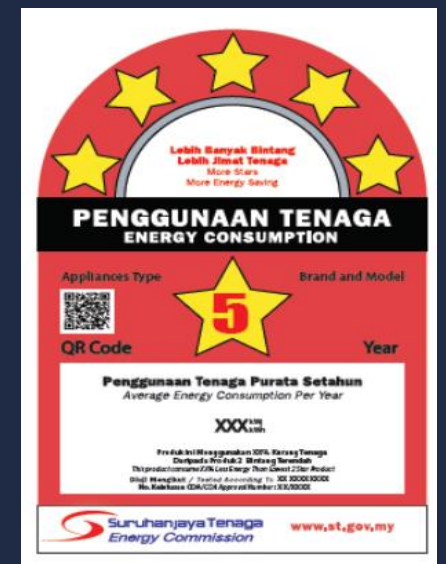




# MEPS Implementation Malaysia Experience

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# Introduction to MEPS

Minimum Energy Performance Standards (MEPS) play a crucial role in promoting **energy efficiency in Malaysia**. The country's journey reflects significant collaboration among stakeholders to implement effective policies.



# Challenges in MEPS Implementation & Timeline of Enforcement in Malaysia

## VOLUNTARY PHASE



From 2009 to 2013, MEPS operated on a voluntary basis with incentives for manufacturers but lacked enforcement.

## MANDATORY MEPS



In 2014, Malaysia established mandatory MEPS under the Electricity Supply Act, focusing on specific appliances for compliance.

## EECA 2024 EXPANSION



The 2025 expansion under EECA 2024 includes thermal and commercial products, enhancing the scope of energy efficiency initiatives.

## Challenges in MEPS Implementation

Implementing MEPS faced significant challenges, including **limited testing facilities** and the need for close collaboration with manufacturers to ensure accurate data gathering for compliance.





# Success Factors in MEPS

## LEGAL FRAMEWORK

Energy Efficiency and Conservation Act 2024

EECA 2024 institutionalizes the MEPS expansion enforcement not only on domestic electrical appliances, but also thermal and commercial product with mandates for registration, certification, and labelling. It offers a clear, enforceable legal foundation for market compliance.

## INCENTIVE PROGRAMS

SAVE programme provided rebates for energy-efficient appliances, increasing market adoption and awareness. Over 6 million units distributed with measurable energy savings.

## TECHNICAL CAPACITY

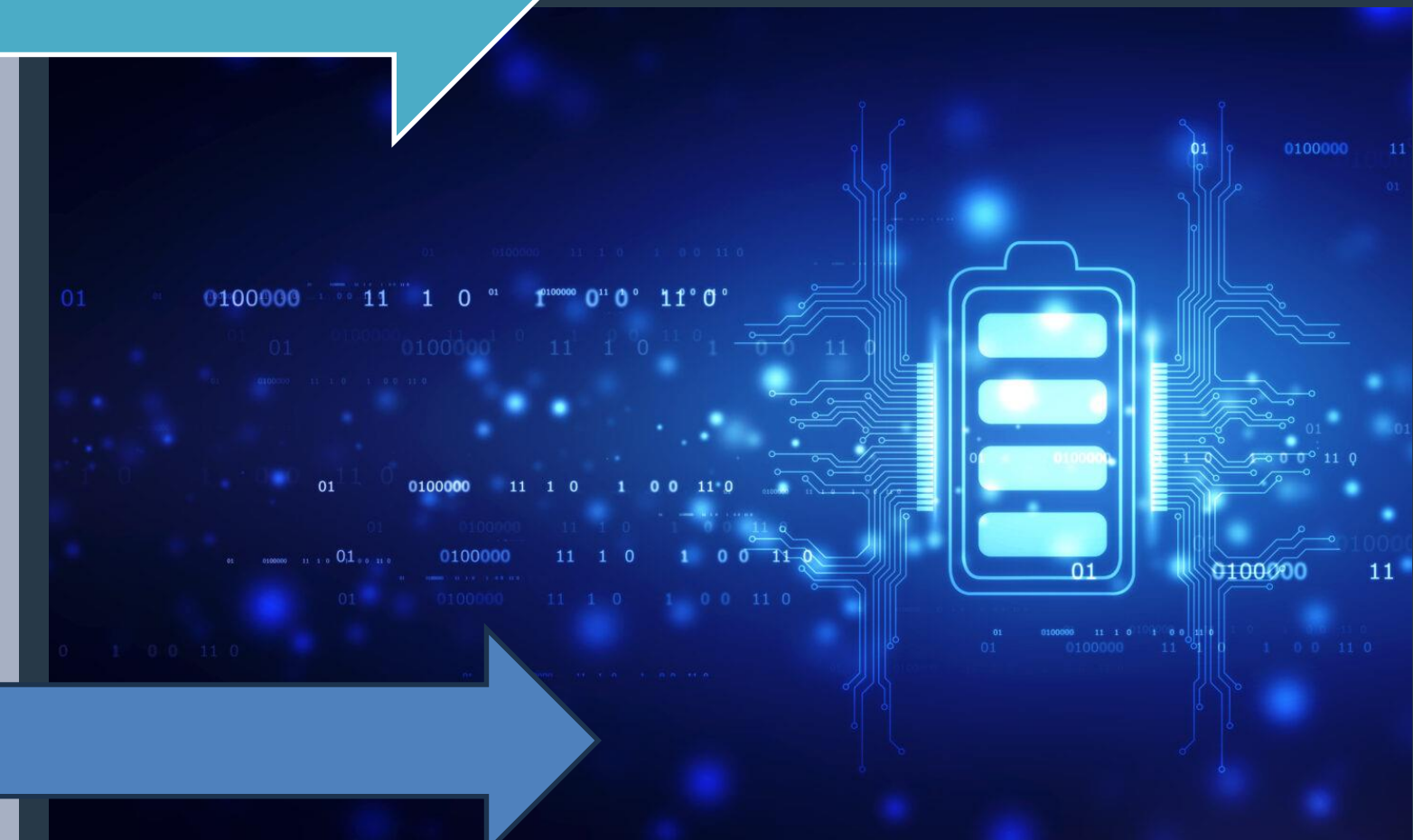
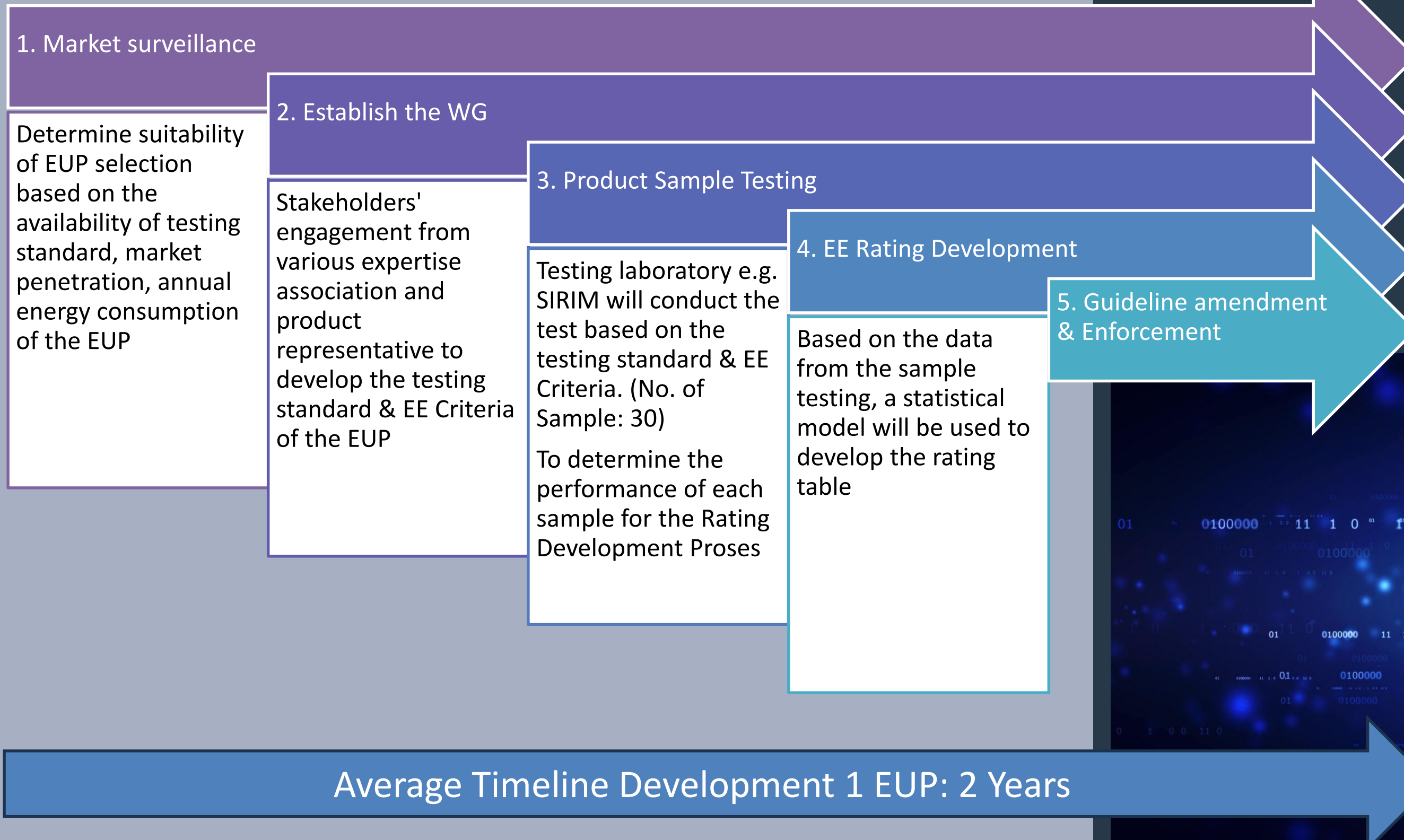
MEPS development is backed by investments in testing infrastructure and methodologies. Stakeholder collaboration ensured credible and verifiable energy efficiency standards.

## National Strategic Planning

Initiatives like the National Energy Transition Roadmap (NETR) aligned MEPS with Malaysia's broader energy efficiency and climate goals.



# Success Factors in MEPS - Development Process





# Current List of MEPS Appliances



## Air Conditioner

- Type :Non-ducted Single Split Wall Mounted
- Capacity  $\leq$  25,000 btu/hr



## Fan

- Ceiling Fan with diameter less than 60 inch
- Wall fan,desk fan,table fan with diameter less than 16inch



## Refrigerator

- 1-door & 2-door only



## Television

- Type :LCD,PLASMA,LED,CRT
- Screen size up to or equal to 70 inch



## Lamp

- T5 & T8 Fluorescent Lamp
- Self ballasted single capped CFL
- Single Capped Fluorescent Lamp & Circular Fluorescent Lamp
- Self ballasted LED Lamp



## Washing Machine

- Type :Top Loading and Front Loading
- Capacity  $\leq$ 16kg

# Current List of MEPS Appliances



## Microwave Oven

- solo; combination; convection; any other microwave oven with similar function; and exclude any type of built-in microwave oven which its power supplied
- Size up to or equal to 32 Litre



## Electric Rice Cooker

- Capacity:  $1.0L \leq \text{Capacity} \leq 3.6L$ ; and
- Rated Power:  $400W \leq P \leq 1600W$



## Freezer

- Chest with Solid Door
- Size up to or equal to 320 L



## Electric Oven

- conventional mode; convectional mode; conventional and convectional mode; and conventional, convectional and steam mode.



# SAVE Programme Impact & Market Growth

## RM164 million

Total budget allocated

The **total budget of RM164 million** for the SAVE Programme has facilitated nearly 800,000 rebates issued, and over 473 GWh energy saved with 396,000 tons CO<sub>2</sub> avoided annually.

## Behavioral Impact

The implementation of the MEPS has significantly **boosted the sales** of 5-Star refrigerators, indicating a shift towards energy-efficient appliances while also **lowering price gaps** for consumers.

## Lessons Learned

To achieve sustained MEPS success, **long-term policy commitment**, effective consumer incentives, robust testing infrastructures, and collaborative stakeholder engagement are essential for fostering compliance and trust.





# Lessons Learned & Applicability to APEC Economies

**Sustained Policy Commitment:** The development of MEPS in Malaysia highlights the need for continuous policy efforts aligned with national energy goals such as NETR.

**Effectiveness of Consumer Incentives:** Programs like SAVE 4.0 have greatly boosted the uptake of energy-efficient products and offer a model that could be applied across other APEC member economies.

**Essential Testing Infrastructure:** Investing early in product performance testing and laboratory capabilities is crucial to making MEPS enforceable and technically sound.

**Inclusive Policy Development:** Engaging a broad range of stakeholders during MEPS formulation fosters trust and enhances compliance among industry participants.





# Thank you

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