



Making the business case for energy efficiency

If improving building energy efficiency were as simple as flipping a switch, it would be easy for the public sector—universities, government, houses of worship—to cash in on the cost savings and emissions reductions. Unfortunately, limited resources, information gaps and organizational barriers often prevent this sector, with its tremendous energy use, from taking advantage of smart energy investments. Environmental Defense Fund can help.

“EDF’s Climate Corps program uncovered energy efficiency opportunities that could save the University millions of dollars and cut our carbon footprint by half.”

– Chancellor Charlie Nelms,
North Carolina Central
University

The Climate Corps Fellowship

Climate Corps Public Sector is EDF’s summer fellowship program that places talented graduate students from top schools in public organizations to develop practical, actionable energy efficiency investment plans. Working with facilities management or sustainability staff, each fellow or pair of fellows develops a unique energy plan to meet the host organization’s needs.

Fellows work throughout the host organization to:

- Inventory the host’s energy use through the review and analysis of professional energy audits, interviews with key employees, and direct observation.
- Model the financial impact of upgrades to lighting, office equipment, and heating and cooling systems, factoring in available rebates and incentives.
- Facilitate collaboration among multiple energy efficiency stakeholders.
- Map a strategy for energy efficiency investments and present the business case to key decision-makers.

Climate Corps Public Sector fellows have helped their hosts with a range of new policies and systems that integrate energy efficiency into core operations. These include improving LEED performance of new buildings and instituting energy-smart building use policies.

Public Sector results

Climate Corps Public Sector fellows were placed at North Carolina Central University (Durham, NC) and Johnson C. Smith University (Charlotte, NC). The fellows uncovered efficiencies in lighting, office equipment, and heating and cooling systems that could:

- Save over \$14 million in energy costs in five years.
- Cut 52,307,761 kilowatt hours of electricity per year—enough to power 4,738 homes.
- Reduce 28,000 metric tons of greenhouse gas emissions per year— equivalent to taking more than 4,516 SUVs off the road.

These results prompted passage of a North Carolina law that allows universities to reinvest energy efficiency savings into projects that will increase sustainability.

“As a Climate Corp fellow, I gained a set of skills that will assist me in effectively making the business case for environmental initiatives, wherever my career takes me.”

– Debbie Breisblatt, Duke University, 2010 Climate Corps Fellow (City of Raleigh)

How it works

EDF recruits graduate students from top business, policy, environmental and engineering schools and puts them through intensive training in energy efficiency technologies, energy pricing and financial models.

Climate Corps Public Sector fellows are placed at carefully selected public hosts for 10-12 week summer fellowships. EDF works closely with host organizations to customize the fellow's work plan to specific host needs and provides ongoing technical assistance and support throughout the summer. EDF also pays the fellows' salaries.

In return, host organizations agree to provide senior-level support, access to energy use data and a day-to-day supervisor. Host organizations must be committed to reducing their energy usage and implementing recommendations where feasible.

Join Climate Corps

EDF is now recruiting fellows and host organizations for 2011. To learn more, please visit the Climate Corps Public Sector website at edfclimatecorps.org/public. You are welcome to contact Climate Corps Public Sector coordinator Jill Logeman at jlogeman@edf.org.



At North Carolina Central University, fellows David Fox and Sahil Thaker found improvements to heating and cooling settings that could **save \$1.4 million per year** with no upfront costs and **reduce carbon emissions by 30 percent**.



A fellow developed a plan to **cut energy use by nearly 25 percent** at Johnson C. Smith University. With an average payback period of less than 18 months, his recommendations could **save over \$225,000 per year**.

2010 Public Sector Hosts

City of Raleigh

Two fellows documented efficiency opportunities at Raleigh's 27 fire stations and a major downtown office building. Their recommendations could save the city over \$106,000 per year and reduce carbon emissions by 816 tons.

Elizabeth City State University

A fellow developed a plan to cut energy use in four buildings with lighting, heating and cooling, and window upgrades, which could cut energy costs by over 15 percent and save over \$31,000 per year.

St. Paul AME Church (Raleigh, NC)

A fellow found ways to save money for the oldest African American church in Wake County while maintaining its Historic Landmark status. Improvements to lighting, heating and cooling systems, and the roof could slash the church's energy bill by more than half.

For more information, please contact Jill Logeman (jlogeman@edf.org) or visit edfclimatecorps.org/public