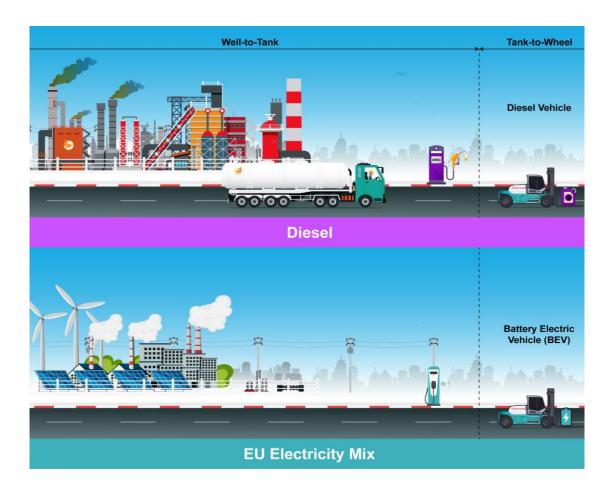
#### Zero tailpipe

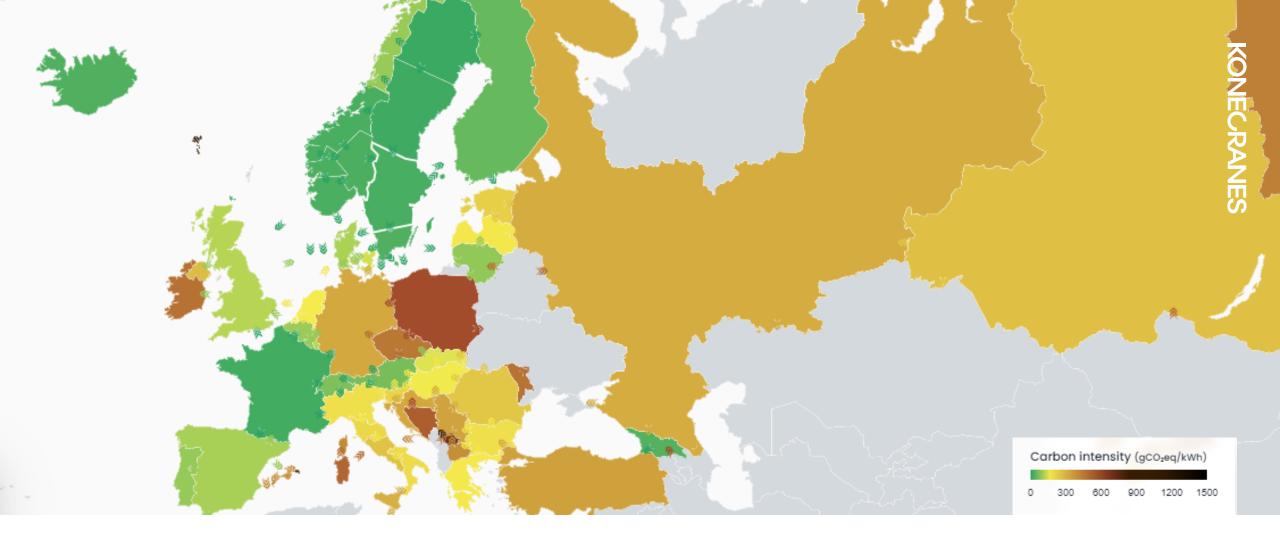




## Looking at the bigger picture

- Market focus has to change from Tank-to-Wheel (TTW), to Well-to-Wheel (WTW) emissions.
- Thinking of the whole carbon production circular chain, it's a MUST to really understand and control the environmental effect of our business
- TTW vs WTW: TTW only takes into account a small part of the circular CO<sub>2</sub> emission effect, whereas WTW encompasses the whole circular effect.





## Electricity can be green, brown or mixed

Green electricity: from renewable energy sources like hydropower,

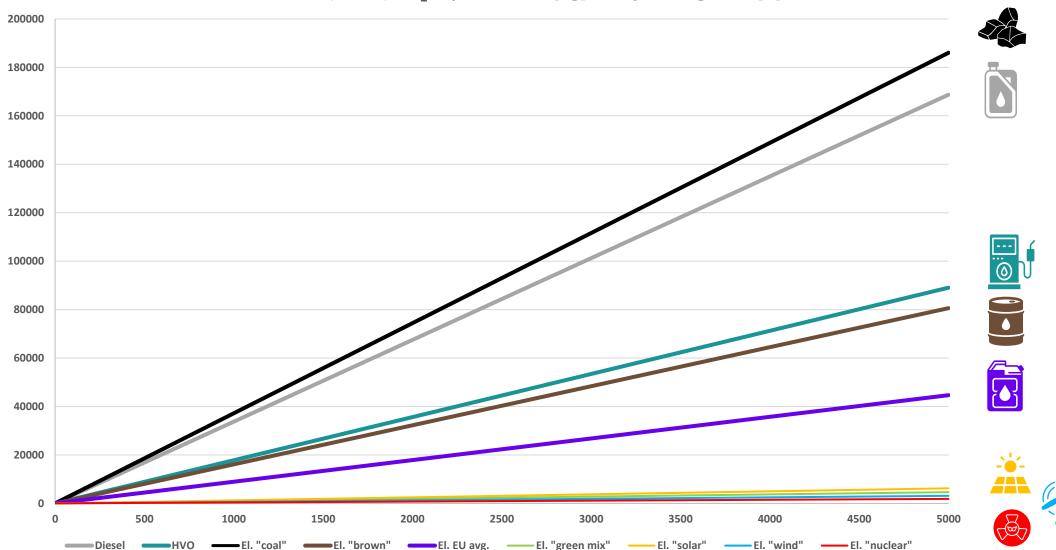
wind, geothermal, biomass or solar.

**Brown electricity:** from fossil fuels like coal, oil, or gas.

**Mixed electricity:** from a mix of fossil fuels and renewable energy.

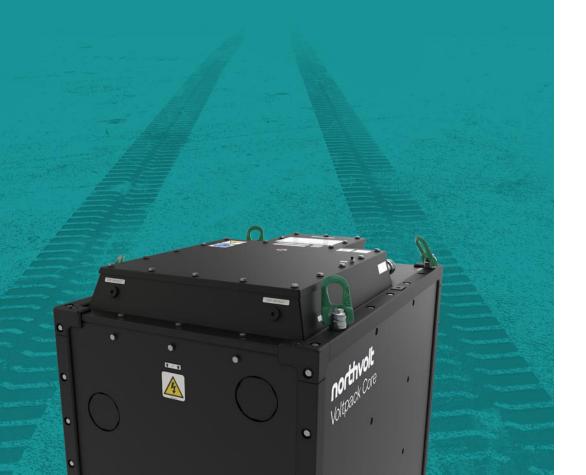
#### **FORKLIFT OPERATIONS 18-33 t**

Well-To-Wheel (WTW) CO<sub>2</sub>-eq emissions [kg] vs. operating time [h]



Ensuring our Product Roadmap delivers the right products and technology at the right time, to match the transition journey ahead

#### Sustainability



## A technology choice

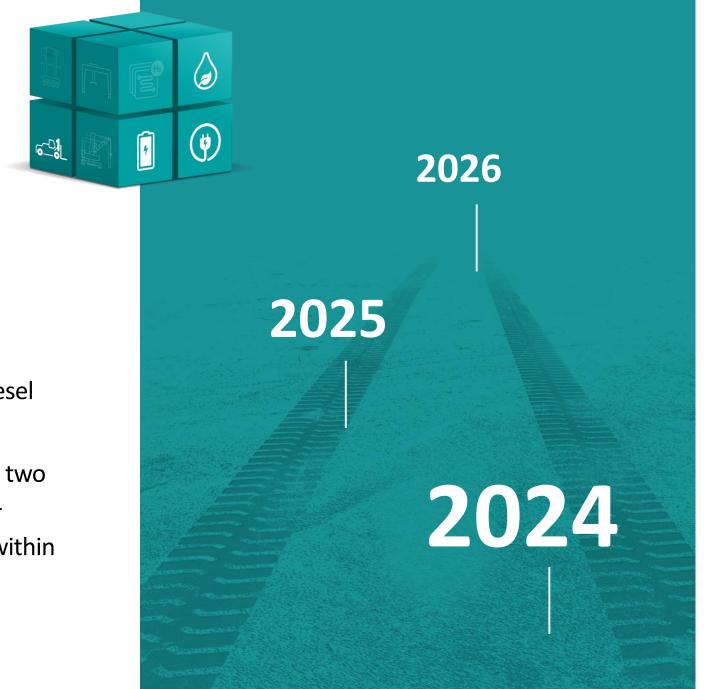
- Konecranes E-VER family part of the Ecolifting portfolio - supports the transition journey when thinking Well To-Wheel.
- Equipment integrated with lithium-ion battery and cells known for their industry-leading energy density, safety features, and extended lifespans.



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## The way forward

- Ongoing investment in battery electric vehicles alongside our conventional diesel
- Enlarging our Konecranes E-VER family
- Fully electrified portfolio by 2026: with two new products slated for launch in 2024
- Keep track on transition technologies within 2026 and Fuel Cell after 2030





# What steps ARE YOU ready to take in this transition journey?

**KONECRANES** 

