



Raytheon



Procurement Strategies that Aim to Reduce Waste

Raytheon Company

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Raytheon Company



OUR VISION

ONE GLOBAL TEAM CREATING TRUSTED, INNOVATIVE SOLUTIONS TO MAKE THE WORLD A SAFER PLACE.

- Raytheon Company is a technology and innovation leader specializing in defense, civil government and cybersecurity solutions.
- Provides state-of-the-art solutions and support services to customers in 80 nations
- Headquartered in Waltham, Massachusetts
- 67,000 employees worldwide

ENGINEERING

A SAFER WORLD

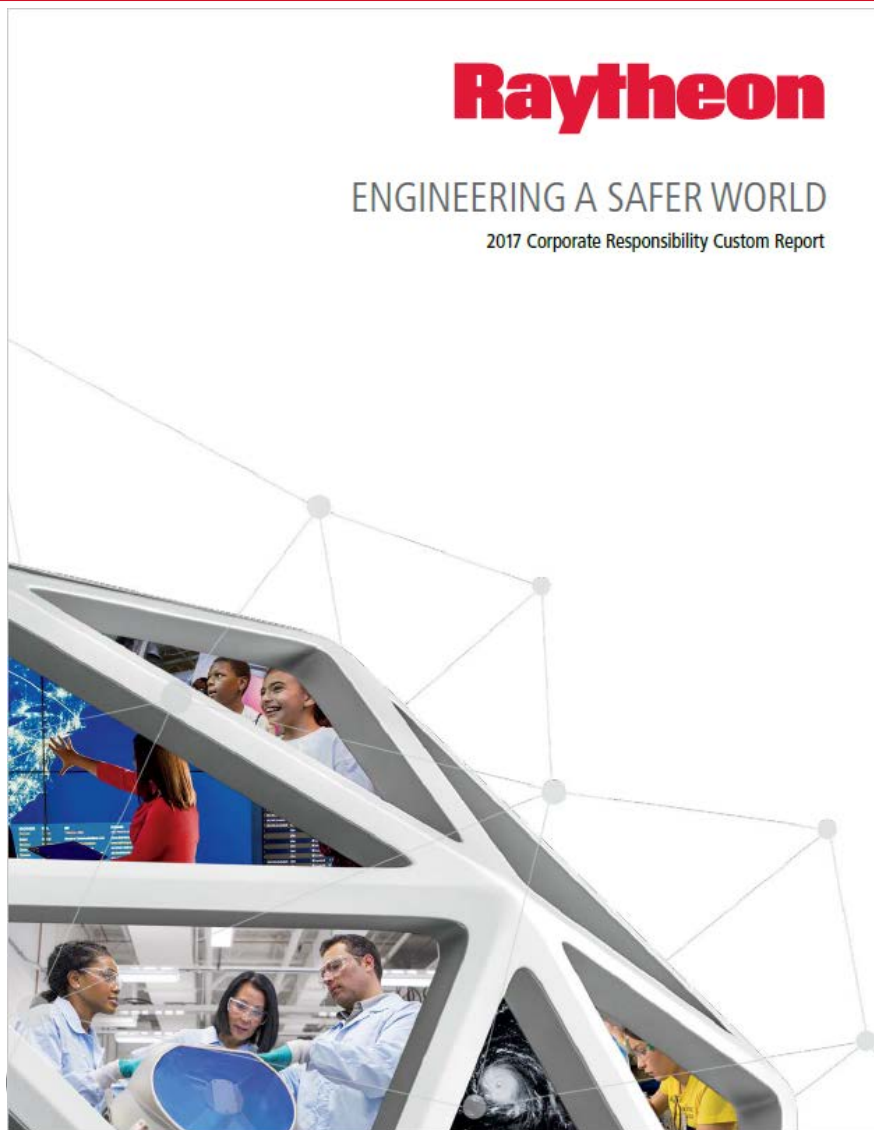
NYSE: RTN



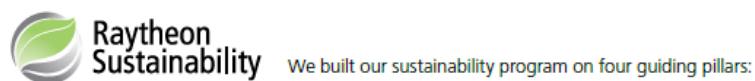
Integrated Defense Systems (IDS)



Corporate Responsibility



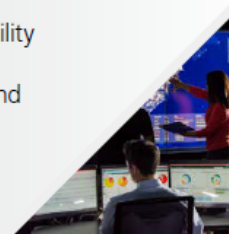
In 2016, Raytheon established 14 sustainability goals for 2020 to keep us focused on engineering a sustainable future



FOUR PILLARS OF RAYTHEON SUSTAINABILITY

INTEGRATE

principles of sustainability into the design of our products, processes and services through their entire life cycle.



OPTIMIZE

environmental performance throughout the value chain by engaging in responsible resource management.



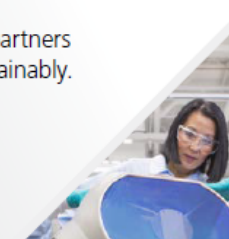
COLLABORATE

with suppliers, customers, industry, academia and communities to develop and deploy sustainable solutions.



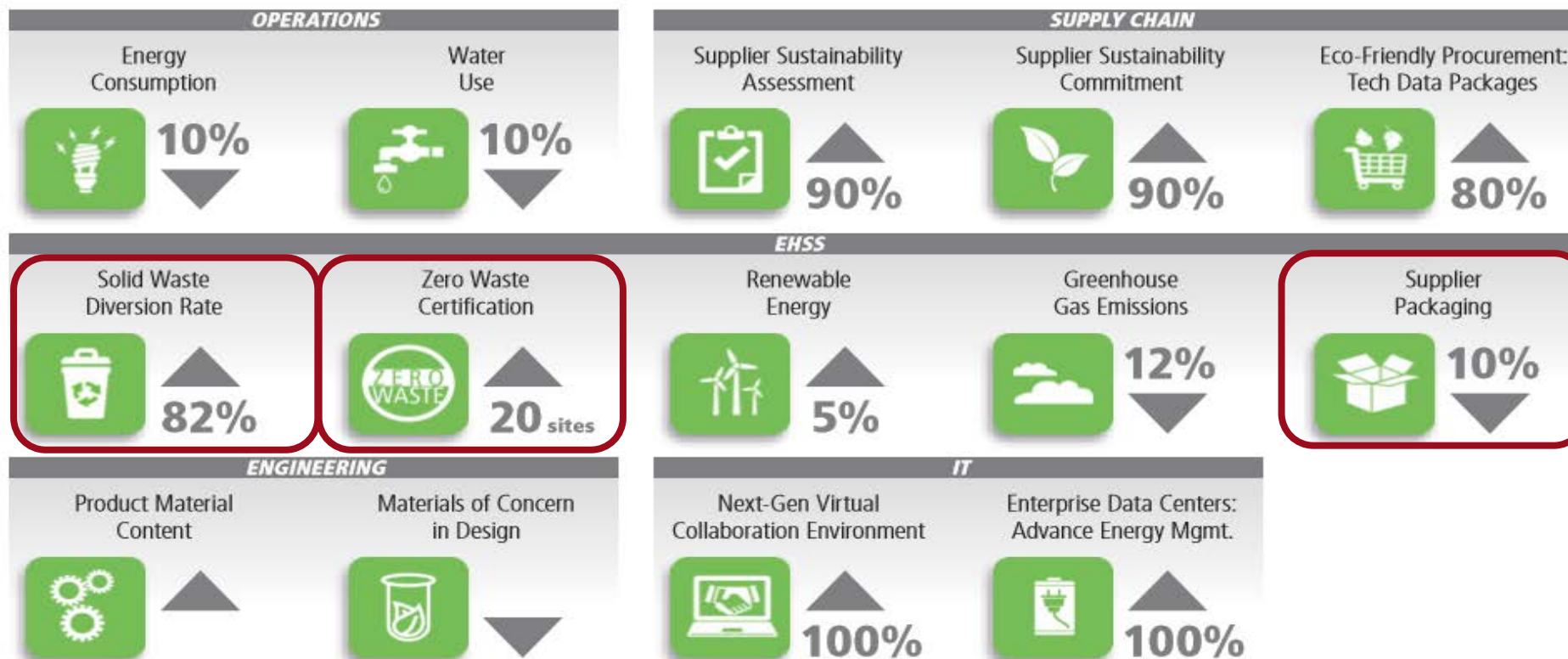
EMPOWER

our employees and partners to work and live sustainably.



Enterprise Sustainability Goals

2020 Sustainability Goals



Awards and Recognition



10th consecutive year



Zero Waste Certification
6 sites (2015)
Zero Waste Business Council



Ranked among top 100 companies (2016)



Excellence in Greenhouse Gas Management Award (2013)



Ranked in top 50 companies (2016)



Ranked 35th on the Top Green Power Purchasers Fortune 500 list (2016)



Member Since 2010



Multiple Raytheon sites recognized (2015)



Raytheon's Commitment to Reduce Waste

In 2018 the **Raytheon Corporate EHSS Standard 02.02** was revised to align with the TRUE Zero Waste Certification establishing requirements for sites to review solid waste streams regularly in order to identify remaining wastes and opportunities to design out, reduce, or pursue a higher and better use:

2.3 Review of Solid Waste Generation

Sites shall conduct a review of the solid wastes that the site generates at least every 3 years. The purpose of the solid waste generation review is to **assess major waste streams and recyclables** that are generated at the following 7 generation points: Manufacturing, Offices, Warehousing and Distribution (includes shipping and receiving), Food Services (e.g., dining centers and cafeterias), Grounds (e.g., lawn care and landscaping), Construction, and Vehicular Maintenance. The review shall include the following:

- a. **Identify the types of wastes and recyclables** that are generated and how the waste streams are currently being managed (e.g., reused, recycled, incinerated, or landfilled). See Appendix B for a Solid Waste Generation Review Checklist template that can be used.
- b. **Identify opportunities** to design out or reduce wastes, increase recycling, reuse, and composting. In addition, identify opportunities to pursue a higher waste management method for waste streams (e.g., changing from recycling to reuse) where practicable. The review may also identify large volume homogenous materials that would be appropriate for reuse, recycling, remarketing, or resale.
- c. **Identify the disposal costs and revenues** (and avoided costs) of waste streams for which financial data is available.



Zero Waste Journey

- 1998: Raytheon started its recycling program
- 2005: Resource Management Contract with E.L. Harvey
- 2009: "Serving Up Sustainability" program developed with the goal to eliminate Polystyrene, promote reusable dining ware & supplement with compostables
- 2014: Electronic Waste Management Contract with ERI
- 2014: Initiated zero waste certification program
- 2015-2018: 11 TRUE zero waste certified sites across Raytheon (7 sites within IDS)



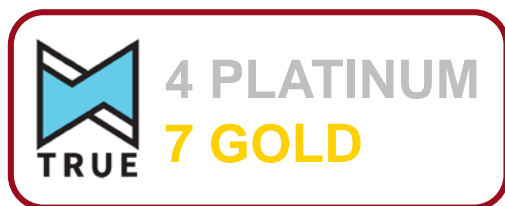
Strong partnerships are critical for a successful zero waste program

TRUE Zero Waste Certification

- **TRUE (Total Resource Use and Efficiency) Zero Waste** certification
 - used by facilities to define, pursue and achieve their zero waste goals, cutting their carbon footprint and supporting public health
- Created in 2013 by the U.S. Zero Waste Business Council
- Currently administered by the Green Business Certification Inc. (GBCI) as of November 1, 2016
- TRUE Zero Waste certification requires:
 - **Zero waste policy** in place
 - **90% or greater waste diversion**
 - Submit **waste diversion data**
- Raytheon goal to certify 20 TRUE sites by 2020!



$$\text{Diversion Rate} = \frac{\text{Materials diverted from landfill, incineration (WTE), and environment}}{\text{Total Waste Generated}}$$



Resource Management Partnerships

- Raytheon’s resource management program is a strategy focused on preventing the generation of waste; and where this is not possible, to recycle or reuse these materials.
- Success of this program depends on strong partnerships.



Resource Management is a partnership between Raytheon and its vendors

E.L. Harvey - Resource Management Program

- Raytheon's resource management (RM) program
 - Structured program allowing increased focus on waste reduction, reuse and recycle
 - Shared responsibility between Raytheon and E.L. Harvey
 - Incentivized to reduce waste volumes and costs
 - Additional commodities added (e.g. composting, wood, scrap metal, construction and demolition)
- Implemented in 2005 and expanded in 2010 and 2012

“... The successful RM Supplier will provide basic container service, hauling, and processing/marketing/disposal (which may be sub-contracted), in addition to value-added services that improve Raytheon's resource efficiency (e.g., waste reduction, reuse, increased recycling) beyond traditional waste and recycling hauling.”



E.L. Harvey - Zero Office Waste Program

When in Doubt, Recycle!

Help Raytheon in its pursuit of zero waste. It is the right thing to do and it's sustainable. New labels were made in support of Raytheon's *Zero Office Waste (ZOWe)* program to help you do the right thing.



No more confusion, just two waste streams – Compost or Recycle. Take a second to read the labels and when in doubt, recycle!



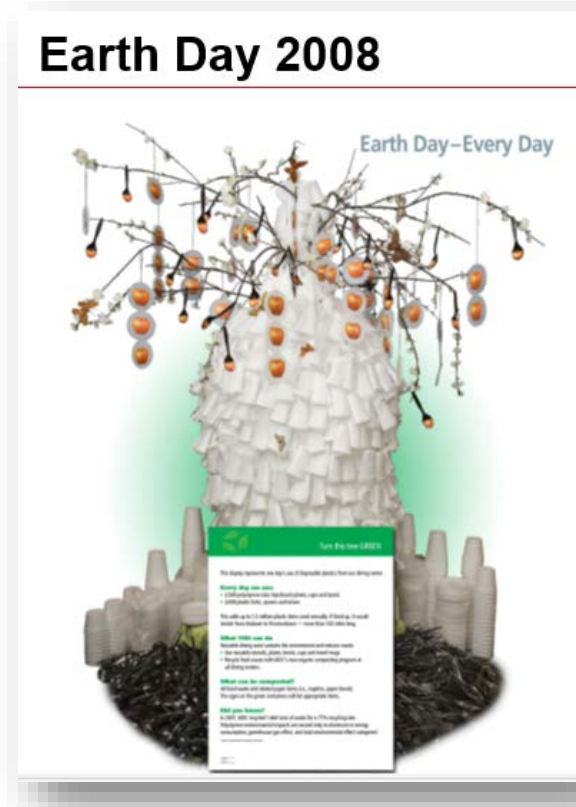
E.L. Harvey – Electronic Waste Collection

Employee electronic waste collection during the Earth Day events across New England



Eurest - Serving Up Sustainability

- Emphasized reusable dining ware
- Replaced polystyrene and plastic take out containers and utensils with compostable alternatives



Eliminated Polystyrene From Dining Centers

Eurest - Serving Up Sustainability



Compostable dining ware (e.g. cups, lids) labeled as "I'm Compostable"



Eurest - Food Waste Reduction Program

WASTE NOT – OVERVIEW

Waste Not data tracked and reported on OMS by station in 3 categories
Over production, production and out of date inventory

HOW IT WORKS

The program is driven by a lead associate. Designed to be implemented and executed by your staff to increase engagement and operational efficiency.

All food production associates have the use of an 18 quart Lexan container

All waste is measured and categorized daily at every station before disposal

Post results and track progress

Minimize the cost and environmental impact of food waste in Compass accounts.



Eurest - Food Recovery Challenge Recognition



- Presented to Raytheon and Eurest by USEPA in 2017 for contributions to the Food Recovery Challenge program
 - Compost
 - Waste Not Program
 - Donations of excess food

Haas - Reuse Shipping Containers



- Refrigerated chemicals are shipped in corrugated boxes with Styrofoam molded inserts
- Boxes are returned to Haas for reuse
- Helps reduce new packaging materials
- Waste diverted from trash
- Collect reuse waste metrics



Haas – Reusable Drums



- Empty product drums that remain once product is removed are returned to Haas for reuse/recycling
- Haas provides a revenue for each drum returned
- Helps reduce new packaging materials
- Waste diverted from trash
- Collect reuse waste metrics



Clean Harbors – Refurbished Drums



CleanHarbors

- Clean Harbors provides refurbished drums for use to collect hazardous waste or waste oil
- Helps reduce purchase of new drums



ERI – Electronics Recycling



- Company wide RM agreement to standardize electronic waste recycling and reuse
- Collect metrics of recycled and reused electronic waste that count towards waste diversion



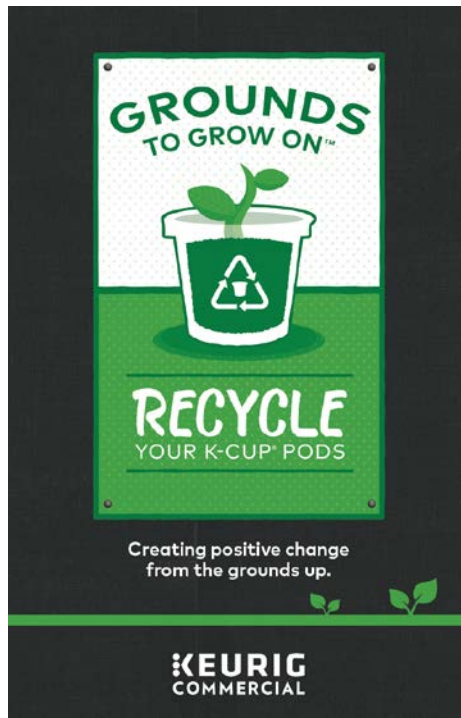
ERI – Reusable Pallets



- Reusable pallets used to ship electronic waste to ERI
- Replaced cardboard boxes, shrink wrap, and wooden pallets
- Pallets are returned to the Site for reuse
- Collect metrics of recycled electronic waste and numbers of pallets reused



Staples – Environmentally Preferred Products



Recycle

Get \$2 back in Staples Rewards® for each cartridge you recycle. Minimum spend required.

STAPLES®

- 30% recycled content copier paper
- Selection of sustainable products
 - Staples' Sustainable Earth Brand (SEB) products
 - Compostable Breakroom Program
 - Recycled content
 - Eco certified
 - Eco conscious
- Recycle toner cartridges
- Keurig pods recycled through the Grounds to Grow On program



Staples – Packaging Reduction Program



- Staples has implemented a “Smart-size Packaging” Program that produces customized packaging tailored to each order
- Raytheon provides feedback to Staples to improve the “Smart-size Packaging” Program

STAPLES®

The Problem: Customers don't like wasteful packaging

Staples' number one customer complaint used to be the wasteful amount of packaging they shipped their products in. Looking for solutions, Staples set a goal to reduce their packaging by 20% by 2020.

The Solution: Smart-size packaging

Staples, in collaboration with Packsize International and its On Demand Packaging® technology, implemented a “Smart-size Packaging Program” in 2012 that produces customized packaging tailored to each order. The result? A better customer experience, improved supply chain sustainability, and efficiency with every shipment.



Vallen – Green Initiatives



- Reusable crates to ship products from Vallen warehouse to sites
- Reusable clean room garments
- Kimberly-Clark RightCycle program to recycle nitrile gloves
- Safety glasses recycling program through Kandu Industries



Garments and gloves are worn in the customer's facility.

Used products are collected and shipped to our recycling centers.

Used products are sorted and processed into plastic pellets or nitrile powder.

Materials are molded into new eco-responsible plastic products and durable goods.

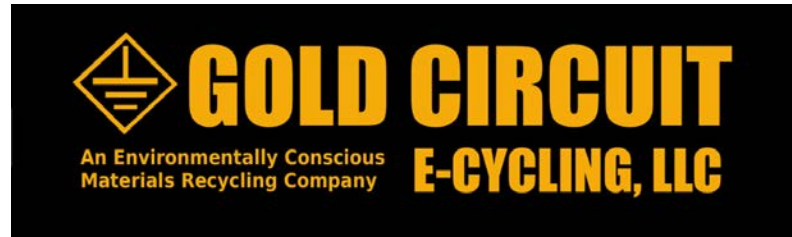
Durkin – Janitorial Products



- Paper towels
 - 40%, 60%, 100% recycled content
- Toilet paper
 - 65% recycled content



Gold E-Circuit - Recycle Styrofoam Containers



- Previously disposed containers in trash
 - Large and bulky
- Worked with Gold E-Circuit to send Styrofoam product containers for recycling
- Waste diverted from trash
- Collect recycling waste metrics



TerraCycle – ESD bags



- Used Electrostatic Discharge (ESD) bags are collected and sent to TerraCycle for recycling
- Waste diverted from trash
- Collect recycling waste metrics



Questions?

