

## Alstom introduces Citadis X05 trams to Kaohsiung

### A first for the Citadis X05 in Asia and debut tram project for Taiwan



**12 January 2021** – Alstom’s Citadis X05 trams have entered passenger service on the South Circular Light Rail line of Kaohsiung City in Taiwan. This launch follows their smooth operations on the existing first phase of Kaohsiung’s circular light rail line<sup>1</sup> since early November 2020.

Alstom has been responsible for the design, delivery and commissioning of 15 Citadis X05 new-generation trams, power supply and energy storage equipment, which are fully interoperable with the city’s current network and planned extension. These are not only Alstom’s first trams operating in Taiwan, but also mark the inaugural Asian launch of its latest evolution of the Citadis range.

“Being the first Asian city to adopt the Citadis X05, we are excited to be contributing towards the green modernisation of Kaohsiung’s public transport network, while protecting the aesthetic appeal of the city. With their efficiency, availability and easier maintenance, the Citadis trams provide a step change in the city’s transport capability, reliability and comfort,” said Olivier Loison, Managing Director for Alstom in China & East Asia.

Passengers have been placed at the heart of the development of this new vehicle, with the emphasis on on-board mobility and comfort. The trams are fitted with a full low floor and double doors for improved passenger circulation and accessibility for all, large bay windows, ambient LED lighting, ergonomic and spacious seats, as well as large passenger information screens.

To integrate seamlessly and safely into the Kaohsiung cityscape, the Citadis trams run autonomously thanks to the Autonomy charging solution, combined with the Citadis Ecopack system of energy storage and catenary-free recharging system at each station. The trams also boast several new technologies, including permanent magnet motors for higher efficiency, as well as optimised HVAC (heating, ventilation and air-conditioning), which together reduce their energy consumption by 25%. Simplified sub-system integration and maintenance decrease lifecycle costs, while the trams are 97% recyclable.

The trams were manufactured at eight Alstom sites in France: La Rochelle for the design and assembly, Aix en Provence for the safety control system, Le Creusot for the bogies, Ornans for the motors, Tarbes for the traction system equipment, Valenciennes for the interior design, Villeurbanne for the on-board

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<sup>1</sup> When fully opened, Kaohsiung’s circular light rail line will form a 22.1km loop around the city via 37 stations. The first phase with 14 stations has been in service since October 2015, while the second phase comprising 23 stations has commenced partial operations with 9 stations, spanning 12.8km (known as the Kaohsiung South Circular Light Rail line) on 12 January 2021.

electronics, and Vitrolles for the on-board power supply switching boxes (Citadis Ecoswitch). Sesto in Italy was also involved for the traction system equipment, while the team in Taiwan is responsible for the onsite testing, training and warranty services.

Citadis trams have been operating in the urban centres of major cities around the world for 20 years, with more than 2,800 Citadis trams sold to date. Each new generation benefits from technological advances, Alstom's expertise and the experience of public authorities and public transport operators. To date, Citadis X05 has been sold in cities such as Athens, Avignon, Caen, Frankfurt, Lusail, Nice, Paris and Sydney.

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## About Alstom

Leading the way to greener and smarter mobility worldwide, Alstom develops and markets integrated systems that provide the sustainable foundations for the future of transportation. Alstom offers a complete range of equipment and services, from high-speed trains, metros, trams and e-buses to integrated systems, customised services, infrastructure, signalling and digital mobility solutions. Alstom recorded sales of €8.2 billion and booked orders of €9.9 billion in the 2019/20 fiscal year. Headquartered in France, Alstom is present in over 60 countries and employs 38,900 people.

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