



DIGITAL OUTLOOK SERIES 2023

TM'S SUSTAINABILITY JOURNEY & LESSONS LEARNT





SERVING THE RAKYAT WITH THE MOST COMPREHENSIVE DIGITAL ECOSYSTEM

3.1 million homes / 3.0 million broadband / 0.8 million mobile / 0.4 million SMEs

6,000 enterprise / 2,800 federal, state and government agencies

999 TALIAN KECEMASAN NEGARA

CAAM Civil Aviation Authority of Malaysia

GMDSS Global Maritime Distress and Safety System

Very Small Aperture Terminal (VSAT)

Over 690,000 km fiber optic cables nationwide

Over 340,000 km of submarine cables

Powered by 19,000 Warga TM



TM'S SUSTAINABILITY JOURNEY



Khazanah's Silver Book launched as part of the GLC Transformation Programme



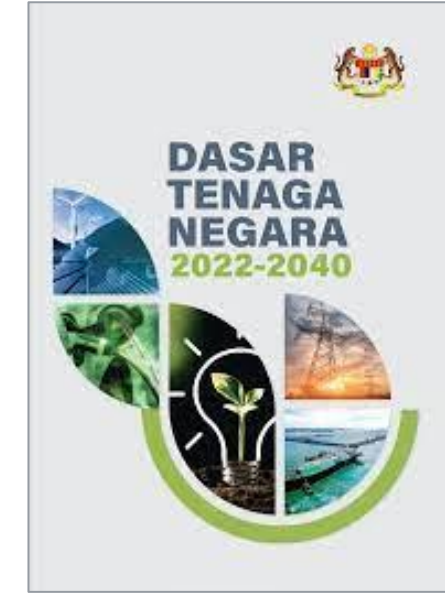
KeTTHA launches the Green Technology Master Plan Malaysia 2017-2030



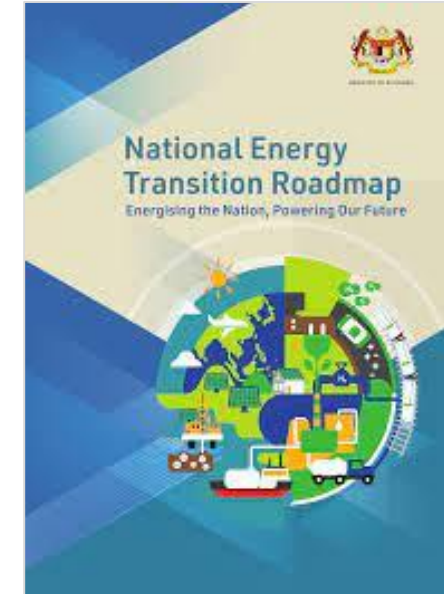
KeTTHA launches the National Green Technology Policy



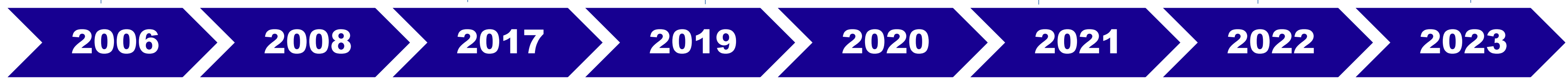
12th Malaysia Plan published with the ambition to achieve net zero emissions by 2050



Dasar Tenaga Negara launched by EPU



Ministry of Economy launches National Energy Transition Roadmap



Published first GRI Sustainability Report



Published our first Integrated Annual Report



FTSE4Good
Started to disclose on Bursa FTSE4Good

Sustainability becomes Board Agenda



Committed to CAN
Started to disclose on the Carbon Disclosure Project



Published our first set of ESG Commitments

Sustainability KPI cascaded to key senior management

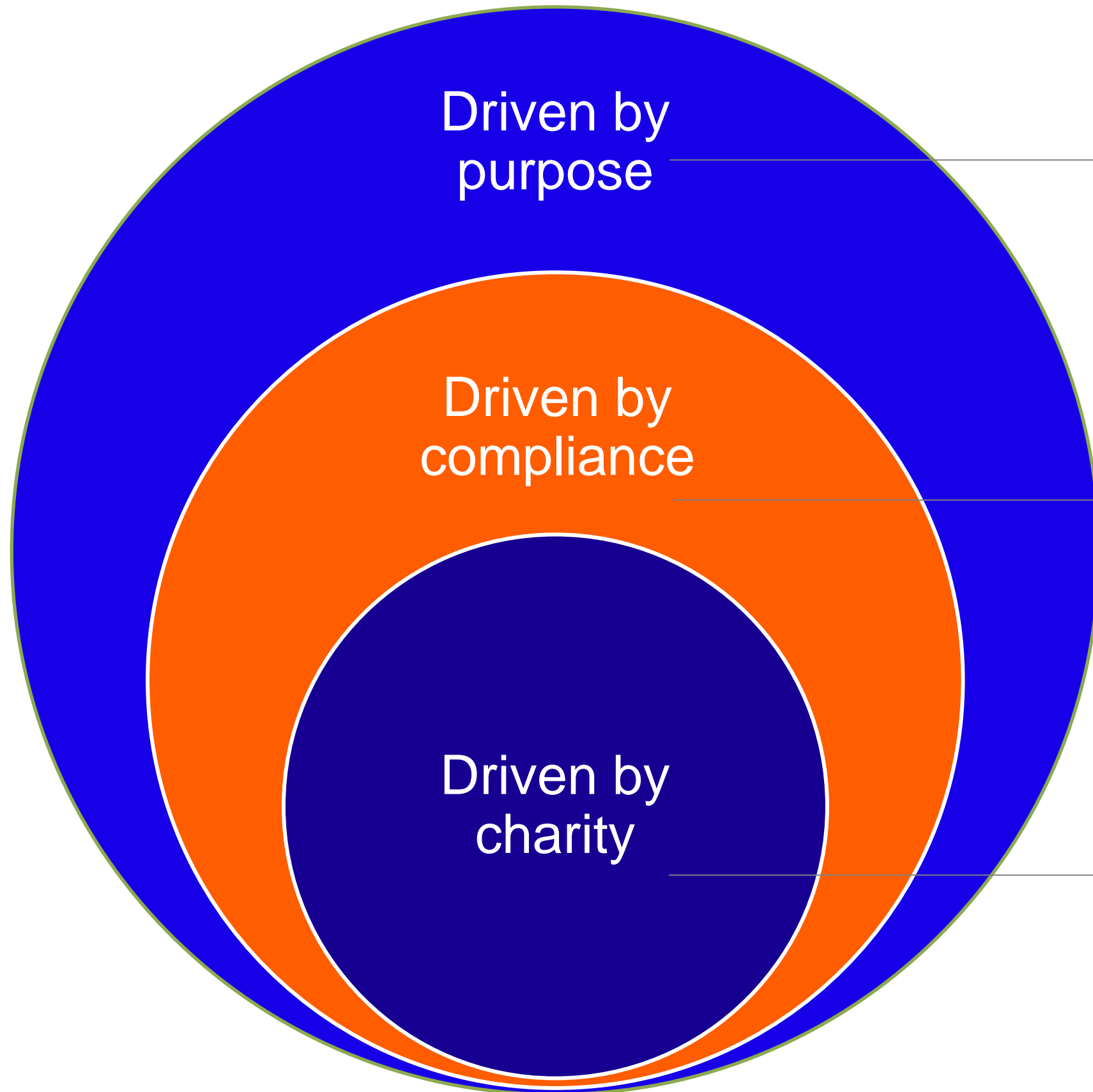


Published first TCFD Report



Became members of UN Global Compact

SUSTAINABILITY ENABLES US TO CREATE LONG-TERM VALUE PROPOSITIONS AS PART OF OUR BUSINESS STRATEGY



Sustainability (EESG):

Creation of **long-term stakeholder value** through the implementation of a business strategy which focuses on **sustainable development**
Eg: Reducing carbon emissions makes business sense to TM. It reduces our operational costs and adds customer value to our products and services.

ESG:

Commitments are made to **fulfil obligations** to government, regulators and investors
Eg: We aim to reduce our carbon emissions by 45% by 2030, in line with Malaysia's National Determined Contributions (NDCs)

CSR:

Doing **what feels good** for the community and for the environment
Eg: We plant trees to green the environment

- ➔ Reputational integrity
- ➔ Competitive edge
- ➔ Business value
- ➔ Resilience
- ➔ Accountability
- ➔ Stakeholder management
- ➔ Risk management
- ➔ Community development
- ➔ Nation building

SNAPSHOT OF INTERNAL SUSTAINABILITY EFFORTS

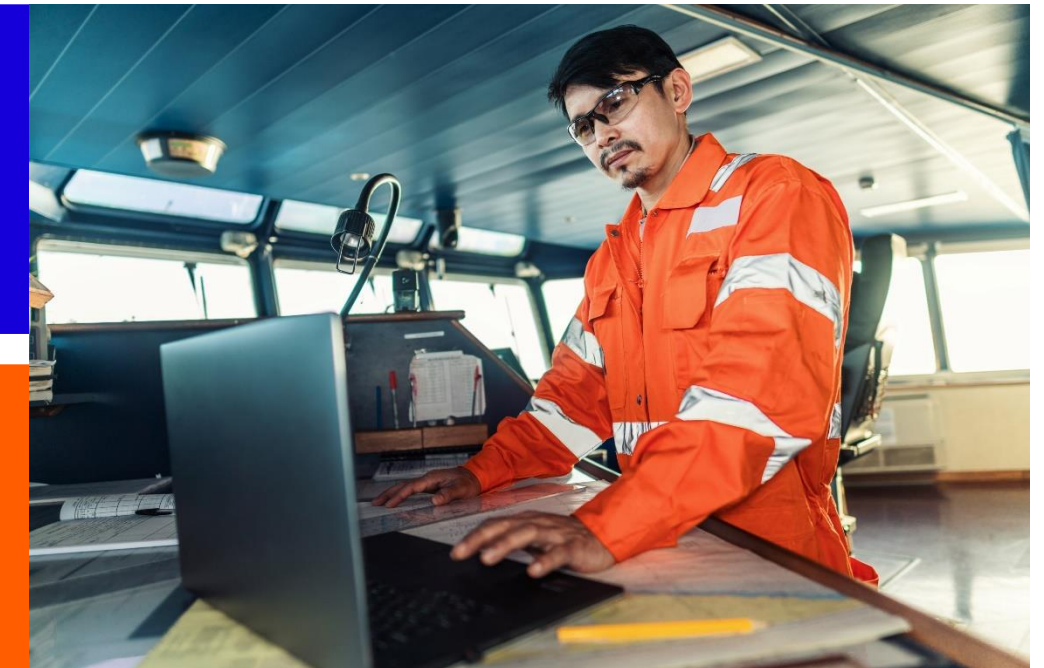


NETWORK ELEMENT MIGRATION

Network modernization, ensuring that high efficiency network elements are maximized. This resulted in reduced energy consumption of almost **10 million kwh** and a cost saving of **RM4.59 million**

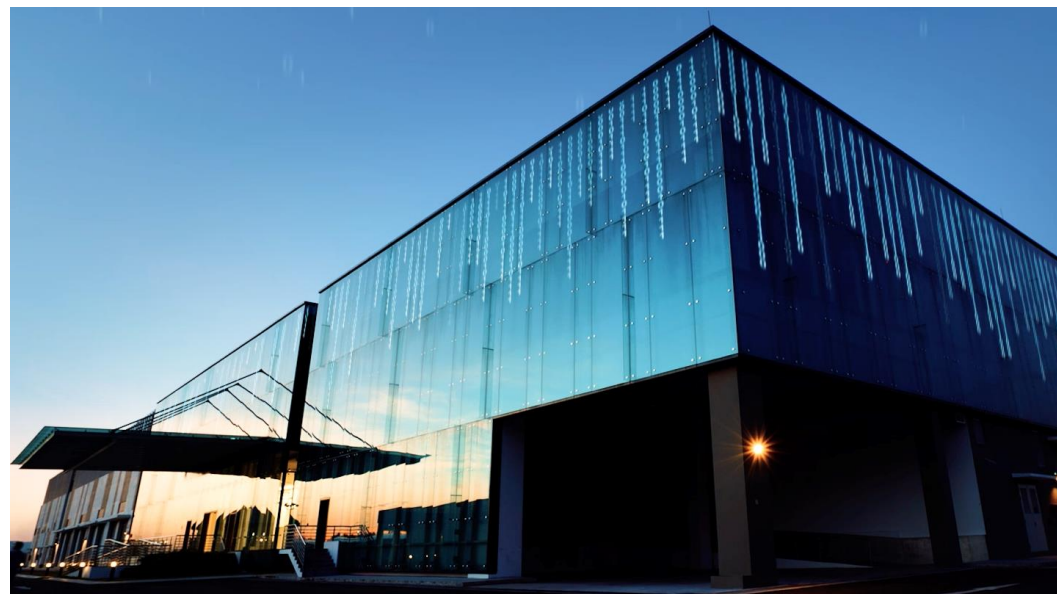
ENERGY EFFICIENCY OPTIMIZATION

Reduced electricity consumption at **233 sites** with cost savings of almost **RM 2 million** and energy reduction of almost **3 million kwh**



COOLING UNIT UPGRADING

By replacing **564 conventional air conditioning units** with more energy efficient units, we reduced our energy consumption by **1.3 million kwh**, a savings of **RM0.66 million**



DATA CENTERS & NODES POWERED BY RENEWABLE ENERGY

Three of our data centers and four of our nodes are now powered by RE mix

Current renewable energy subscription: **52 million kwh per year**

Orang jual keropok lekor 5 ringgit pun
orang bayar menggunakan QR Pay

OFFERING SUSTAINABLE SOLUTIONS

LANGKAWI

5G Integrated Operations Command Centre for Smart Traffic Lights, Smart Parking, Smart Safety & Security Solutions, Langkawi Smart Tourism App, Gerbang Langkawi Platform for smart water management system and other solutions

IPOH

Improved traffic flow by 51% using TM One's Smart Traffic Analytics and Recognition System. This led to reduction in carbon emissions by 7,500kg per month

SUBANG JAYA

Deployment of 5G-enabled solutions: Smart Traffic Light, Smart Parking and Smart Safety & Security solutions

KULAI

Upgrade surveillance facilities at targeted areas, maximize the use of public parking lots using TM One's Smart Parking System

KUCHING

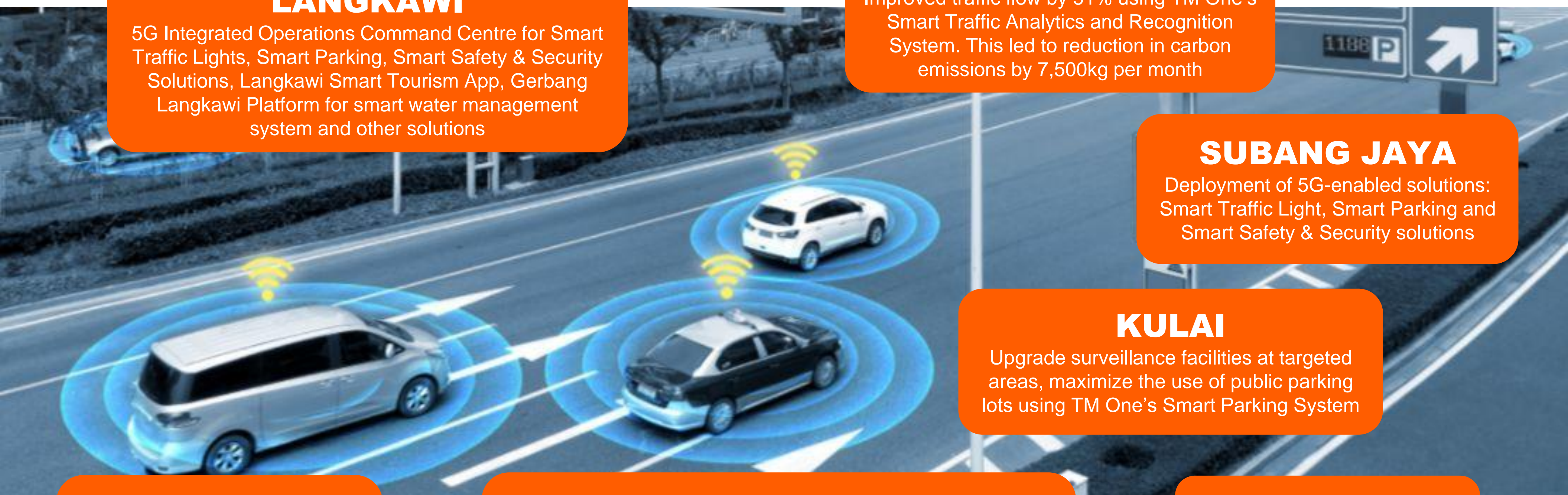
Smart street lighting and analytic surveillance - helps local councils detect and respond to any incidents quickly

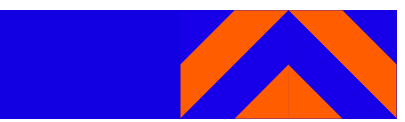
KELANTAN, PERLIS, PENANG, SELANGOR, JOHOR

Smart traffic lights that respond to real-time data collected by connected cameras and sensors

CYBERJAYA

Reduction in waiting time along Persiaran Multimedia by 65%





OFFERING SUSTAINABLE SOLUTIONS



SMART HEALTHCARE

Using the Internet-of Things (IoT) for automation and to enable patients to customize their in-patient environment

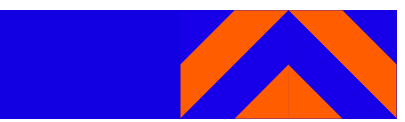
SMART AGRICULTURE

Using smart automated irrigation, harvesting and crop processing solutions – reducing wastage, improve quality of crops, pest control, enhance safety



SMART MANUFACTURING

Using Operational Equipment Effectiveness (OEE) to digitize equipment management, maximize workforce efficiency by reducing manual work, virtualization of data and statistics, integrated continuous improvement, predictive analysis for improved decision-making



IMPORTANT LESSONS LEARNT



SUSTAINABILITY NEEDS TO MAKE BUSINESS SENSE & CREATE VALUE TO THE COMPANY

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



17 PARTNERSHIPS FOR THE GOALS



START BY GETTING TO KNOW AND CLEANING UP YOUR OWN BACKYARD

CREATE BASELINES

LOW-HANGING FRUITS



BUILDING AN INTERNAL CULTURE OF SUSTAINABILITY

CAPACITY BUILDING

POLICIES

THANK YOU



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