Retrofitting

Buildings use electricity and natural gas for heating, ventilation, and cooling (HVAC); water heating; lighting; and to power appliances and electronic devices. Retrofitting existing buildings can reduce energy demand and lower the associated greenhouse gas emissions.

QUICK FACTS

- There are many ways to retrofit a building. This solution considers a range of options including: improving insulation, installing LED lighting, replacing conventional HVAC systems with high-efficiency heat pumps, and switching conventional windows with high-efficiency windows.
- There are lots of opportunities to deploy this solution. The 2017 American Housing Survey reports that Georgia has about 4.2 million homes, including 2.8 million single-family detached residential units.
- Retrofitting technologies are mature and market ready and innovations continue to improve the options.

BEYOND CARBON

- Retrofitting can reduce energy demand and therefore reduce fossil fuel power generation. This can lead to improved air quality, which has environmental and public health benefits.
- Reducing energy demand can also reduce energy burden, the percentage of a household income that is spent on energy costs.
- Installation of retrofits can create local jobs.
- For residential focus, issues to watch include cost and awareness barriers for under-resourced communities and energy burdened customers, necessitating external financing and support solutions.

GEORGIA'S 2030 MEGATON OPPORTUNITY

We could reduce 1 Mt of CO2e by retrofitting 20% of Georgia's homes to save 20% of their annual energy use.

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