





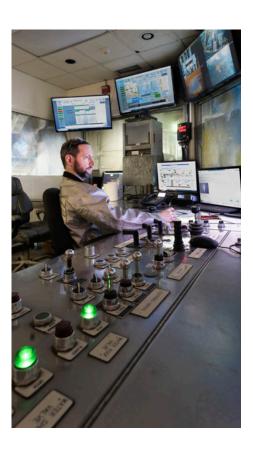


### IN ENERGY-INTENSIVE

**INDUSTRIES**, there are no quick fixes. Upgrade projects often involve complex feats of engineering and millions of dollars in capital.

This is where energy managers come in as experts at creating strategies, budgets and business cases for energy-efficiency improvements. They also help industrial customers liaise with Save on Energy to access financial incentives, training and more.

"The biggest challenge for these projects is getting the capital and the buy-in," said Francois Abdelnour, Energy Director at Ivaco Rolling Mills.



## REWRITING THE PLAYBOOK WITH INNOVATIVE SOLUTIONS

Ivaco's main project

involved recovering heat from furnace off-gases and using it to preheat scrap metal on Consteel®, a continuous pre-heating conveyor system. Preheated scrap requires less electrical input to melt, leading to huge gains in energy efficiency. As well, the addition of variable frequency drives (VFDs) boosted the efficiency of a new, higher-capacity baghouse system for collecting dust. Because the VFD motors only run as needed and adjust automatically based on predetermined setpoints, they save energy, tune furnace combustion and control emissions.

## REACHING NEW HEIGHTS IN EMISSION CONTROL

"From an engineering standpoint, there's no precedent for a solution like this," said Abbas Gholipour, Energy Manager at Ivaco Rolling Mills. "Since then, we've seen others in the industry take our emission control system and implement it at their own plants. It was a true team effort and

we're very proud of what we've achieved."

Other energy-saving upgrades included swapping old lighting fixtures for LEDs, adding VFDs to melt shop compressors and participating in a demand response program by ramping down production when demand on the grid is high.

#### BY THE NUMBERS

Consteel® scrap pre-heating

\$4,988,000 Total incentive

21,700 MWh

Total annual electricity savings

2.2 MW

Total annual demand savings

\$1 million

Expected total annual cost savings

8 years
Expected project payback



#### BY THE NUMBERS

# BAGHOUSE FANS VFDs

\$549,000 Total incentive

3,100 MWh

Total annual electricity savings

\$150,000

Expected total annual cost savings

2.5 years

Expected project payback

# MELT SHOP COMPRESSOR VFDs

\$180,000 Total incentive

Total meentive

1,600 MWh
Total annual electricity savings

\$90,000

Expected total annual cost savings

3 years

Expected project payback

# LED LIGHTING CONVERSION

179,000

Total incentive

3,600 MWh

Total annual electricity savings

\$175,000

Expected total annual cost savings

2.5 years

Expected project payback



#### INCENTIVES AND RESOURCES FOR ENERGY-EFFICIENCY PROJECTS

Drive down operating costs and maximize return on investment (ROI) with the help of Save on Energy's suite of programs. We support customers across Ontario in improving their industrial processes and implementing system optimization projects. Eligible projects will deliver electricity savings using proven commercial technologies to lower energy consumption and reduce electricity bills.

# Ready to transform your industrial processes? Contact us today to get started.

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