

Greening the M/V *Edwin H. Gott*

This project is a Public-Private partnership to improve air quality by significantly improving the main engine air emissions from the M/V *Edwin H. Gott*. The partners are Key Lakes I, Inc., EPA Region 5, and the Great Lakes Maritime Research Institute, www.glmri.org.

This project supports *Goal 1 of EPA's 2003-2008 Strategic Plan, Clean Air and Global Climate Change, Objective 1.1 Healthier Outdoor Air*, and it directly targets Sub-objective 1.1.1 in the reduction of nitrogen oxides and particulate matter in non-attainment areas.

Edwin H. Gott particulars

Year Built: 1978
Length Overall: 1,004'
Beam: 105'
Draft: 52'
Capacity: 74,100 tons
Product(s): iron ore pellets



Photo by Ken Newhams, Duluth Shipping News

The M/V *Edwin H. Gott* transports over 3 million tons of cargo annually. A total of 115,385 semi-trailers or 30,000 rail cars moving through some of the nation's most congested highways and cities would be needed to replace this single vessel operating on the Great Lakes marine highway.

New engine configuration

Configuration of MaK 8M43C replacement engine and verified technologies	
Output range	7200 kW (9650 bhp)
Speed	450 rpm
Emissions	US EPA Tier 2 Commercial Regulations

Air emission reductions with new engines

	Annual reduction	% Reduction
NO_x	239 tons	27%
CO	53 tons	75%
PM	7 tons	31%