

Green Stimulus:

Economic Impact Scenarios for Funding the Diesel Emissions Reduction Act

Two Birds, One Stone: Funding the Diesel Emissions Reduction Act (DERA) represents a unique opportunity to simultaneously stimulate the U.S. economy while improving national environmental and health outcomes.

Background: DERA was enacted as part of the Energy Policy Act of 2005. Its purpose is to provide \$1 billion over five years (FY06-FY10) to finance the installation of retrofits on existing heavy-duty diesel vehicles. Although DERA was authorized for \$600 million between FY06-FY08, only \$50 million was appropriated.

DERA is Good Public Policy: Diesel retrofit programs result in \$13 of economic benefit for every \$1 invested (Voinovich, 2008) and rank second in terms of cost-effectiveness among more than 20 widely employed emissions reduction strategies (Keybridge, 2008).

DERA Enjoys Broad Bipartisan Support: The DERA authorizing statute passed the Senate by a vote of 92 to 1. President-elect Obama co-sponsored the original bill and co-signed three letters to President Bush to secure DERA funding. DERA is supported by a coalition of more than 250 environmental, public, industry, and labor groups.

DERA is Effective Fiscal Stimulus: The economic stimulus provided through DERA funding will be timely, targeted, and temporary.

- **Timely:** The DERA program is already oversubscribed – current requests for the National Clean Diesel Program component currently exceed appropriated funds by a factor of five. As much as \$1.5 billion in DERA funding could be deployed in the next 6-18 months.
- **Targeted:** DERA funding will leverage non-federal matching funds and initiate projects that yield maximum “bank for the buck.” Current applications suggest a matching rate of \$1.38 for every \$1.00 of federal funding. DERA funding also targets industries undergoing significant dislocation and layoffs.
- **Temporary:** DERA funding will provide a one-time boost to the economy over the next 2 years.

The Potential Economic Impacts: A recent analysis by Keybridge Research estimated the potential economic impacts for three different DERA funding scenarios: (1) \$550 million, (2) \$1.0 billion, and (3) \$1.5 billion. Employing a methodology based on the use of standard economic multipliers provided by the BEA's RIMS II model, Keybridge concluded that:

- DERA is likely to generate approximately \$6 of increased economic output for every \$1 of federal expenditures.
- Funding DERA at \$550 million is likely to result in approximately 19k new jobs created (or job losses avoided), while increasing funding to \$1.0 billion to \$1.5 billion is likely to result in approximately 30k to 50k new jobs created.
- The economic impact is likely to be the greatest in auto parts manufacturing and heavy-duty truck (e.g., school bus) manufacturing sectors, which have sustained job losses at nearly 9-times and 7-times the national rate.

ECONOMIC IMPACTS UNDER THREE FUNDING SCENARIOS

Economic Impact with Matching Rate Maintained

Matching Rate = \$1.38 per \$1.00*

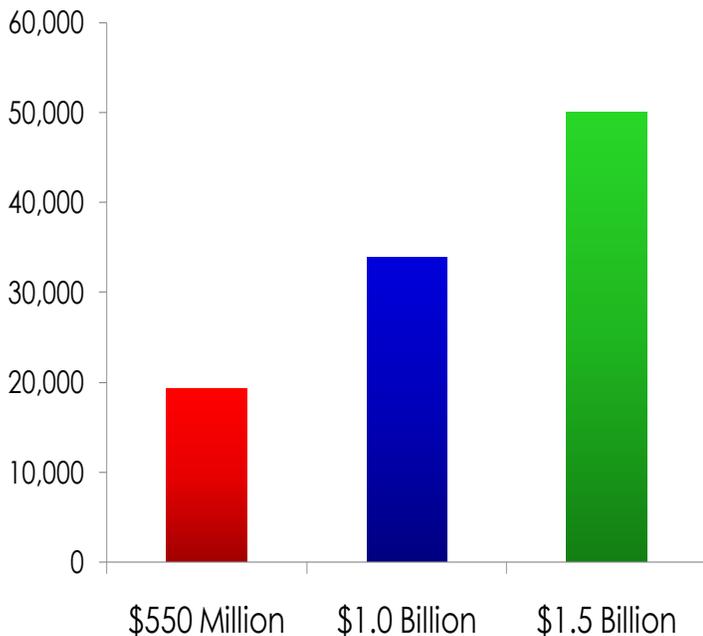
Funding Scenario	Output (Million 2008\$)	Earnings (Million 2008\$)	Employment (Jobs)	Value-Added (Million 2008\$)
\$550 Million	\$3,332	\$835	19,266	\$1,556
\$1.0 Billion	\$5,859	\$1,468	33,874	\$2,736
\$1.5 Billion	\$8,666	\$2,171	50,105	\$4,047

Economic Impact with Matching Rate 50% of Existing Rate

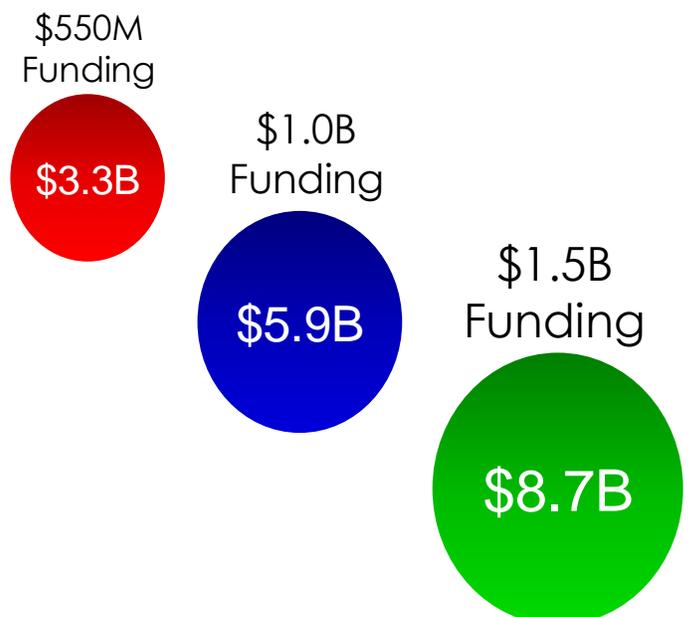
Matching Rate = \$0.69 per \$1.00*

Funding Scenario	Output (Million 2008\$)	Earnings (Million 2008\$)	Employment (Jobs)	Value-Added (Million 2008\$)
\$550 Million	\$2,663	\$667	15,397	\$1,244
\$1.0 Billion	\$4,642	\$1,163	26,839	\$2,168
\$1.5 Billion	\$6,841	\$1,714	39,552	\$3,195

Funding Scenarios: Job Creation (# Jobs, Match Rate = \$1.38 per \$1.00)



Funding Scenarios: Economic Output (Change in Output, Match Rate = \$1.38 per \$1.00)



* Assumed matching rate for the National Clean Diesel Program component.