# Driving Digitalisation and Innovation

Technology developments in artificial intelligence (AI), machine learning, cloud computing, internet of things (IoT), blockchain and robotic process automation, underpinned with cybersecurity, are disrupting most industries, including ours. Sembcorp continues to innovate and is embracing digital technologies to create competitive advantage and strengthen our position as a leading energy, marine and urban development group. We are actively broadening and deepening our digital capabilities around four themes.

## Establishing a Strong and Secure IT Foundation

Enhancing cybersecurity and improving the flexibility and reliability of our information technology (IT) infrastructure by building a future-ready IT foundation and architecture.

### Moving to the Cloud

Ability to rapidly deploy and scale applications with the migration of over half of our existing enterprise systems and applications to a highly secure, flexible and cost effective cloud environment

### Cybersecurity Framework

Implemented a framework based on the National Institute of Standards and Technology (NIST) to provide a common language and systematic methodology for managing cybersecurity risk

## Digitising the Business

Improving efficiency, productivity and the customer experience with investments in business process engineering, optimisation and robotic process automation.

### Fully-automated Drones

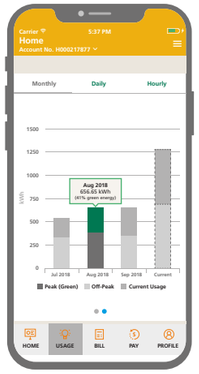
Pipeline inspections and fuel stockpile analyses will be carried out more efficiently and accurately by fully-automated drones equipped with highly specialised cameras, sensors and AI for image analysis

### Business Process Automation Bots

Increased productivity through the automation of repetitive processes, such as data verification and entry, by software robots

### Customer-centric Mobile Application

Retail customers can monitor electricity consumption and manage their accounts easily with the Sembcorp Power app, which provides a rich digital experience




### Intelligent Wastewater Processing

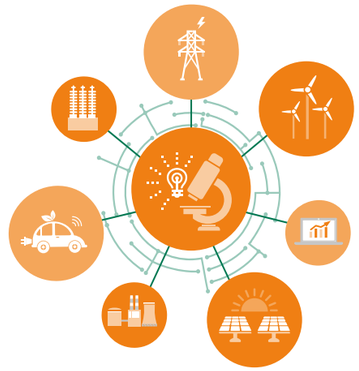
Consistent and reliable execution via a patented intelligent platform that digitises standard operating procedures, with over 100 machine learning models that help improve operation of industrial wastewater plants

## Embedding Innovation in Our Business

Innovation is key to the success of digitalisation. We are developing differentiated solutions to improve plant and business operations through a team of experienced data scientists and engineers. We are also incubating cutting-edge technologies by partnering with tertiary institutions, research institutes and government agencies.

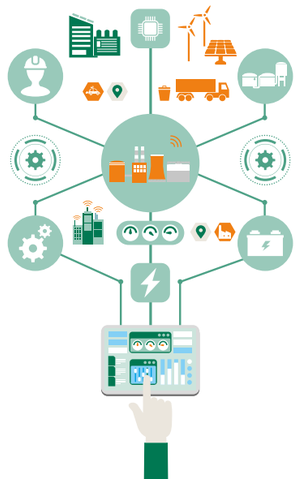
### Research & Development

Our R&D identifies and develops novel technologies to improve how we maintain and optimise our assets as well as reduce greenhouse gas emissions. We also partner the Energy Market Authority to encourage translation and commercialisation of new intellectual property, and develop enhanced capabilities for Singapore's energy sector



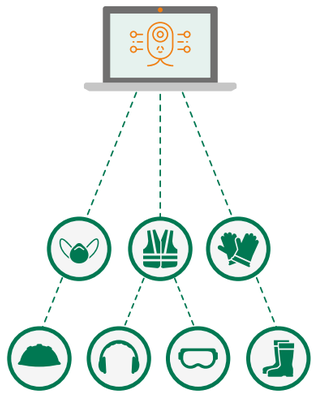
### Asset Optimisation and Improvements

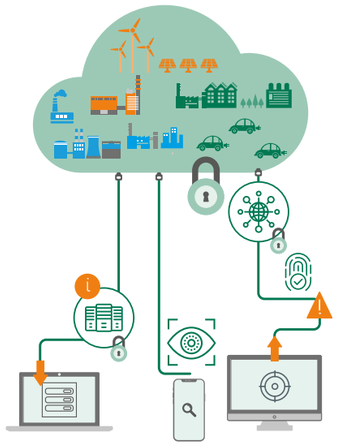
Developing insight platforms using machine learning and AI to improve how we operate and optimise our thermal and renewable assets. For example, the Sembcorp Virtual Brain combines machine learning and engineering processes to proactively identify and enhance plant performance



### Automated Detection of Potential Hazards

Health, Safety, Security and Environment event detection applies computer vision to video footage to detect potential hazards to improve operator safety





### Data Lake

Ability to build and deploy analytic applications much faster, because of our data lake – a highly secure and single source of truth repository of real-time operational data from over 200,000 IoT sensors across our global power, water and renewables businesses

## Managing Our Digital Journey and Change

Creating a digital workplace of the future by introducing advanced digital solutions and investing in employee upskilling.

### E-Learning Platform

Employees can pick up new skills easily through our partnership with a leading employee e-training provider