

PROJECT DESCRIPTION

General Contractor: Webcor **Number of Buildings:** 3

TRUE Certification Level: Gold Average Diversion Rate: 98%

Building Location: Brisbane, CA, USA

Building Typology: Laboratory and Commercial Office

Sector: Science & Technology **Project Size:** 560,000 square feet

Website: https://www.genesis-marina.com

MAIN INDICATORS



+ **86,000 tons** of waste diverted from landfill, incineration, and WTE.

Equivalent to 380x the weight of the Statue of Liberty.



Over **\$34,000** saved with reuse initiatives implemented during construction



1,391 MT of greenhouse gas emissions reduced (via EPA WARM Model v16). **Equivalent to 310 gasoline-powered cars driven for one year**

WHAT IS TRUE?



Total Resource Use and Efficiency (TRUE)

TRUE is a Zero Waste Certification system owned and administered by Green Business Certification Inc. (GBCI) that "enables facilities to define, pursue and achieve their zero waste goals, cutting their carbon footprint and supporting public health."

WHY ZERO-WASTE?

- **Reduce costs:** Saving money by streamlining expenses, enhancing resource utilization, minimizing material purchases, optimizing waste management, enhancing operational efficiency, and implementing cost-saving measures throughout the supply chain.
- Reduce Environmental Footprint: Improve material flows to reduce scope 3 indirect GHG emissions by implementing sustainable procurement practices which optimize resource consumption, minimizing reliance on new raw materials.
- Reduce Health Impacts on People: Advocating for environmental justice by centering communities who have historically been most negatively impacted by waste, fostering ecosystem health, safeguarding public health, enhancing community well-being, and minimizing environmental pollution



REDESIGN

Throughout the construction process, the project adhered to a successful Construction Waste Management Plan, which aligned with all **zero** waste goals and initiatives. Additionally, all supply chain contracts were assessed, and two questionnaires were distributed to vendors to promote sustainable purchasing practices throughout the project.

REDUCE

Numerous waste reduction strategies were implemented place during the project. These included practices such as avoiding the use of temporary plastic materials in construction, transitioning from plastic water bottles to canned water and water filters, and prioritizing digital documents and floor plans instead of having physical copies on-site. These changes resulted in a **reduction of more than 6,000 lbs of plastic.**

REUSE

The Genesis Marina project team collaborated with Webcor Equipment to repurpose formworks that were in good condition for future construction projects. Webcor Equipment serves as a circularity hub, storing and refurbishing various equipment and materials for reuse at construction sites. Through this partnership, the project team successfully diverted 1,680 lbs of plywood and 25,695 lbs of wood pallets from the landfill by reusing them.

Additionally, by partnering with the vendor for curtain walls, storefronts, and podium units, all transportation containers and packaging materials were salvaged for reuse, including steel bunks and wood cribbing materials, totaling 143,325 lbs. Furthermore, focusing not only on construction but also on-site trailer operations, the Webcor team implemented water refill stations and provided only reusable utensils, emphasizing sustainability at every level.

+170,000 lbs successfully reused



DIVERSION

ITo determine the diversion rate, we collaborated with waste haulers to gather data on pick-up frequency, weights, and volumes. This information was then inputted into a a waste diversion calculator developed by All About Waste LLC, alongside other pertinent factors. With a meticulous analysis of all zero waste initiatives implemented, Genesis Marina proudly achieved an exceptional diversion rate of 98%.

98% of waste
diverted from
landfill and incineration



COMPOST

Throughout the construction project, key points of waste generation were identified, and compostable materials were collected separately. This deliberate approach to composting food waste and organics serves as a pivotal strategy to mitigate carbon dioxide and methane emissions typically associated with landfill disposal methods.

1,391 MT of greenhouse gas emissions avoided with recycling and composting



ZERO WASTE REPORTING

Effective waste management relies on thorough source separation, which ensures cleaner material streams and enhances the likelihood of successful waste diversion. TRUE Certification mandates projects to report waste diversion data for each distinct material stream involved in the project. Consequently, the project team meticulously tracked various waste streams, each with its own destiny, including waste avoidance, reuse, recycling, composting, and as a last resort, landfilling. This comprehensive approach to waste tracking aligns with TRUE Certification standards and facilitates informed decision-making to minimize environmental impact.

LEADERSHIP

Setting a clear goal is an indispensable first step in zero waste initiatives. Upon committing to pursue TRUE Certification and targeting a diversion rate surpassing 90%, Webcor and AAW initiated monthly discussions with the primary waste hauler. These meetings addressed various aspects including waste generation, contamination levels, zero waste strategies, collection schedules, and container capacities. Moreover, Webcor took proactive measures by organizing a tour of the construction site during the 2022 Greenbuild International Conference, engaging in community clean-up activities, and producing educational videos tailored for on-site workers. These initiatives underscored their commitment to sustainability, fostering collaboration, and disseminating knowledge within the construction community.



TRAINING

Webcor created personalized labels and signs for all bins, dumpsters, and containers at the construction site. They used banners, flags, and traditional print signs for various collection points. Additionally, a waste chute was employed during certain construction phases, with signs placed in designated areas. The jobsite trailer featured different colored bins (blue for recyclables, green for compost, and black for landfill waste) along with corresponding signage. Throughout the construction process, ongoing training sessions were conducted that covered zero waste practices, sorting techniques, and accepted materials for each waste category. Moreover, a zero waste dashboard was set up on-site to track the monthly diversion rate and the target to be met.





THINKING OUT OF THE BOX!

Webcor placed repurposed catering carts as water stations at designated spots throughout the construction site. This enabled workers to conveniently refill their water bottles, thereby reducing reliance on single-use bottles. The ingenuity of this initiative lay in repurposing old catering carts to serve a new function on the construction site.

ZERO WASTE PURCHASING

During construction, the Webcor team developed a corporate Environmental Purchasing Policy to facilitate better purchasing decisions. The document guided purchasing agents to select products with superior environmental performance or attributes, such as recycled content or environmental product certifications. This approach reduces the impacts of producing, using, and disposing of products, thereby earning the project credits in this category

