

Measures implementation and results monitoring

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- ❑ Identify opportunities to apply ***improvement learned from the assessment of energy performance***
- ❑ Implement strategies analyzed to the real world situation
- ❑ Learn ***how to monitor the implementation*** to maintain the system improved



Information Communication Measures

- ❑ Labeling
- ❑ Public Awareness and
- ❑ Information Campaigns

Regulatory Instruments Standards

- ❑ Regulations for the
- ❑ Designated Consumers
- ❑ Building Codes
- ❑ Quantity Instruments

Market-based Instruments

- ❑ Price Instruments



Minimum Energy Performance Standard (MEPS)

Energy Performance Standards

Regulations for Designated Consumers

Regulations for the Public Sector

- Forces worst-performing products off the market
 - Appliances, buildings, power, industry, etc.
- Logical next step after labeling
- Implementation
 - Strict
 - . Remove least-efficient products/ technologies from the market
 - Flexible
 - . Require sales-weighted average EE improvements
- Should be ratcheted-up over time



Large energy consumers take steps to understand, monitor, and plan energy use

- Energy Audit**
 - Recommendations not mandatory
 - Encourages “Cultural shift”
- Energy Consumption**
 - Report to government, shareholders
 - Incentive to monitor performance
- Energy Mangers**
 - Report back to firm leadership
- Energy Savings Plan**
 - Grants flexibility to choose most attractive improvements
 - Often required of municipalities



Private sector often has greater financial capacity than the public sector to lead on energy efficiency initiatives

Energy Performance Standards

Regulations for Designated Consumers

Regulations for the Public Sector

Country	Regulation applied to public sector
Australia, Denmark, France, Portugal, USA	Energy performance standards (appliances, buildings, vehicles)
Uruguay	Phase out of incandescent lamps
Denmark, France	Mandatory inspections and audits
Mexico, Turkey, USA	Mandatory planning and reporting
EU, Denmark, USA	Green procurement (appliances, buildings, vehicles)



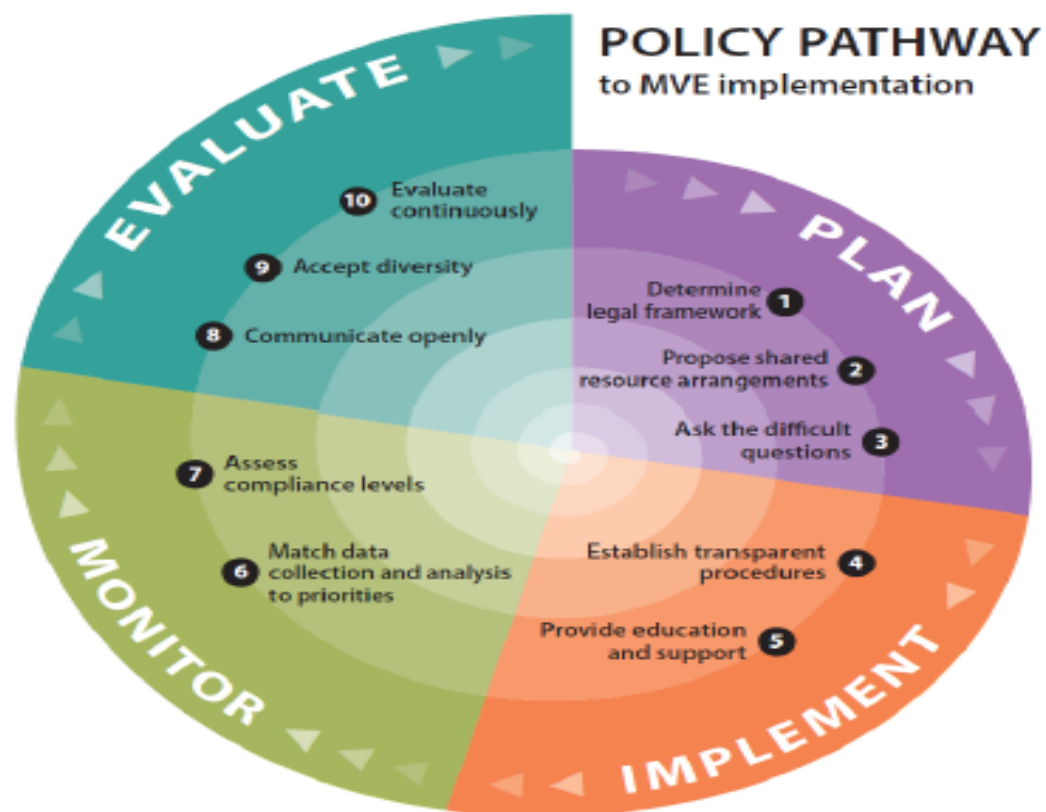
- **periodically update policies and measures in all sectors**
Need to monitor, enforce, evaluate and
- Evaluation ***before and after implementation*** to determine effectiveness = use results to improve.
- Baselines assessments and periodic review and reporting
- Non-compliances identified, reported and addressed
- Penalties to be clear and deter for non-compliance



- ❑ Challenge with all policies adopted is to determine how they contribute towards **meeting national targets** >> how to monitor and evaluate the policies that are adopted.
- ❑ When planning an EE policy package, whether it has quantitative targets or not, proper ***planning and budgeting for monitoring mechanisms***.
- ❑ Establish ***baseline conditions and a methodology*** to evaluate the impact of the adopted policy or programs.
- ❑ If targets are quantitative, how to reconcile enterprise level ***MRV with sectorial targets***.



Example of Policy Pathway for Monitoring, Verification and Enforcement (MVE) for S&L



MONITOR	6 Match data collection and analysis to priorities	Decide what data to collect and from whom Decide what equipment to test Decide how to analyse the results
	7 Assess compliance levels	Assess non-compliance Consider different types of non-compliance Focus on risk
EVALUATE	8 Communicate openly	Report test results Establish channels of communication Name non-compliant suppliers Decide who has access to the data
	9 Accept diversity	Respond proportionately Involve other stakeholders Respond to international obligations
	10 Evaluate continuously	Enforce vigorously Adjust policies to new circumstances Measure success

Source: OECD/IEA, 2015



Certification

Use of international standards instead, according to customer's needs

Monitoring & Performance Evaluation

Installation of energy monitoring devices

Setting up of an organization to monitor energy consumption in the premises

Training of energy monitoring staff

Regular evaluation of results achieved compared to set targets



Power meter



Choose any information-based or market-based instrument currently active in Vanuatu. Research the instrument's history of implementation. How is the success of this instrument monitored and evaluated? (If there is no evidence of monitoring and evaluation, propose a basic methodology for monitoring the instrument's success over time). Given the information available, how would you evaluate the success of the instrument? How would you recommend improving the instrument and the system in place for monitoring and evaluation?



1. What was the best part of the workshop today?
2. What could be improved or maybe something was missing?
3. What is the first thing you would like to see happen next?



- World energy Council (2010): Energy Efficiency Policies and Measures database
- Global buildings Performance Network,
- IEA (2010) Energy Efficiency Governance
- IEA (2010) Policy Pathway: Energy Performance Certification of Buildings
- World Energy Council-ADEME (2010): Instruments and Financial Mechanisms of Energy Efficiency Measures in Building Sector

Thank You



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