

The Port of Aalborg is based on sustainable sewer pipes



Special project setup ensures sustainable sewer pipes at Port of Aalborg

A special partnering agreement has enabled new and more sustainable stormwater pipes for the port expansion in Aalborg.

By challenging suppliers on delivery methods, trying new approaches and searching the market for sustainable materials such as Ultra Rib 2 Blue from Uponor, a 40% reduction in the project's overall carbon footprint was achieved.

Project Facts:

Location	Completion
Aalborg, Denmark	2022
Building Type	Product systems
Industrial	Sewer Municipal, Storm water

Focus on lowest product price does, however, remain a stumbling block for the green transition in the construction sector

The port area in Aalborg has recently been expanded by 20,000 square metres. But the process behind the expansion has not followed a conventional path for the construction industry, whether in terms of materials, consulting engineers or contractors.

Thanks to a partnering agreement and an aligned focus on finding the right solutions, Port of Aalborg and their business partners have achieved genuine success. By challenging suppliers on delivery methods, trying new approaches and searching the market for sustainable materials such as the [Ultra Rib 2 Blue](#) sewer pipe from Uponor, a 40% reduction in the project's overall carbon footprint was achieved. That 40% comes from comparing this latest project to a reference project that did not seek out green solutions, but simply went ahead 'as usual'.

Trust enabled better solutions

The expansion of the quay is one of two test projects selected by Port of Aalborg as part of its work in line with the ISO 14001

environmental management system, the aim being to test the partnering concept in practical application rather than a traditional turnkey or main contractor approach. In a partnering agreement, the parties enter into a business agreement early on in the process, and increased emphasis is placed on trust, knowledge sharing and the possibility of ongoing project development. This has given the parties better possibilities to seek rational solutions of higher quality and minimal CO2 emissions, rather than approaching the project on the basis of overall price.

"In traditional construction projects, as a main contractor we have to be quite specific on the choice of materials and solutions, so that the best prices can be offered in the bidding process. These prices then apply from that point on. By involving consultants and contractors early on in the process, decisions on the choice of methods and materials are made in cooperation. We reached a point of trust and a positive spirit in the collaboration quite early on, which paved the way for open ideas development and discussions on potential solutions. We've achieved far more sustainability in the project than any of us dared hope for," says Brian Dalby Rasmussen, Head of Engineering, Port Facilities & Environmental Management at Port of Aalborg.

COWI, consulting engineer on the quay extension, and Project Manager Casper Holmgaard Jensen is equally enthusiastic about the project form and the results.

"Sustainability and green transition are now everywhere in Danish business, but not every company can "walk the talk" and live up to their own ambitions. But Port of Aalborg has certainly done so in this project. If it hadn't been for the partnering agreement, it's unlikely we would have come up with the solutions and products that we did," says Casper Holmgaard Jensen.

Wholesalers didn't believe the buyers

This alternative project approach has, however, highlighted one of the biggest challenges facing the Danish construction industry if it is to succeed with a green transition: the sector's dogged focus on the lowest price when buying materials. The buyers at Per Aarsleff, a contractor and the final member of the partnering group, have certainly experienced this.

"Individual wholesalers did offer us green alternatives, but the vast majority automatically offered us the cheapest solutions, even though we clearly stated that we wanted sustainable products. They simply didn't believe that price was not the most important factor, like it usually is," says Ludvig V Pullich, General Manager at Per Aarsleff.

"At Uponor, we want to help reduce a construction project's carbon footprint, while also contributing to more sustainable development in the construction industry. But this also means that contractors and wholesalers discover and are willing to see the potential of alternative new products, and that they're ready to focus on factors other than price alone. The project in Aalborg is a great example of how an industry can make proactive choices and take the next steps in the green transition," says Jan Lunding, Project Manager at Uponor.

About Uponor Ultra Rib 2 Blue

- Ultra Rib 2 Blue is a PP plastic sewer pipe that reduces the carbon footprint by up to 70%. The pipe is made of renewable raw materials based on the mass balance model, with the same quality and performance as the conventional Ultra Rib 2.
- Ultra Rib 2 Blue meets the dual requirements of Nordic Poly Mark with an expected service life of more than 100 years.
- Ultra Rib 2 Blue is produced at the ISCC (International Sustainability and Carbon Certification) Plus factory in Fristad, Sweden, which uses green electricity in production facilities.
- Customers receive a declaration showing how much fossil-free material the delivery contains.
- Ultra Rib 2 Blue is supplied in lengths of 3 and 6 metres, in diameters of 200 to 560 mm.

Port of Aalborg gallery



