

Financing Low-Carbon Performance



Climate Solutions
Affine Vancity

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FREE WEBINAR
Mar 9, 2022
9.30 - 10.30am PST
zeb.org



CONSTRUCTION COST ANALYSIS OF HIGH-PERFORMANCE MULTI-UNIT RESIDENTIAL BUILDINGS IN BRITISH COLUMBIA

JUNE 2021

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The ZEB^x Podcast Decarb Lunch

**The Builders Have Spoken:
The Cost of High-Performance
Construction**

Season 1 Episode 4



The ZEB^x Podcast Decarb Lunch

**Building a High-Performance
Home - Does it Cost More?**

Season 1 Episode 3



The ZEB^x Podcast Decarb Lunch

**Developer/Builder Recipes for
Low-Cost, All-Electric, Step 4
Residential Construction**

Season 1 Episode 5

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Decarb Lunch Series

zeb_x

 **BC Hydro**
Power smart

 CITY OF
VANCOUVER

SFU Parcel 21: Achieving Step 4 at Conventional Construction Budgets

Thu Mar 31, 2022,
from 12- 1pm PDT
Free Webinar | zeb.org

 **SFU** SIMON FRASER
UNIVERSITY



ZERO EMISSIONS BUILDING EXCHANGE



BUILDDEX
VANCOUVER

AMPLIFIED

#BUILDEXVancouver #BUILDEXAmplified

March 23 – 24, 2022

In Person @ Vancouver Convention Centre West

Financing Low-Carbon Performance



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Financing Low-Carbon Performance

Co-host:

Rocky Sethi, Chief Operating Officer, Adera Developments



POLL 1

Tell us about yourself!

Three-part anonymous poll



Forestry Innovation
Investment®



ZEBx/UDI/Affine event: Financing Low-Carbon Performance

Rocky Sethi, COO, Adera Development
March 9, 2022

ADERA 2025 VISION: **Buildings For Better Lives**

From our 2025 Vision:

“We acknowledge the environmental impact of our industry and are driven to develop new solutions to address the environmental crisis.”

Adera’s Sustainability Value:

Operational excellence, technology, and a commitment to innovation unlock the path to sustainable development. We understand that price, product, location, and reputation remain paramount to our customers, but so does our unwavering commitment to sustainability and climate change. We deliver on this through leadership in mass timber. We will deliver more homes than any other in our class in the next five years. We are committed to reducing waste and emissions, and being advocate for climate change, while operating with fiscal prudence and accountability.

Mass Timber Projects



Crest, North
Vancouver

Duet,
Coquitlam



Virtuoso,
UBC

Mass Timber in our Homes



BUILDINGS
FOR BETTER
LIVES

Sustainability

CREST - CITY OF NORTH VANCOUVER

RESULTS					EQUIVALENT TO	
2734 M ³	7 MINUTES	2365 MT	2588 MT	4952 MT	1047 CARS	523 HOMES
Volume of wood products used	Time to grow in U.S. & Canadian forests	Carbon stored in the wood	Avoided greenhouse gas emissions	Total potential carbon benefit	Number of cars off the road for a year	Energy to operate homes for a year

DUET FLATS - WEST COQUITLAM

RESULTS					EQUIVALENT TO	
1366 M ³	4 MINUTES	1181 MT	457 MT	1638 MT	346 CARS	173 HOMES
Volume of wood products used	Time to grow in U.S. & Canadian forests	Carbon stored in the wood	Avoided greenhouse gas emissions	Total potential carbon benefit	Number of cars off the road for a year	Energy to operate homes for a year

DUET CITYHOMES - WEST COQUITLAM

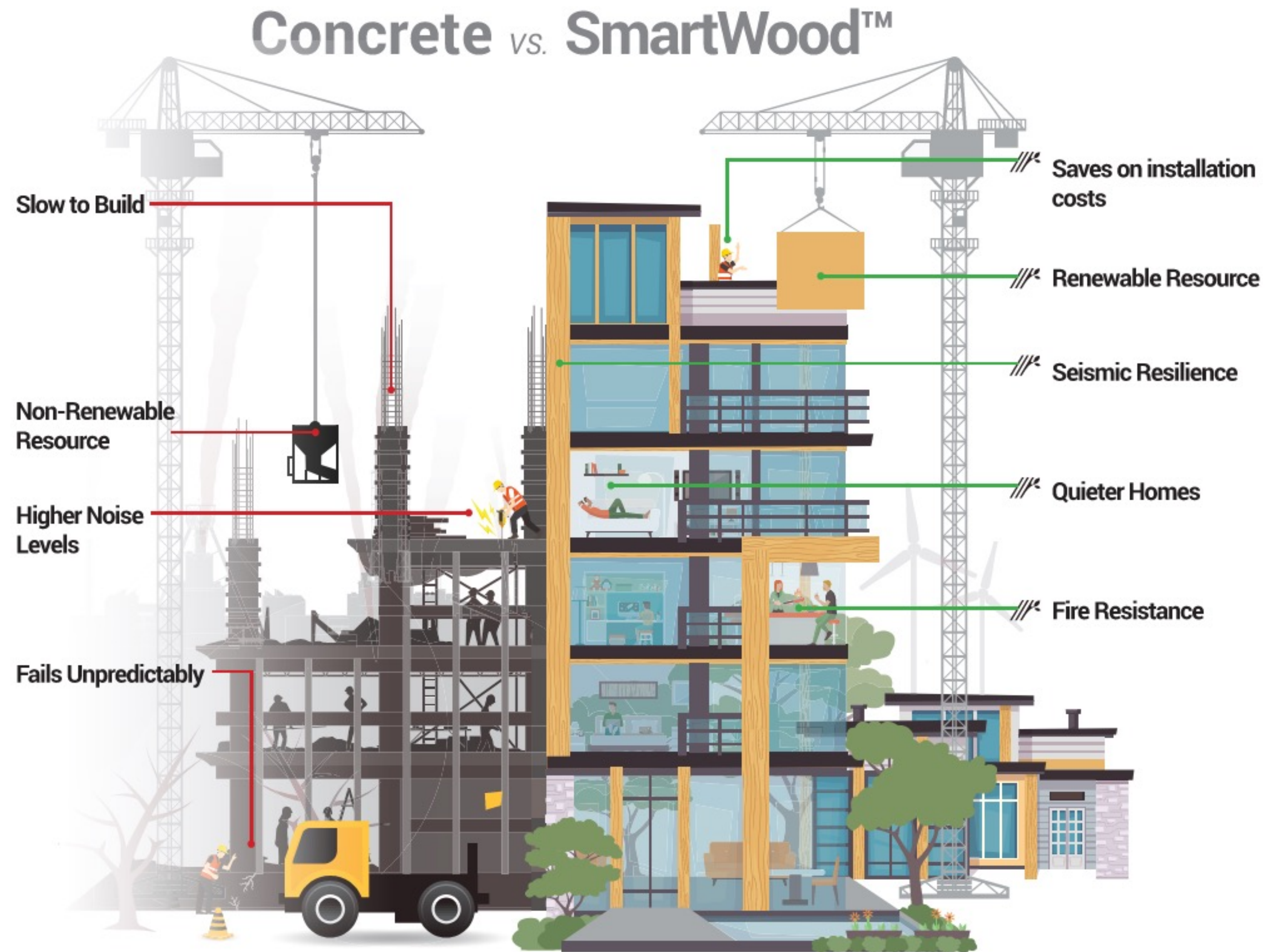
RESULTS					EQUIVALENT TO	
1330 M ³	4 MINUTES	1174 MT	1781 MT	2955 MT	625 CARS	312 HOMES
Volume of wood products used	Time to grow in U.S. & Canadian forests	Carbon stored in the wood	Avoided greenhouse gas emissions	Total potential carbon benefit	Number of cars off the road for a year	Energy to operate homes for a year

BUILDING FOR THE FUTURE

At Adera, our goal is to create truly sustainable communities. For over 50 years, we've earned a reputation as leaders in sustainable and innovative building practices. We face the constraints of all others in our industry, but we address them differently. In order to provide a secure future for our families, our customers, and those who make our community whole, we are committed to finding better ways to build.

Adera has been constructing high quality, sustainable housing for more than a decade. We are proud to say that we have built more independently certified sustainable homes than any other market developer in B.C. As a result of Step Code, Adera introduced our Adera Sustainability Program or (ASP) approximately 4 years ago. Based on the essentials of LEED and BuiltGreen, our ASP offers buyers real value. Items such as low flow fixtures, LED lighting throughout the building, energy efficient appliances, efficient window/wall ratio to optimize insulative values, and air exchanges well below Building Code to maximize heating performance. This is all in addition to the aforementioned benefits of mass timber.

SmartWood + Fitwel



CENTER
FOR ACTIVE
DESIGN®

fitwel®

- Increases Physical Activity
- Promotes Occupant Safety
- Reduces Morbidity and Absenteeism
- Supports Social Equity for Vulnerable Populations
- Instills Feelings of Well-being
- Impacts Surrounding Community Health
- Enhances Access to Healthy Foods

Fitwel's Health Impact Categories



LIVE WEST COAST™

Momentum in the Financial Sector

- COP 26: Glasgow Financial Alliance for Net Zero (GFANZ)
- Global Alliance for Banking on Values (GABV)
- Reporting frameworks on Climate-Related Financial Disclosures (TCFD)
- Matrices on how to factor climate risk into financial valuation.
- Implementation of climate commitments is the crucial next step.
- Lending and investment decisions are a key lever of influence.

Financing Low-Carbon Performance

Speakers:

- Morgan McDonald, Director of Operations, Ledcor Renew and Affine Climate Solutions
- Bill Sherritt, Director, Community Business and Real Estate, Vancity Credit Union



Affine

Climate Solutions

Financial Tools for Low-Carbon Resilient Buildings

2022 March 9

Living Future Vancouver (LFV) → Affine

- History
- Name change
- Mission

Our Mission

Provide tangible, inspiring decarbonization solutions for climate recovery.

Why Green Finance?

Why Green Finance?

- Scale
- Business case
- Find new value



Working with Vancity

Finding the Value

Risk

- Physical risk
- Transition risk
- Future liability

Opportunity

- Leadership
- First-mover advantage





Technical Criteria

Context:

- Community-based
- Affordability
- Not green building experts

Low-Carbon Construction Financing Pilot

	Category	Climate Criteria
1	Operational Carbon	No fossil fuels except for emergency use
2	Embodied Carbon	Submit carbon Life Cycle Assessment (LCA)
3	Climate Resilience	Confirm that future (2050) climatic projections (temperature, rainfall, flood, smoke events) will be used in building design

A scenic mountain landscape featuring a small stream flowing through a lush green valley. The stream is surrounded by dense vegetation, including tall grasses and large-leafed plants. In the foreground, large, moss-covered rocks are visible. The background shows a dense forest of evergreen trees covering a steep slope, with distant mountains visible under a cloudy sky.

What's Next

Ongoing & Upcoming Work:

- Retrofit solutions with Vancity
- Solutions with other Financial Institutions
- Solutions for Non-Profit Housing Associations
- Solutions with First Nations

We believe Climate Recovery is possible.

We know how to help others achieve it.

Your support will put our knowledge into action.

Thank you

www.affineclimate.ca

Vancity Low Carbon Construction Financing Pilot

March 9, 2022

We're longtime leaders in fighting climate change...



Canada's first socially responsible mutual fund.

1986

First in Canada to dedicate a portion of credit card profits to grants for local sustainability initiatives.



Canada's first low-interest loan for purchasing low-emissions vehicles.

1990

2003

Canada's first financing vehicle for energy-efficient home renovation.

2004



First financial institution in North America to win a Ceres-ACCA North American Sustainability Reporting Award.

2005

First financial institution in North America to achieve carbon-neutral operations.

2008

All investment funds we manage are fossil-fuel free.



2019

Net zero by 2040

Our ambition is to make Vancity net zero by 2040 across all our mortgages and loans.

That means the carbon emitted from anything we finance will be eliminated or significantly reduced, with any remaining emissions being brought to net zero.



Towards net zero



First measured and reported financed emissions in 2021



Bulk of emissions come from mortgage portfolios



Commercial Real Estate more emissions intensive than residential

Focus on buildings

To deliver on net zero goal we are:



Increasing low-carbon buildings in portfolio



Decreasing emissions in portfolio via retrofits



Partnering for impact



Vancity Low-Carbon Construction Financing Pilot



Climate criteria



To qualify for the Low-Carbon Construction Finance Pilot, projects must meet the following criteria, in addition to meeting current building code requirements:

Category	Criteria	Verification
Operational Carbon greenhouse gas emissions generated from space and water heating, cooking, and powering the building once in operation	No fossil fuels except for emergency use	Engineer's letter
Embodied Carbon greenhouse gas emissions associated with building materials and construction practices	Submit carbon Life Cycle Assessment (LCA)	Copy of LCA
Climate Resilience a building's ability to continue to avoid or withstand climate change impacts such as extreme heat, flooding, and wildfire	Future (2050) climatic projections (temperature, rainfall, flood, smoke events) will be used in building design	Engineer's letter

Low carbon = preferred terms.



Projects that meet climate criteria may be eligible for:

- Reduced rates and fees
- Extended amortization period
- Higher loan-to-cost ratio
- Other adjustments as appropriate

Developers must be experienced and meet usual requirements for financing.

Let's talk.

We're on a journey to zero

If you want to discuss the Pilot, or other emissions reduction financing opportunities we're all ears.



**Bill Sherritt, Director, Community
Business and Real Estate**

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