



Process Optimization

Process optimization is one of the most immediate and cost-effective levers companies can pull to reduce GHG emissions. By tightening controls and optimizing system performance, businesses can unlock measurable emissions reductions while building the foundation for deeper decarbonization efforts over time.

“Operational energy efficiency isn't just good practice – it's good economics. The cheapest energy is the energy you never have to consume.”

– Trio, Energy Optimization

Highlights

Payback Potential: **High**

Implementation Complexity: **Medium**

Key Stakeholders: Facilities Mgrs., Maintenance teams, and Operations Mgrs.

GHG Reduction Potential: **Medium**

GHG Scopes Reduced: Scopes 1 & 2

Progress toward these Honda Scorecard Requirements

- Reduce emissions 5.7% annually
- Reduce emissions by 34% by 2030
- Achieve carbon neutrality



How this drives GHG reductions

Process optimization measures offer a direct pathway to cutting GHG emissions by reducing the amount of energy required to run facilities. Optimizing production with energy in mind, commissioning equipment and controls, and improving day-to-day operational practices can significantly lower electricity and fuel use. These improvements can generate quick, measurable results without major capital investments.

Where to start

Establish an energy baseline using monthly utility data or through the implementation of a real-time energy monitoring system. Conduct energy audits (ASHRAE 1, 2, and 3) to identify high-impact opportunities.

Create a list of near-term priority projects, acting on immediately feasible opportunities and building a prioritized roadmap for larger upgrades.

Project examples

- Facility energy monitoring
- Process flow coordination and runtime reduction
- Equipment controls commissioning
- HVAC scheduling and setpoint management
- Compressed air leak detection
- Employee energy checklists



Resources to guide you

ENERGY STAR Treasure Hunt: This resource helps organizations assess facilities to uncover practical, low-cost energy-saving opportunities that can collectively deliver both immediate efficiencies and long-term operational value.