Statement by Mr. Nanno Mulder

Mr. Chairman,

Thank you for inviting me to participate in this important discussion on the role of services trade in enhancing science, technology, and innovation for a just transition to sustainable energy.

In this brief contribution, I'd like to introduce a new service that is gradually being deployed for the energy transformation of urban public transportation in some Latin American countries. This service is known as retrofitting, which contributes to the circular economy while lowering CO2 emissions. Retrofitting aims to convert diesel buses into electric buses. For this purpose, the engine and transmission train must be replaced, as well as a battery installed. Furthermore, essential bus components are being relocated within the bus to distribute weight better.

Retrofitting has various advantages, including:

- A reduction in emissions. Unlike diesel buses, electric buses do not emit polluting gases during operation. However, building an electric bus and a diesel bus produce comparable emissions: 42.1 and 31.7 tons of CO2 equivalent, respectively. Although we do not have figures for the emissions generated by retrofit activities, these are certainly lower as fewer parts are involved. This reduces pollution while also improving air quality.
- Economic advantages: building a retrofit bus is roughly one-third cheaper than importing a comparable electric bus from China. Furthermore, electric buses are less expensive to repair than diesel buses, resulting in significant cost savings over time.
- Electric buses are silent, which helps to reduce noise pollution in metropolitan areas.
- Retrofitting existing buses rather than scrapping them can also help cut landfill waste while giving components and sections a second life.

Several companies and municipalities throughout Latin America have implemented retrofitting. Reborn Electric Motors (REM), for example, is a Chilean technological company that converts diesel buses to electric (retrofit). The Chilean Ministry of Transportation has approved or certified REM electric buses. In Argentina, the National Institute of Industrial Technology (INTI) is building a model car using retrofit and a best practices manual, allowing for broader participation of industry stakeholders.

Based on these local experiences, it is critical to identify crucial sectors and products with significant regional trade to scale up retrofitting in the region. Formulating an appropriate regulatory framework to attract investment and sectoral development, including retrofit, may promote local production and regional trade. In addition, creating the necessary investments for bus maintenance and energy charging based on renewable sources is required. Regional factor endowments, such as lithium, nickel, copper ore, iron, and steel, could potentially be used in retrofit production networks.

These issues will be further examined at UNCTAD's next Global Services Forum, as well as at the Latin American Services Research and Policy Network meeting in Mexico City in November of this year.

Thank you very much.