

# 5G O-RAN: Enhancing the ESG Competitiveness of Traditional Industries

## Green Competitiveness ESG Digital Transformation - 5G Smart Manufacturing AI Efficiency Enhancement and Energy Saving Technology Platform

The manufacturing sector plays a crucial role in driving Taiwan's economic progress. Apart from production capacity and efficiency, ESG and digital transformation are key issues for future development. Solutions that integrate 5G networks with AI help the electronics, metal, and machinery manufacturing industries compile their carbon inventory, perform preventive maintenance, and implement electricity safety management to undergo ESG transformation.

### Project Results

**#Average Energy Conservation of 10%** | Established just-in-time, energy-efficient, safe, and sustainable smart manufacturing systems, and utilized innovative technologies to implement energy conservation and carbon reduction.

**#Improved Industrial Safety** | Collected and transmitted operating parameters of machinery and equipment in real time, and used AI image analysis for real-time monitoring and warning of switchboard temperature, as well as preventive maintenance.

