

WHY?

Our Operations

Net Operating Expenses

DOT

Private Sector

\$77_{Billion}

FY2013 Net Cost of Operations









Buildings

DOT

10,000 Buildings Federal Govt.

500,000 Buildings

Vehicles

DOT

6,000 Vehicles Federal Govt.

600,000 Vehicles

Employees

DOT

57,000 Employees Federal Govt.

1.8 Million Employees

Goods and Services Purchased



\$6.3 Billion by DOT

\$500 Billion by Federal Government

Our Environmental Footprint

Annual Electricity



100,000 Homes

Annual Water





1 Day of Use in National Capital Region



Annual Greenhouse Gases



Sequestration by 500,000 Acres of Forest

Sustainability Drivers

Federal Mandates

21st Century Government

- **Efficiency**
- **Effectiveness**
- **Economic Growth**

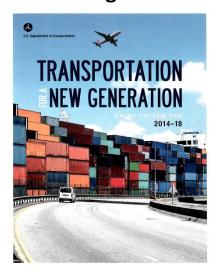
DOT Policy Orders

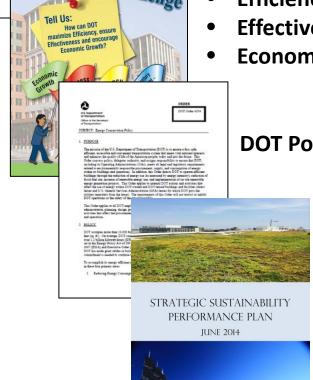
DOT Sustainability Plan

Fiscal Responsibility

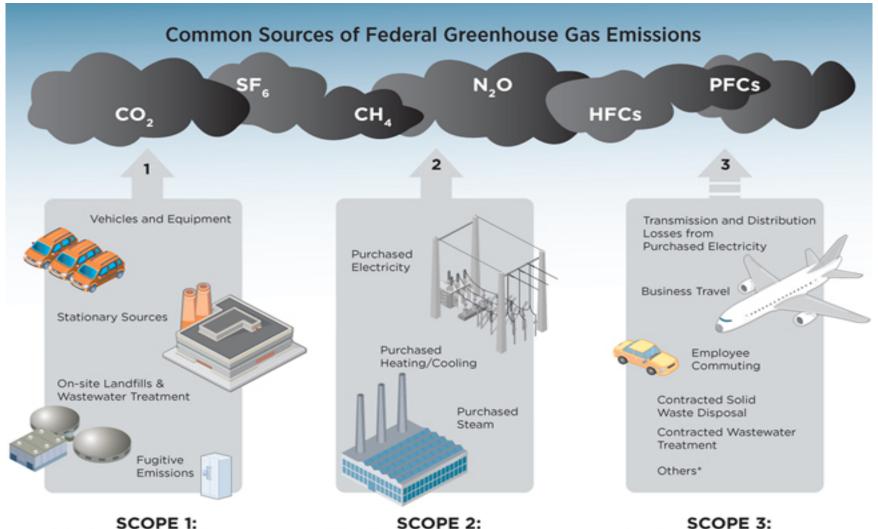


DOT Strategic Priorities





Types of GHG Emissions



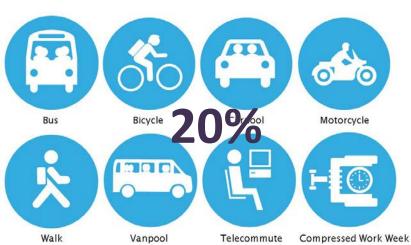
Greenhouse gas emissions from sources that are owned or controlled by a Federal agency.

Greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.

Greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities.

*Additional, significant Scope 3 emission sources exist beyond the examples provided.

Source: DOE



Top 3 Sources of DOT Emissions

Source: RTCSNV





WHAT?



Greenhouse Gas Emissions

Stationary Combustion in DOT Buildings

Strategy

- Capital Improvements
- Cogeneration
- Improved Building Design



Tools

- Performance Based Contracts
- HPSB principles
- Partnerships
- Metering

Results

- Stationary
 - Combustion: 24%↓
- Electricity: 19%↓



Success Story: MARAD



Troy Dent Fleet Operations Building Beaumont, Texas

Innovative Rebuild

After destruction from Hurricane IKE tidal surge, rebuilt as a LEED certified building featuring:

- LED lighting
- High efficiency windows and robust insulation
- Tankless water heater
- Advanced metering



Renewable Energy

Goal: 20% energy from renewable sources by 2020

Strategy

Short Term: Renewable Energy Certificates

Long Term: Increased on-site generation and green power purchases



Tools

- Performance
 Based Contracts
- DOE support
- Power Purchase Agreements



Results

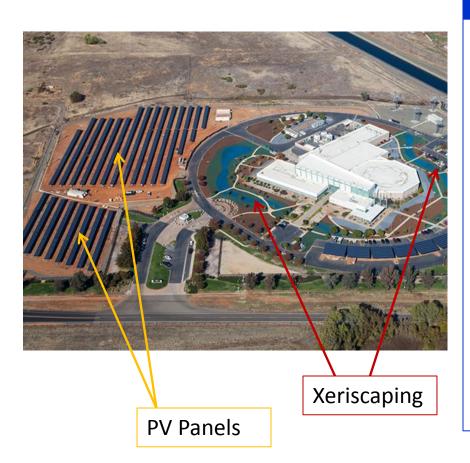
Renewable

Energy: 9%



Success Story: FAA

FAA Northern California Tracon



Performance Contract

DOT's largest ESPC to date allowed for \$8M in infrastructure improvements including:

- 31% reduction in natural gas
- 1 MW PV system provides 63% of site energy
- 4 acres of xeriscaping → 33% less water use
- Sitewide energy efficiency improvements



Vehicles

Petroleum-based fuels in owned & leased vehicles*

Strategy

- "Right size" our fleet #of vehicles & types of vehicles
- Reduce VMT
- Acquire only fuel efficient and alt fuel vehicles when possible
- Install more alt fueling stations



Tools

- data management system,
- missed opportunities tool,
- vehicle allocations



Results

- •Road vehicles:
 - **40% ↓**
- Non-road vehicles:
 - 33%↓

^{*}includes both road and non-road vehicles



Success Story: FHWA

Awareness Campaign

- FHWA's Alternative Fuel Awareness Campaign
- Targeted 60 field offices by identifying alt fueling stations, distributing educational materials and tracking progress

Results:

- 13.5% reduction in petroleum use
- 70% increase in alt fuel use
- 76% of the fleet (65 vehicles) were replaced with alt fuel vehicles



This vehicle accepts E-85.

E-85 is an alternative fuel source containting ethanol. DOT policy requires that vehicles within 5 miles of an E-85 fuel source use E-85. Your location has been identified as being within 5 miles of an E-85 fuel source.

To find the fuel source nearest your location, please visit www.afdc.energy.gov/locator/stations



U.S. Department of Transportation Federal Highway Administration



Greenhouse Gas Emissions

Employee Commuting

Strategy

- Promote flexible workplace/ telework
- Support and promote public transit, biking, carpools, and telework



Tools

- Measure and track commuting patterns through annual survey
- DOT runs the transit benefit program for the Federal Government



Results

Commuting **Emissions:**

**24% **





Success Stories



GreenGov Spotlight Award

NHTSA and FHWA employees key organizers of the Federal Bike to Work Challenge.

As a result of their efforts, the first challenge involved 522 riders from 20 agencies. A year later it grew to 2100 riders nationwide and keeps growing.

Walk/Ride Day Winner

Volpe Center partnered with non-profit, Green Streets Initiative

- 7.2% participation
- 20% switch rate from cars to greener commutes was 3rd highest in Boston area





Business Travel

Business flights & ground transportation

Strategy

- Sharp decline because of travel restrictions
- Reduce # of trips,
- Take direct flights and combine trips



Tools

 Use VTC and webconferencing when possible



Results
Business
Travel
Emissions:

**28% **



Success Story: FRA

Virtual Collaboration

Restructured annual settlement claims conference by hosting a virtual meeting using SharePoint and VTC

Saved on travel emissions and \$300,000 cost

Plan to replicate this for all Class 1 Railroad Conferences



HOW?

Win-Win Solutions

Sustainability = mitigation + adaptation



CO₂

Onsite
 renewables
 reduce
 emissions
 and
 vulnerability
 to extreme
 climates

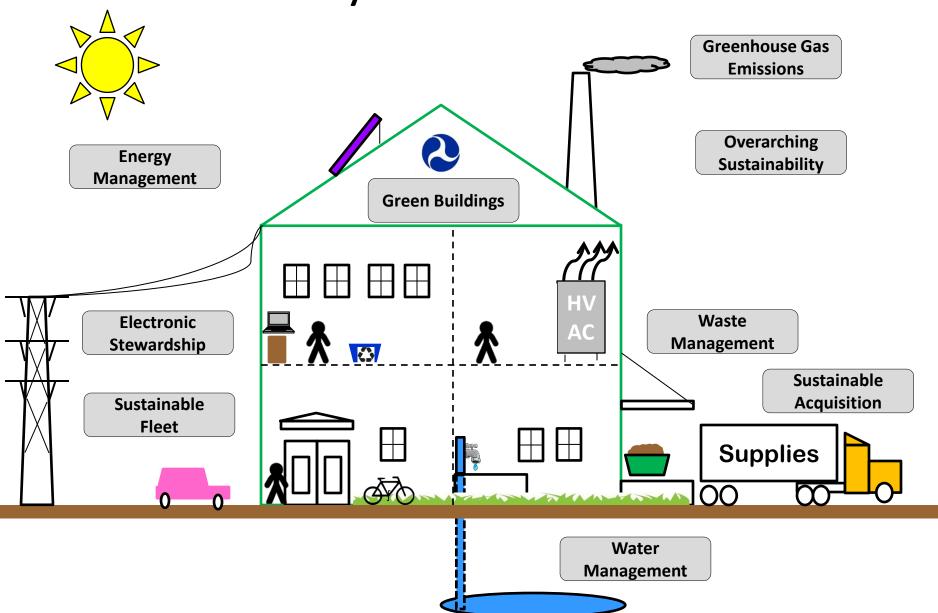


 Locating new buildings in walkable communities reduces commuting emissions and improves operational resiliency



Water
 efficient
 practices
 require less
 energy and
 support
 drought prone areas

Sustainability Policies: A Foundation



Every Employee Counts!

Buy Green

Information technology



Purchase environmentally preferred and biobased products and services!





Efficiently use and manage electronic devices





Purchase energy and water efficient products and services!



Reduce energy intensity by managing servers and federal data centers!

Management Review is key

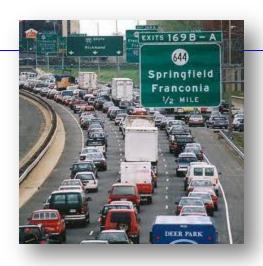
Leadership in Sustainability Advance environmentally sustainable policies and investments									
FY 2013	FY 2014^	Q1	Q2	Q3	Q4	On Target	Not on Target		
1. Fleet Petroleum Reduction	20% reduction by 2015 from 2005 baseline (projected end-of-year performance)	16%	18%					√	X
2. Alternative Fuel Use	At least 5% of year-to-date total fuel consumption	5%	5%						
3. Biopreferred Sustainable Acquisition	60% of eligible contract actions must include clauses for biobased products and language in the SOW about biobased products (based on a 5% sample of contracts on quarterly basis)								
4. Business Air Travel Emissions	1% reduction of GHG emissions per year associated with employee business air travel from FY2012 baseline (year-to-date)								
5. Commuting Days Avoided	Average commute days avoided per employee (AWS and/or regular telework, year-to-date)								
6. Sustainable Buildings	15% of existing buildings and leases (>5,000 gsf) meet the Guiding Principles by 2015								
7. Water Efficiency	26% reduction in potable water intensity by 2020 from a 2007 baseline								
8. Renewable Energy	10% renewable electricity purchase or generation (Reporting is optional in Q1-Q3 but required in Q4.)								

RESULTS

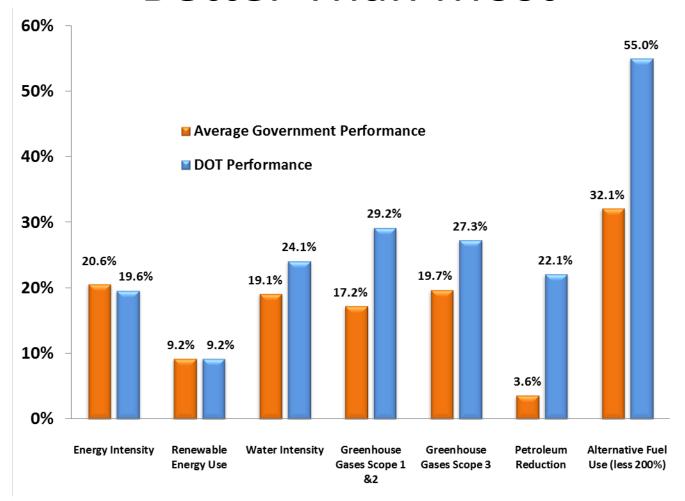
Reducing Our Footprint

The Department has eliminated more than 345,000 MT CO₂e compared to 2008 or the equivalent of removing 72,000 passenger vehicles from the road in FY13

GHGs	Percent Reduction					
Scope 1 and 2	27.1%					
Scope 3	26.9%					
Total	27%					



Better Than Most



DOT's performance has consistently ranked in the top half of Federal Agencies in the last three years.

