ENERGY EFFICIENCY Market Report 2013

Hidden Fuel

First Fue

Robert Tromop 23 October 2013

Market Trends and Medium-Term Prospects

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IEA fuel market reports



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Energy efficiency: a huge opportunity going unrealised

Energy efficiency potential used by sector in the WEO 2012 New Policies Scenario



Two-thirds of the economic potential to improve energy efficiency remains untapped in the period to 2035

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USD300Bn global EE market in 2011

- Comparable to RE and fossil power generation investments
- BUT, investments in energy efficiency are still less than two-thirds of the level of fossil fuel subsidies



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IEA's first fuel?

- Between 1974 and 2010, energy efficiency was the largest energy resource
- Cumulative avoided energy consumption due to energy efficiency in these IEA countries amounted to over 1 350 EJ (32 billion toe)



Long-term improvements in energy efficiency in 11 IEA countries



In 2010 energy efficiency was the largest resource

Energy efficiency contributed 63 exajoules (EJ) (1400mtoe) of avoided energy use in 2010

Iarger than the supply of oil (43 EJ), electricity or natural gas (22 EJ each)



Contribution of energy efficiency compared to other energy resources consumed in 2010 in 11 IEA countries

Energy efficiency has been the key factor restraining energy growth

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- Final energy use increased by 0.5%/year between 1990 and 2010
- Efficiency effect is larger than the effect of structural changes in restraining energy growth



Changes in TFC, decomposed into structure, activity and efficiency effects for 15 IEA countries

Country case studies

- Markets have distinctive characteristics related to country-specific socio-economic conditions and resource endowments.
- Information provision and regulation have played a leading role in stimulating the energy efficiency market
 - standards and labelling
 - providing access to energy assessments and financing
 - energy efficiency obligations placed on energy suppliers
- Utility and energy service company (ESCO) schemes have also driven growth, especially among large energy users.

Technology focus: the digital era is defining future appliance EE markets

Appliances are increasingly becoming network-connected

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Smart appliance global market value

- Network-connectivity and information communication technology can enable energy efficiency BUT they are also rapidly driving up energy demand
 - Network standby could be 550TWh/yr if we don't act
- Standards (Energy Star, Top Runner) are key

Prospects –looking forward

- Energy efficiency markets are expected to grow in the medium term :
 - Significant growth expected in private investment enabled by government policy rather than direct public investment.
 - End-use energy price is also a key driver,
 - but analysis is limited by data availability and relatively greater uncertainties in projecting future pricing trends.

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A big market with bigger potential

USD300 billion market

- Already delivers substantial reduction
 - Recent growth driven by policy and high energy prices
- Bright national policy prospects
- Significant impact on the global economy
- Huge growth potential



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Thank You

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