

Manuel has over 15 years' professional experience in the pharmaceutical industry, from facility projects to greenfield sites of 2 major biotech facilities in Singapore. His career spans Project Life Cycle Experience from Concept Design to Performance Qualification, Infrastructure design and Energy systems, Pharmaceutical Manufacturing Operations, Solid Dosage and Biotechnology. Regional accountabilities comprise Site Development Operations, including all Facility Infrastructure management and Service Deliveries such as Engineering and Logistics.

He is work stream Lead in Novartis' Onest (One Novartis Environment Sustainability Team) "Alternatives to Plastic" initiative and Group Sustainability Lead for Biopharmaceutical Manufacturers' Advisory Council (BMAC). Manuel is a Registered Energy Manager under ECA Singapore and engineer by Education, with an ME in Faculty Energy Management from Politecnico di Milano, Italy.