



# What are the Steps Industry Transformation

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Session 4

Melanie Slade, IEA - Bangkok, 2 April 2019

 #energyefficientworld

# Overview of the appliance training sessions

#	Session	
0	Introduction and roundtable	<input checked="" type="checkbox"/>
1	Planning energy efficiency programmes	<input checked="" type="checkbox"/>
2	Selecting products for MEPS and Labelling programmes	<input checked="" type="checkbox"/>
3	Assessing efficiency performance and setting MEPS	<input checked="" type="checkbox"/>
<b>4</b>	<b>Industry transformation</b>	<input type="checkbox"/>
5	Stakeholder involvement and communication	<input type="checkbox"/>
6	The relationship between product efficiency and price	<input type="checkbox"/>
7	Modernising energy efficiency through digitalisation	<input type="checkbox"/>
8	Insights into energy labels	<input type="checkbox"/>
9	Monitoring, verification and enforcement	<input type="checkbox"/>
10	Monitoring and evaluating policies and programmes	<input type="checkbox"/>
11	Roundtable discussion, review and report back	<input type="checkbox"/>



**Mel Slade**

International Energy Agency

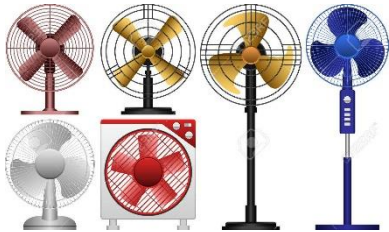
Your government is proposing to introduce MEPS for electric fans.

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?*



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

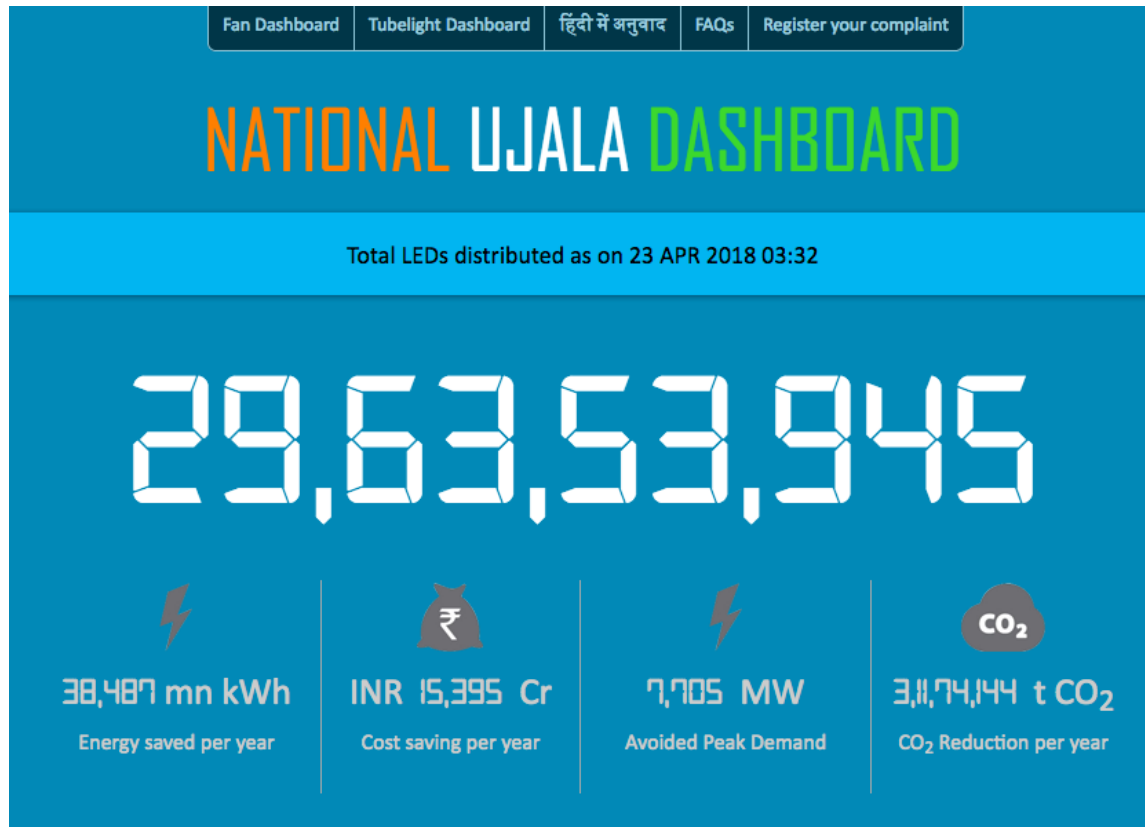
- Standards and Labelling Programme
- High Energy Performance Specification
- Manufacturers tender to place qualified products on a list
  - Rebate for consumers based on those listed products
  - Government procurement
- Why?
  - *Provide market “pull”*
  - *Incentive to increase the number/range of 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*

- 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*



- 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”



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



- 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

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?

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- 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

- 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.





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