



Incentive Programs: Accelerating Market Transformation for Energy Efficient Appliances

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Definition of Incentive Programme:

A financial stimulus (subsidized loan, cash rebate, etc.) or awareness programmes, where the goal is to motivate private investment in energy-efficient equipment

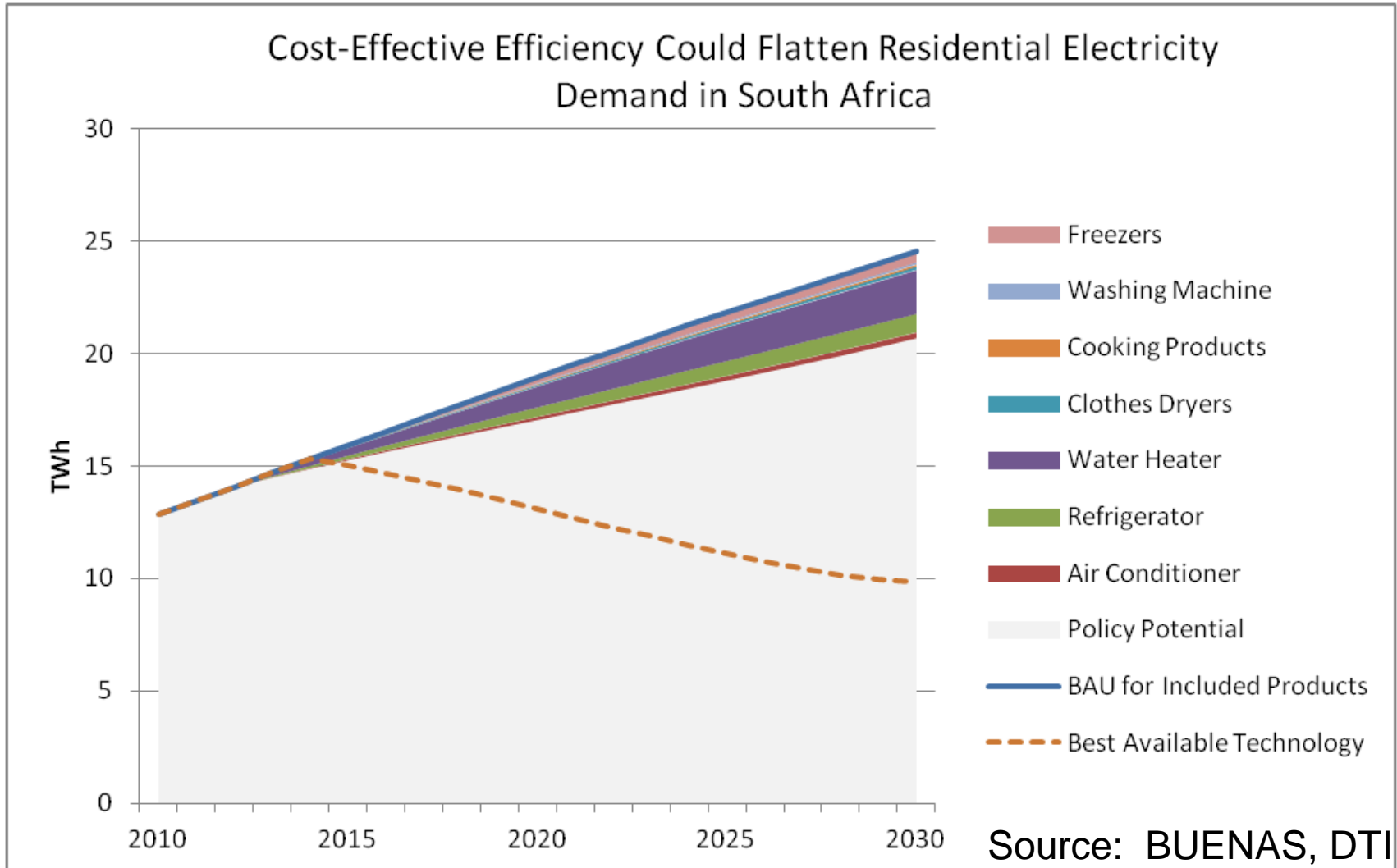


Why Incentives...?

- For governments seeking to develop and expand their energy efficiency policy strategy
- To complement S&L policies and help increase the penetration of most efficient products on the market

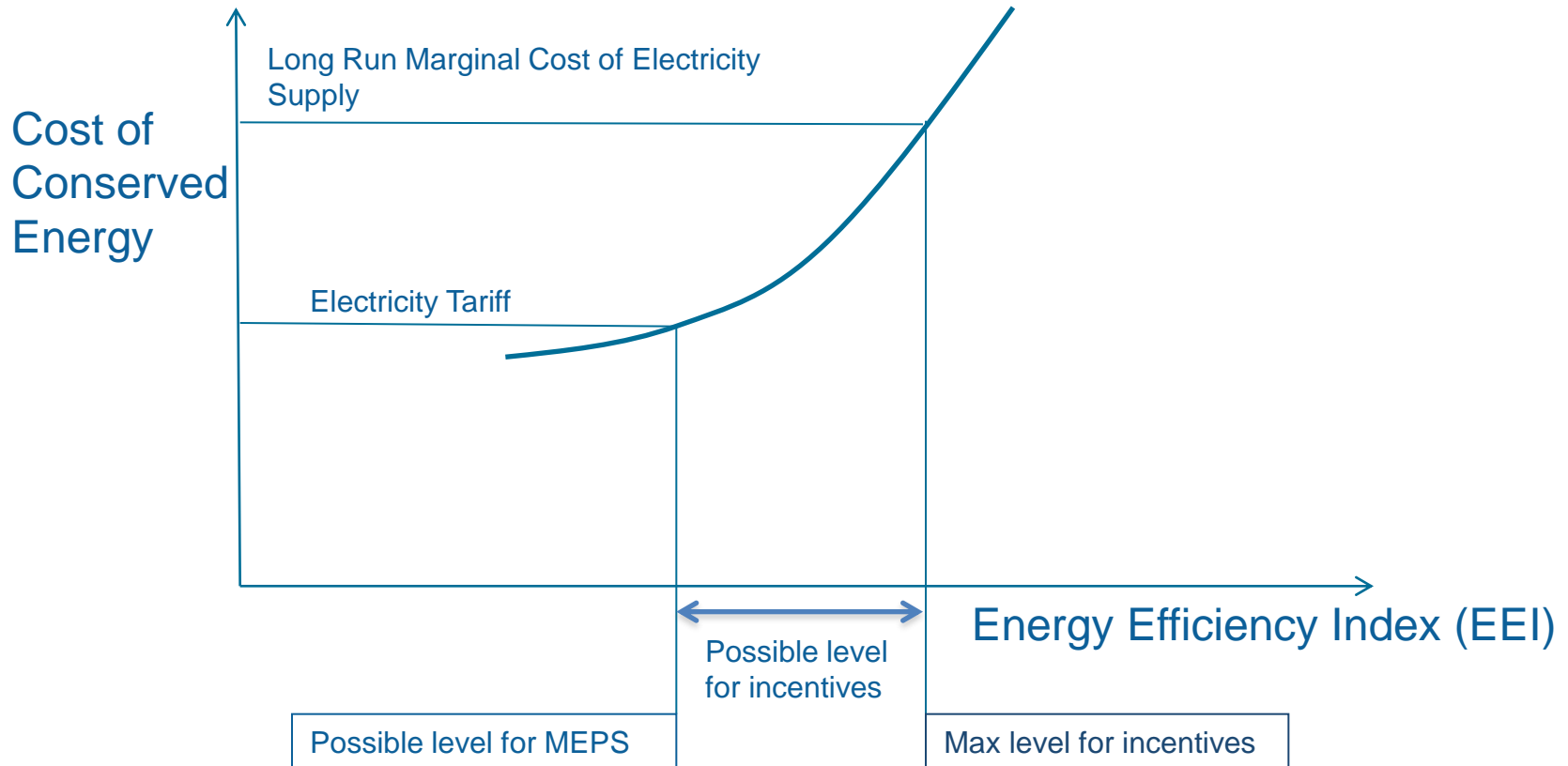


South Africa's Energy Efficiency Potential





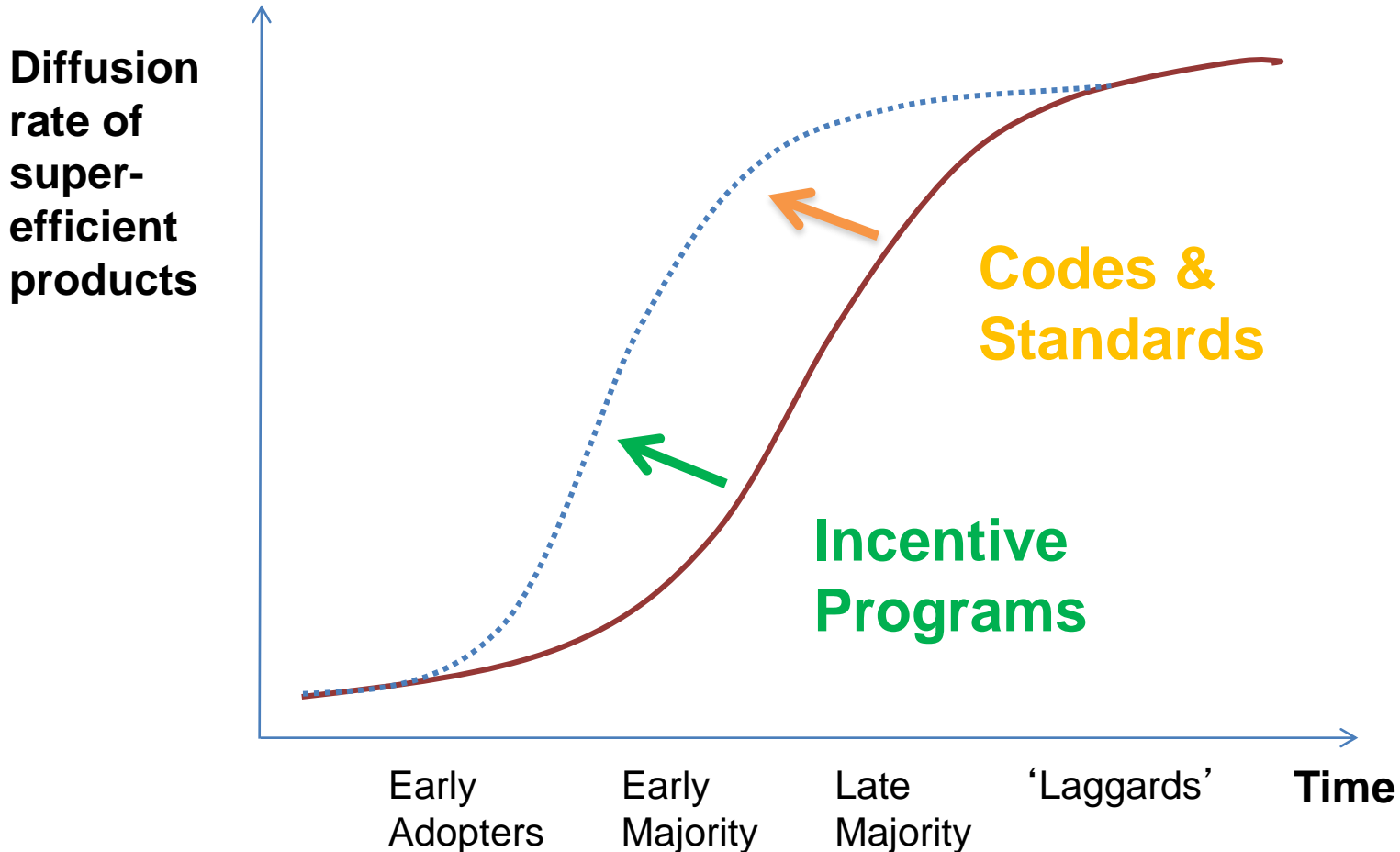
Techno-economic Analysis Example - Refrigerators



SEAD global techno-economic analysis can be used to design specifications for market transformation programmes



Accelerating “super-efficient” products diffusion





Different Incentive Programmes

Manufacturing Upstream Programs

Barriers Addressed:

- Uncompetitive price
- Lack of available product

Main Advantages:

- Lower transaction costs
- Multiplier effect on retail price

Distribution & Retail Midstream Programs

Barriers Addressed:

- Lack of available product
- Lack of information

Main Advantages:

- Increases retailers knowledge of energy-efficient products
- Meets customers at point of decision

Consumers Downstream Programs

Barriers Addressed:

- Uncertainty of savings
- Lack of information
- Limited access to capital

Main Advantages:

- Allows incentive to be directed to specific groups e.g., the low income
- Announcement effect*



Programme	What is it?	Advantage
TAX CREDIT	Income tax credits or tax deductions - reduces expense of purchasing energy efficiency systems	Easy implementation
REBATES	Price reduction to consumers to purchase new energy efficient appliances	Spillover effects to other customers
UPSTREAM	Subsidies for manufacturers or retailers to bring down wholesale price of energy efficient appliances	Leverage investment, limit admin costs, increase product availability at point of retail
REPLACEMENT	Replacing inefficient residential appliances before end of their useful lives with significantly more efficient ones	Low-income households, recycle materials; comply with Montreal Protocol to remove CFCs
ECO POINTS	Awards system offering consumers carbon points, redeemable for discounts in price or cash, for high-efficiency electronic and electrical appliance purchases	Promoting low-carbon lifestyles by raising consumer responsibility and awareness



Case Study : SEEP in India

- Voluntary upstream subsidy programme
- Incentives for 5 million “super-efficient” fans over 3 years (1st phase)
- “Super-efficient” fan will consume 35W, compared to market average of 70W
- “Super-efficient” fans will be more efficient than the 5-star rated, most-efficient, 52W fan



Case Study: Ghana Refrigerator Program

- ‘Promoting of Appliance Energy Efficiency & Transformation of the Refrigerating Appliances Market’
- Pilot Rebate and Exchange Program launched June 2011
- Pilot runs until mid-2014
- Downstream rebate program
- Provides residential electric utility to customers with a voucher for \pm USD105 per unit
- Aims to replace 50,000 refrigerators
- Voucher for units rated between 2 – 5 stars
- End goal to save 216 GWh



Incentive Programme Benefits

- Provide a source of cost-recovery on electricity subsidies by reducing electricity consumption
- Increase penetration of “super-efficient” appliances
- Go beyond S&L policies – accelerating pace of technology to “super-efficient” products
- Prepare market for more stringent S&L programme
- Support local industries



Lessons Learned

- Value of effective monitoring and evaluation to measure success of programme
- Incentives should not be viewed as a permanent instrument - can be phased out as cost of efficient products decreases over time
- Financial incentives for most efficient products only
 - Impact of market transformation: incentives no longer effective if product has 30-40% market saturation
- Manufacturer involvement in programme design – particularly in upstream programmes



SEAD Incentives Activities

Incentives Database: Resource for policy makers and programme administrators of countries' incentive programmes to facilitate Benchmarking and Programme Design

LBNL Energy Efficiency Revenue Analysis tool (LEERA): Compare cost of energy savings to cost of supply and analyze opportunity to design incentive programs, notably in subsidized economies

Upstream Programme Guidebook: Sets out framework for successful programme design based on current implementation of Indian Super-Efficient Equipment Programme

Webinar and Workshop: To aid and inform policy makers and programme administrators in SEAD countries on incentive programme design



Thank You!

U.S. Department of Energy (DOE)
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