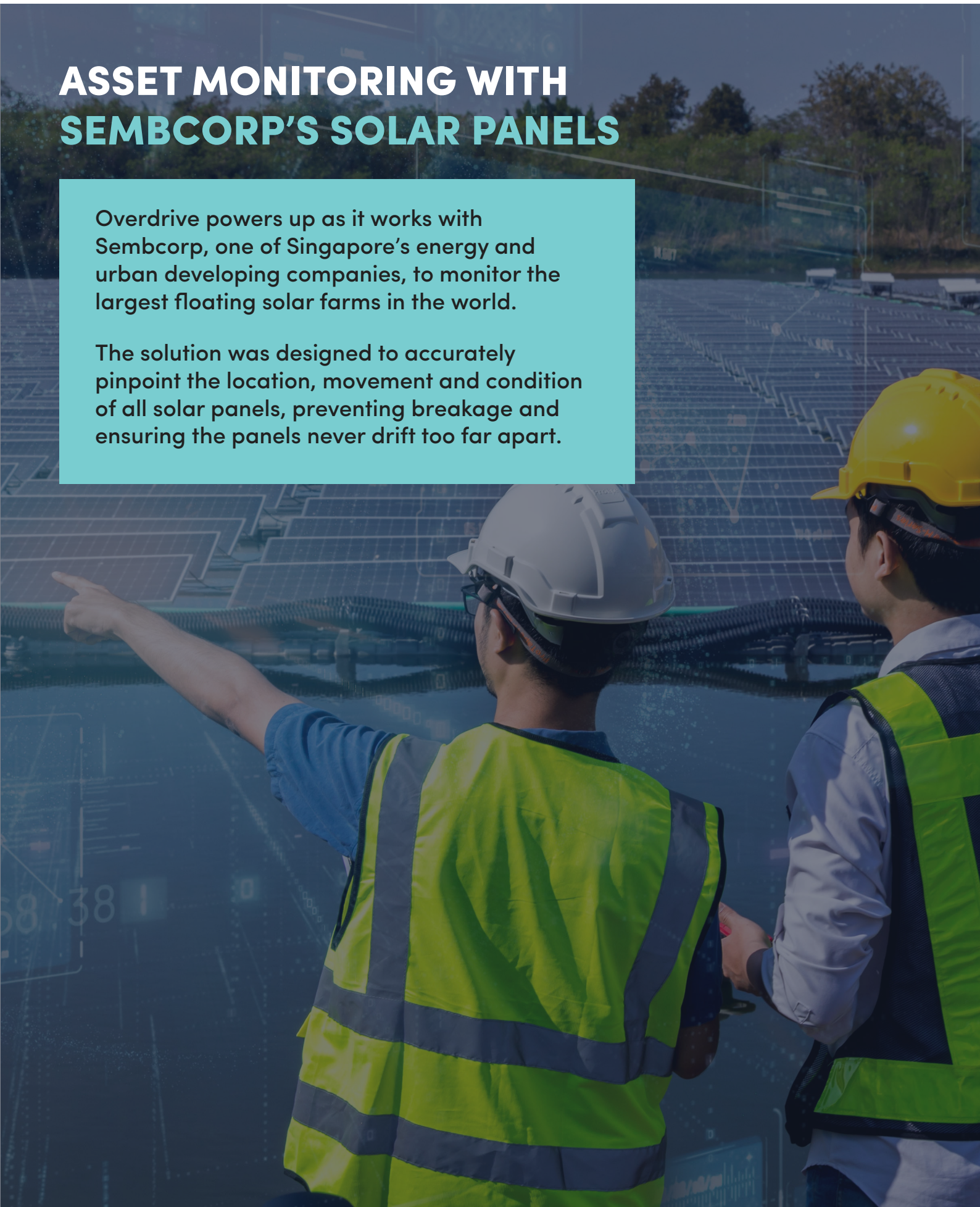


# ASSET MONITORING WITH SEMBCORP'S SOLAR PANELS

Overdrive powers up as it works with Sembcorp, one of Singapore's energy and urban developing companies, to monitor the largest floating solar farms in the world.

The solution was designed to accurately pinpoint the location, movement and condition of all solar panels, preventing breakage and ensuring the panels never drift too far apart.





## The Challenge

The floating solar farm consists of 122,000 solar panels sprawling across 45 hectares over Tengeh Reservoir. Unlike other land-based solar installations, deploying solar panels in open waters is difficult due to the unpredictable nature of the reservoir.

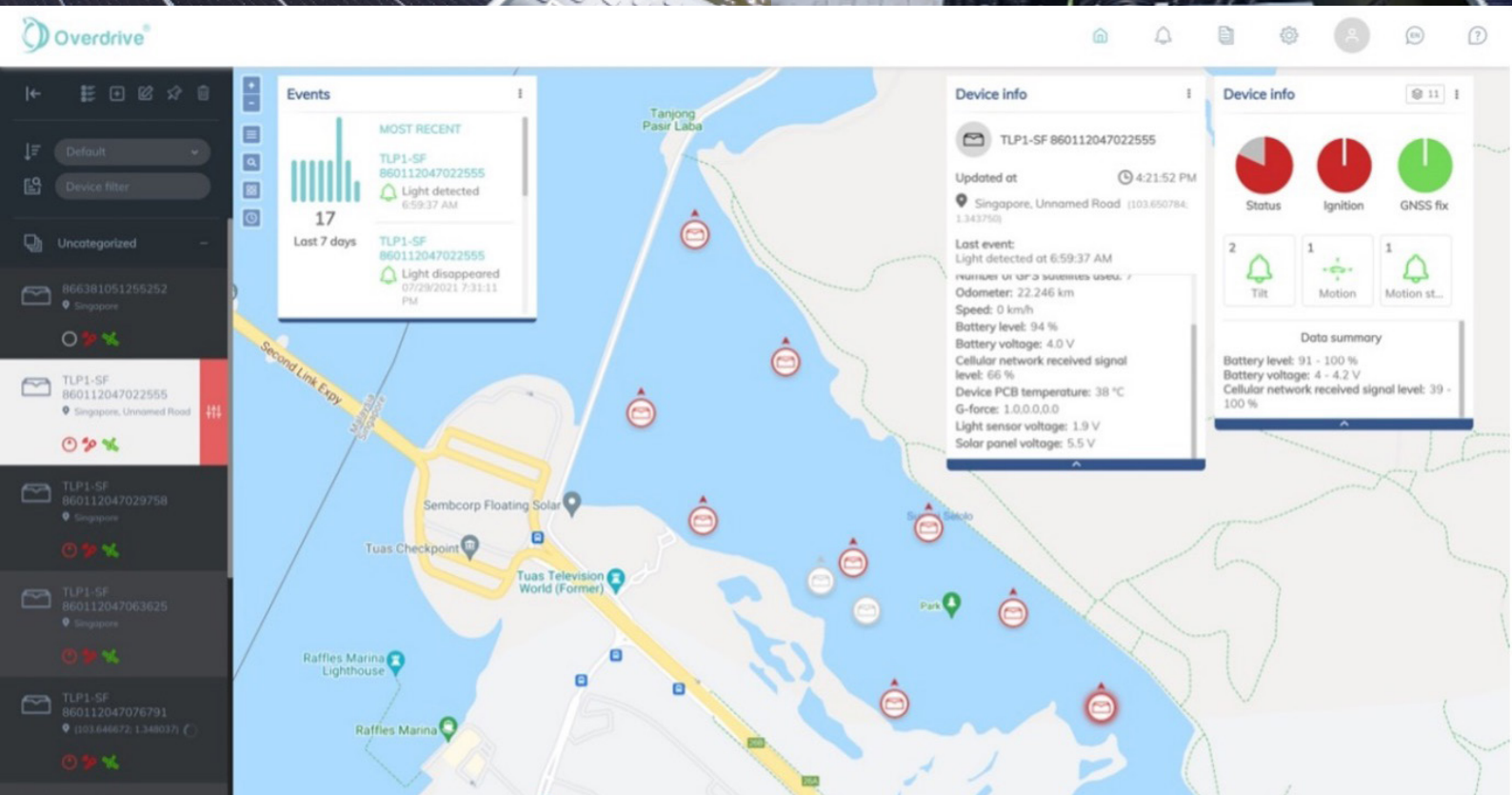
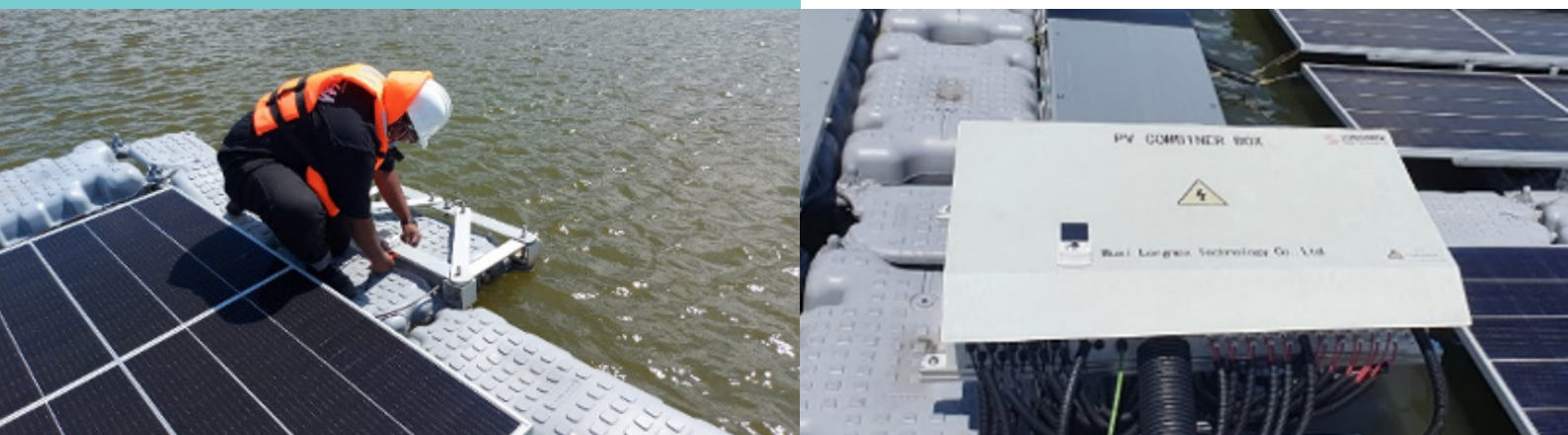
The solar farm comprises 10 solar PVs called “islands” which are equipped with thousands of electric panels and cables. These islands need to be closed monitored before it drifts too far apart, it can damage the electrical cables in between the solar PVs and impact daily operations.

## The Solution

Overdrive's asset monitoring solution secures the position of each island by giving real-time updates on the location of each panel and sending alerts whenever a solar PV drifts apart.

Built to withstand rugged environments, our solution enables Semcorp to have faster response time in case of any cable breakage, expedite possible onsite repairs, and even prevent costly unplanned downtime.

**Product Used:** OverGuard



## How does it work?



The trackers were strategically deployed across certain points on Sembcorp's solar PV testing platforms, where each anchor point was fitted with a tracker allowing Sembcorp's technicians to have a full overview of all the panels.

Any movement made by the panels is automatically detected and technicians will be notified instantly through Overdrive's platform. The solution also enabled geofence capabilities that allowed them to set up virtual boundaries and prevent panels from drifting away from the parameter.

### The Benefits



**Real-time status updates** on panel position



**Speed up** panel replacement or repairs onsite



**Improve security** while saving time and effort



Prevent damages to **reduce cost**

### The Results

Solar panels are one of the significant sources of renewable energy and by deploying Overdrive's asset monitoring solution, Sembcorp can remotely track and manage the operation of the entire solar farm in real time. As a result, it minimizes their operational expenses and reduces their reliance on manual work.

The solution enables preventive maintenance, securely anchors the position of the panels and effectively maps out the cause of any breakdown occurrences.

### Who Are We

Overdrive is the leading real-time asset monitoring IOT company in Asia that provides end-to-end IoT solutions and automates data sensing of various types of assets within a business ecosystem, from vehicles and machinery to facilities and people – all under one roof.

### What We Do

Specialises in

- Vehicles Monitoring
- Airport Management
- Vessel Tracking
- Heavy Machinery Monitoring
- Smart Hygiene
- Environmental Monitoring
- Sustainability Solution

Hello,  
We Are **Overdrive.**

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