

Metro Trains on track to energy efficiency - Northmore Gordon

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Certificates Our Environmental Attribute Certificate services help businesses accelerate technology adoption, improve project ROI, and manage claims of renewable energy, energy efficiency and carbon offset 1 carbon offset = 1 tonne of CO₂-e avoided or removed from the atmosphere. Avoided emissions covers activities that alter behaviour that would have otherwise caused emissions such as energy efficiency improvements or avoided deforestation. Removal covers activities that permanently remove CO₂ from the atmosphere such as new forestry plantations, soil carbon improvement or carbon capture and storage.

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November 25, 2020 Danielle O'Reilly Wattly and Northmore Gordon worked alongside Metro Trains and the contractors over a period of almost three years to ensure every step of the Victorian Energy Upgrades program were met to the high standards required by the rules and programs regulator. We enjoyed their enthusiasm and professionally towards recognising the energy savings Electricity or gas savings or both. and carbon emissions achieved through the Comeng Life Extension. – Metro Trains Melbourne The Client Metro Trains Melbourne operates 226 six carriage trains across 1,000 kilometres of track, transporting 450,000 customers each day. Metro Trains is owned by and draws on the strengths and experience of three leading rail industry organisations: Hong Kong's MTR Corporation, Australia's John Holland Group and UGL Rail, a division of United Group Limited. Key Facts Equipment Upgraded: 136 x Comeng Train Units Upgraded 14,100 lights replaced Annual Energy Savings: ~2,000 MWh PA Carbon Abatement: ~2,200 tCO₂e PA, OPEX: ~200,000 Certificate Value: \$570k / < 1 year payback Program: Victorian Energy Upgrades (VEU Victorian Energy Upgrades is a Victorian government energy efficiency program that gives every Victorian household and business the opportunity to receive rebates or discounts on energy saving products.) using Project Based Activities (PBA Project Based Activities) Wattly Partner: Northmore Gordon The Project Every year 1,000s of fluorescent tubes would require replacement on the aging Comeng train fleet to ensure uniform lighting levels and colour throughout all carriages. As part of the Comeng Series Train life extension project Metro Trains replaced 14,100 fluorescent tubes with high efficiency LED replacements to improve reliability and energy efficiency. The Comeng Life Extension project updated the interior and exterior of Melbourne's fleet of Comeng trains in order to keep them in service until potentially 2027 and beyond. Challenges High Maintenance overheads Desire to extend the life of existing fleet Additional Outcomes Removal over more than 14,000 fluorescent tubes from service and the recycling of the small amounts of mercury that exists in the tubes Reduced maintenance cost by 95% with reliability and more consistent lighting levels at all times The LED lighting upgrades means the trains will spend more time in service Our Role Wattly and Northmore Gordon worked with Metro Trains and TTM Rail to ensure the specialised lights for the train sets were approved under the VEU. They provided a sophisticated approach using a sampling measurement and verification approach to allow a subset of the fleet to be measured and the savings calculated for the entire fleet. They worked through many stages of the VEU PBA methodology to ensure certificate registration and payment to Metro Trains. Operates

Melbourne's metropolitan rail network, with 226 trains over 1,000 km of track, serving more than 450,000 passengers daily. Industry Transportation Location Melbourne, Victoria Hamish McGovern Group Managing Director Contact Hamish > You may also like: Case Studies Turning a Regional Utility into an Active Energy Market Participant Case Studies Visy Gibson Island: 34,000 t CO₂e Cut a Year With Waste to Energy Case Studies MainStream Aquaculture: \$19K Grant funds a heat pump electrification project Case Studies Kalafatis Fresh Produce: \$283K in Solar Certificates Case Studies Poultry Client Set to Hit 2030 & 2050 Carbon Emissions Targets Case Studies Greenham: Moving Towards Decarbonisation Get in touch Australia 1300 854 561 (Advisory) 1300 878 500 (Certificates) Melbourne Suite 1, Level 4 607 Bourke Street Melbourne VIC 3000 Singapore +65 6690 2480 Singapore 1 Keong Saik Road, Singapore 089109 Stay up to date Alternatively, complete the form and we will be in touch with you. First Name Last Name Email Phone Number Country Australia Singapore Subject Message Send Services Energy Audit Services M&V; Services EEO Assessments Corporate Energy and Carbon Management Grants and Program Strategic Energy Sourcing Virtual Energy Manager Climate Active Certification Sectors Animal Processing Chemical Processing Commercial Buildings Food & Beverage Manufacturing Mining Oil & Gas Pharmaceutical & Health Products Public Sector Waste & Wastewater Wood, Paper & Cardboard Processing Upgrades Boiler Upgrades Commercial Lighting Hot Water Systems Mid Scale Solar NABERS Public Lighting Refrigerated Display Cabinets Solar PV Small Scale UPS Certificates Live Certificate Prices International Renewable Energy Certificates Tradable Instrument for Global Renewables Australian Carbon Credit Units Energy Savings Certificates Large-scale Generation Certificates Small-scale Technology Certificates Victorian Energy Efficiency Certificates Government Schemes Emissions Reduction Fund Energy Savings Scheme Renewable Energy Target Victorian Energy Upgrades Helpful Links About us Meet the Team Careers Contact us Articles News Glossary Privacy Policy Complaints