# **Keppel Bay Tower -**Singapore's first Green Mark Platinum (Zero Energy) commercial building



# Energy Use Index (EUI) of <115 kWh/m<sup>2</sup> per year

Almost 50% more energy-efficient compared to typical office buildings in Singapore



#### Overall energy savings of over 30% or 2.2 million kWh/year

Equivalent to the amount of energy required to power more than 400 five-room HDB flats in Singapore for a year



#### Reduction of over 2,400 tonnes of carbon emissions per annum

Purchase of Renewable Energy Certificates generated from PV panels installed in Keppel Offshore & Marine's yards in Singapore. Together with the installation of onsite PV panels at Keppel Bay Tower, these initiatives will result in a reduction of over 2,400 tonnes of carbon emissions per annum

## Smart, eco-features of Keppel Bay Tower

(1)

Keppel

allows the harvesting of about 100,000 kWh of energy per annum

### (2)

nergy-Efficient A istribution Syste

features air handling unit fans which are about 45% more energy-efficient than other best-in-class technologies

#### 3

#### Demand Control Fresh Ai Intake System

utilises integrated sensors to regulate fresh air intake according to indoor activities, optimising energy usage for better thermal comfort and indoor environmental quality

#### <u>(</u>4)

#### Intelligent Building Control System

employs a highprecision physicsbased simulation engine to improve data analytics and control

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#### ooling Tower Water anagement System

utilises a patented solution that reduces cooling tower water usage and eliminates the need for chemical water treatment

### 6)

#### Smart Lighting System

utilises occupancy sensors which allow seamless transition in lighting levels according to building occupancy