Quality Infrastructure Investment for Smart Cities - Singapore’s Latest Urban Transformations

Submitted by: Mitbana
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Singapore’s Latest Urban Transformations

Gareth Wong
CEO, Mitbana (a joint venture company of Mitsubishi Corporation & Surbana Jurong)
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Mitbana is formed through a partnership with Mitsubishi Corporation, with a mandate to invest in townships, transit-oriented developments (TODs) and urban infrastructure in ASEAN & South Asia.

**Surbana Jurong** formed by the merger of Surbana International Consultants and Jurong International Holdings.

**Surbana International Consultants** - Roots in Singapore’s Housing & Development Board (HDB); principal engineering and design consultant behind Singapore’s public housing.

**Jurong International** - Roots in Jurong Town Corporation (JTC); lead government agency developing and managing industrial estates in Singapore.

1960s

2015
June

2018
November
Complete Value Chain Services

Our value proposition

**PLAN & DESIGN**
- Concept & Feasibility Studies
- Master Planning
- Development & Project Financial Services
- Sustainability & Environmental Consultancy

**DEVELOP**
- Architecture & Landscaping
- Engineering & Specialist Services
- Quantity Surveying & Cost Management

**DELIVER**
- Project Management
- Construction Engineering
- Site Supervision
- Contract Advisory

**OPERATE & MANAGE**
- Smart City Solutions
- Facilities Management & Asset Enhancement
- Safety & Security Services
- Defence Services & Training Solutions

**SUPPORTED BY OUR FAMILY OF SPECIALISTS**

SJ SURBANA JURONG
Transforming an Open-Air Carpark...
Houses the world’s tallest indoor waterfall and one of the world’s largest air-conditioned gardens

Arching over the gardens, waterfall and shops is a large glass roof more than three times the size of a football pitch

...into Jewel Changi Airport
Transforming the Open-Sea...
Waterfront gardens in Marina Bay featuring two large conservatories

Supertrees house photovoltaic panels that generate enough annual power to light the Supertrees.
From Traditional Fish Farms...
to Floating Ponds

World’s first vertical fish farm that is six times more productive than traditional land-based farming

Harnesses solar energy to grow algae on rooftops

> 90% of the water is recycled via a Recirculating Aquaculture System (RAS)

Source: Apollo Aquaculture
From Rural Villages...
…to Punggol Town

Singapore’s first eco-town incorporating new planning concepts and models in its design
Singapore’s longest man-made waterway
Surbana Jurong completed over 40 housing projects in Punggol Town
...and Jurong Innovation District

Advanced manufacturing hub that will provide testbed for innovations and smart technologies

Implementation of info-comm technology infrastructure, sensor networks, technology solutions

Surbana Jurong’s new Campus will be situated in JID
24/7 Estate Management

Leveraging data to support 17 Town Councils with real-time asset monitoring

Continuous improvement through data analytics

Data-backed decision making enabled by consolidated dashboard
24k Integrated Platform

- Monitor CO₂ levels
- Detect Water leakage
- RH – Monitor optimal temp for equipment
- VOC - Monitor optimum IAQ
- Monitor lights operational
- Detect mosquito infestation
- Check optimal O₂ level
- Check air exchange and ventilation
- Check pest infestation

- Smart Lights with motion sensors
- Check air exchange and ventilation
- Virus sensor - control UV air circulation equipment

- Waste Management - bio waste, e waste
- LMPD - For lift performance
- Smart Energy meters
- Check on dust in the air
- Nitrogen Dioxide in car parks
- Motion sensor - to detect movement at silent hours
- People counting - note people movement & suspicious behavior

- PM 2.5
- Smart Parking
- Flood detection
- Ammonia - check toilet cleanliness

- Nitrogen Dioxide
- People counting - note people movement & suspicious behavior

- Smart Lights with motion sensors
- Motion sensor - to detect movement at silent hours

- Motion sensor - to detect movement at silent hours

- Digital Twin
- OMNI
- Integrated Operations Centre
- Mobile Support
- AI & Analytics
- Common Data Environment
Thank you

Contact Us

Mitbana Pte. Ltd.
168 Jalan Bukit Merah
#01-01 Connection One
Singapore 150168

Tel: +65 62481288
Fax: +65 62739090
Email: enquiries@mitbana.com