



Efforts to Ensure Affordable Energy in Malaysia

APERC ANNUAL CONFERENCE 2023 | 26 APRIL 2023 | Tokyo, Japan

Energy Division

Ministry of Economy



Malaysia: Key Statistics



32.6

**Total population
in 2021**
(Million persons)



76.2%

**Urbanization rate
in 2019**



RM1,387 bil
USD335 bil

Real GDP in 2021



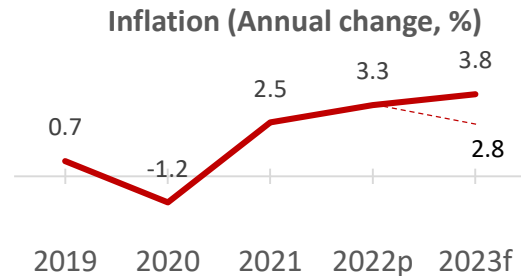
RM46,163
USD11,142

**Income per
capita in
2021**



10.6%

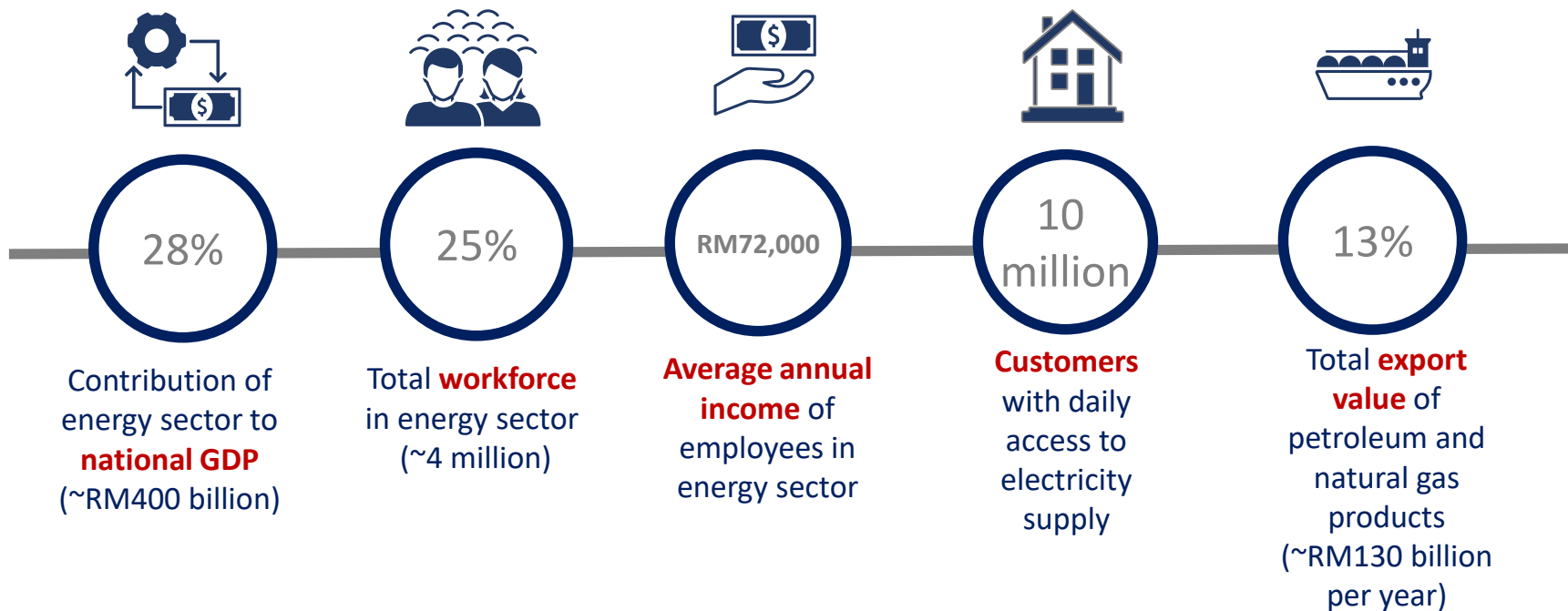
**Energy
expenditure
per household**



RM2,250
USD543

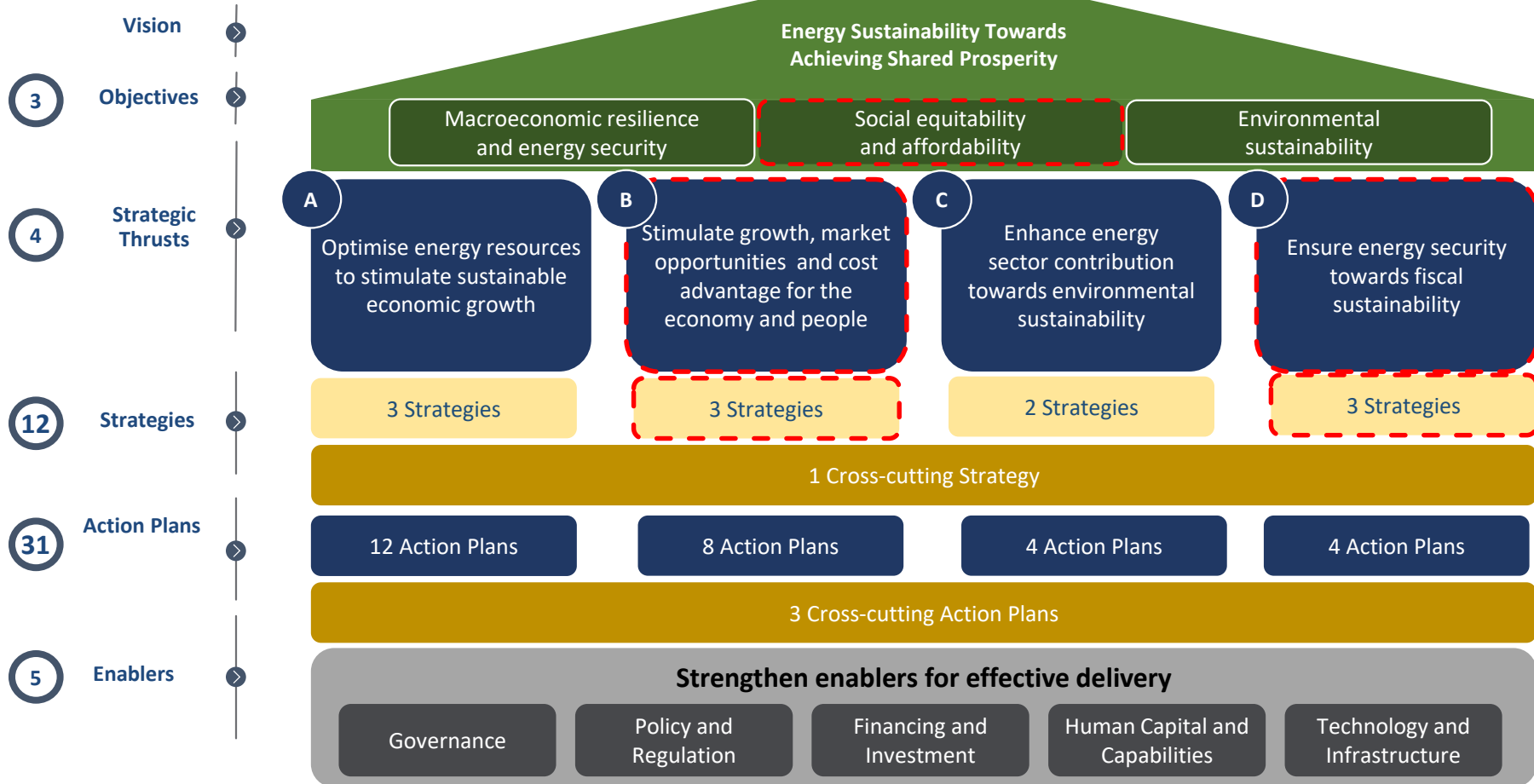
**Median
monthly
salaries/wages**

National Contribution of Energy Sector




































Source: Department of Statistics Malaysia (2019)

National Energy Policy, 2022-2040



SELECTED TARGETS OF LOW CARBON NATION ASPIRATION 2040

Selected Targets		2018	2040
	1. Percentage of urban public transport modal share	  	20% → 50%
	2. Percentage of electric vehicle (EV) share		<1% → 38%
	3. Alternative fuel standard for heavy transport		B5 → B30
	4. Percentage of Liquefied Natural Gas (LNG) as alternative fuel for marine transport		0% → 25%
	5. Percentage of industrial and commercial energy efficiency savings	  	<1% → 11%
	6. Percentage of residential energy efficiency savings	  	<1% → 10%
	7. Total installed capacity of RE	  	7,597 MW → 18,431 MW
	8. Percentage of coal in installed capacity	  	31.4% → 18.6%
	9. Percentage of RE in TPES	  	7.2% → 17%

Legend:  Energy security  Energy affordability  Environmental sustainability

Efforts to Ensure Affordable Energy

- 1 Government subsidies & infrastructure investments
- 2 Energy efficiency programmes
- 3 Robust domestic oil and gas production
- 4 Diversification of energy sources

1

Government subsidies & investments

Subsidy (RM billion)	2018	2020	2022
Petrol, diesel, LPG	7.4	1.6	50.8
Electricity	-	-	6.8

Prices	Ron 95	Diesel
Current market price	3.09 (RM/litre)	3.46 (RM/litre)
Subsidised price	2.05 (RM/litre)	2.15 (RM/litre)

- Government assistance for underprivileged – Electric Bill Rebate (in 2022 RM40 monthly);
- Discounts – SMEs, selected sectors
- Investment for rural electricity access – infrastructure; tariff support for Sabah
- Increasing public transport modal share - expand urban rail network – MRT/LRT lines, ETS
- Incentives for users – unlimited passes MY100 & MY50

Source: Ministry of Finance

2

Energy efficiency initiatives

- National Energy Efficiency Action Plan 2016-2025 (NEEAP) to encourage the adoption of EE through reducing electricity demand growth by 8%
- SAVE¹ 2.0 (2021): rebates RM27.49 million
- SAVE 3.0 (2022): rebates of RM35.78
- Buildings - Energy audit and energy management in buildings and industries
- Energy Performance Contracting (EPC) with energy services companies (ESCO)
- By reducing energy consumption, energy efficiency can also help to reduce the demand for energy, ultimately leading to lower market prices.

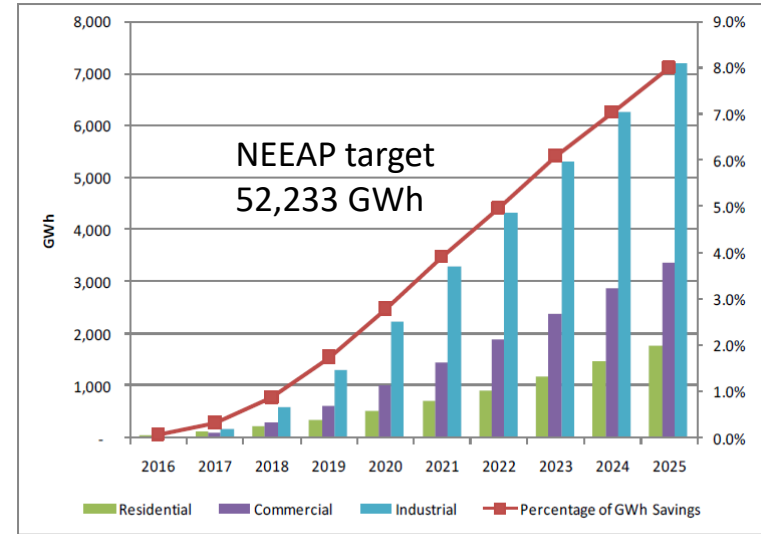
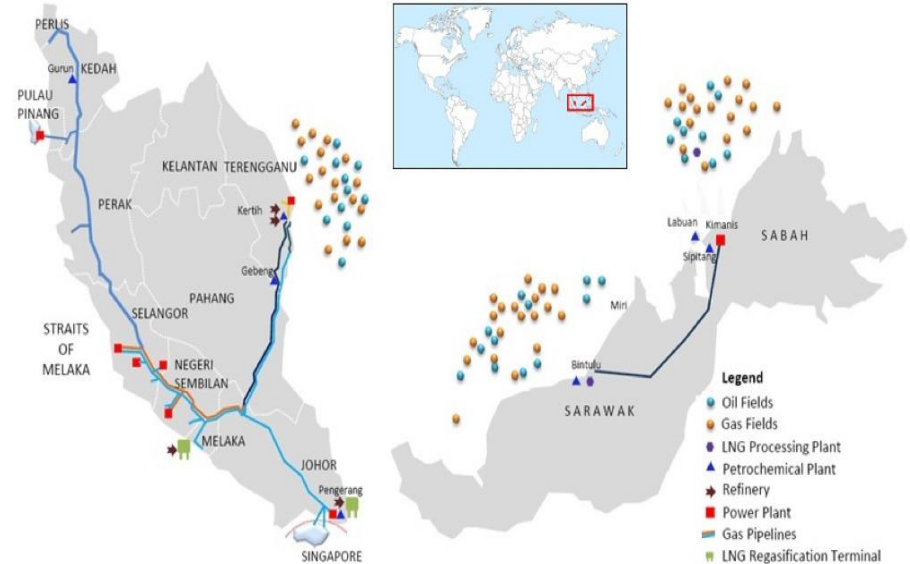


Figure 3: The electricity savings and percentage of savings by the National Energy Efficiency Action Plan

¹ Sustainability Achieved Via Efficiency (SAVE) introduced in 2011 provides cash rebates for the purchase of energy efficient appliances

3 Robust domestic production of oil and gas

- Current production of Petronas: 550 kbd liquids; 6100 mmscfd
- Commercial reserves: 6.9 Bboe
- Pipeline linkages with Indonesia, Thailand and Vietnam further enhance the robustness of the market for hydrocarbons
- Malaysia Bid Round (MBR) 2022 – awarded 9 exploration blocks & 3 DROs were offered , highest since 2009



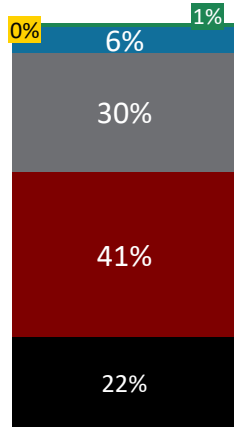
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Diversification of energy sources

Primary Energy Mix

Current Position

99.9 Mtoe

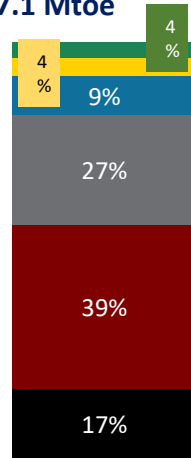


Bioenergy Coal

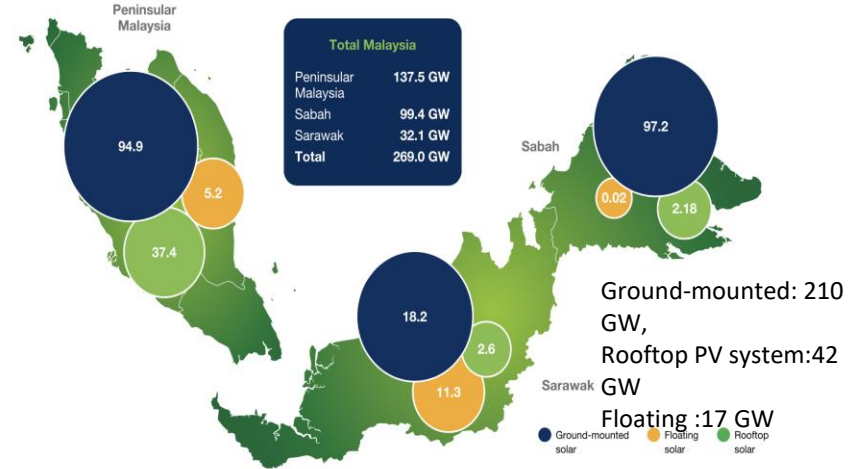
Solar Hydropower Oil / Petroleum Products Natural Gas

Low Carbon Nation Aspiration 2040

117.1 Mtoe



Solar PV potential



- Renewable Act 2011 introduced FIT, RE fund, SEDA
- Green Electricity Tariff, Corporate Green Power Prog.

Moving Forward

- Implement targeted subsidies – data improvement and implementation mechanism
- Expand public transport modal share – improve last mile connectivity; continued investment infrastructure; etc.
- Enhance EE and energy conservation
- Accelerate RE in energy mix
- Further investment in oil & gas - implement sustainability strategies, adopt CCS
- Ensure that indigenous energy resources as well as opportunities, benefits and costs of energy transition pathways will be equitably distributed across income groups

Thank you --- Terima kasih

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Malaysia