

**New York State
Environmental Investment Program
Capital Project Summary**

Novelis, Inc.

Company Background

Novelis, Inc. was created and incorporated in September, 2004, when Alcan Inc. reorganized its rolled product (sheet aluminum) facilities into a new company. Novelis remains the world's largest rolled aluminum products company, making products for the automotive, transportation, beverage and food, construction, foil and lithographic industries. It is also the biggest aluminum container recycler globally. The Oswego plant is one of 38 operated by Novelis worldwide, and its largest wholly-owned facility. In 2007, Novelis was acquired by Hindalco Industries, Ltd.

Today, the Oswego plant continues to make aluminum sheet for can and other product manufacturing, including a unique product called "brazing sheet." Brazing sheet is comprised of an aluminum "core" clad on each side with an alloy whose melting temperature is lower than that of the core. Baking transforms the brazed components into single solid, leak-proof units, which are strong, lightweight, durable and corrosion resistant. Brazing sheet is uniquely suited for, and widely used in the manufacture of motor vehicle heat exchangers (radiators, oil coolers, heater cores, etc.).

Project Description

This EIP project was part of a larger Novelis investment that would completely redesign and install a new brazing sheet manufacturing center at Oswego. Prior to the project, brazing sheet was made by casting separate ingots of aluminum and alloy (at another Novelis facility), melting and casting them into separate sheets, rolling them together (one each for the top, core and bottom layers), welding them, and then rolling them

again. Now, Novelis can melt the aluminum and aluminum alloy ingots, and co-cast them directly into single composite ingots. The aluminum layer gets sandwiched between the alloy layers as the ingot is cast. Then, these ingots are rolled directly into brazing sheet, cutting production time from nine to six weeks, saving energy, and freeing up the hot rolling mill for other production. Oswego is the only facility in the world using this technology. Over the last several years, Novelis has been positioning the Oswego facility as the major manufacturer of brazing sheet in North America. In July, 2007, Novelis announced it would invest an additional \$9 million in a new energy efficient sheet ingot furnace at the Oswego facility.

The central piece of material handling equipment in the new casting center is the charging scrap metal carrier. This is an in-house vehicle that lifts, stages, and transports large containers of aluminum material from the casting center storage area to the melting furnace. ESU supported a similar piece of equipment for a project completed at this facility in 2000.

Project Results

The project increased Novelis' capacity to recycle aluminum scrap by 50,000 tons per year. It also allowed Novelis to consume another 40,000 tons per year of recycled aluminum from smelters, reuse 10,000 tons per year of internal trim and edge scrap (saving \$3.4 million per year), increase brazing sheet sales by 10,000 tons per year (\$60 million in added revenue), and create eight full time positions.

Contractor:	County of Oswego IDA	NYS EIP Investment:	\$ 300,000
County:	Oswego	Contractor Match:	\$ 426,532
ESD Region:	Central New York	Total:	\$ 726,532
ESD Contact:	518/292-5340	Completion Date:	October, 2007