From Passive House...
...to ‘Net Positive’

Expanding the context for high performance buildings

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From laneway house...
...to passive house
The Mendoza Lane House, 710sf (Vancouver’s 1st Laneway House) Vancouver BC
The E.57th Solar Lane House
Two Birds Lane House, 940sf  Vancouver BC
The E.29th Solar Lane House
0.42 ACH, Final Blower Door

Merritt Passive House, Tsawwassen BC
E.37th Passive House Duplex, Vancouver BC

Eureka St. Passive House Duplex, San Francisco CA
1 Missing Pieces
2 Green Categories
3 Net-Positive, In Practice
1. Missing Pieces
2. Green Categories
3. Net-Positive, In Practice
Photos: Rocky Moutain Institute, Thomas Crenshaw
GHGs from a ‘typical’ building of the same size

GHGs from this green building

Photo: 2007 RMI GreenHome Visitor’s Guide
GHGs from this green building
GHGs from this green building

+ GHGs from transportation

Photo: 2007 RMI GreenHome Visitor’s Guide
Where is it located?

Can you walk?
Bike?
Transit?

Photo: 2007 RMI GreenHome Visitor’s Guide
Zero GHG Emissions

Transportation

The New Green Building

Photo: 2007 RMI GreenHome Visitor’s Guide
Transportation

An Old, Inefficient Building

Transportation

The New Green Building

Photo: 2007 RMI GreenHome Visitor’s Guide
What does it replace?

An old building?
Farm?
Field?
Where is it located? What does it replace?

PASSIVE HOUSE

MAXIMUM COMFORT

MINIMUM ENERGY

For more information! www.phnw.org

Passive House Northwest PHnw
2 Green Categories
How ‘good’ is your building?
Better than code:
L.E.E.D.
Built Green
Energuide
Energy Star
Aiming for ‘Net-Zero’:
- Passivhaus
- Net-Zero Solar
- Living Building
Passivhaus

Photo: SchwörerHaus KG
‘Net-Zero’ (or) ‘Energy Positive’
Using Renewable Energy Technology
GHG emissions connected to buildings
GHG emissions connected to buildings

1970

Today

2050

Code Minimum

Single Family Homes
Unmatched Location, Unmatched Value.

MORGAN
GHG emissions connected to buildings

1970

Today

2050

‘Green’
1970

Today

2050

Or “Net-Zero”

GHG emissions connected to buildings
1970
1970
Today
Today
GHG emissions connected to buildings
Where we actually need to go...
Net Positive:
Beyond net-zero, *projects* that make the world measurably better...
Tool: Net Zero Building

Goal: Net Positive Project

- Net Ø
- Green
- Code Minimum
- Old Buildings
How ‘good’ is your building?
How ‘good’ is your building?

Net Ø
Green
Code Minimum
Old Buildings

How ‘good’ is your building?

Where is it located?

What does it replace?
How ‘good’ is your building?

Where is it located?

What does it replace?