

#### **Energy Efficiency Training Week** Indicators and Evaluation

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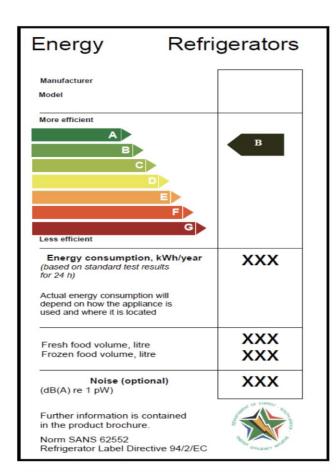
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- Case study
- Indicators and evaluation as part of policy making
- Types of indicator
- Types of evaluation
- Introduction to theories of change
- Choosing indicators and setting evaluation questions







#### **Appliances covered**





# Purpose of monitoring and evaluation

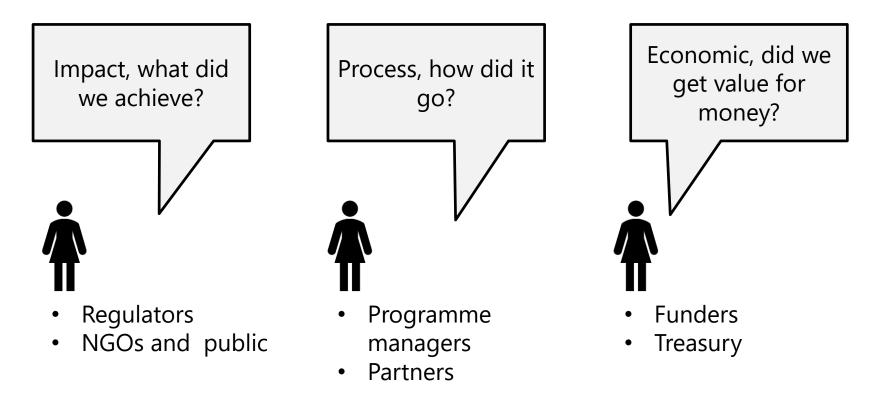
• What we have achieved



• How we can improve

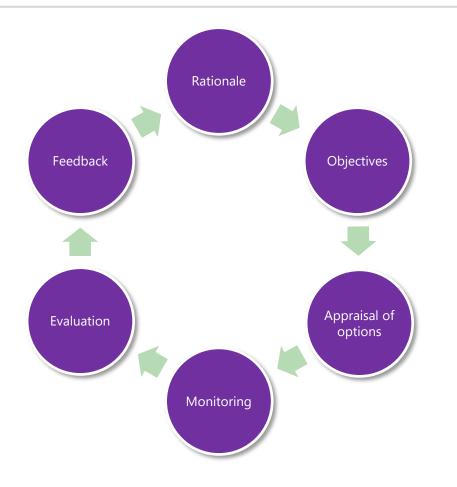








#### Indicators and evaluation in the policy making process





## What indicators are we interested in?

- Economy...
  - Whole economy
  - Sector e.g. residential
  - End use e.g. space cooling
- Policy/programme
  - Compliance/uptake
  - Technology adopted
  - Behaviour change
  - Energy saved



#### What makes a good indicator

- Specific Measurable Achievable Replicable Timebound (SMART)
- Not too many
- Represent the outcome of interest e.g.
  - Is the number of products sold a good indicator for understanding energy use?
  - What are the implicit assumptions?
- Beware of averages
  - Heavy users might be more likely to buy efficient products
  - Annual consumption may not be a good indicator of peak demand
  - Some sectors of interest may behave differently from the average e.g. rural consumers, poor households, women



## **OECD Development Assistance Committee criteria for evaluation**

- Relevance are the objectives still valid, are the activities consistent with the objectives?
- Effectiveness to what extent did the policy achieve its objectives?
- Efficiency was the policy good value for money?
- Impact what difference did the policy make?
- Sustainability will the benefits be sustained after the funding ceases?

http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistanc e.htm



#### Main sources of evidence

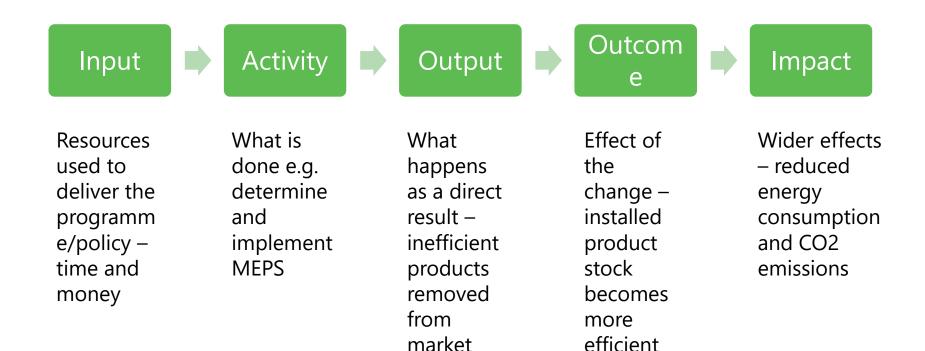
- National statistics e.g. product sales, ownership levels
- Utilities e.g. meter readings
- Management information/reporting e.g. registration scheme
- Measurement e.g. meter readings, compliance data
- Modelling e.g. LEAP
- Surveys e.g. household energy consumption, label compliance
- Interviews and focus groups



## Theory of change

- Forms the basis of monitoring and evaluation
- Should be developed alongside policy/programme design
- Participative process
- Refine in the light of evidence







#### **Exercise**

- Develop theory of change for energy efficiency labels for refrigerators covered by South Africa's energy efficiency labelling policy
- Suggest indicators for each stage (Specific Measurable Achievable Replicable Timebound)
- Suggest evaluation questions (Relevance, Effectiveness, Efficiency, Impact, Sustainable)
- Consider where the evidence would come from



- Are your policies fair?
- Wealthier consumers benefit most from product policy
  - Buy more products
  - Use them more
  - Spend more on energy
- Who pays for subsidies/incentives/scheme costs
  - Manufacturers?
  - Consumers e.g. levy on bills?
  - General taxation?
- What are the implications for indicators and evaluation?







Energy REPUBLIC OF SOUTH AFRICA