



# Accelerating the transition to a sustainable future through GreenTech

17 October 2024



# Agenda

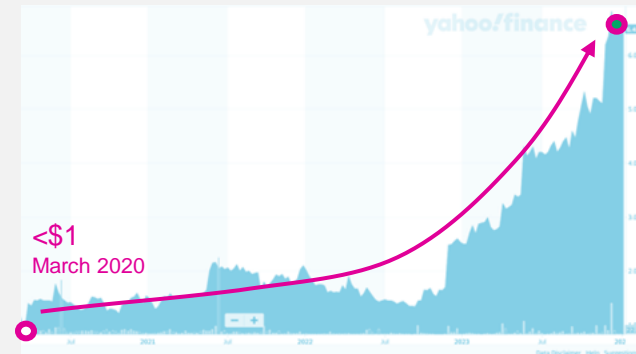
- Introduction
- Green Transformation in Energy
- How digitization enables the new energy market
- Water Industry Transformation
- How digitization enables the new water market
- Q&A

# Gentrack Introduction

**Global Company** - 750 employees, 3 years of experience



**PUBLIC COMPANY** - NZX:GTK - ASX:GTK



Top performing stock on NZX in the last 6 months  
Entered S&P/NZX50 and ASX All Tech Index this financial year

**OUR CUSTOMERS** - 60+ customers, 16+ regulated markets

ENERGY & WATER – B2B & B2C



**FACTS & STATS**

I&C leader in the UK (energy)

100% Transformation success

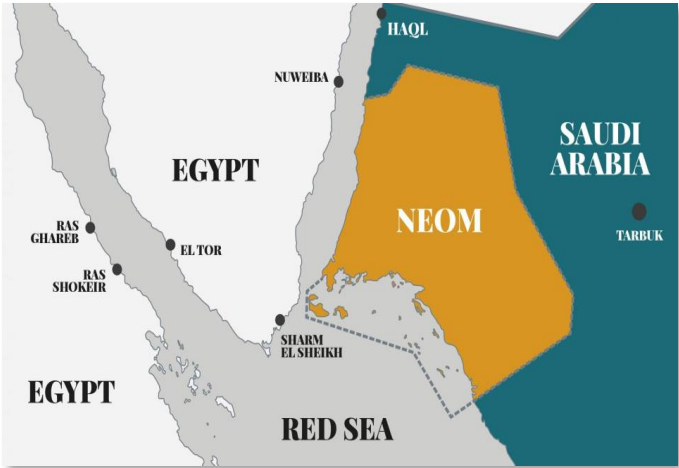
>50%

B2C energy bills in NZ

7

Of top 15 water suppliers in AUS

**Vision:** "NEOM is the land of the future where the greatest minds and best talents are empowered to embody pioneering ideas and exceed boundaries in a world inspired by imagination".



NEOM

**THE LINE**  
REVOLUTIONARY URBANISM

THE LINE IS COMPRISED OF A SERIES OF INTERCONNECTED MODULES, REACHING 500M HIGH.

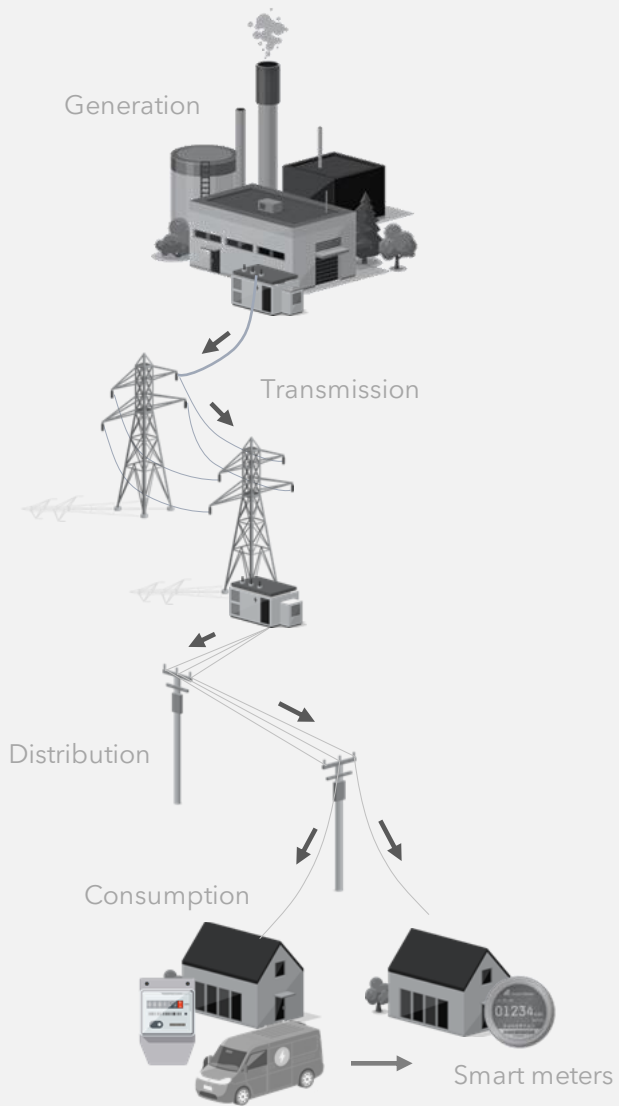
THE CORE ELEMENTS OF EVERY MODULE ARE STANDARDIZED TO MAXIMIZE COMPATIBILITY AND DRIVE DOWN CONSTRUCTION COSTS.

170 KM LENGTH OF THE LINE	500 M ABOVE SEA-LEVEL HEIGHT OF THE LINE
200 M WIDTH OF THE LINE	34 SQ. KM FOOTPRINT OF THE LINE 2% OF CONVENTIONAL CITIES

NEOM.COM

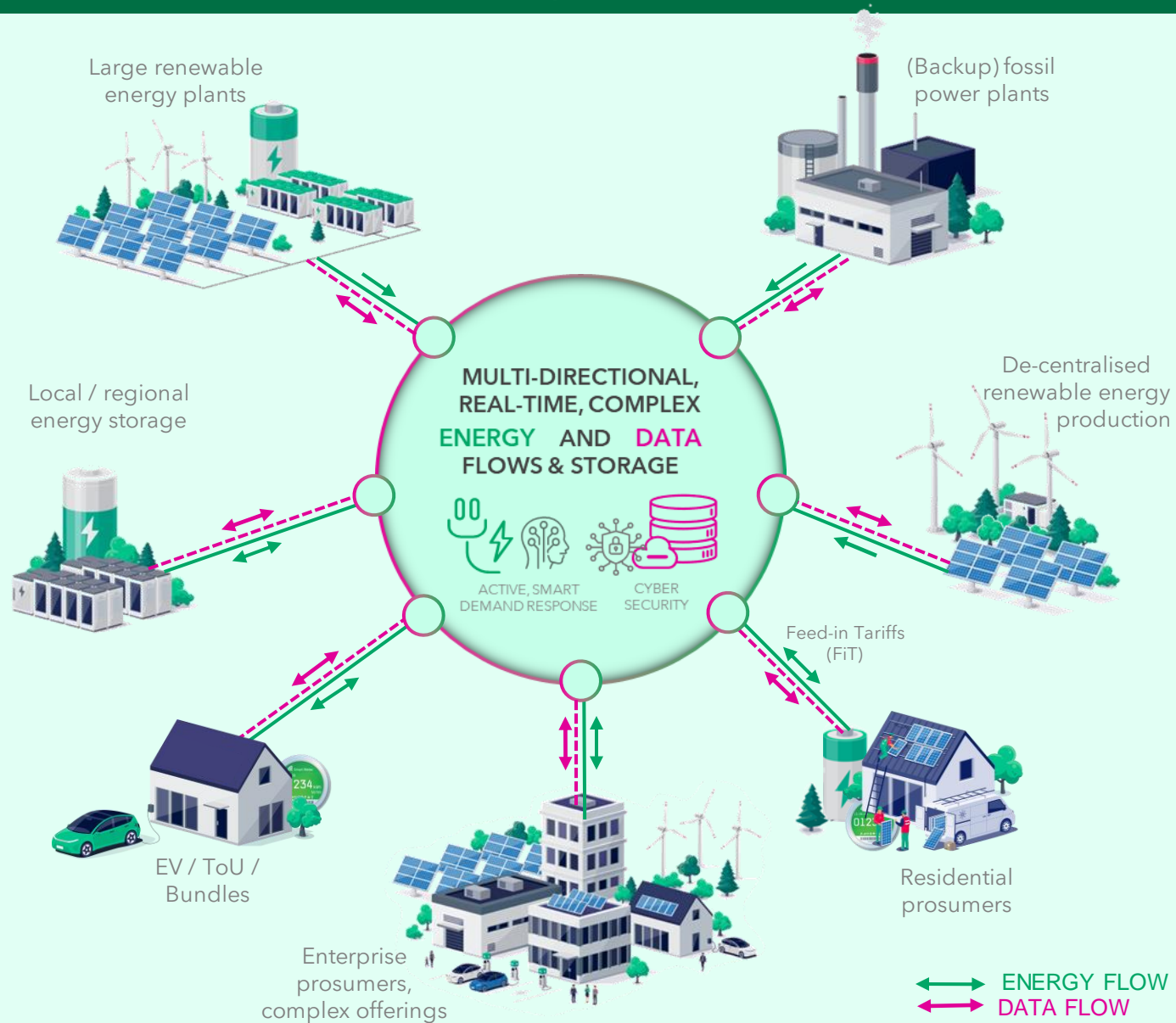
# ENERGY MARKET YESTERDAY

PREDICTABLE, UNIDIRECTIONAL ENERGY FLOW

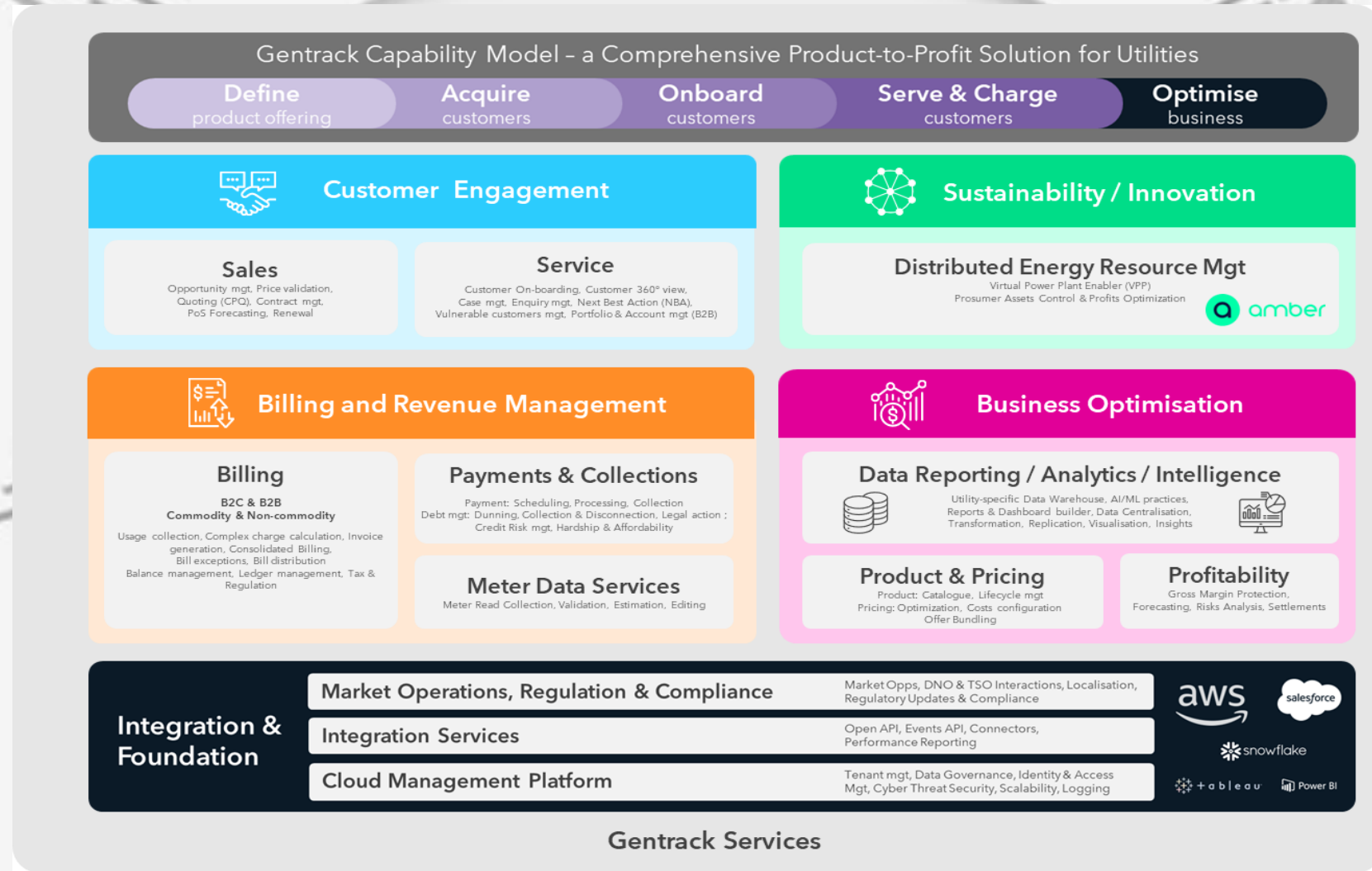


# ENERGY MARKET TODAY & TOMORROW

DE-CENTRALISED PRODUCTION & STORAGE  
SMART DEMAND-RESPONSE | HYPERSCALE DATA NETWORK

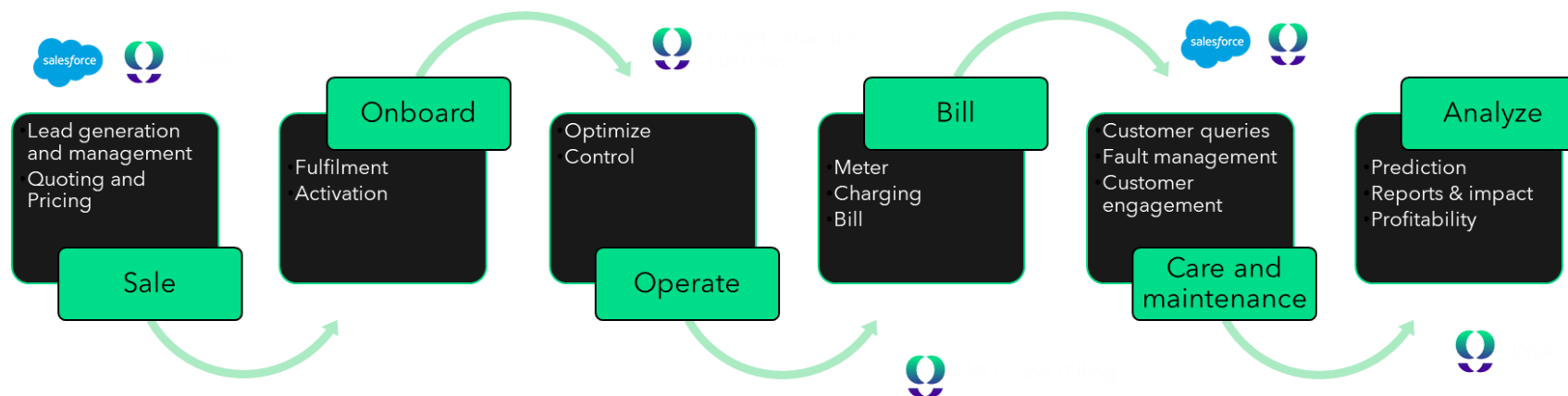
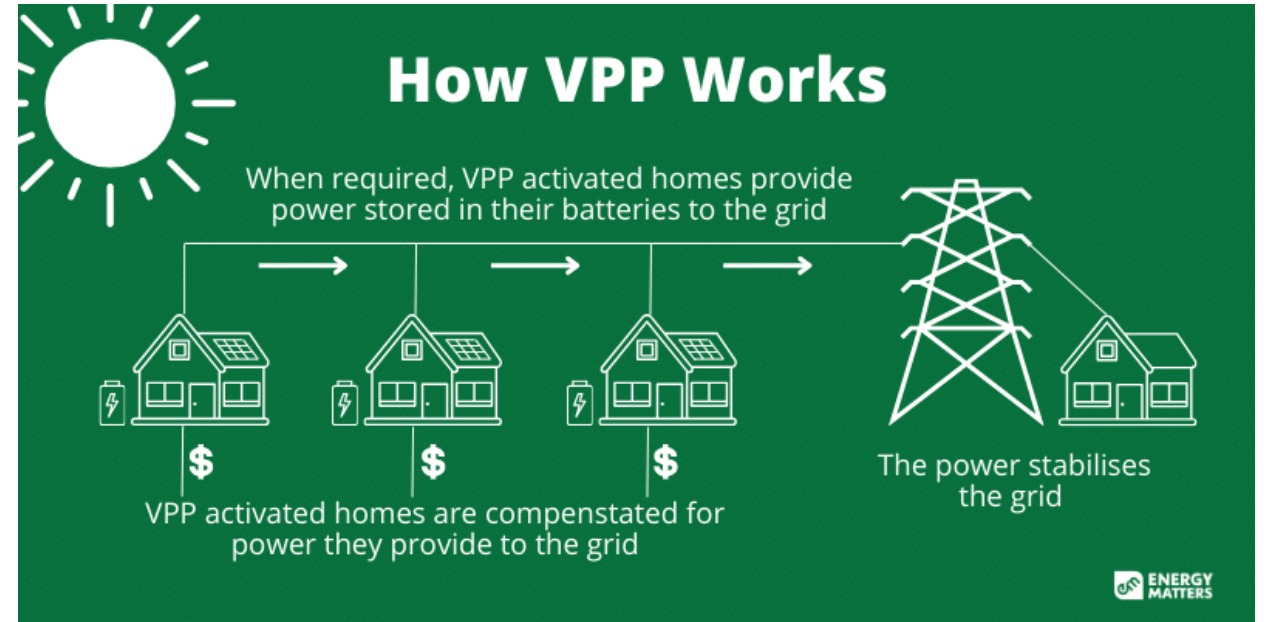


# Product to Profit System



# Virtual Power Plant

A Virtual Power Plant (VPP for short) is a network of energy generation & storage systems that are centrally managed by software to provide and consume energy to/from the grid during peak/off peak times. Virtual Power Plants allow renewable energy to be harnessed quickly, keeping the network stable and reducing reliance on fossil fuels. (adopted from EA, 2024)

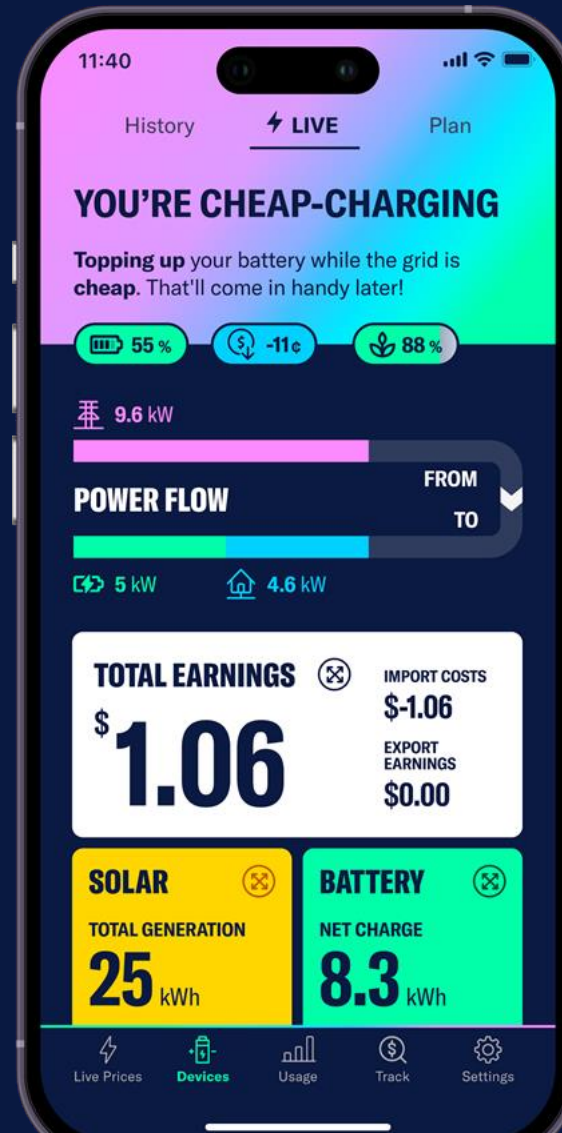


# Amber – technology that enables the customer to control and optimize the use of his battery

## CONTROL & AUTOMATION

Gives the customers the technology to automate their battery for their benefit based on their preferences.

Amber's SmartShift software forecasts the wholesale energy price, household usage and solar production to maximize the value for the customer within their constraints.



## MORE VALUE FROM THEIR ASSETS

Allows customers to earn the same price as a big generator for their exports, so they can capture more value from their battery or EV in the energy market.

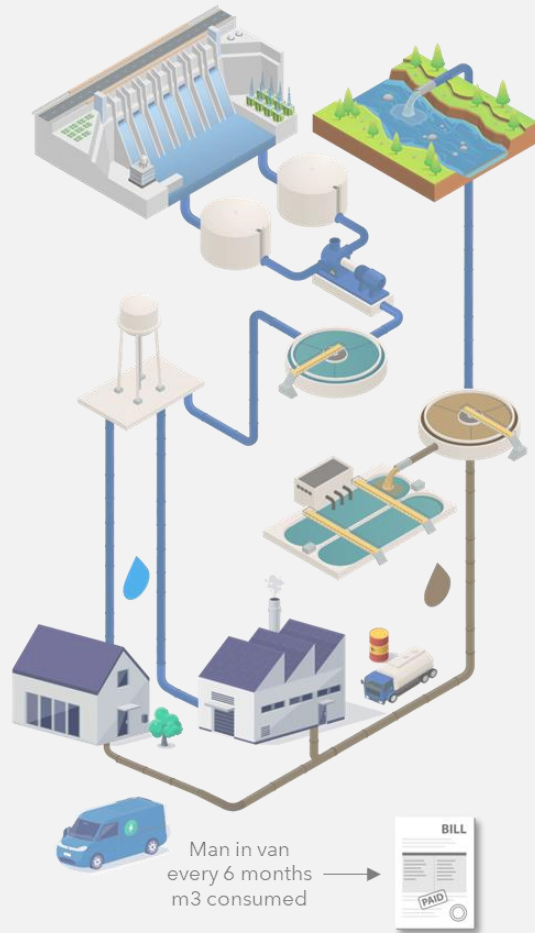
Amber customers are earning ~\$100 in a day (in AU) while accelerating the renewable transition.



# WATER MARKET YESTERDAY

ASSET  
CENTRIC

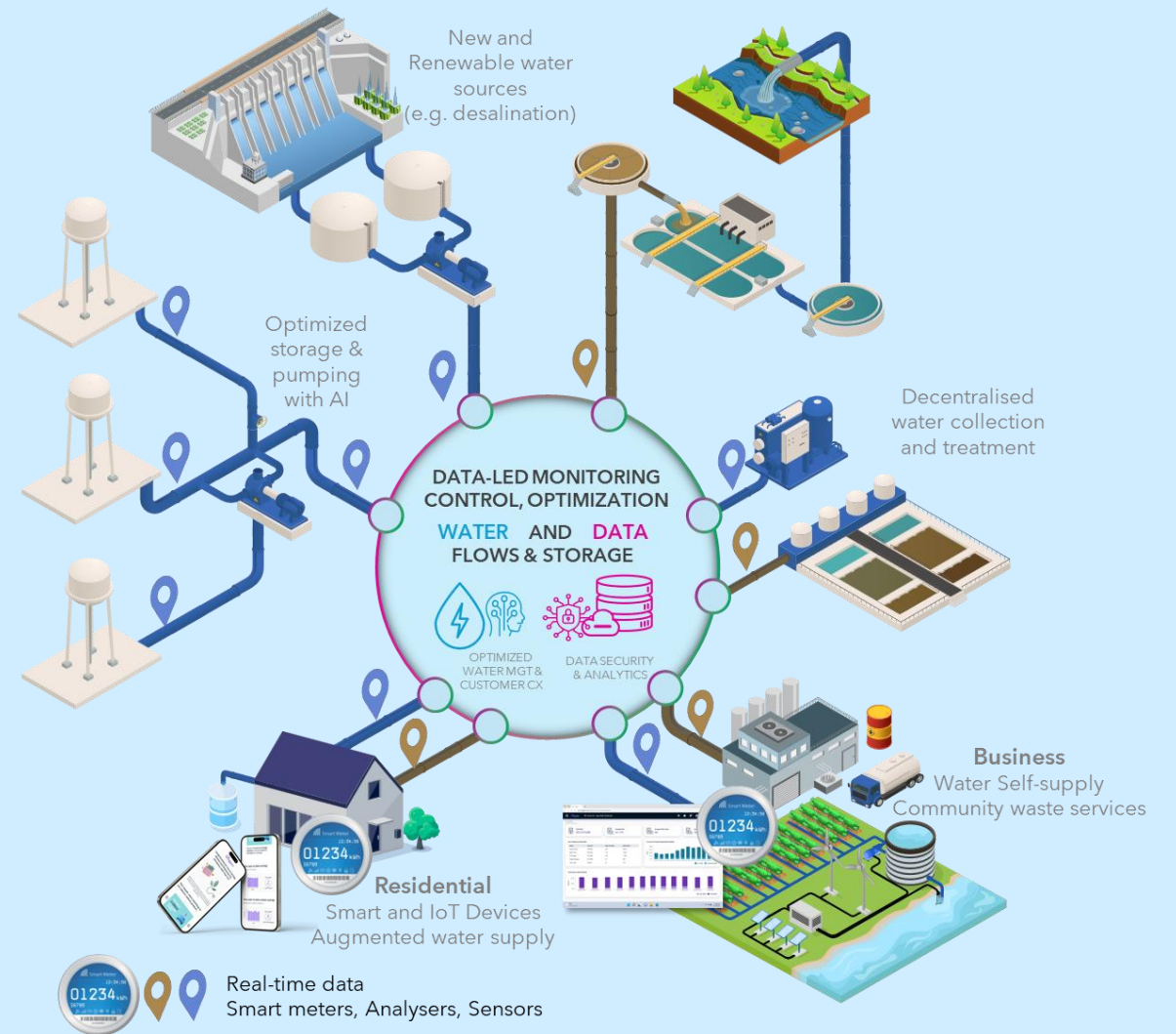
COMMODITY SERVICES AROUND A BATCH-BASED AND MANUALLY UPDATED NETWORK SUPPORTED BY A LEGACY IT SYSTEM WHICH REQUIRES A HUGE PYRAMID OF COSTS TO OPERATE

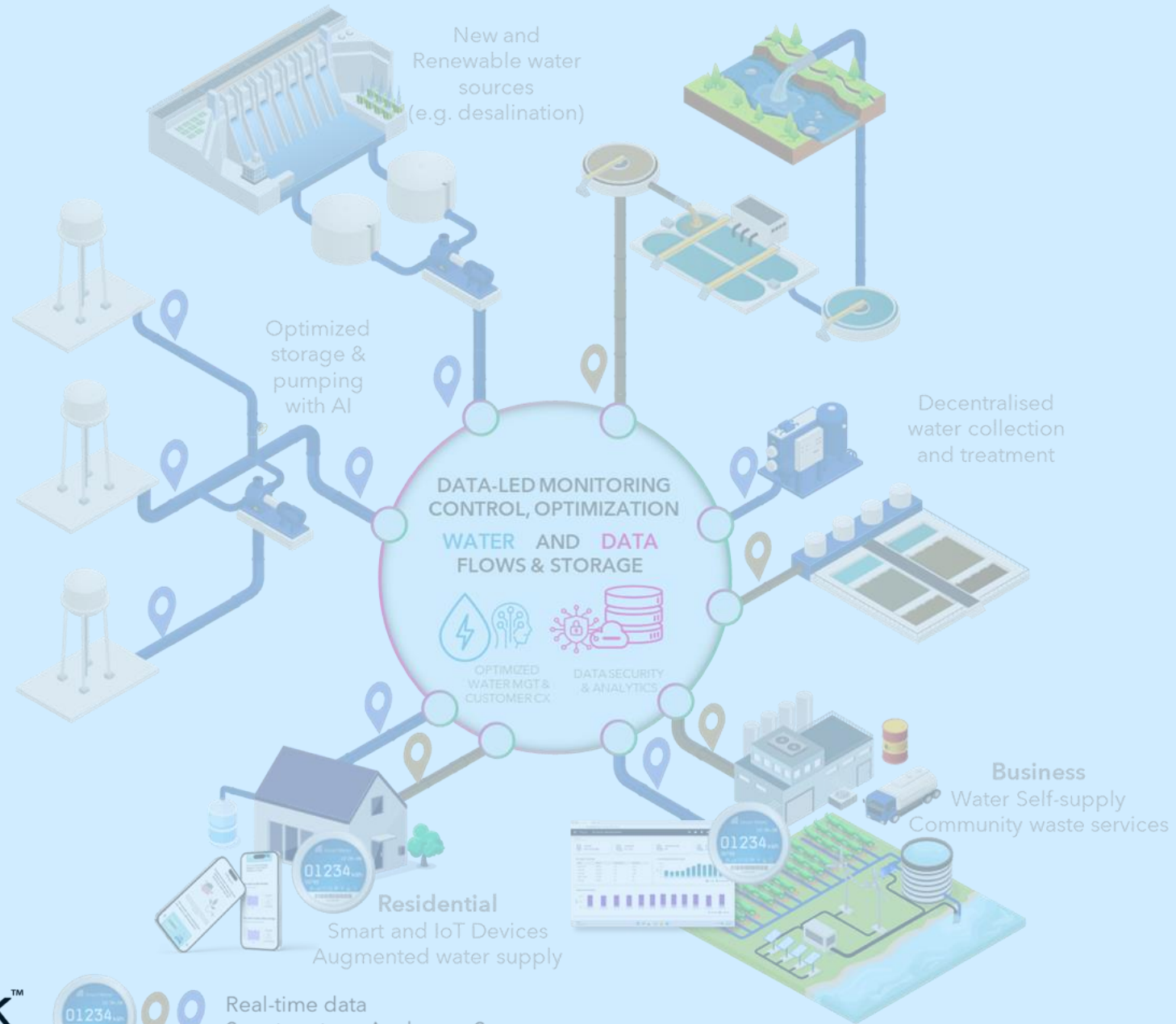


# WATER MARKET TOMORROW

CUSTOMER &  
BUSINESS  
CENTRIC

NEW HYPER-SCALE DATA-LED NETWORK SUPPORTED BY CLOUD-BASED INTEGRATED BILLING, CRM AND FIELD SERVICES UNLOCKING OPERATIONAL EXCELLENCE, CUSTOMER ENGAGEMENT AND SERVICES INNOVATION







## EACH OTHER




### WATER SECURITY

- Water supply
- Accountability options for water and wastewater

### DIGITAL FIRST EXPERIENCE





- Enabling self-service capabilities 
- Inform and optimise your water behaviours 

### ECONOMICAL WATER SERVICES

- Reward for positive behaviour 
- Enable self-generation of water 
- Enable market for self-generation 

## WATER INDUSTRY



### SERVICE EFFICIENCIES

- Accurate data / information 
- AI/ML assistance and optimisation 
- Optimise and tailor/personalise customer service options 
- Short TTM to setup new offerings 

### OPERATIONAL EFFICIENCIES

- Optimise maintenance costs
- Minimise faults and outages

### BUSINESS IMPROVEMENTS

- Value-based tariffs & services 
- Education on these products 

### DATA-LED MONITORING CONTROL, OPTIMIZATION

#### WATER AND DATA FLOWS & STORAGE






OPTIMIZED  
WATER MGT &  
CUSTOMER CX




DATA SECURITY  
& ANALYTICS

## THE PLANET

### PROTECT WATER SUPPLY

- Per Capita Consumption (PPC) reduction 
- Sewerage and trade waste management 
- Leakage management 

### PROTECT ENVIRONMENT

- Enhance renewable energy sources
- Overlay with renewable energy for truly renewable consumption 
- Reduce environmental impacts/habitat loss

### PROTECT THE FUTURE

- Focus on "what's next" instead of the problems of yesterday

# In closing

The problem is an **ever-increasing complexity** in the utility industry

Driven by the journey to net zero and our **rapidly growing population** and the **very limited capacity of readily-available sources**

**Innovation**, available and accelerated **investment in technologies** create great opportunity to optimize and address existing challenges

It creates an exciting space and opportunities for academic research in multiple disciplines



# Questions?

