

The situation

As a leader in the aerospace and defense industries, Raytheon Technologies Corporation (Raytheon) is focused on "transforming tomorrow" with breakthrough aerospace, defense and cybersecurity technologies for its customers. The company also is committed to transforming tomorrow through an innovative approach to sustainability that includes a zero waste goal.

In 2015, Raytheon became the first aerospace and defense company to earn Total Resource Use and Efficiency (TRUE) zero waste certification. By the end of 2020, it hopes to obtain zero waste certifications for 20 sites. To date, 16 sites have reached this milestone, including its large manufacturing facility in McKinney,



Texas, which was the first location in Texas to receive TRUE Platinum Zero Waste certification.

Getting to zero waste is a challenge that requires many different solutions. Raytheon works closely with its suppliers to reduce and divert waste from landfills. One waste stream that was both ubiquitous and highly visible was gloves, which are used extensively in Raytheon's labs, cleanrooms and manufacturing operations.

The solution

Dimitri Shanin, Raytheon's sustainability leader, learned about a novel solution that changed the trajectory of this waste stream: **The RightCycle**[™] **Program**.

This groundbreaking service enables customers to collect previously hard-to-recycle items, such as nitrile gloves, safety glasses and single-use apparel items, and have them turned into new plastic products and consumer goods.

The program was first implemented in Raytheon's El Segundo, California, site and has since been expanded to sites in Goleta, California, and McKinney, Texas. Both used gloves and apparel are recycled through the program.



RightCycle^{*}

The results

"The RightCycle™ Program helped us achieve TRUE Platinum certification. We see it as an integral part of our sustainability efforts moving forward."

— Maryl Vanden Bos

"It was the solution we were looking for and it's really taken off," said Maryl Vanden Bos, Raytheon's sustainability lead for California sites. "Seeing something that used to go into a trash can but can now go to a greater purpose downstream is really important, and it helps our employees see how we are consistently improving our

> Raytheon has diverted

metric tons

of used PPE

sustainability programs."

In the four years since it began participating in The RightCycle[™] Program, Raytheon has diverted 10.9 metric tons of used PPE from landfills, equivalent to about two light aircraft.

Raytheon transitioned to the Kimtech[™] and KleenGuard[™] Brands for gloves and apparel prior to implementing the program. The gloves led to both cost and quality improvements and the on-site support provided by the Kimtech[™] and KleenGuard[™] sales professionals was crucial to a successful conversion.

"They interviewed lab operators and managers, did fittings and asked questions," Shanin said. "This was a big deal. Fit and dexterity are very important to people, especially if they are handling highly valuable pieces of hardware. We established a lot of goodwill and excitement around the program by letting operators and managers try the gloves and apparel first through fitting sessions."

Another benefit was bringing a waste diversion program to areas that are often left out of these initiatives. "Implementing a new program in manufacturing floors or labs is difficult because these are closely regulated environments.



Raytheon's Agustine Ortiz (far left) and George Grama (far right) accept a Greenovation award from Kimberly-Clark Professional for diverting used PPE through The RightCycle[™] Program.

Most companies see these as the hardest-to-tackle areas of their businesses, so they default to zero waste in office spaces and shy away from labs and manufacturing floors," Shanin said, adding that the right partner makes all the difference.

"The RightCycle™ Program has done a brilliant job of reporting data, backed up by shipping invoices. Everything has an audit trail behind it, which is huge. It's a fact-based program. That's a key differentiator."

Raytheon hopes to have more sites join the program in the coming years as it continues to pursue closed-loop solutions for its waste footprint.