

Raytheon

Customer Success Is Our Mission



Raytheon Sustainability and Water Conservation

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Sustainability “Green” Ratings and Rankings Can Affect Brand and Image

Raytheon



Corporate Knights



FTSE4Good



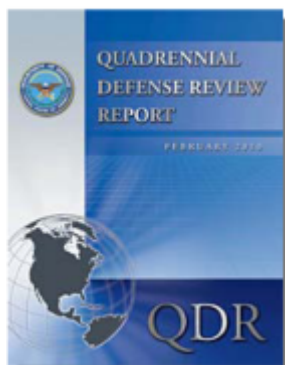
S&P 500 Clean Capitalism Ranking



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Sustainability and the Department of Defense

- DoD prepares Strategic Sustainability Performance Plan
- **DoD views sustainability as critical to its mission readiness and operational capabilities**
- Develops aggressive, long-term sustainability goals
- Incorporating sustainability into investment and procurement decisions to reduce lifecycle costs and improve mission performance
- **Climate change will have a dramatic impact on national security** (Secretary of Defense Leon Panetta – May, 2012)



Climate Change and Energy

“...Climate change and energy will play significant roles in the future security environment. Climate change will shape the operating environment, roles, and missions that we undertake...and DoD will need to adjust to the impacts of climate change on our facilities and military capabilities.”

DoD Quadrennial Defense Review, 2010

Department of Defense Sustainability Goals

Fossil Fuel Use

- Reduce energy intensity by 30% by 2015 and by 37.5% by 2020 (2003 is baseline)
- Produce or procure 18.3% of energy consumption from renewable energy sources by 2020
- Reduce use of petroleum in vehicle fleets by 30% by 2020 (2005 is baseline)

Water Resources

- Reduce potable water consumption intensity by 26% by 2020 (2007 is baseline)
- Reduce industrial and irrigation water use by 20% by 2020 (2010 is baseline)
- Maintain pre-development hydrology for all development and redevelopment projects > 5,000 sq ft

Greenhouse Gas Emissions

- Reduce GHG emissions by 10% by 2012, 19% by 2015, and 34% by 2020 (2008 is baseline)
- Reduce GHG emissions from scope 3 sources by 13.5% by 2020 (2008 is baseline)
- Reduce GHG from employee air travel by 7% by 2020 (baseline is 2011)
- Increase the percent of eligible employees teleworking at least once a week to 30% by 2020

Solid Waste Management

- Implement policies in all DOD organizations by 2014 to reduce printing paper use
- Divert 50% of solid waste from disposal in landfills by 2015
- Divert 60% of construction and demolition debris from the waste stream by 2015
- Recover landfill gas from 10 landfills for use by DOD by 2020

Chemicals of Concern

- Reduce on-site releases and off-site transfers of toxic chemicals by 15% by 2020 (2007 baseline)
- Dispose of 100% of excess or surplus electronic products in an environmentally sound manner
- Ensure that 100% of DOD personnel and contractors who apply pesticides are properly certified

Sustainable Practices

- Include requirement for sustainability in 95% of new and modified contracts
- Conform to Sustainable Building Guidance for 15% of existing buildings by 2015

Aligning With Our Customer



Raytheon Sustainability

Our commitment to future generations

*Engaging our employees, customers, **suppliers** and communities to protect our environment and conserve natural resources*

Strategic Focus Areas:

- Energy Efficiency
- Greenhouse Gas Emission Reductions
- Recycling and Waste Minimization
- Water Conservation
- Design for Sustainability
- Eco-Friendly Supply Chain
- Environmental Stewardship

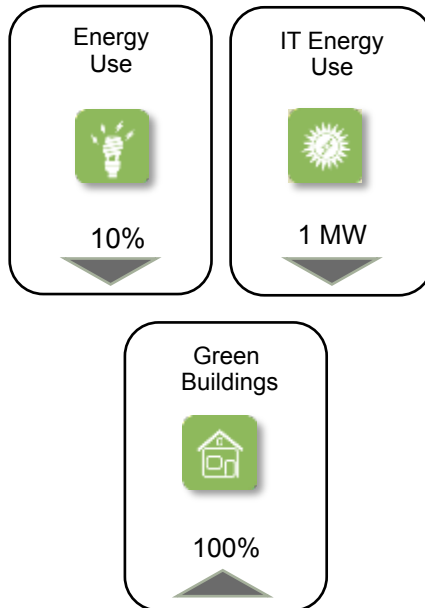


Raytheon Sustainability

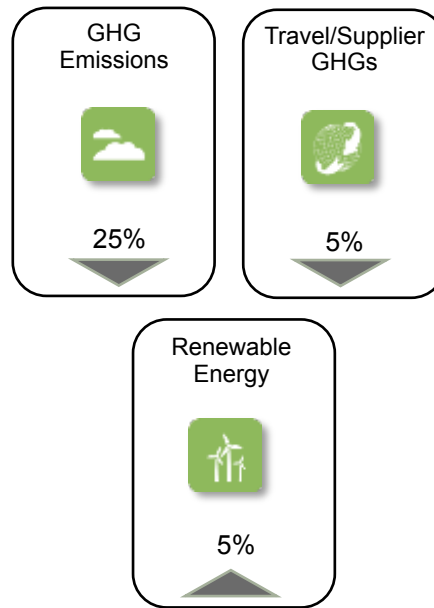
- Raytheon Sustainability adds business value
- Protects the environment
- Conserves natural resources
- It's the right thing to do!

2015 Sustainability Goals

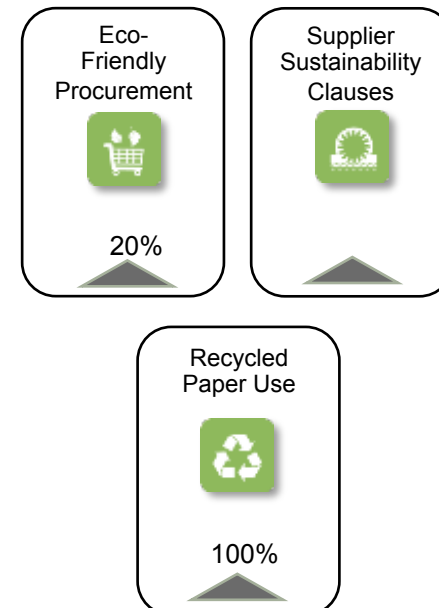
Energy Efficiency



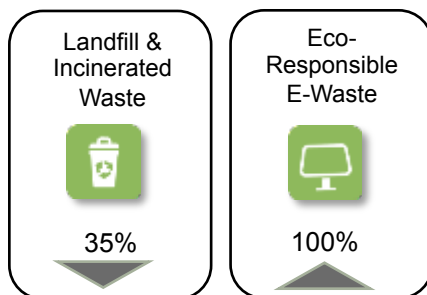
Greenhouse Gas Emissions



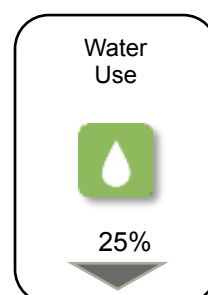
Eco-Friendly Supply Chain



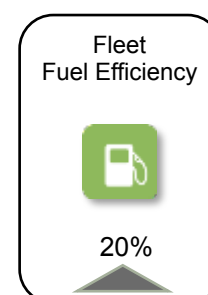
Recycling / Waste



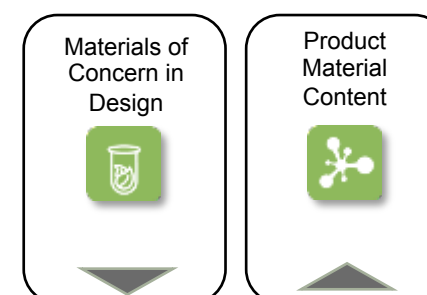
Water Use



Stewardship



Design for Sustainability



5-Year Business Value Over \$87M (2010 – 2014)

Injury Prevention ~\$12.5M

- Reduced recordable injury rate from 0.70 to 0.53
- Cumulatively prevented 384 injuries
- Savings of \$2.5M in direct costs and \$10M in indirect costs

Asset Protection ~\$10.3M

- “Highly protected risk” status and best pricing from insurance carriers
- Comprehensive electrical & fire safety programs
- No major losses

Energy & Water ~\$37.1M

- Reduced energy use from 4,533 to 4,026 Billion BTUs/year
- Reduced water use from 643 to 499 million gallons/year

Environmental Remediation ~\$11.0M

- Innovative technology deployment
- Strong relationship with regulators
- Value engineering of operating solutions

Waste & Recycling ~\$16.3M

- Reduced hazardous waste from 872 to 661 tons/year, cumulatively saving 680 tons
- Reduced solid waste from 7,487 to 3,707 tons/year, cumulatively saving 8,011 tons
- Recycling rate improved from 62% to 74%



Adding Business Value ~\$87M

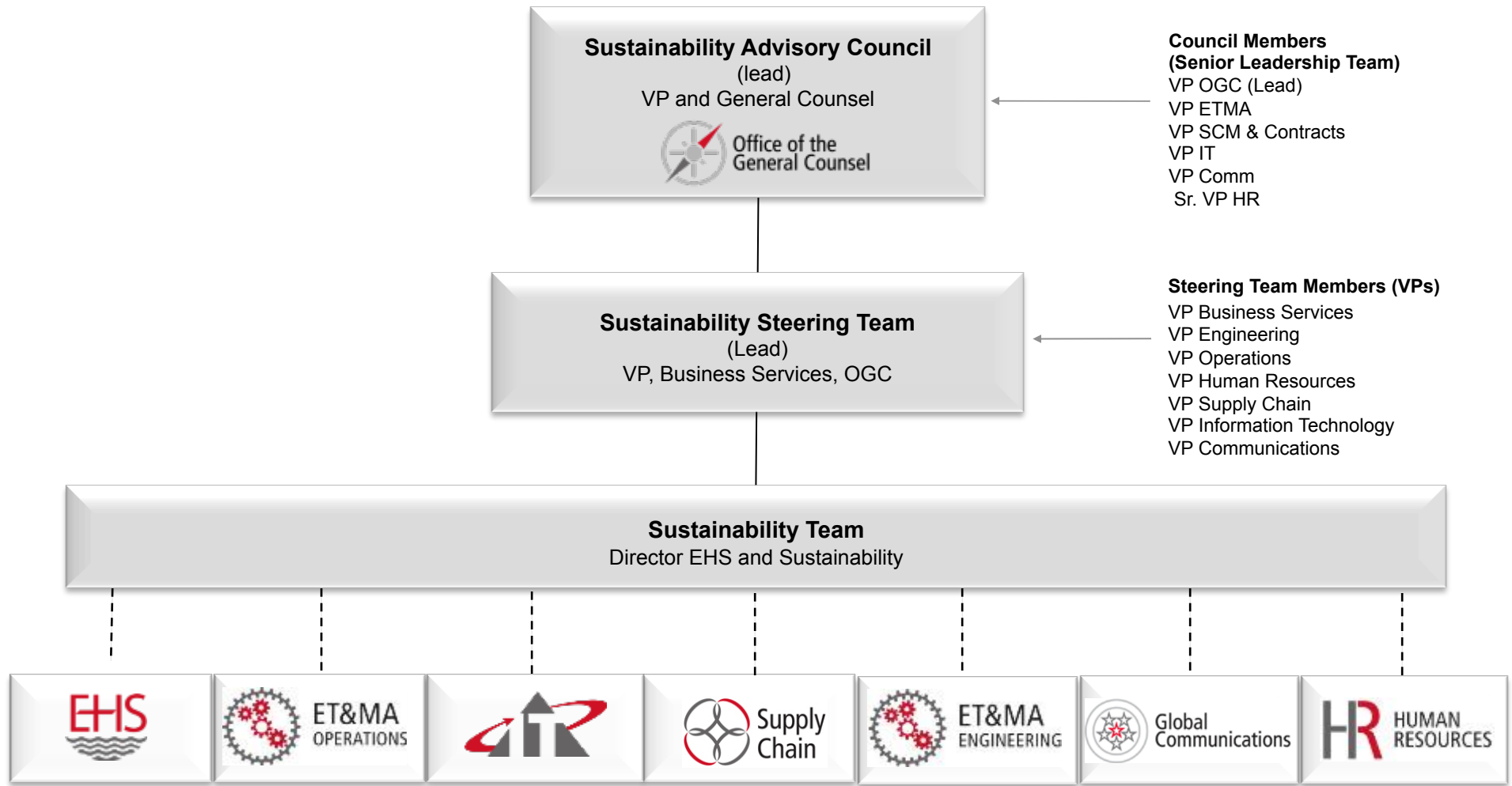
- Cost Savings**
- Direct and indirect benefits
 - Efficiency improvements
 - Reduced use of resources
- Risk Mitigation**
- Protecting people and property
 - Compliance assurance
 - Emissions reduction and waste minimization



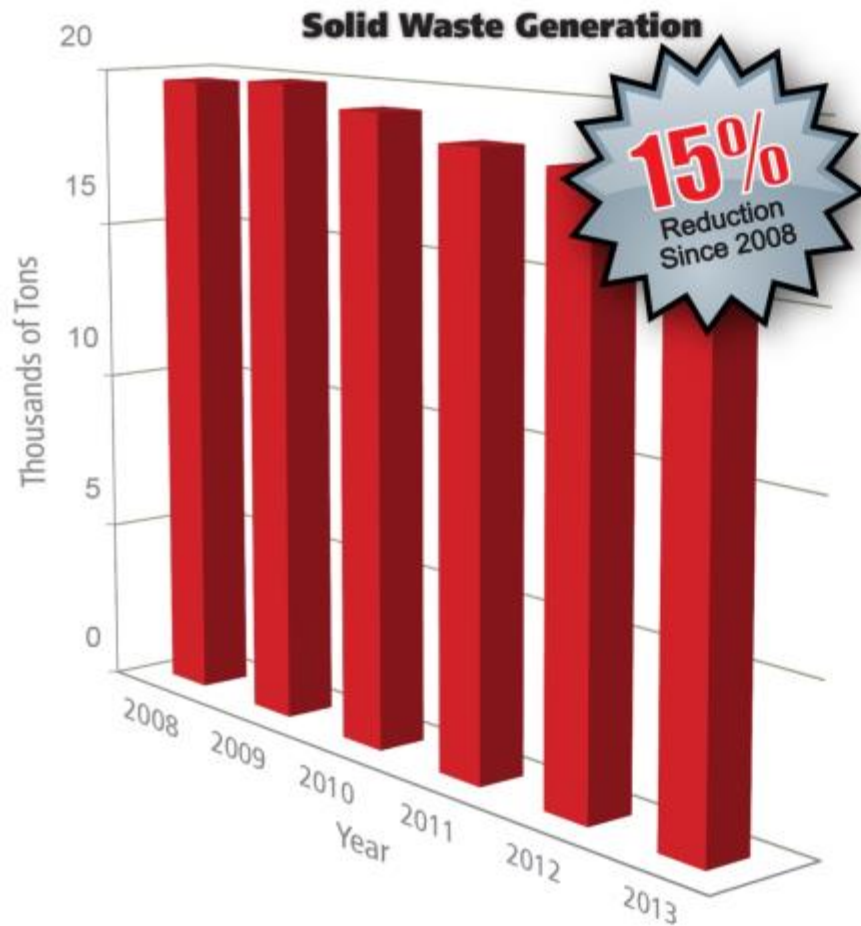
Creating Shareholder Value

- Improving competitive position
- Enhancing Raytheon brand

Raytheon Sustainability Governance Structure



WASTE MINIMIZATION AND RECYCLING



RAYTHEON 2013 Solid Waste Recycling Rate

74%



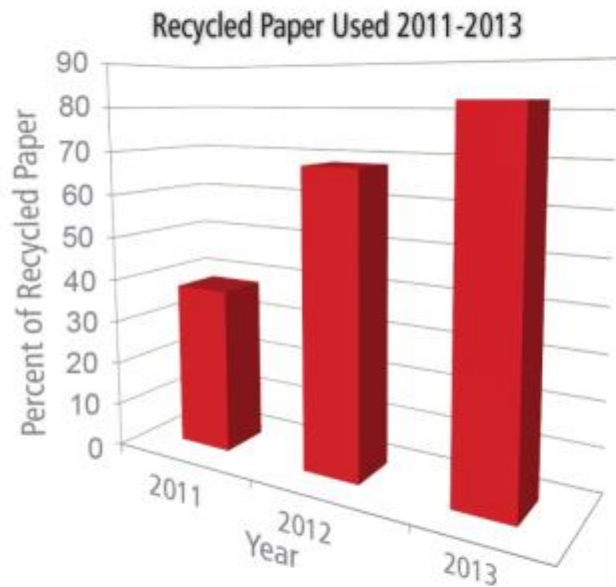
- Our recycling rate is the best ever for 2013, at 74%.**
- We are greening our dining operations with use of compostable to-go packaging, composting of food and prep wastes, and use of reusable dinnerware.**
- In 2013, we composted over 1,100 tons of food and yard waste.**
- We've reduced the amount of waste we landfill or incinerate by 49% since 2008.**
- During 2013, we recycled 12,000 tons of materials, including 3,000 tons of scrap metal, 2,300 tons of paper, 1,400 tons of wood and 509 tons of electronic scrap.**

RECYCLED PAPER



Raytheon's goal:
100-percent recycled paper use by 2015

Significant progress



Environmental Benefits

- ♻️ More eco-friendly with smaller environmental footprint
- ♻️ Provides a demand for post-consumer waste
- ♻️ Keeps paper out of landfills
- ♻️ Encourages further recycling of paper



Paper used in:
**Printers, Copiers,
Multi-function
Devices & Print
Service Centers**

WHAT IS ELECTRONIC WASTE? (E-WASTE)



E-waste consists of obsolete or discarded electronic devices including, computers, monitors, printers, laptops, tablets, servers, cell phones, smart phones, test equipment, production scrap i.e. circuit cards, cable ends etc and anything with a plug.

What are the concerns with e-waste?

Discarded e-waste may contain personally identifiable information (PII) or company private data.



Improper handling of e-waste can adversely impact the environment (air, land, water).

Inappropriate recycling processes can expose workers to toxic materials like lead, chromium and cadmium.



What is my role?



- Ensure you follow IT procedures to turn in any e-waste for proper handling and disposal.
- You are an important link in making sure all Raytheon e-waste is properly handled during active use and at end of life.



Did you know?

In 2013, Raytheon recycled over 500 tons of e-waste.



E-waste that is recycled results in recovered precious metals including gold.



Value can be harvested from e-waste recycling which helps Raytheon reduce operating costs.



DOE Workplace Charging Challenge Pledge

- EV Everywhere Challenge – goal is to make plug in electric vehicles (PEVs) affordable and convenient in the U.S.
- Raytheon signed on as a partner in the program
- Partners of the program commit to assessing employee demand and developing and executing a plan
 - Develop a plan, assess demand, install stations at one or more major worksites
 - Publicly announce the program within 6 months
 - Share progress and best practices annually



Building on the original 13 partners announced in January, these new partners include

- AVL
- Bentley Systems
- Biogen Idec
- Bloomberg LP
- The Coca-Cola Company
- City of Sacramento
- Dell
- Facebook
- The Hartford Financial Services Group
- The Hertz Corporation
- National Grid
- New York Power Authority
- NRG Energy
- OSRAM SYLVANIA
- Raytheon Company
- Southern California Edison

DOE Recognition of Raytheon

Workplace Charging Challenge Summit 2014

Hilton Alexandria Mark Center
5000 Seminary Road, Alexandria, VA 22311

November 18, 2014 (8 AM – 5 PM)

- The Department of Energy held the Workplace Charging Challenge Summit on November 18, 2014 where they recognized employers who demonstrated leadership in supporting the development of the national plug-electric vehicle charging infrastructure. Raytheon Company was one of fewer than 20% of all Challenge partners who received this recognition presented by Deputy Assistant Secretary for Transportation Reuben Sarkar. The Department of Energy launched the Workplace Charging Challenge in 2013 with the goal of achieving a tenfold increase in the number of U.S. employers offering workplace charging by 2018.

Raytheon



For supporting the development of the national plug-in electric vehicle charging infrastructure and demonstrating leadership by fulfilling the voluntary requirements of the Challenge in 2014.

Presented by the U.S. Department of Energy
Office of Energy Efficiency and Renewable Energy
November 18, 2014

Handwritten signature of Reuben Sarkar in black ink.

Reuben Sarkar
Deputy Assistant Secretary for Transportation

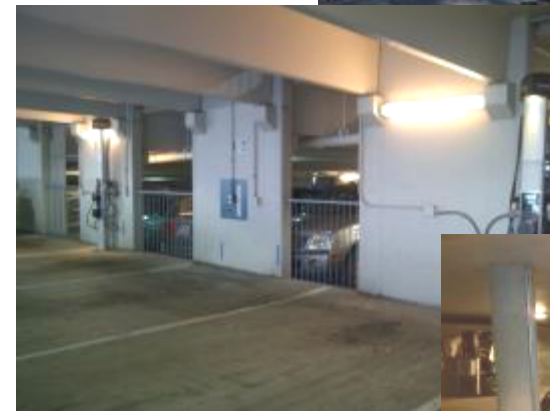
Handwritten signature of Patrick Davis in black ink.

Patrick Davis
Director, DOE Vehicle Technologies Office

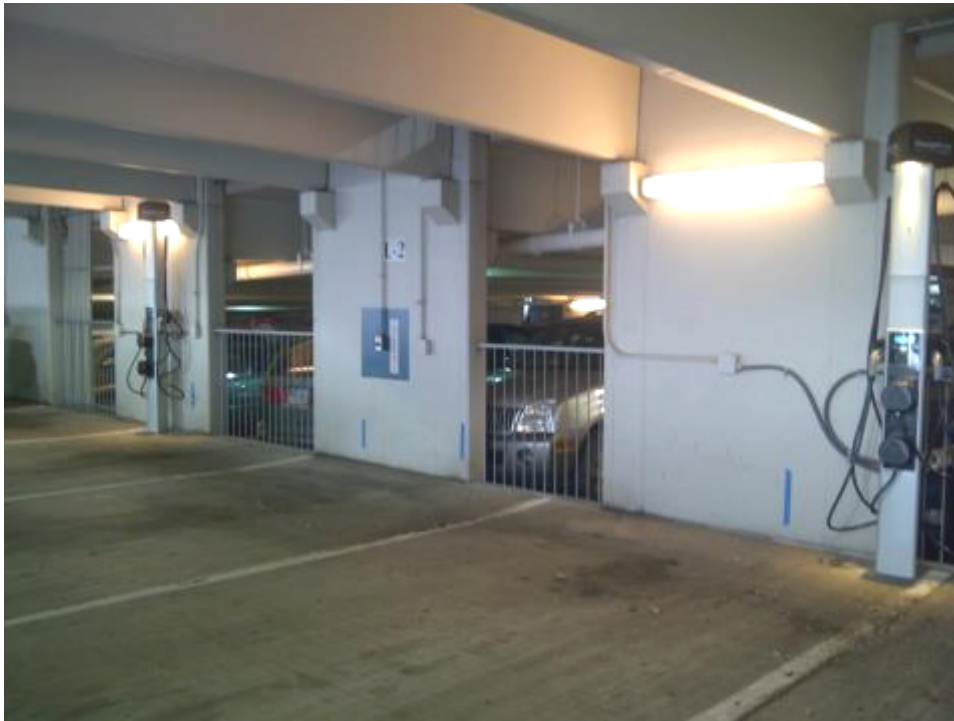
U.S. DEPARTMENT OF
ENERGY

Charging Stations - Current State

- Fifteen dual stations now installed
 - El Segundo – 8
 - Dulles – 2
 - Aurora -2
 - McKinney -1
 - Woburn -1
 - Tewksbury -1
- Utilization is highest in El Segundo, followed by Tewksbury then Dulles
- Metrics to date:
 - 5,575 charging sessions
 - 49 MWh of electricity consumed
 - Avoided 20K kg of GHG emissions
 - Avoided use of 6K gallons of gasoline
 - Average charging session = 3.2 hrs.



Station Placement to Maximize Efficiencies



Garage pass-through allows 4 cars to charge without moving a vehicle



Center island allows 4 cars to charge without moving a vehicle

Station Locations

Our Stations

IDS MASS / BLDG 200 GARAGE

50 Apple Hill Dr, Tewksbury, Massachusetts 01876, United States

Port 1: (208/240V, 30A, J1772) **In Use**

Port 2: (208/240V, 30A, J1772) **Available**

Reservations Disabled

Rates

Station Parking	\$1.00/hr	\$0.40/hr
	First 1 hour	Thereafter

Min \$0.50

[Get Directions](#)

Real-time Summary

Per Port

Available	18 (60%)
In Use	9 (30%)
Watch List	0 (0%)
Needs Service	3 (10%)
Not Ready	0 (0%)

GHG Emissions Avoidance

