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Oil Shift: The Case for Switching Federal Transportation Spending to Alternative Fuel Vehicles

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Briefing Document

Every year, federal agencies spend roughly \$150 billion on third-party transportation services. We propose a "Buy American" program for procuring these services that promotes widely shared objectives: energy security, jobs, economic growth, public health, and environmental protection.

Specifically, our plan ratchets down the government's consumption of oil – and the fiscal and environmental costs that come with it – by requiring federal agencies to apply to third-party transportation providers the same kinds of alternative fuel targets, efficiency standards and reporting practices that agencies currently apply to their own vehicle fleets.

We estimate that implementation of this plan could produce annual cost savings of as much as \$7 billion, or more than \$25 billion through 2025; reduce petroleum consumption by billions of gallons each year; stimulate the introduction of tens of thousands of new alternatively fueled vehicles; and cut greenhouse gas pollution by over 20 million metric tons annually.

Moreover, by leveraging its influence with freight carriers and other suppliers, the program detailed here offers the federal government an opportunity to create very large multiplier benefits nationwide –effectively reducing the oil dependence of the trucking industry and other private-sector transportation providers.

Key Recommendations

1. Federal Procurement of Transportation Carrier Services

a. Starting in 2014, federal agencies should develop and report annual targets, measures and initiatives for increasing the use of alternative fuels, reducing

^a This Briefing Document provides an overview of a new 50-page report by the Foundation that will be released on In August2012.

- petroleum consumption, and lowering emissions associated with the transportation carrier services they procure.
- b. Starting in 2015, federal agencies should require transportation carriers to use alternative fuels for at least 5 percent of federally contracted shipments (measured in ton-miles). This requirement should increase by at least 2 percent each year from 2015 to 2025.
- 2. Transportation Services Associated With Federal Procurement of Products

Starting in 2016, federal agencies should develop and report annual targets, measures and initiatives for increasing the use of alternative fuels, reducing petroleum consumption and lowering emissions associated with transportation services in procurements of products from major suppliers (i.e., for supplier-owned and contracted shipping not covered by the transportation carriers in the prior recommendation).

3. Reports to Congress

In 2013, and annually thereafter, at the request of Congress, the General Accountability Office (GAO) should report on the effectiveness of federal programs to increase the use of alternative fuels and to reduce petroleum consumption, costs and emissions associated with the transportation services directly or indirectly purchased by federal agencies.

Using the federal government's purchasing power to drive the transition to cleaner, domestically-produced, and ultimately less expensive transportation fuels responds to a number of widespread public concerns and national policy objectives: minimizing taxpayer outlays to pay for high-priced conventional gasoline and diesel; reducing our country's dependence on foreign petroleum and our economy's exposure to volatile world oil markets; improving our balance of trade; and addressing the public health and environmental harms caused by vehicle emissions of particulate matter, smog-forming chemicals, and greenhouse gases.

Americans expect the federal government, as well as state and local governments, to "lead by example" – not just in their own vehicle fleets but also in their other purchases.

Background

Over the past four decades, successive Congresses and presidents have repeatedly sought to decrease the nation's petroleum consumption. Addressing America's dependence on oil has been a long-standing and broadly-held goal of U.S. energy policy for several reasons—most prominently, promoting energy security, spurring economic growth, improving public health and sustaining the environment. To achieve these national goals, America needs more non-petroleum-fueled vehicles running on domestic, lower-cost, cleaner fuels.

Alternative fuels and technologies offer huge cost savings over petroleum-based fuels. For example, in April and May of 2012, fuel costs to operate cars, trucks and buses on compressed natural gas (CNG) or liquefied natural gas (LNG) were 26–43 percent lower than for vehicles operating on gasoline or diesel fuel. The 2012 Annual Energy Outlook published by the Department of Energy (DOE) forecasts that the significant (\$1.00 or more per gallon) price advantage of CNG/LNG over diesel fuel will continue for at least 20 years.

Likewise, all-electric and hybrid-electric light-duty vehicles yield average fuel cost savings of 30–87 percent compared to conventional vehicles. The lower operating costs of alternative-fuel vehicles translate into lower total lifecycle costs of ownership and attractive payback periods across a wide range of uses.

Alternative-fuel vehicles also provide large reductions in many forms of harmful air pollution compared to gasoline or diesel-powered vehicles.

Policies are already in place to promote alternative fuels and vehicle technologies in federal vehicle fleets (i.e. in the 660,000 cars and trucks that are directly owned or leased by federal agencies). In fact, existing laws and executive orders require federal agencies to reduce their direct consumption of gasoline and diesel to operate federal vehicles. However, these policies have had only limited effect so far. In 2011, U.S. taxpayers spent \$1.3 billion to purchase approximately 400 million gallons of gasoline and diesel fuel for use in federal vehicles. Non-petroleum fuels (mostly ethanol, biodiesel and CNG) accounted for only 4 percent of the total fuel consumed by federal fleets.

While federal agencies must continue to reduce petroleum usage in their own fleet vehicles, this report analyzes the much larger, related area of direct and indirect federal spending on third-party transportation services.

Annually, federal agencies spend about \$50 billion directly to procure transportation services from private-sector trucking companies and other carriers. For example, the U.S. Postal Service (USPS) currently spends more to reimburse its suppliers for their fuel purchases than all federal agencies combined spend on gasoline and diesel for the vehicles they directly own or lease. Additionally, the federal government indirectly spends an estimated \$100 billion annually on transportation services associated with the procurement of products (such as paying suppliers to deliver their goods to federal facilities).

Together, these direct and indirect federal procurements of transportation offer an enormous opportunity to drive broader shifts in the vehicles and fuels used for shipping freight and packages in the U.S., and to reap significant benefits for the taxpayer at the same time.

Standards and Plans for Federal Fleets and Transportation Services

Several existing laws and executive orders require federal departments and agencies to "lead by example" in reducing petroleum consumption, raising energy efficiency, and mitigating adverse environmental impacts from the use of federally-owned vehicles as well as federal purchases of transportation services.

For example, each federal agency annually is required to: (a) reduce the petroleum used in its fleet vehicles by 2 percent; (b) increase its consumption of non-petroleum fuels by 10 percent; (c) ensure that alternative-fuel vehicles account for at least 75 percent of new vehicle purchases or leases; and (d) cut greenhouse gas emissions. Each agency publishes an annual Strategic Sustainability Performance Plan, which is subject to approval by the Council on Environmental Quality (CEQ). The Office of Management and Budget (OMB) issues an annual scorecard that tracks agency performance.

Pursuant to these standards and reporting requirements, most federal agencies have implemented vehicle purchasing, fueling and optimization initiatives for their fleets. The programs have yielded substantial benefits; by 2010, eight agencies had already surpassed their petroleum consumption targets for 2015 (cutting their usage 23–57 percent compared to 2005). These agency initiatives are spurring the development and production of cleaner vehicles and domestic fuels to power them.

Building On Executive Order 13514

Executive Order 13514, adopted in 2009, directs federal agencies to purchase transportation services that promote energy security, energy efficiency, and cleaner air. There has been some progress in complying with this directive, especially at the USPS and through the General Services Administration (GSA).

Much more could be achieved by extending the framework of specific standards, performance tracking and plans from federally-owned fleets to third-party transportation service providers. Most large freight carriers and many major product shippers already partner with the Environmental Protection Agency (EPA) and/or the DOE to track their use of petroleum and alternative fuels, increase their fuel efficiency and cut their emissions. Efforts to improve federal transportation procurement practices could use data already reported by these suppliers. Also, several states, local governments, and major corporations have proved that programs aimed at reducing petroleum use and emissions from third-party transportation services can be successful and cost-effective.

Given that the federal government is such a large customer, many federal agencies have close relationships with, and considerable influence over, some of the country's largest freight carriers and product shippers. The federal government's shift from oil to fuel-efficiency with alternative fuels is not just about leading by example. It is about changing the management of fleets common to both government and private contracts. That could not only save taxpayer

Dollars; it could also have large economic and environmental benefits - positively shifting supply and prices for alternative fuels and vehicles throughout the nation.

The recommendations in this report can be implemented successfully and cost-effectively. The lifecycle costs of alternative-fuels vehicles have declined; the availability of new vehicle technologies and fueling options is increasingly rapidly; companies widely use analytical tools and report data for their energy use and emissions; and the private sector also has considerable experience in reducing transportation petroleum use through numerous initiatives and government programs.

Some might argue that federal agencies should not be asked to take on a new challenge. We disagree. At a time of growing doubt about government's fundamental ability to tackle the issues most central to our nation's future, a demonstration of real progress on transportation, sustainability, public health and security — areas of critical and long-term importance – could not be more welcome.

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