

Challenge

Revolutionizing Urban Transport: The Ultimate Vehicle Solution for Building Tomorrow's Cities in 2045

This competition seeks innovative designs for **emissions-free urban vehicles**, predicts the future of construction and materials transport industries, and anticipates changes in cargo requirements. A central focus is on crafting optimal loading crane concepts for **future cargo handling**, emphasizing **efficiency and safety**. Exploring unconventional crane designs and where they may offer advantages is highly encouraged. This challenge invites to **create cleaner, adaptable urban transportation systems** for construction industry, promoting sustainability and efficiency in future cities.



Industry Partner

PALFINGER

PALFINGER is an international technology and mechanical engineering company and the world's leading producer and provider of innovative crane and lifting solutions. With over 12,600 employees, more than 30 manufacturing sites and a worldwide sales and service network of around 5,000 service points, PALFINGER creates added value from the challenges of its customers.

Mission

- ▶ **Research** on the development of the construction industry and the building materials transport sector 2045
- ▶ **Design** technical concepts for the **zero-emission vehicle solution** for future cities in the construction material transport sector 2045
- ▶ **Develop** a business case including a special view on sustainability