

The Numbers on U.S. Building Energy Efficiency ...

Billions of dollars are being invested in energy efficiency in thousands of buildings across the United States, with a significant focus on renewable energy.

Energy efficiency in buildings received strong focus in President Barack Obama's plan to cut carbon pollution, as part of the President's Climate Change Plan, announced in June. The initiatives include expanding the President's Better Building Challenge, which is focused on helping commercial, industrial, and multi-family buildings cut waste and become at least 20 percent more energy efficient by 2020.

To get a snapshot of what is currently going on in building energy efficiency, enerG looks at the highlights of the U.S. Department of Energy's Better Buildings Initiative.

► Announced by President Obama in December 2011, the program has some tall challenges: it is a broad, multi-strategy initiative designed to reduce by 20 percent the energy intensity in the commercial and industrial sectors by 2020, catalyze revolutionary change in energy use, achieve billions in energy bill savings, and create high quality American jobs.

► A cornerstone of the initiative, the Better Buildings Challenge, is a public-private partnership program in which leading organizations commit to improve the energy intensity of their building portfolios by at least 20 percent over 10 years and share their strategies and results with the market.

► The Better Buildings Alliance includes more than 200 organizations, representing almost 10 billion square feet of commercial building space in both the public and private sectors. Members are asked to set an energy-saving goal (encouraged to be at least two percent per year), provide updates on progress toward that goal, and implement at least one Better Buildings solution per year.

► More than 110 organizations have taken the Better Buildings Challenge. Over half are Commercial and Industrial Partners that represent more than 2 billion square feet of real estate across diverse public and private sectors.

► The Better Buildings Challenge Partners and Allies have made significant progress in the first year of the program. More than 50 showcase projects and nearly 40 implementation models have been completed or are underway highlighting innovative, aggressive, and realistic strategies for realizing energy savings.

► Public and private commercial partners include commercial real estate, healthcare, hospitality, food service, retail organizations, state and municipal governments, K-12 schools, and higher education institutions.

► Partners have provided detailed information on 7,700 facilities to date; more than 1,300 of these facilities have been improved by 20 percent or more, and another 2,100 have been improved by 10 percent or more since their baseline years.

► Among the partners is Legrand, a global specialist in electrical and digital building infrastructures, who has committed to a 25 percent reduction in energy intensity across five plants, and another nine non-manufacturing facilities. Through its implementation model on submetering, Legrand demonstrated how it reduced its base load power use at one facility 14 percent in three months through a modified HVAC schedule and altered building occupancy sensors. Legrand has achieved a 29 percent reduction in energy intensity since its 2009 baseline year.

► Southern California Edison (SCE), one of the nation's largest investor-owned utilities, has committed to five percent energy savings across its commercial customer class by 2015. With its On-Bill Financing (OBF) implementation model, SCE provides a solution to the upfront capital cost barrier in conducting energy efficiency projects. SCE's OBF program has issued over \$10 million in loans and has commitments in place for another \$20 million. The loans issued thus far have supported energy efficiency projects with projected savings of 17 GWh and 2.8 MW.

