



The multiple benefits of energy efficiency in international policy discourse

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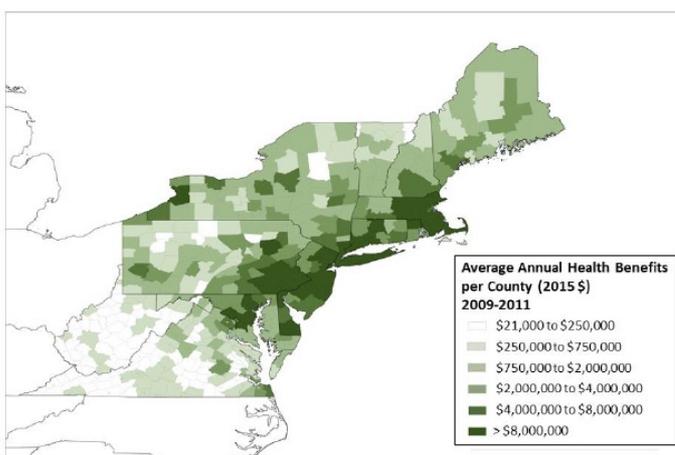
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Case studies

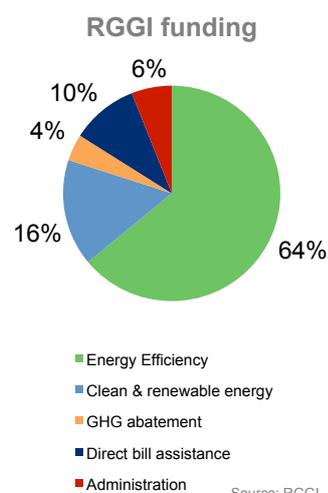
Health and economic benefits outside of Europe

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Health benefits – Evidence from the US



Source: Abt Associates analysis (2017).



Source: RGGI, 2017

In some US states, energy efficiency is resulting in millions of dollars in avoided health costs.

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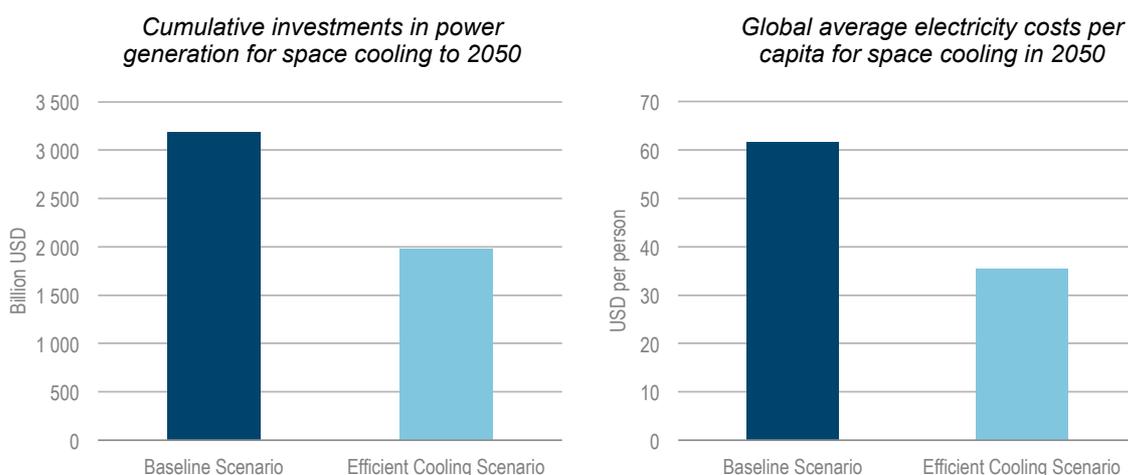
“The health, welfare, and prosperity of all Illinois citizens require the provision of adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability.”

*“**Energy efficiency**, demand-response measures, zero emission energy, and renewable energy are resources currently underused in Illinois. These resources should be used, when cost effective, to reduce costs to consumers, improve reliability, and improve environmental quality and **public health**.”*

- Future Energy Jobs Act, State of Illinois

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Projected economic benefits of efficiency – The case of cooling



Strengthening cooling efficiency would reduce investment and running costs by USD 3 trillion between now and 2050. Average cooling energy costs would be almost halved.

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- Replacing 1.6 million inefficient refrigerators led to...

\$22.4 million / year in avoided energy subsidies saved

>1500 permanent jobs created in manufacturing
and inefficient refrigerator destruction

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“By increasing our energy productivity we strengthen our economy and help safeguard our environment. Businesses reduce their energy costs through innovation and modernising their infrastructure – improving their output and making them more competitive.”

- National Energy Productivity Plan, Australia

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Global observations

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Gaps remain in the global evidence base



- The **geographic scope** of evidence on multiple benefits appears to be limited.
 - Yet potential for using MBs as a communications tool very high (e.g. Indonesia)
- In buildings:
 - Work on tenant satisfaction nascent
 - Benefits of cooling EE understudied (
 - Interactions between indoor/outdoor air quality also understudied
 - Single family vs multi-family homes?
- In transport:
 - Biggest gap: quantifying **activity changes** due to policies that target transport users' behaviour.
 - Big data offers opportunities

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Gaps remain in the global evidence base



- In industry:
 - Providing sector-specific evidence of MBs at the project level may help to increase industry acceptance of energy efficiency.
- Addressing policy makers' needs:
 - Some policy makers unsure of what they should be asking
 - Developed vs developing countries differ but work still needed in both.
 - Policy makers' needs are diverse...
 - ...but in most contexts health and wellbeing and various macroeconomic benefits resonate.

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Multiple benefits remain a powerful communications tool



- Communicate power of multiple benefits could be crucial to help scale up EE
- Academic studies show using multiple benefits a common tactic to influence change
 - Energy savings alone not seen as a benefit of EE, just a “thing”
- Different benefits more salient at different times (e.g. election cycle)
- Communicating the multiple benefits key for macro and project levels
 - Macro level e.g.: Evidence from the EC and target setting.
 - Project level e.g.: Investors in deep energy retrofits
- Private sector uses the multiple benefits to lobby politicians by telling compelling stories.

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More than a communications tool?



- The multiple benefits framework is about thinking holistically.
- A holistic approach to policy design in any field is crucial.
- Ignoring the multiple benefits / impacts could have negative consequences:
 - Unforeseen overlaps could lead to waste in a time of fiscal austerity
 - Under-/over-selling impacts → over-/under-stating costs → changes countries' level of ambition.
- Given limited timeframes for action on climate change, ambition must be maximised.

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Measuring EE's benefits at the global scale



- Health & well-being: SDG1, SDG3, SDG11
- Energy access, energy savings: SDG7
- Macro-economic development: SDG8
- Energy security: SDG9
- Disposable income: SDG10
- Environmental sustainability: SDG12



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Questions?

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- Identify priority benefits
 - Preliminary candidates health and wellbeing and associated benefits (e.g. air pollution)
- Develop tools for overcoming silo-ism
 - Helping different stakeholders speak a common language
 - Preliminary talks with EEFIG
- Mapping benefits to the SDGs
 - Expand on the SDG7 work
 - Potential to promote multiple benefits to development stakeholders
- Capacity building
 - Build on the E4 Programme and update content on multiple benefits