

# A successful collaboration: Maritime Innovation and FEDNAV



## ▶ Saving Fuel on the St. Lawrence!

By Clémence Cireau  
Translated by Edith Skewes-Cox

**Fuel costs take up an increasing share of shipping company expenses. The Optide application offers an innovative solution that saves money and reduces pollution!**

Sailors have known about the idea for centuries: a ship consumes a lot less fuel if it is pushed along by river currents.

The application is based on a simple principle. Using tide and current models of the St. Lawrence developed by the Canadian Hydrographics Service, Optide determines how much time and fuel is needed to travel up the St. Lawrence to Montreal for a number of different departure times.

Having all this information in hand helps shipowners significantly reduce their costs and ensures that their ships travel at optimal times, particularly when a team of stevedores is required at the port of arrival.

“Optide is a decision support tool that can generate major savings for the maritime industry,” explains Nicolas Parent, Executive Director of **Maritime Innovation**, who developed the tool. This applied research centre, associated with the Institut Maritime du Québec, offers services such as research and development, technical assistance, assistance to small and medium-size businesses, dissemination of information and technological monitoring to all companies and organizations working in the maritime industry.



Teams from the centre have been working on prototypes for several years. A year ago, Maritime Innovation approached Fednav, a major Canadian shipping company, and proposed that it invest in the project so Optide could be tested in the field. “We agreed to get involved in the project, because it has huge potential,” says Marc Gagnon, Director, Government Affairs and Regulatory Compliance at Fednav.

The product is currently in the final stage of testing. “We know that the product works, but people have to adopt it for the system to function,” explains Nicolas Parent, referring to ship captains who are already accustomed to using currents in an empirical manner.

Testing is scheduled to wrap up before the first permanent ice forms. Fednav plans to use Optide for its fleet of ships, starting in spring 2013.

Maritime Innovation has successfully “proven its expertise with this type of tool,” according to Nicolas Parent. As for Fednav, the company has taken part in the development of an application that it will find very useful in the future. “We have killed two birds with one stone: navigating the St. Lawrence will be less costly and more environmentally friendly,” says Marc Gagnon, who is aware that the priorities of shipping companies must now include a greater awareness of the damage caused by CO<sub>2</sub> emissions into the atmosphere. □

