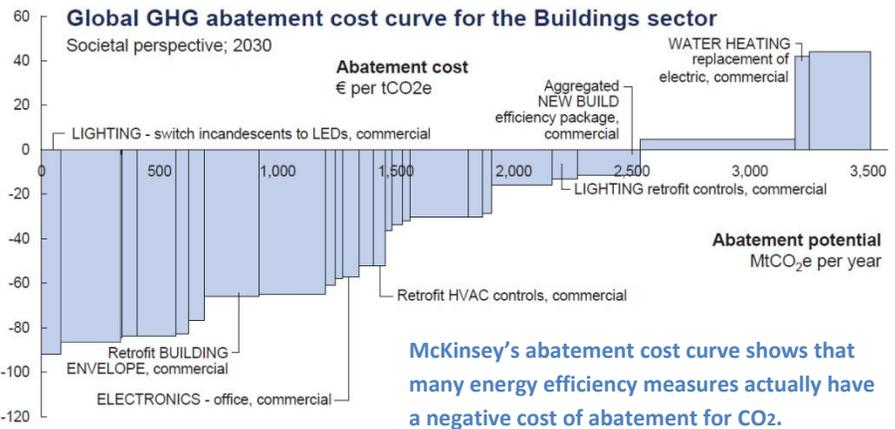


Success Stories in Building Efficiency

Based on the 2009 estimates from the International Energy Agency (IEA), commercial and residential buildings in the MAIN countries represent about 28% of total CO₂ emissions from fuel combustion, including the associated emissions from electricity and heat generation. In addition, based on Intergovernmental Panel on Climate Change (IPCC) projections, building sector emissions across Latin America are expected to grow at least 30% between 2010 and 2030.



Some of the **key policies** that can achieve significant mitigation in the building sector include:

- Building efficiency codes and standards
- Appliance standards and labeling
- Financial incentives
- Programs that engage utilities in making their customers more energy efficient
- Public sector leadership programs

An effective NAMA in the building sector is likely to include a combination of these measures.

Efficiency measures in the building sector present a large opportunity for mitigation, particularly in non-OECD countries. According to a Technology Roadmap completed by the IEA, technologies in the building sector—most of which are commercially available today—have the potential to reduce CO₂ emissions by up to 2Gt by 2050.

However, achieving these emission reductions will require strong government policies to overcome existing barriers (e.g., split incentives, high initial costs) and create the economic conditions that will enable a transition to low-carbon buildings.

Energy Efficiency Benchmarking in New York City, USA

In December 2009, New York City passed the “Greener, Greater Buildings Plan,” which ultimately requires public and private buildings in excess of 10,000 square feet to report their energy and water use via the US Environmental Protection Agency’s Energy Star Portfolio Manager tool, a free on-line benchmarking program. The data is reported to the city, but will also be available to the public on the city’s tax assessment web site. It is anticipated this information, to be updated annually, will be used by prospective buyers and tenants. It will also be used by the state energy authority to deliver energy efficiency funding to buildings that are most likely to benefit.

This benchmarking program is coupled with mandates requiring building efficiency improvements. For example, buildings are required to conduct energy audits every ten years (paid for in part by the state) and carry out retro commissioning recommended by the audit. In addition, buildings undergoing retrofits must meet the Energy Conservation Code on portions of the building being retrofitted. An additional mandate requires lighting system upgrades by 2025.

Overall, the Greener, Greater Buildings Plan is expected to reduce the City's GHG emissions by roughly 4.75 percent, contributing to the city's overall goal of reducing carbon emissions by 30 percent by 2030. And in terms of cost savings, the city expects to reach the break-even point on energy efficiency investments by 2013. The program is expected to save New Yorkers hundreds of millions of dollars per year in energy costs, and create nearly 18,000 green jobs.

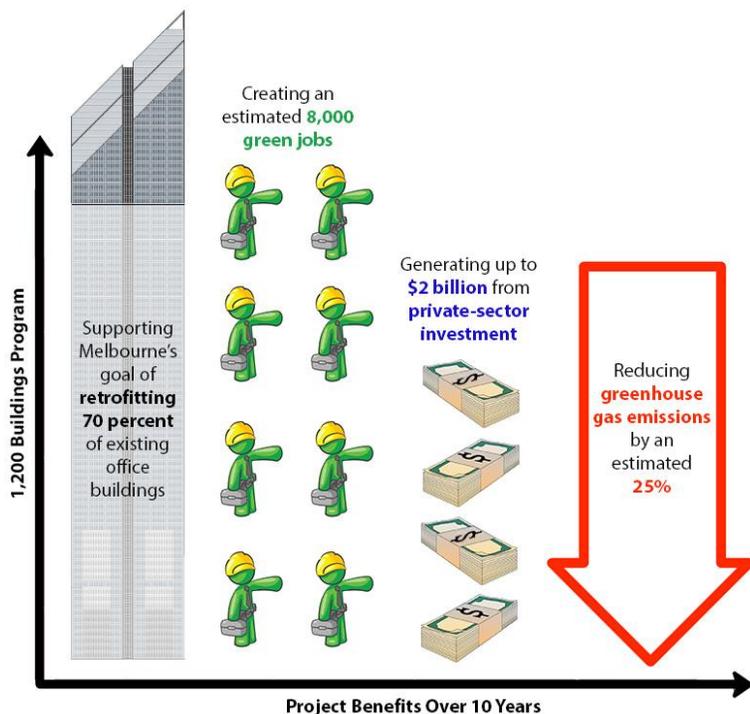
Energy Efficiency and Renewable Sources Fund (EERSF) in Bulgaria

Established in February 2004 through the Energy Efficiency Act adopted by the Bulgarian Parliament, the EERSF is an independent legal entity that supports energy efficiency investments in Bulgarian businesses, municipalities and residential sector. The Fund's main environmental objective is to support the identification, development and financing of viable energy efficiency and renewable energy projects in the building sector.

Now a self-sustaining fund that supports financially viable projects, the EERSF was initially financed by grants from the Global Environment Facility (US \$10 million), the Government of Austria (€1.5 million), the Government of Bulgaria (€1.5 million), and several private Bulgarian companies.



Property-Secured Clean-Energy Retrofit Financing in Melbourne, Australia



An amendment to the City of Melbourne Act on Sept. 14, 2010 allows the Melbourne city council to enter into **Environmental Upgrade Agreements (EUAs)** with commercial property owners seeking upfront financing for projects that improve energy efficiency, and with the financial institutions willing to fund those retrofits. In helping to overcome financing hurdles to energy efficiency investments, this program complements existing mandates (e.g., efficiency standards for new buildings and building retrofits; minimum sustainable design guidelines) and supports the City's goal of retrofitting 1,200 existing office buildings (about 70 percent) as part of the zero net emissions by 2020 strategy.

EUAs reduce the risks faced by lenders through up-front government approval of the project, and with the government serving as an intermediary for payments. The owner or occupier pays an

ongoing Environmental Upgrade Charge (EUC), levied by the city council, equivalent to the monthly principal and interest payment for the project. The council passes the EUC payments received through to the lender. Unpaid EUCs transfer to the property, are subject to penalty interest rates, and can be recovered by the government.



For more information, visit www.ccap.org or email Senior Program Manager Stacey Davis at sdavis@ccap.org.