2014 Emissions, Effluents & Waste

Caltech endeavors to explore, evaluate, and implement innovative techniques for minimizing the impact of campus emission, effluent, and waste streams.

Caltech’s direct GHG emissions have decreased by 24 percent since inception of the Institute’s Climate Action Plan in 2008. The Institute remains on track with its goal of reducing emissions to 1990 levels by 2020. Direct emissions in 2013 were two percent below the target reduction for the year despite a three percent increase from 2012.

Direct emissions increased in 2013 due to non-planned disruptions in the Institute’s on-site combined heat and power plant. As a consequence of the disruptions, more power was purchased from the grid to maintain adequate supply for the campus. Grid energy is approximately 20 percent more GHG emissions intensive than Caltech’s on-site generation portfolio and thus reducing grid purchases assists the Institute in meeting its reduction goal.

With respect to waste and effluents, Caltech is working to better quantify the impact of the core campus on local municipal waste water treatment. The Institute reports chemical oxygen demand and total dissolved solids to the sanitation district annually. The Sustainability team is working with facilities management staff to develop metrics that contextualize local and regional impacts.

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Chemical hazardous waste

3% landfilled
97% incineration

0% municipal solid waste went to the landfill in FY2014. In collaboration with the Institute’s waste hauler, 100 percent of waste generated on campus was either recycled directly from campus, recovered at a material recovery facility or processed at the Southeast Resource Recovery Facility (SERRF) in Long Beach through waste to energy transformation.