TENAGA NASIONAL BERHAD

PRESENTATION TO INVESTOR

July 2025

Investor Relations, Group Finance Division

Corporate Profile

TNB is the largest electricity utility company in Malaysia and at the forefront of the country's energy transition

Sabah Electricity Sdn Bhd (SESB)
(83% owned by TNB)

Tenaga Nasional Berhad (TNB)

Our Presence in Peninsular Malaysia

Holds 48.7% of Domestic Generation Capacity

Our grid network and retail business* are governed by the Incentive Based Regulation (IBR) framework

Transmission length: 29,519 km
Substations: 543
System Minutes: 0.0019 minutes

Distribution Network: 738,028 km
Substations: 99,374
SAIDI: 47.88 minutes

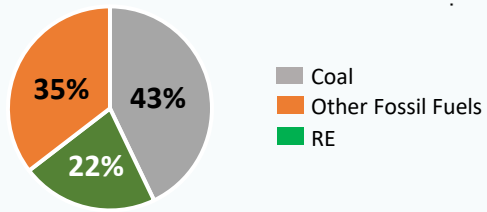
Retail customers: 10.4 mil
Customer Satisfaction Index (CSI): 87%

*Data as of December 2024

Group Portfolio

Total TNB Gross Capacity: 21,174MW
(March 2025)

- Domestic: 17,905MW
- International: 3,269MW



Notes:
1. RE inclusive of large hydro and small RE
2. Data is based on gross installed capacity
3. Solar capacity based on MWp

Main Subsidiaries

TNB GENCO · Sabah Electricity · TNB ENGINEERING CORPORATION · TNB REMACO · GSPARX · allo! · MTM MALAYSIA TRANSFORMER · TSG · tci TENAGA CABLE INDUSTRIES SDN. BHD.

Corporate Profile

We are also a global player as we strive to future proof our business by expanding our RE footprint and establishing strategic partnerships with leading RE players

INTERNATIONAL PORTFOLIO

2021 VANTAGE RE

- **Equity stake:** 100%
- **Capacity**:
  - 123.9MW in onshore wind
  - 365.0MW in solar *(55% equity)*
  - 41.5MW in offshore wind *(49% equity)*
  - 276.0MW in solar

2016 GAMA ENERJİ A.Ş.

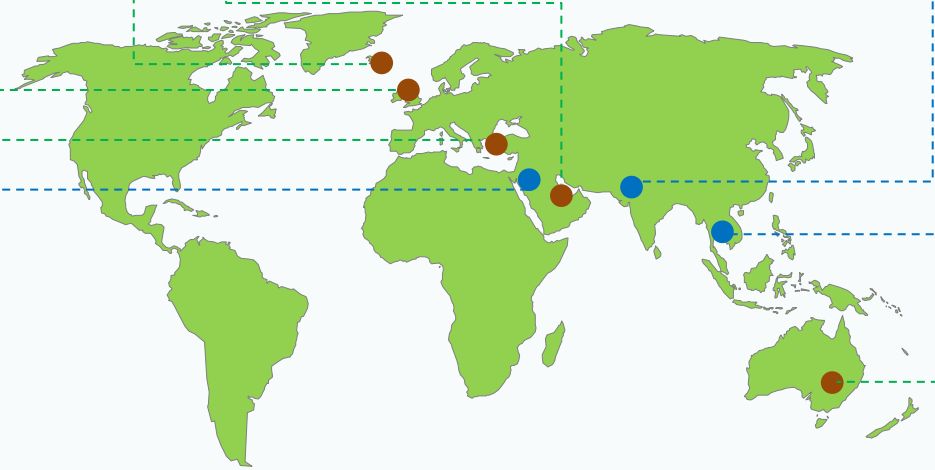
- **Equity stake**: 30%
- **Capacity**:
  - 1,151.5MW in gas, hydro and wind. Water conveyance in Jordan

REMACO (A subsidiary of TNB Power Generation)

- **Operation & Management Services**:
  - Operation & Maintenance Contract for Doha West and Shuwaikh Power Stations
  - Maintenance, Repair and Overhaul Contract for Sabiya Station-1, Sabiya Station-2 & Shuaibah North Power Stations

2005 SEPCO / SWEC

- **Equity stake:** 6% effective equity stake
- **Capacity**:
  - 1,190.7MW in oil
  - Water desalination of 376 mcm p.a.



REMACO (A subsidiary of TNB Power Generation)

- **Operation & Management Services**:
  - TNB Remaco & Balloki Power Plant National Power Park Management Company Limited 276.0MW in Solar

REMACO (A subsidiary of TNB Power Generation)

- **Technical Advisory:**
  - Technical Advisory for Electricité du Cambodge (EDC) Heavy Fuel Oil Plant of 400MW

2023 SPARK RENEWABLES

- **Equity stake:** 100%
- **Capacity**:
  - 120.5MWp in Solar

Our International Presence

Solar, Wind, Hydro, Gas

United Kingdom, Ireland, Australia, Turkiye, Saudi Arabia

New Energy Division — Remaco

Composition of BOD

NON-INDEPENDENT NON-EXECUTIVE CHAIRMAN
TAN SRI ABDUL RAZAK BIN ABDUL MAJID

EXECUTIVE DIRECTOR / PRESIDENT / CEO
DATUK IR. MEGAT JALALUDDIN BIN MEGAT HASSAN

Senior Independent Non-Executive Director

ONG AI LIN

Expertise: Audit & Finance

Independent Non-Executive Directors

DATO' MERINA BINTI ABU TAHIR

Expertise: Accounting

GOPALA KRISHNAN K.SUNDARAM

Expertise: Law

JUNIWATI RAHMAT HUSSIN

Expertise: Corporate Planning and Human Resource

ALAN HAMZAH BIN SENDUT

Expertise: Accounting

DATO' ZULKIFLI BIN IBRAHIM

Expertise: Engineering

Non-Independent Non-Executive Directors

MUAZZAM BIN MOHAMAD

Permodalan Nasional Berhad (PNB)

YB. TUAN RAMZI BIN MANSOR

Ministry of Finance (MOF)

ROHAYA BINTI MOHAMMAD YUSOF

Employees Provident Fund (EPF)

SELVENDRAN KATHEERAYSON

Khazanah Nasional Berhad

ELAINE ONG YEE LYNN

Khazanah Nasional Berhad Alternate Director

Technical Performance Overview

Group earnings supported by; i. Improved generation performance
ii. World-class network performance

Equivalent Plant Availability Factor, EAF (Generation) %

1QFY2025

82.0%

1QFY2024: 75.4%

2025 Target: 83.2%

Improved overall performance by power plants

System Minutes (Transmission) Minutes

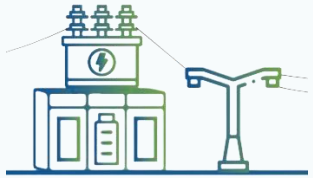
1QFY2025

0.0001

1QFY2024: 0.0001

2025 Internal Threshold: 1.5

SAIDI (Distribution Network) Minutes



1QFY2025

11.63

1QFY2024: 11.95

2025 Internal Threshold: 48.0

World class network performance safeguarded our regulated business earnings

Distribution Automation (DA) & predictive analytics* initiatives enhanced network reliability

DA played a key role by enabling faster fault detection, isolation and restoration

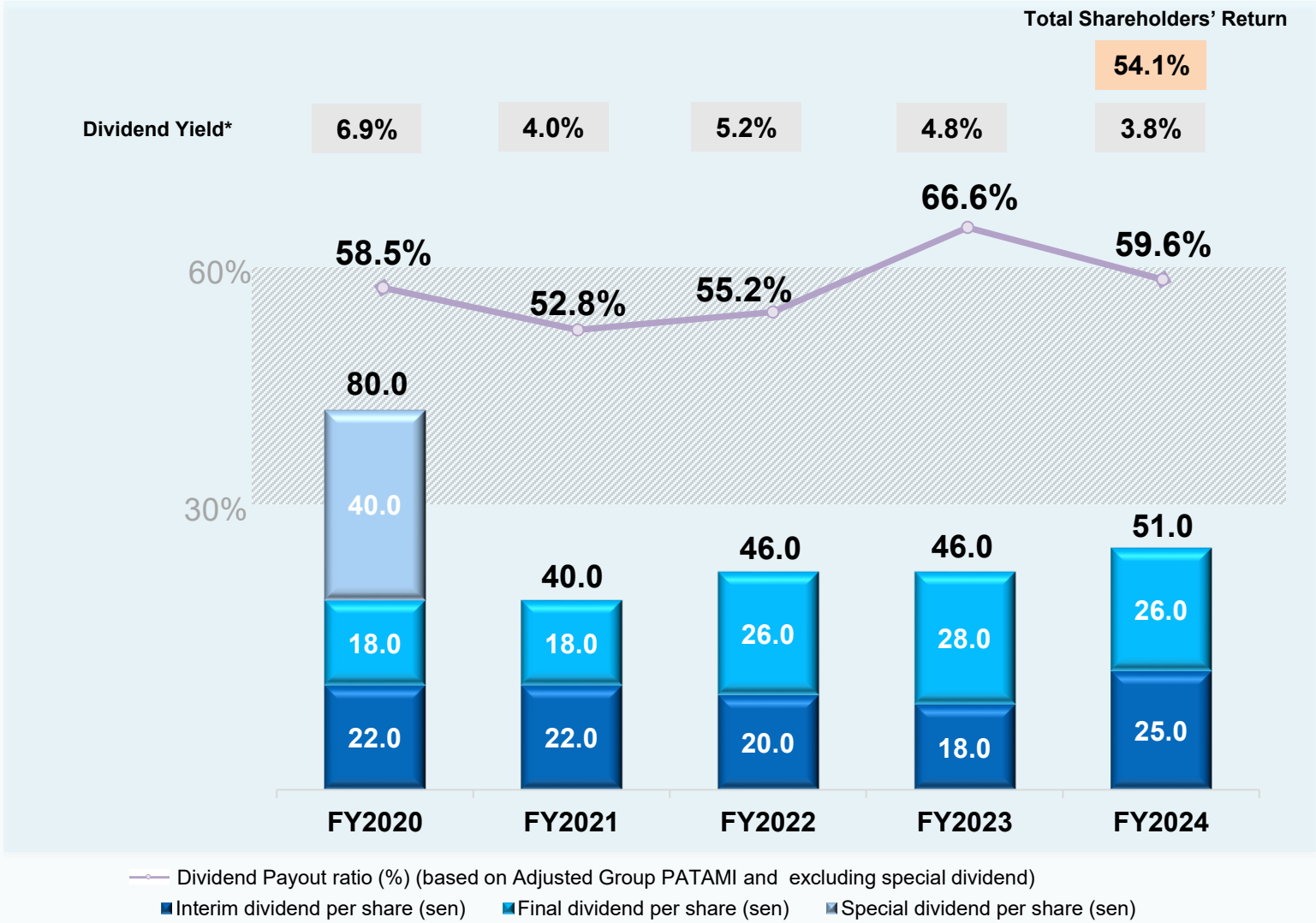
**Started in September 2024*

Dividend Policy and Payout

We continue to deliver stable dividend payouts, reflecting our commitment to rewarding shareholders and maintaining prudent capital management

DIVIDEND POLICY

We will continue to honour our dividend policy of 30% to 60% dividend payout ratio, based on the TNB Group Consolidated Net Profit Attributable to Shareholders After Minority Interest (PATAMI), excluding Extraordinary and Non-Recurring items (adjusted PATAMI)



*Dividend yield based on VWAP for the year

Regulated Business

Our regulated business is governed by the Incentive-Based Regulation (IBR) framework which provides stable returns to the Group while ensuring a more efficient energy sector

Governed under PPA/SLA/REPPA

Generation

TNB GenCo / IPP / RE Developer

Regulated Entities under IBR

Ring-fenced entities

1 **Single Buyer**

Single Buyer Generation

(Actual Cost)

Single Buyer Operations

(Revenue Cap)

2

Grid System Operator

(Revenue Cap)

3

Transmission

(Revenue Cap)

4

Distribution Network

(Revenue Cap)

5

Retail

(Price Cap)

The IBR mechanism provides:

- Clear and transparent regulatory framework
- Consistent and stable returns
- Shield against uncontrollable swings
- Incentives for operational efficiencies

- Regulated business made up more than 70% of the overall Group revenue.
- **Revenue cap:** Allowed annual revenue based on approved demand growth. Any excess/shortfall is adjusted through revenue adjustment mechanism.
- **Price cap:** Any excess/shortfall of revenue made due to higher/lower average selling price compared to base tariff is adjusted through revenue adjustment mechanism.

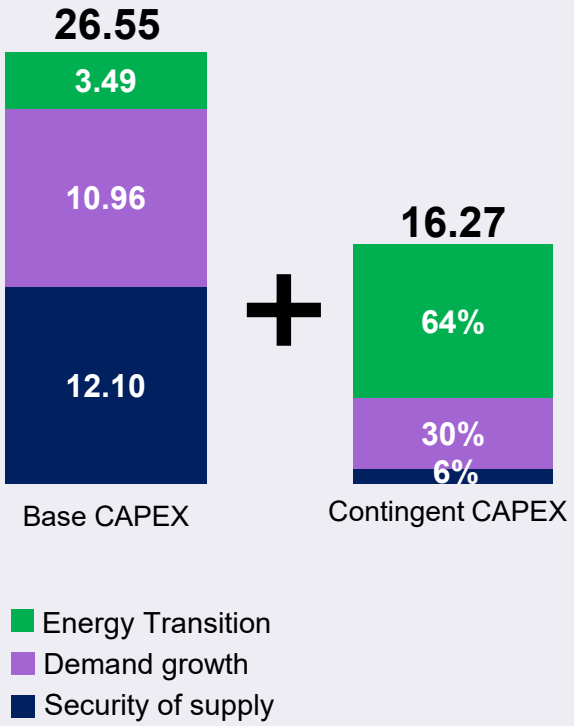
IBR Regulatory Period 4 (RP4) Parameters

We have successfully secured our returns at 7.3% and sufficient expenditure allowance for the next 3 years

Tariff Parameters

	Regulatory Period 3 (RP3)	Regulatory Period 4 (RP4)
Base Tariff (sen/kWh)	39.95	45.40
Average Sales (TWh)	116.8	141.7
Coal price (USD/MT)	79	97
FOREX (RM/USD)	4.123	4.307
Gas price (RM/mmBTU)	T1: RM26 - RM30 (800mmscfd) T2: RM33	T1: RM24 - RM35 (800mmscfd) T2: RM46
OPEX (RM bil)	17.9	20.8
BASE CAPEX (RM bil)	20.6	26.6 *(with RM16.3 bil Contingent CAPEX)*
WACC	7.3%	7.3%

RP4 Allowed CAPEX (RM bil)



Contingent CAPEX

- Investments required to:
  a) **Maintain security of supply**;
  b) **Meet potential demand growth** in supporting economic priorities (e.g. data centres and industries); and
  c) **Facilitate Energy Transition (ET):** Upgrading infrastructures to support RE, NETR and interconnection projects.
- The list of projects has been **pre-approved by the Energy Commission (EC) and will be implemented once triggers occur.** For example:
  a) Accelerated ET– Accelerating smart projects related to distribution automation (DA), smart meters (AMI), and investments in EV infrastructure; and
  b) Demand growth – New ESA with data centres and robust system for EV charging.
- The recovery mechanism is being finalised.
- Entitled for the same regulatory return at 7.3%.

Automatic Fuel Adjustment (AFA) Mechanism

AFA Mechanism enhances RP4 certainty through timely fuel cost recovery

Fuel Cost Recovery (2015 – 2027)

Historical

RP1 – RP4
(Jan 2015 – June 2025)

6-monthly adjustment

JAN — JUN

Imbalance Cost Pass -Through (ICPT)

Current

RP4
(effective July 2025 – Dec 2027)

Monthly adjustment

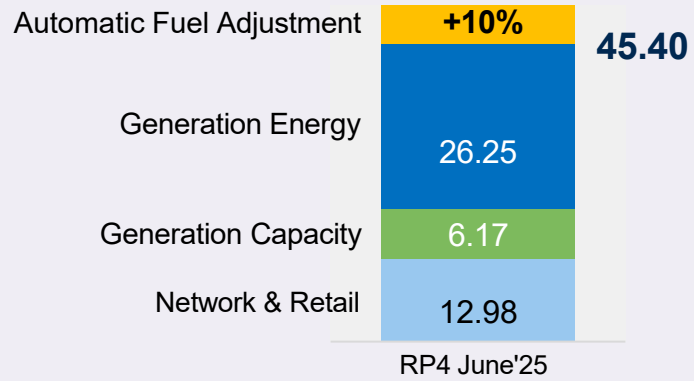
JUL — DEC

Automatic Fuel Adjustment (AFA)

The AFA mechanism **strengthens transparency** by ensuring customers benefit from **timely adjustments** that **reflect current fuel and generation cost**, supporting efficient price signal.

Automatic Fuel Adjustment (AFA)

Base tariff + AFA, sen/kWh



- ✓ **Monthly AFA mechanism** to better reflect current fuel prices.
- ✓ **Automatic adjustment if within the threshold of ≤ 3sen/kWh (+10%)** from the Prevailing Energy Cost.
- ✓ **Beyond >3 sen/kWh** threshold will require **Government approval**.

Net Zero & Coal Free by 2050

TENAGA NASIONAL Better. Brighter.

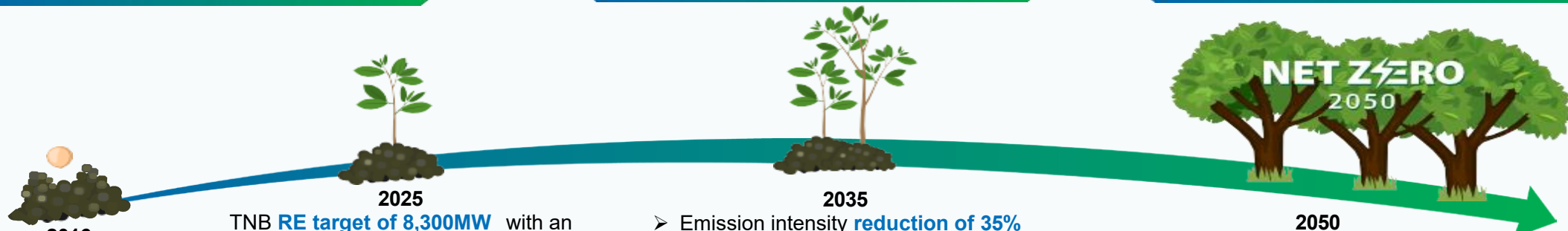
Our journey towards Net Zero 2050 Aspiration will bring positive business growth and enhance value to our shareholders, as well as support the nation's aspiration

Net Zero 2050 Aspiration

Our Target for 2025
- Build scale in renewable generation
- Improve thermal plant efficiency

Our Commitment to 2035
- Significant renewable generation growth
- 50% reduction in coal generation capacity

Our Aspiration to 2050
Invest and grow our emerging green technologies including Hydrogen and Carbon Capture & Utilisation (CCU)



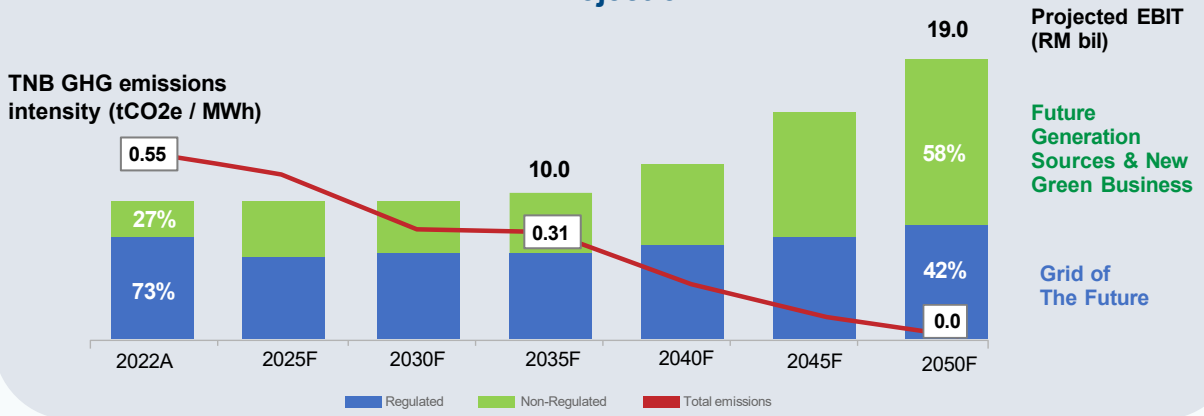
2016
Our Energy Transition journey started **here**

2025
TNB **RE target of 8,300MW** with an acceleration of RE investments towards 2050

2035
- Emission intensity **reduction of 35%**
- Reduction of **coal capacity by 50%**

2050
Aspire to achieve Net Zero & Coal-Free by 2050

EBIT Projection



MSCI ESG rating **upgraded to A, score: 6.9 (2025)**

Ranked 1st in Malaysia in ESG Transparency Reporting by **Global ESG Monitor (2023)**

We believe our pathway will bring positive business growth to the Group while **creating long-term value to our shareholders** through earnings growth.

Note: The announcement of the target was made in 2021, with 2020 as the base year

Three (3) Key Levers: Decarbonisation, Digitalisation & Electrification

Our Energy Transition Plan cuts across the electricity supply value chain, anchoring on three (3) key levers: Decarbonisation, Digitalisation & Electrification

Deliver Clean Generation

ENERGY SOURCES

Renewable Capacity Growth
- Capture RE growth potential in domestic and international markets
- Embark on strategic partnership for new technology
- Adopt commercial capabilities in foreign markets to drive domestic RE growth

Carbon Management
- Reduce scope 1,2,3 GHG emissions
- Capture emissions (CCS, CCU)
- Trade/offset
- Manage carbon pricing

Coal Generation Capacity Reductions
- Uplift value of existing plants
- Reduce coal generation capacity
- Increase gas generation capacity

Develop Energy Transition Network

ENERGY VECTORS

Smart Grid
- Enhance grid & network flexibility to enable higher penetration of VRE[1], DER[2] and electrification

Hydrogen
- Produce for applications in domestic power, industrial and mobility sectors, and for export market

Energy Storage
- Stabilise the grid
- Manage grid's peak demand
- Enable off-grid supply and peer-to-peer generation among prosumers

Dynamic Energy Solutions

ENERGY USAGE

Electrification
- Spur the development of low-carbon mobility ecosystem

Energy Efficiency
- Provide energy audit services and integrate energy efficiency improvements on machinery, equipment & appliances
- Deploy energy monitoring system

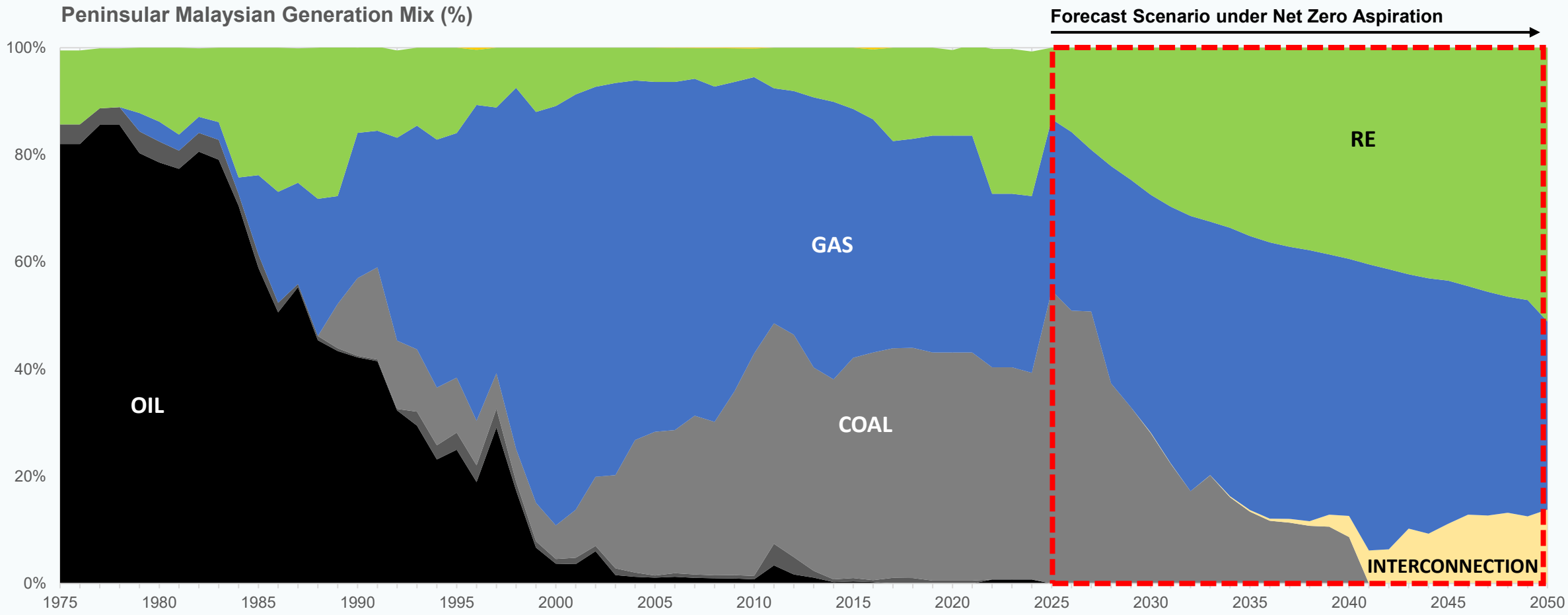
Prosumers
- Provide rooftop solar + storage solution

Digital Platforms
- Complement Energy Transition (ET) initiatives with digital platforms such as myTNB app, Electric Vehicle (EV) charging platform, digital marketplace and green energy aggregation and trading platform

[1] Variable Renewable Energy
[2] Distributed Energy Resources

Peninsular Malaysia Generation Mix

The nation's current generation mix reflects the diversification required for security of supply, and will continue to shift as we take a responsible approach towards energy transition



- Historically, Malaysia's generation mix was dominated by the use of oil as we transitioned into gas and then coal
- **Moving forward, RE will grow significantly as costs rapidly decline**

Note: RE includes solar, hydro, biomass, biogas and waste to energy (WTE)

Our growth story supports our ET agenda

TENAGA NASIONAL Better. Brighter.

TNB's fast-track sustainability agenda will bring major shifts across the value chain, ensuring business growth while meeting our ESG commitment

Deliver Clean Generation

GenCo aims to capture ~RM40 bil revenue from domestic market by 2050

Fast track decarbonisation

1. Coal plants early retirement
2. Repowering plants with cleaner fuel and green tech
3. Strategic technology partnership

Explore opportunities in ASEAN

Hydro

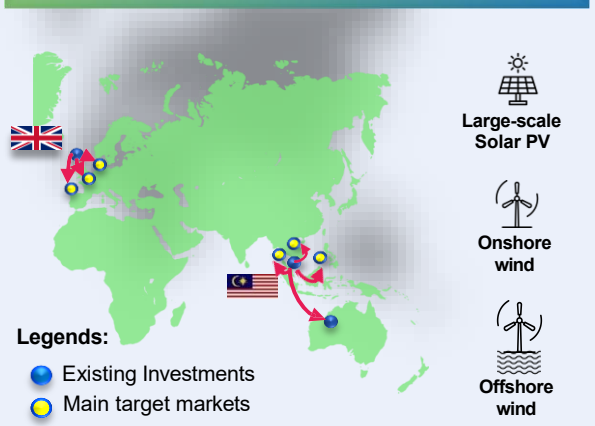
Gas

~800 MW

Target share of capacity by 2050

- Increase enterprise value and sustainability position of GenCo
- Possibility of an IPO of GenCo

NED aims ~USD7 bil Equity investment by 2050



Large-scale Solar PV

Onshore wind

Offshore wind

FOCUS MARKETS

EXISTING

Driven by: TNB Renewables — MY

Driven by: Vantage RE — UK, Ireland

Driven by: Spark Renewables — AU

EXPLORING

SEA — TH, PH, VN

14.3GW by 2050

(Average portfolio return of 7% – 9%)

Develop Energy Transition Network

Regulated asset base (RAB) to grow to ~RM100 bil by 2050

- Renewable Energy (VRE) and Distributed Energy Resources (DER)
- Propelling growth of transportation and industrial customers electrification
- Reducing carbon footprint and preserving the forestry & natural environment

Regional Interconnection

To strengthen security of supply and open investment opportunities

Potential Earnings by 2050: ~RM7 bil

Dynamic Energy Solutions

We will invest RM90 mil to support BEV ecosystem with the following key strategic moves:

1. Build charging infrastructure
2. Reskill & upskill workforce
3. Lead by example through TNB Fleet electrification
4. Sponsor EV-related studies
5. Foster coalition among EV sector players

2030 EV Market Potential

80,000 charging points	500,000 BEV on the road
4,432 k tons CO_2 emission reduction	
RM 1,258 mil annual electricity revenue	2.318 TWh annual electricity sales

Driving changes in customer behaviour via myTNB

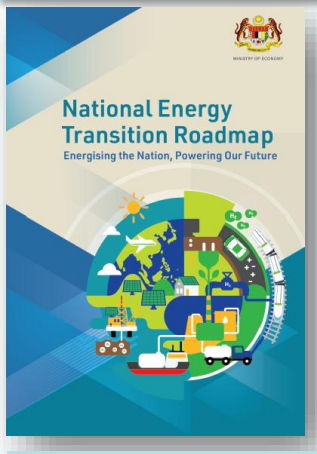
Usage of Energy Budget features via myTNB

- As of Dec 2024, ~876k users have subscribed
- Driving energy efficiencies resulting CO_2 avoidance

Capitalising on high-value green economy

The National Energy Transition Roadmap (NETR) aims to shift Malaysia from a traditional fossil fuel-based economy to a high-value green economy

Responsible Transition (RT) Pathway 2050
to shift Malaysia's energy systems from fossil fuel-based to greener and low-carbon systems



Aligned with the national aspirations and commitments to sustainable development

- The **Twelfth Malaysia Plan 2021-2025** which outlines aspirations for the nation to achieve net zero emissions by 2050.
- The **National Energy Policy (DTN)** launched in September 2022 with aspirations to become a low carbon nation in 2040.

Review of RE policies

1. To increase the country's installed RE capacity from **40% in 2035** to **70% by 2050**;
2. To introduce the concept of a **self-contained system according to the "willing buyer, willing seller" principle** to the RE development framework;
3. To increase **the installation of solar systems on government buildings;** and
4. To allow **cross-border RE trade** through the establishment of an electricity exchange system, complementing the ASEAN power grid initiative.

NETR Part 1
(6 energy transition levers)

Optimise

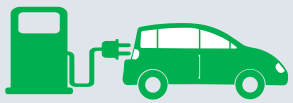
Energy efficiency

Shift to Renewables

Renewable energy

Bioenergy

Hydrogen



Green mobility

Abate

Carbon capture utilisation and storage (CCUS)

NETR Part 2
(Focus on biomass, waste-to-energy usage, CCS and hydrogen integration)

1. Establish the National Energy Council
2. Set up the National Energy Transition Facility (NETF) with a seed fund of RM2 billion
3. Establish and launch a RE exchange in 2024

Note: The NETR was announced in two parts: Part 1 in July 2023 and Part 2 in August 2023

RE Portfolio

We remain resolute in delivering our RE target capacity of 14.3GW by 2050

RE portfolio

4.5GW as at March 2025

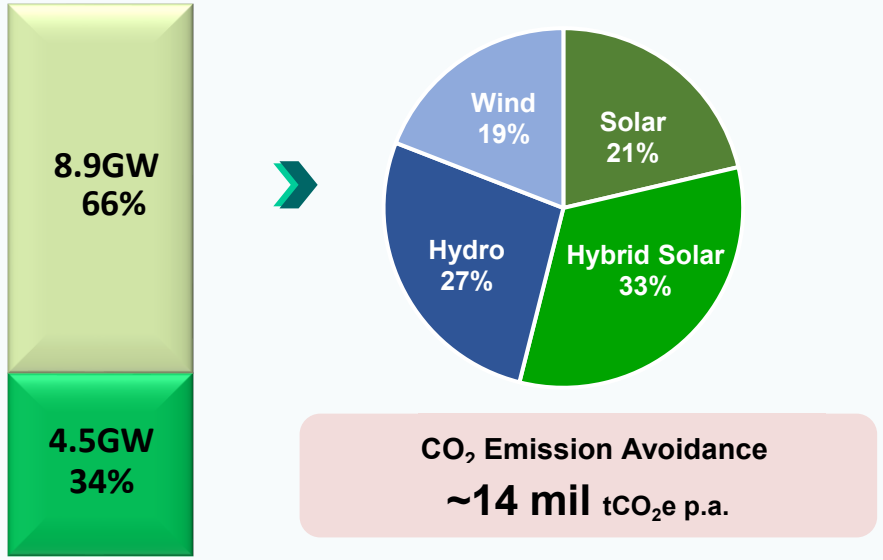
HYDRO	2,700MW 60%
SOLAR	1,482MWp 33%
WIND	284MW 6.3%
BIOMASS	12.5MW 0.3%
BIOGAS	4.8MW 0.1%

Notes:
1. Solar gross capacity is quoted in MWp
2. Numbers manually computed will not match due to decimal variance

Champion for 3 flagship catalyst projects

- Establishment of Large-Scale Solar Parks over 5 sites, each with 100MW capacity,
- Development of Hybrid Hydro-Floating Solar (HHFS) at existing dams with a capacity of 2,500MW, and
- Co-firing of Hydrogen and Ammonia at our power plants.

13.4GW Secured RE Capacity
(as at March 2025)



CO_2 Emission Avoidance
~14 mil tCO_2e p.a.

Disclaimer

This presentation and discussion may contain forward looking statements by Tenaga Nasional Berhad related to financial trends for future periods. Some of the statements contained in this presentation or arising from this discussion which are not of historical facts are statements of future expectations with respect to financial conditions, results of operations and businesses, and related plans and objectives. Such forward looking statements are based on Tenaga Nasional Berhad's current views and assumptions including, but not limited to, prevailing economic and market conditions and currently available information. These statements involve known and unknown risks and uncertainties that could cause actual results, performance or achievements to differ materially from those in the forward-looking statements. Such statements are not and, should not be construed, as a representation as to future performance or achievements of Tenaga Nasional Berhad. It should be noted that the actual performance or achievements of Tenaga Nasional Berhad may vary significantly from such statements.

Thank you

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