

# A SMARTER PORT

The Tuas mega port will be outfitted with new technologies such as automated container port systems, to improve the efficiency of terminal operations. It will open in four phases from 2021 to around 2040.

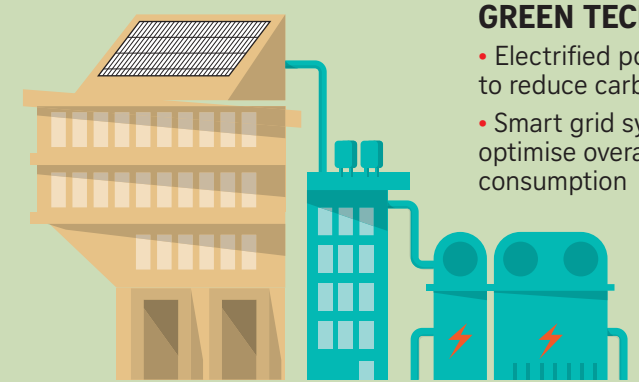


## ADVANCED PORT TECHNOLOGIES

- Automated yard cranes that can load and unload containers with precision, aided by computers, intelligent sensors and cameras
- Fully automated quay cranes to be tested
- Driverless and battery-powered automated guided vehicles to transport containers
- Autonomous truck platooning
- Drones to inspect port equipment and assist in troubleshooting with remote video streaming
- Video analytics of footage to pre-empt breakdowns

## INTELLIGENT PORT SYSTEMS/PORT DIGITALISATION

- One-stop digital portal for seamless and more efficient port clearance
- Intelligent planning system to optimise ships' turnaround time at the port and anchorages



## GREEN TECHNOLOGIES

- Electrified port handling equipment to reduce carbon emissions
- Smart grid systems that actively optimise overall electrical consumption
- Usage of renewable energy such as solar power
- Green building designs, rainwater harvesting

## Tuas Terminal PHASE 1 by the numbers

\$1b

Amount saved by reusing dredged and excavated materials for reclamation

\$2.42b

Cost of the contract for Tuas Phase 1

15,000 tonnes  
Weight of each caisson

294ha

Area to be reclaimed, the size of 272 football fields

28m

Height of each caisson, the equivalent of a 10-storey HDB block

200 cubic metres

Bucket size of GOSHO. It can fill one Olympic-size swimming pool in 45 min with 15 grabs

GOSHO  
The largest Grab Dredger in the world

