

CARBON ACTION PLAN

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Buildings are responsible for 40% of U.S. energy usage and 70% of NYC greenhouse gas emissions. Cooper Union accepted the NYC Carbon Challenge committing to a 30% carbon footprint reduction. Students are developing a Carbon Action Plan outlining steps towards achieving our carbon emissions goal. Areas of research include optimizing our cogeneration plants and laboratory ventilation systems. Cogeneration increases efficiency by using an onsite heat engine to simultaneously generate electricity and useful heat. The 250 kW and 150 kW cogeneration plants at 41 Cooper Square and the Foundation Building save Cooper Union around \$130,000 annually. However, by analyzing sensor data, students have identified that increasing heat recovery and uptime would further reduce operating costs and our carbon footprint. Laboratories consume significant energy due to extra ventilation requirements. Students are analyzing the laboratory ventilation system of 41 Cooper Square and identifying potential energy and carbon savings from reducing the amount of airflow while satisfying building codes and optimizing exhaust fan operation.



WORK SPACE **SHOWCASE**

THE COOPER UNION ANNUAL STUDENT EXHIBITION
ACADEMIC YEAR 16/17