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Capturing the Multiple Benefits of Energy Efficiency

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Founded in 1974

 Formed in wake of 1973 oil embargo with mission to promote member country energy security -- autonomous agency of the Organisation for Economic Cooperation and Development (OECD)

29 member countries

- Asia Pacific: Australia, Japan, Republic of Korea and New Zealand
- North America: United States, Canada
- <u>Europe</u>: Austria, Belgium, Czech Rep, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey and United Kingdom
- European Commission also participates in the work of the IEA

Headquarters: Paris

Decision-making body: Governing Board

- Consists of member country representatives
- Under the Governing Board, several committees are focusing on each area

Secretariat:

• Staff of around 240, mainly energy experts and statisticians from its member countries



A huge opportunity going unrealised



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



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iea International Energy Agency

Capturing the Multiple Benefits of Energy Efficiency

Measuring the Positive Impacts



Addressing fuel poverty

www.iea.org

Fuel poverty often occurs at the nexus of three factors:



Residential energy efficiency measures could help lift more than 150 million people out of fuel poverty in the EU



Multiple benefits for the fuel poor www.iea.org

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Health impacts of fuel poverty: Negative exposure/outcome pathway





Health impacts of fuel poverty

Extensive body of research linking poor energy efficiency / high fuel costs to **low indoor** temperatures and poor housing condition (e.g. mould)...





...with significant implications for health and wellbeing outcomes.





Improved indoor environments

Ventilation Insulation systems - Comfortable temps Efficient, **Draught**effective - Reduced damp/mould proofing & cooking/fridge pipe lagging - Less gas/particulates systems - Increased living space Efficient Efficient - Sense of control heating lighting systems systems



Energy Efficiency → Warmth as Medicine



Carefully executed energy efficiency can deliver USD 99 billon in annual savings for Europe's public health sector by 2020



Applying a multiple benefits approach

The multiple benefits approach includes three key recommendations:

- Apply the multiple benefits approach to energy efficiency policy development
 - Consider which benefits are relevant in country context

Pay more attention to impact assessment; take an innovative approach

- Engage a range of stakeholders; community level experts
- Adapt existing tools to capture hard-to-measure impacts
- Build consensus on methods for data collection and assessment so that results are comparable across countries and experience can be meaningfully shared



Thank you



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