

# Salmon Creek Net Zero Case Study



## Project Information

**Project Type:** New Single-family

**Location:** Vancouver, Wash.  
Neighborhood, Wild Glen

**National Green Building Standard Certification Level:** Emerald

**Date Completed:** 2014

**Climate Zone:** 4

## Project Team

**Builder:** Urban NW Homes

**Designer:** Design Solutions

**Engineer:** Anderson Structural  
Engineering

**Interior Designer:** Jerud Martin

**Verifier:** Swiftsure Energy

## Specifics

This home is located in the Wild Glen community, which was first conceived in 2010. There were two main goals for this community. The first was to feature a holistic and green approach to an entire neighborhood, including lot infrastructure construction. The second was to build certified high quality/healthy home construction.

Wild Glen was the first project on the west coast to feature a NGBS (National Green Building Standard) Emerald level neighborhood. They achieved this through the use of new techniques such as: back filling trenches with recycled glass, recycling all the onsite hard surface materials, recycling the onsite existing homes, and designing and planning an overall low footprint street, just to name a few.

The next phase was to build all of their homes to the same NGBS standard, and furthermore, to build one home to an emerald rating including a Net Zero standard. The neighborhood was opened to the public for a “Hard Hat Tour”, offering hands on public education. This project was an eye opener in the Portland Metro area and it sold out in just under 12 months during some of the worst economic times.

## Cost Notes

The additional costs to build a Bronze level home through the NGBS are minimal, compared to what it would cost Urban NW Homes to build this home to code in their area.



*“It’s a well-built house that’s comfortable.” - Home owner Mike Mooney*

## Key Features:

### ENERGY

- Staggered stud construction
- Triple-pane windows
- Heat Recovery Ventilator
- Mini split heating
- Heat pump hot water heater
- Internal ducts and heating

### SUSTAINABILITY

- Recycled wine barrel flooring
- Locally recycled glass tile
- 100% Recycled plastic soda bottle carpet
- Cork entry flooring
- Refurbished interior doors
- Washing machine that waters the yard

### HEALTHY HOME

- Low Volatile Organic Compound (VOC) glue and paint
- Lifebreath air purifier
- NASA-invented air scrubber
- Mechanical fresh air intake

### DURABILITY

- Large overhangs
- 50-year roof
- Vented wrap
- Unsealed window sill tips
- Flashed butt joints

All information in this case study was provided by one or more members of the project team.

For information on certifying your project to the NGBS, visit [homeinnovation.com/green](http://homeinnovation.com/green).



*"It's probably the best home I've ever owned as far as performance. ... It's about being sustainable." - Owner*

## Lessons Learned

- The No. 1 lesson: A home is only as green as the subs that build it. It is necessary to really pay attention to the work being done, each step of the way. It isn't that subs are trying to do things wrong, but sometimes they go too fast and run a little loose. They have learned a lot through their NGBS Certified projects.
- Over time, Urban NW Homes has dedicated one person to work on the certification piece. They have found it helpful to have somebody who has their eye on the ball. This may not be feasible for smaller builders, but when working on a lot of homes at once, it is useful for credibility.
- Urban NW Homes has built under other certifications in the past, but ultimately has found that an educated buyer knows the importance of an ANSI-approved standard. Its customers do their research. Once the home buyer visits the NGBS website and learns about it, they rarely go to other certifications.



Recycled plastic soda bottle carpeting



Recycled wine barrel flooring