

**Request for proposals:**  
**EDF Fleet Greenhouse Gas Emissions Calculator Update**  
Nov. 8, 2011

## **Overview**

Environmental Defense Fund's Corporate Partnerships program seeks an experienced PHP/MySQL developer to update its popular [online Fleet Greenhouse Gas Emissions Calculator](#). The project will include work on user-facing form fields, updates to coefficients and formulas in the underlying model, and adding calculation outputs featured on the results screen.

## **Organizational background**

Environmental Defense Fund (EDF) is a leading national nonprofit organization representing more than 500,000 members. Since 1967, we have linked science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems.

The mission of EDF's Corporate Partnerships program is to work with leading U.S. companies to reduce the environmental impact of their products and services, and to fully incorporate environmental considerations into their business decision-making.

## **Project background**

In early 2009, Environmental Defense Fund (EDF) and NAFA Fleet Management Association (NAFA) teamed up to create and promote a greenhouse gas calculator to enable fleets to measure their emissions footprint and track progress over time. This tool was designed to minimize data entry while still providing reasonable accuracy, as its calculations are directly tied to fuel consumption.

The calculator was last updated in August 2009.

## **Project goals and specifications**

The GHG Fleet Calculator tool is targeted toward fleet managers who want a simple and accessible tool for assessing emissions. We would like our model to reflect the latest data as well as fleet managers' growing need to compare liquid fuel emissions with electricity, a calculation the current tool does not accurately make.

### **EDF will provide:**

- HTML/PHP code for existing calculator
- MySQL dump of database tables
- Excel model of calculator with updated data

### **Contractor will provide:**

- Revised HTML/PHP code to include new features and calculations
- Revised MySQL database tables to include new data
- Code compatible with PHP 5.3.8 and MySQL 5.1.59
- A development environment where we can test a functioning version of the updated calculator
- Support and troubleshooting if needed during transfer of files to EDF servers

## **Deliverables**

### *URLs for reference:*

- [Existing calculator](#)

- [Technical background and user's guide](#)
- [Spreadsheet data](#)

**Changes to existing calculator inputs:**

- On form field "Compressed Natural Gas (CNG)" (Step 2), there is currently one option to enter units in Square Cubic Feet (SCF). We want to add a second option to enter units in Gallon Gasoline Equivalent (GGE). EDF will provide the conversion calculation.

**Changes to existing calculations:**

- Update the direct CO2 emissions factors for each of the fuels (Motor Gasoline, Diesel Fuel, LPG, CNG, LNG, Ethanol and Biodiesel).
- Update the CH4, N2O, and HFC fractions for each of the vehicle types (Passenger Cars; Light Duty Trucks, Vans and SUVs; Medium and Heavy Duty Vehicles).
- Update the electricity emission factor to the new national average.

**New calculations/outputs to add:**

- Include upstream CO2e coefficients for each of the fuels (Motor Gasoline, Diesel Fuel, LPG, CNG, LNG, Ethanol and Biodiesel).
- In the calculator outputs, replace "Totals" column with three:
  - Direct emissions
  - Upstream emissions
  - Total emissions (combined direct and upstream)

**Deadline**

Please respond by Wednesday, Dec. 21, 2011 with related experience, work samples, and time/cost estimate.

**E-mail responses or requests for additional information to:**

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