



# Energy saving and emission reduction

## 380 kWh

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Sherwin-Williams produces paints and coatings and is actively pursuing multiple 2030 sustainability goals. To achieve its Scope 1 and Scope 2 sustainability goals of reducing GHG emissions by 30%, Sherwin Williams contracted a third party to conduct energy audits across eight of their U.S. manufacturing and distribution sites, representing all of its supply chain technologies and five of their blending facilities. The audits produced a comprehensive list of 136 energy reduction opportunities with a potential of 7.7 million kWh in energy savings and a GHG emissions reduction potential of 10,000 metric tons of CO<sub>2</sub>.

In 2021, the company committed to reducing Scope 1 and Scope 2 greenhouse gas emissions by 30% and increasing operational energy efficiency by 20% by 2030. Sherwin-Williams traditionally used an internal process (Waste Value Stream Mapping) to identify new sustainability projects, but the company recognized the need for external energy audits to identify new opportunities and accelerate energy and emissions savings.

Sherwin-Williams worked with the third party to audit eight of their manufacturing and distribution sites and five of their blending facilities during 2021. In addition, the company defined a new process to operationalize energy audits internally in the future. The opportunities identified during the audits focused primarily on the following categories: compressed air systems, process heating and cooling systems, HVAC, lighting, and plug loads.

Sherwin-Williams' first step was to develop a Request for Proposal (RFP) for potential bidders. The project deliverables for the auditors were scoped into the following list:

Six vendors submitted bids for the RFP, and Edison Energy was awarded the final contract based on the alignment of their experience with Sherwin-Williams' expectations. Sherwin-Williams' Energy Audit team comprised internal professionals across Environment, Health, and Safety, Engineering, and Purchasing. The development of the RFP started in March 2021 and once finalized, it was sent to bid in April with responses due in May. After reviewing and ranking the responses, the final contract was awarded in June. The Energy Audit project began in August 2021 and the auditing timeline developed thereafter. Each audit lasted two to three days with a closing report of high-level findings on the final day.

Sherwin-Williams shared all the projects and audits internally on their Sustainability SharePoint. Upon receiving the results of the audits, personnel across engineering, operations, environment, health, and safety met internally to prioritize the projects for future capital resourcing.

Partnering with a third party helped Sherwin Williams identify new project opportunities and gave them insights and best practices for their internal energy auditing process. During each audit, Environment, Health and Safety, and Engineering personnel accompanied Edison Energy auditors to help them understand the



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equipment and identify areas to focus on during an energy audit. This involvement contributed to the development of Sherwin-Williams' energy audit process and, eventually, to an internal Sustainability Playbook focused on optimizing energy usage within their operations. They are also actively working with the Regional Engineering team to review completed audits and apply the insights they gained to sites with similar systems and technologies.

The final audit reports and summarized list of project opportunities were completed in February 2022. The cost to implement the Energy Audit project was approximately \$170,000. Some of the audit findings were implemented immediately - for example, one of Sherwin Williams' sites was able to shut down a dust collector that was no longer needed. This resulted in an estimated 650,000 kWh per year in energy savings and avoided 380 metric tons of CO2 emissions. The audit reports provided detailed cost information to implement each improvement and a corresponding return on investment to help the prioritization process.

Identifying new opportunities to accelerate energy and emissions savings

Contract a third party to conduct energy audits across eight of its U.S. manufacturing and distribution sites

Comprehensive list of 136 energy reduction opportunities with a potential of 7.7 million kWh in energy savings and a GHG emissions reduction potential of 10,000 metric tons of CO2

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