

Flinders Port Holdings sets steady course for sustainability

Sustainability will increasingly grow in importance within the ports industry, as consumers demand cleaner and greener products and services. For Flinders Port Holdings (FPH), sustainability is taken seriously to ensure not only its international ESG priorities and goals are met, but are exceeded through its Sustainability Plan while being aware of and mitigating risks.

This commitment means the organisation is acting positively to achieve sustainable outcomes, minimise harm to the environment and work to be at one with its Adelaide-based and regional communities while ensuring financial and operational resilience now and into the future.

Putting sustainability into practice is essential, as the organisation aligns with its recently updated Sustainability Plan and works towards its long-term goals.

Given Flinders Ports operates in a sensitive marine environment, understanding water quality in those areas is important to the business. The majority of the Port River has long been designated as a Dolphin Sanctuary by the South Australian Government. As per the UN Sustainable Development Goal mapping – Goal 14 “Life Below Water” FPH strives to comply with its environmental protection responsibilities.

FPH has deployed several real-time marine water monitoring sensors in the Port River. Three monitors are located on navigational channel markers. The fourth is a floating buoy which can be deployed in various locations throughout the river, allowing water quality to be monitored at different sites.

The marine water monitoring sensors measure marine water quality at approximately one metre below the water surface, depending on tide. Individual water quality sensors measure parameters including temperature, dissolved oxygen (DO), conductivity (EC) and turbidity.

Raw data from the sensors is collected every 15 minutes via a data logger on the sensor and transmitted by mobile network to a data server. Frequent monitoring ensures that FPH can respond to changes where necessary.

Another important factor in the sustainability chain is making sure logistics are finely tuned and as efficient as possible, including shipping and container movements in and out of ports, stevedoring and in the equipment procured to facilitate that movement.

FPH recently purchased five Noell Diesel Battery Hybrid Straddle Carriers, which will be the first Konecranes Noell Diesel Battery Hybrid Straddles in the Asia Pacific region.



Fitted with a battery module to capture power during braking and lowering, the new straddles offer fuel savings of approximately 32.5 per cent without compromising on performance. Over the nominal life of the straddle (approximately 50,000 operating hours), the hybrid model provides an estimated 415t of carbon dioxide reduction when compared to its comparable diesel-electric model. The five new straddles will be delivered later in 2023.

To further enhance efficient operations FPH has been working with Complexica to explore how AI can optimise the manual process of moving a container through FACT, putting the terminal at the forefront of container innovation. The AI application pre-empts and manages key decisions linked to a container’s movement such as its contents, which berth it needs to go to and timing linked to trucking arrivals.

FPH is embracing technology and innovation to reduce its environmental impact, increase health and safety and facilitate a smoother experience for its customers. It’s about sustainable port development, using renewable-based energy, integrating sustainability into planning and decision making, and minimising pollution and waste while being socially responsible.