





Significance and Benefits of MEPS for Lighting Products

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Why MEPS?

MEPS are an effective way to increase the energy efficiency of products: Typically, the bottom performing 20% of the market is removed. Regular reviews are required to maintain the progressive improvement in efficiency. By specifying minimum energy performance levels: Inefficient products are prevented from entering the marketplace Manufacturers are given appropriate signals to increase product efficiency Consumers are provided with products in the market that use less energy and improved quality and function.



Significance and Benefits of MEPS

- Cost Savings
- ☐ Energy Savings
- Energy Security
- Emissions Reductions
- ☐ Technological Innovations
- ☐ Eliminating Market Barriers
- ☐ Job Creation

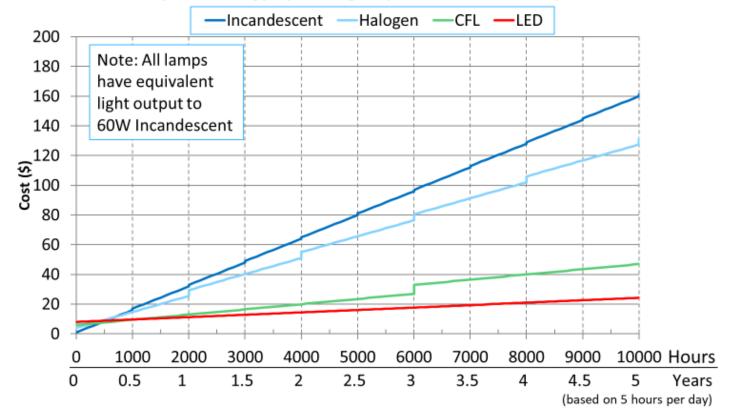


Cost Savings



- ☐ Increase in initial purchase price is recovered multiple times through electricity savings
 - Over time purchase price reduces significantly with sales volumes & competition

Lamp Technology Operating/Replacement Cost Comparison



	Cost	
Electricity	\$	0.25
Incandescent	\$	1.00
Halogen	\$	5.00
CFL	\$	6.00
LED	\$	8.00

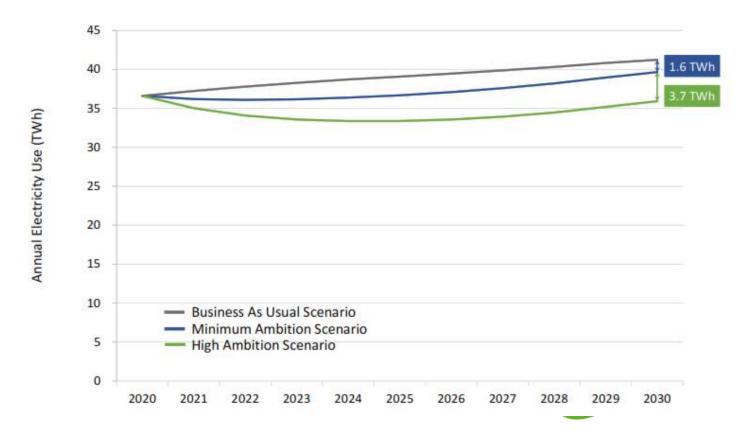


Energy Savings



☐ Efficient equipment uses less energy thereby reducing demand and peak loads





Energy Security



- ☐ Reduces the need to:
 - Build more electricity generating capacity
 - ☐ Import more fuel for generation





Emissions Reductions



☐ Decline in electricity consumption (for manufacture and operation of lighting) requires less energy generation from fossil fuel-fired power plants







Reduce electricity CO₂ emissions by over 1.1 Million tonnes





equivalent to 620 Thousand Passenger Cars



Technological Innovations



☐ Stimulates manufacturers to move away from outdated technologies towards the most efficient, innovative, and competitive product designs

Signify cuts energy consumption by 60% on LED bulbs

The new "Philips LED A-class" white LED bulbs will hit the shelves in Europe on Sept. 1 in 40W and 60W equivalent versions, each available in 3000K or a cooler 4000K version, delivering at least 210 lm/W. Signify is labeling them as "ultra efficient."

https://www.ledsmagazine.com/architectural-lighting/article/14209479/signify-cuts-power-consumption-by-60-on-led-bulbs





Eliminating Market Barriers



- Manufacturers benefit from harmonised standards by:
 - ☐ Providing market consistency and certainty across the region (ASEAN)
 - ☐ Eliminating the need to comply with different standards
 - Creating economies of scale
 - ☐ Simplifying market entry
 - ☐ Reducing the retail cost of innovative technologies for consumers



Job Creation



☐ MEPS create research, manufacturing, and installation jobs

European Commission has published its <u>Renovation Wave Strategy</u> to improve the energy performance of buildings. The Commission aims to **doubling the renovation** rate to cut emissions, boost recovery and reduce energy poverty.

Lighting Europe Calls for Renovation of Lighting Installations

...key to helping Europe's lighting industry – 80% of which are SMEs – to recover from the economic impact of the current pandemic





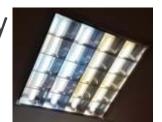
Additional Benefits to Society



- ☐ Realised through additional performance requirements in the MEPS
 - Minimum lifetime
 - Providing confidence in obtaining the expected savings



- Health parameters
 - Healthier living and working spaces (flicker, blue light)
- Colour consistency



- Harmonics
 - Making other appliances less efficient





Questions



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TRANSFORMING MARKETS TO ENERGY-EFFICIENT PRODUCTS



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