

#### What are the Steps Industry Transformation

Session 4

Kevin Lane, IEA - Pretoria, 14 October 2019















# Overview of the appliance training sessions

Monday 14 October 2019		
0	Introduction and roundtable	$\overline{\mathbf{V}}$
1	Planning energy efficiency programmes	$\overline{\checkmark}$
2	Selecting products for MEPS and Labelling programmes	$\overline{\mathbf{V}}$
Tuesday 15 October 2019		
3	Assessing efficiency performance and setting MEPS	$\overline{\checkmark}$
	Special - Regional harmonisation	$\overline{\checkmark}$
4	Industry transformation	
5	Stakeholder involvement and communication	
6	The relationship between product efficiency and price	
7	Modernising energy efficiency through digitalisation	
Wednesday 16 October 2019		
8	Insights into energy labels	
9	Monitoring, verification and enforcement	
10	Evaluating policies and programmes	
	Special - Available resources U4E	
11	Roundtable discussion, review and report back	



#### Scenario

Your government is proposing to introduce MEPS for electric fans.

Several local fan manufacturers are upset, claiming that the MEPS in force in several neighbouring economies would ban most of their current products lines, and threaten their businesses.

What steps could you take to gain the support of local industry for the introduction of















#### **Exercise**

As a group try to list some of the reasons why a manufacturer might not want to switch to producing more efficient products.



















### What are the key issues?

- Is the claim correct or reasonable?
  - Assess product range against potential MEPS levels (see Session 3)
- What is required to make local products more efficient?
  - Import different components
  - Re-tooling
- What are the relevant barriers?
  - Capital for investment
  - Time required to change contractual arrangements
  - Insufficient confidence that the market will change (regulations wont be enforced)
  - Perceived reduction in profitability
  - Inertia, lack of will
- What can governments (or others) do to help the transition?
  - And why they might want to do this















#### What have countries done: China

- Standards and Labelling Programme
- High Energy Performance Specification
- Manufacturers tender to place qualified products on a list
  - Rebate for consumers based on those listed products
  - Government procurement
- Why?
  - Provide market "pull"
  - Incentive to increase the number/range of of efficient products
  - Incentive to increase number of manufacturers
  - Increase domestic sales of efficient products by reducing their cost
  - Volume production leads to cost reductions















#### What have countries done: US L Prize

- Published an LED Specification
- Rigorous testing requirements
- 1 million dollar award
- Why?
  - To maintain the US as a base for manufacturing high tech products
  - To keep the US role in new technology (clean energy) development
  - To keep jobs in the high tech industry















### What have countries done: Energy Efficiency Services Limited - India

- Super ESCO rolling out efficient products at scale (e.g. 270m LEDS; 1.3m Fans)
- Scale reduced purchase price significantly made available at less than the cost of a conventional light bulb
- Paid for by consumers through monthly power bills
- Why?
  - Stimulates high quality Indian LED lamp manufacturing industry
  - Enables utilities to meet growing electricity demand (esp. peak demand)
  - Households can use saving of 15% off power bills to improve their quality of life leading to economic growth and prosperity







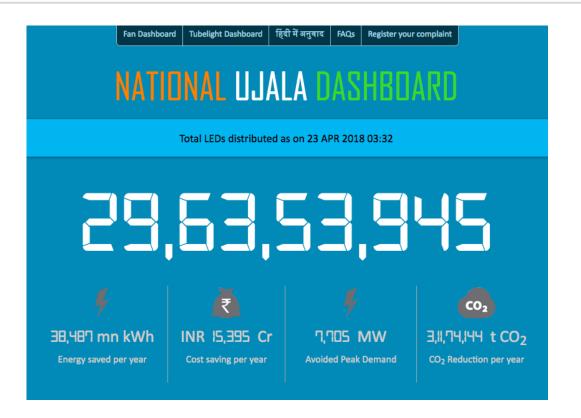








#### What have countries done: India "UJALA"

















## Pakistan: high efficiency fans

- Government procurement (offices and schools) have stimulated a new market segment.
- Nine manufacturers in Punjab now producing efficient fans.





### Take-aways

- Local jobs and manufacturing capacity are very important to governments
- Getting local suppliers on-side is vital!
- Transitioning to production of more efficient products can provide significant opportunities:
  - For Companies:
    - Opening up export markets
    - Increased profitability
  - For Government:
    - Employment potential in future technologies
    - Improved energy supply reliability
    - Lower energy bills increased disposable household expenditure
    - Better comfort levels improved productivity and lower medical costs
  - For Utilities:
    - Lower cost supply of energy services to consumers & businesses















#### **Exercise**

Your government is proposing to introduce MEPS for electric fans.

Several local fan manufacturers are upset, claiming that the MEPS in force in several neighbouring economies would ban most of their current products lines, and threaten their businesses.

What steps could you take to gain the support of local industry for the introduction of MEPS?

- Break into groups
- Identify a package of options to assist local companies to transition to a more energy efficient product line

















### A packaged approach from government

The details need to depend upon the barriers, which may be multiple

#### Other ideas include:

- Support for new products designs, e.g. technical assistance
- Facilitate access to finance for re-tooling, e.g. low interest loans through banks, etc.
- Introduce a consumer-friendly endorsement label for high energy performance (HEPS) products
- Mandate public procurement of HEPS products by government departments
- Provide rebates to HEPS products to kick start the market and bring initial prices down
- Support sales efforts to encourage exports to neighbouring markets
- Assist the manufacturers in reducing their operating costs by improving their own operational energy efficiency















#### How to cover the costs?

- Use industry restructuring funds
- Value the deferred investment in power generation
- Value the reduction in peak load
- Value the reduced energy imports or exports
- Value increase in GDP through growth in manufacturing
- Value the jobs created
- Use funds saved through phasing out fossil fuel subsidies
- Undertake a holistic cost benefit analysis















### Summary

- Assess how disadvantaged local manufacturers might be
- Identify the key barriers to transition
- Identify the time needed to transition
  - Agree MEPS but vary when it comes into force to allow for transition
- Identify all the potential (non-energy) benefits
- Put together a whole of government response to tackle barriers
  - Other ministries might include: Energy, Industry, Environment, Health, Others?
- Involve other stakeholders
  - Utilities, ESCOs, etc.

























