

COST SAVINGS



Cost Savings Related to Sustainability

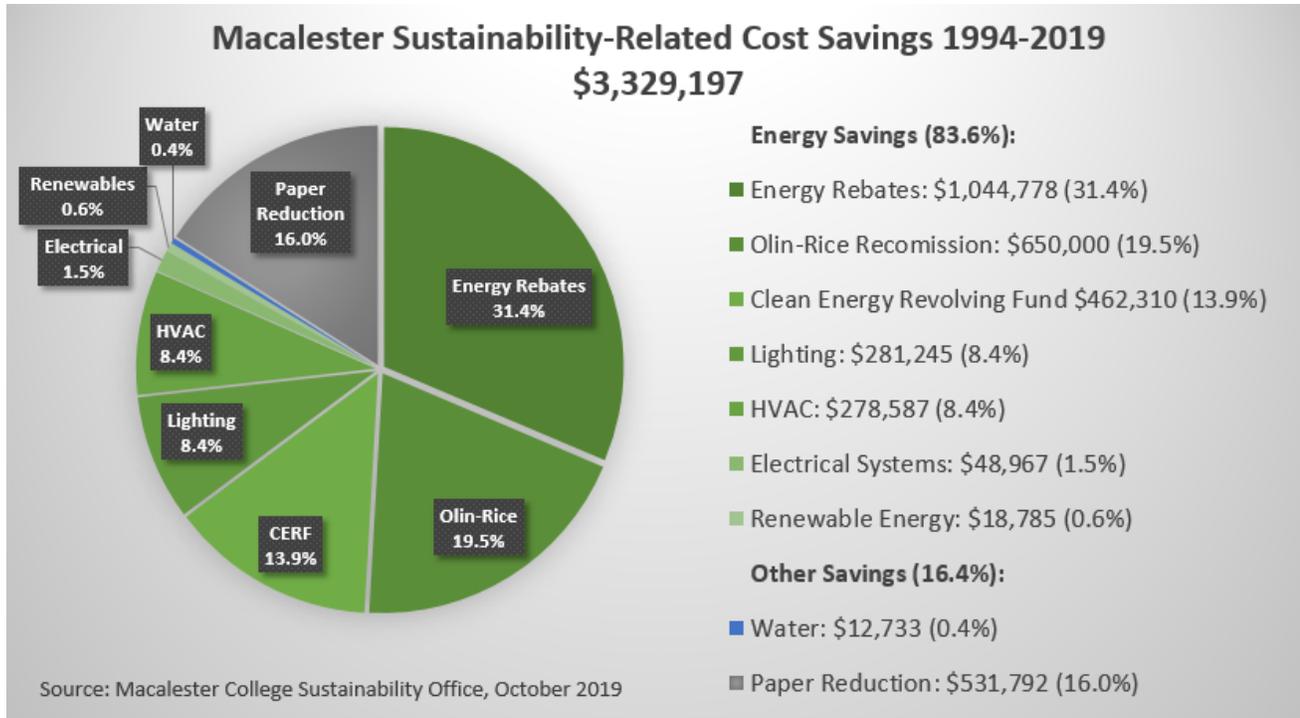
Macalester College's sustainability-related operational initiatives have reduced the campus' carbon footprint and saved the college more than \$3 million as of September 2019. Early on, the college began making decisions that had a positive impact on both the environment and the college's bottom line:

- § **1960s** - Building recommissions and equipment upgrades focusing on energy efficiency began and continue today.
- § **2007/08** - President Rosenberg signed the Presidents' Climate Commitment, and the college hired its first Sustainability Manager, Suzanne Savanick Hansen. Hansen calculated both cost savings and greenhouse gas (GHG) reductions from projects completed prior to her arrival, and began tracking these two metrics going forward.
- § **2014** - A campus Energy Manager was hired and collaborations between the Energy and Sustainability Managers led to more granular and sophisticated measurement systems. The new systems strengthened data collection on energy usage, cost savings, and GHG emissions, helping pave the way for additional sustainability-related projects.

By the Numbers

💰 **Total savings** (1994 - September 2019): **\$3,329,197**

💰 **Total savings during the Sustainability Office** (June 2008 - September 2019): **\$1,792,135**



Programs

- 💰 **Building upgrades: lighting** – sensors and controls, **electrical systems** – transformers and heat tape, **HVAC** – ventilation, steam/water piping, DDC controls, and VSDs
- 💰 **Paper: Bathrooms** – Green Seal certified sanitary paper and paper towels, **administration** – Electronic billing and communication with students, **printing** – Print release stations, PaperCut software for students, and multi-function devices for staff and faculty
- 💰 **Clean Energy Revolving Fund (CERF): energy efficiency** – Insulation, Energy Star appliances, and LED light bulbs, **water efficiency** – Low-flow fixtures
- 💰 **Waste reduction: food waste** – Pig food program reduces waste. It has cut trash output by 50% and reduced hauling fees
- 💰 **Renewable energy: solar** – 3 solar photovoltaic projects and community solar, **wind** – 1 wind turbine, wind source energy for EV charging
- 💰 **Xcel Energy Rebates: controls** – control optimization, HVAC controls, **renewable energy** – solar, **maintenance** – lighting retrofits, steam trap repairs