

lets meet... KTECT

prepared for

SWITCH Ontario, Kingston



Why Net Zero?

Changing the conversation...



If it is true... that housing accounts for 17 per cent of secondary energy use in Canada and 16 per cent of the country's **greenhouse gas** (GHG) emissions.

Its time to change the conversation... from consuming to stewarding... this is not just about housing... at its roots this is a lifestyle and cultural shift.

Engaging this fully requires honest reflection... about ownership and identity.

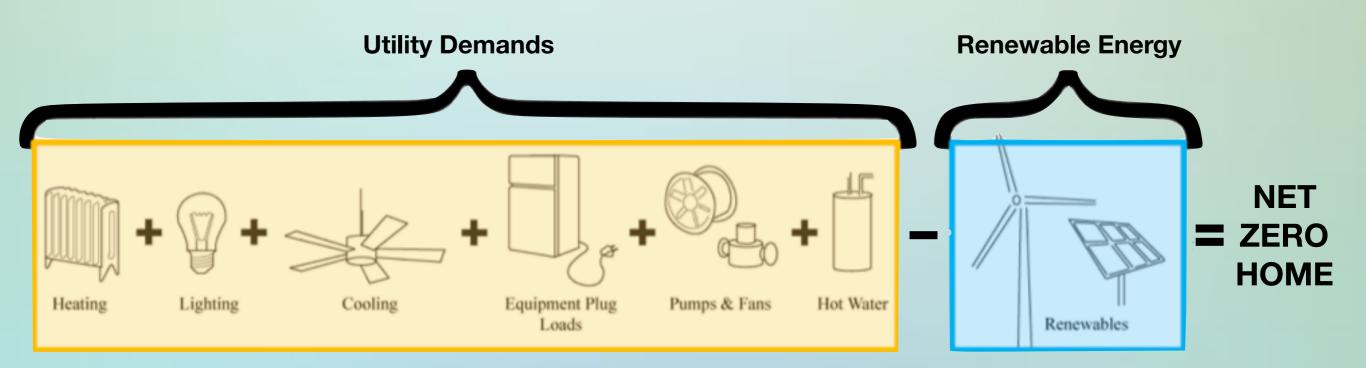
What Makes a Home Net Zero?

Keep it simple...



- Net Zero Energy homes set the standard for high-performance buildings.
- The International Living Future Institute states that a Net Zero home must be designed, and constructed to
 produce as much energy as it consumes on an annual basis. This is achieved by reducing the amount
 of energy needed to operate and by generating energy on site through alternative energy sources.
- A Net Zero home is up to 80% more energy efficient than typical new homes.

"It is expected that all new homes must be Net Zero energy ready by 2030." - Sheena Sharp, OAA



Net Zero - User benefits

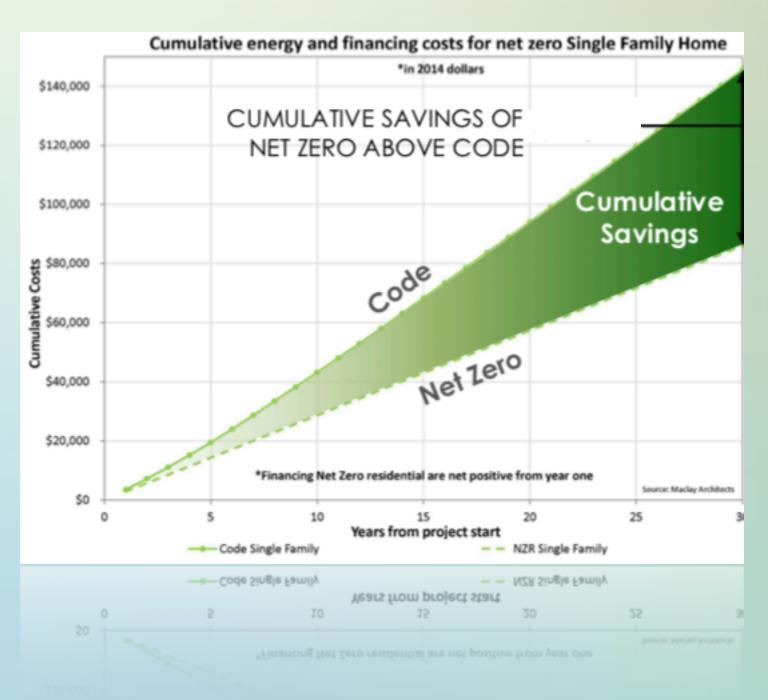
ROI, healthier living, comfort



A UK based study concluded that building greener spaces improve sleep, happiness, and overall health. - ARUP UK Design Firm

The National Institute of
Standards and Technology
(NIST) built a Net Zero
home... One of their
findings was that on
average a home built to Net
Zero standards had an
indoor air quality of 15x
better than the government
specified IAQ guidelines.

30 years of savings



KTECT - the technology

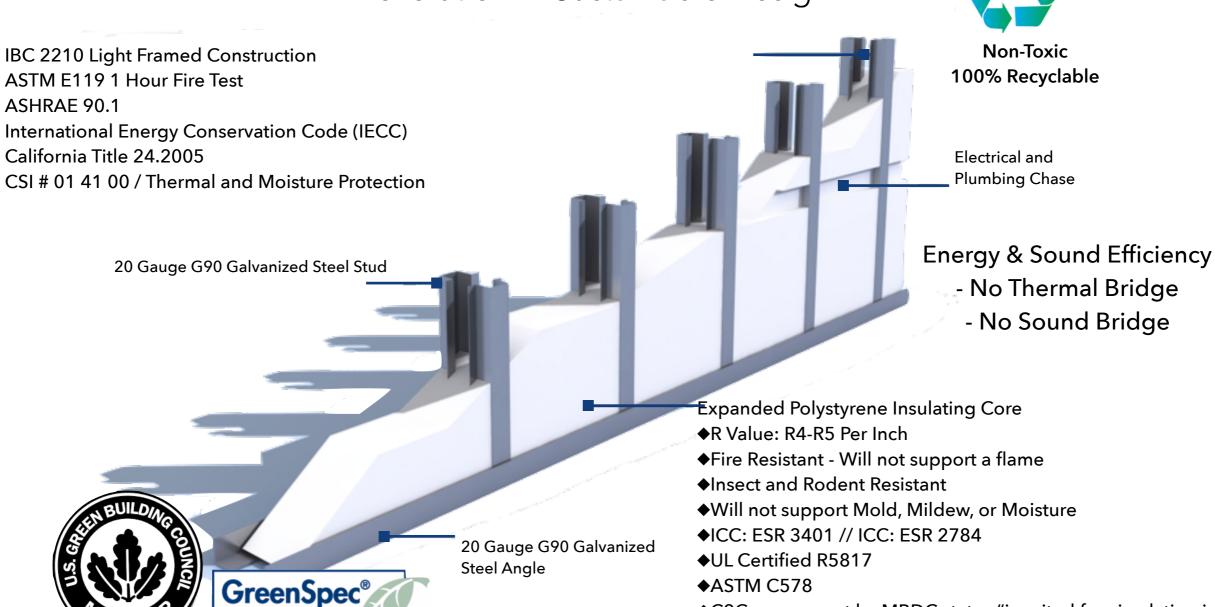


◆C2C assessment by MBDC states "is suited for circulating in

a cradle-to-cradle lifestyle as a technical nutrient"

Structural Wall System

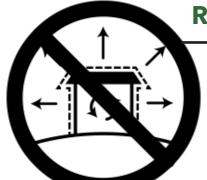
A Revolution in Sustainable Design



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Performance & Savings





Return on Investment

ROI increases as energy costs rise, and in comparison to traditional building technology.



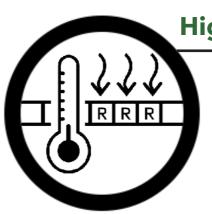
Less Maintenance

With KTECT the risk of mould or mildew is mitigated along with resisting pests. Result: minimal maintenance compared to a traditional home.



More Sustainable

KTECT Panels generates up to 45% less CO2 emissions than traditional building materials.



Higher R-Value

Our use of EPS for insulation ensures that the our panels have a significantly higher R-Value than what can be achieved by insulating wall cavities alone.



No Thermal Bridging

Thermal bridging is when heat is able to escape through studs etc. KTECT's unique design eliminates this problem.



More Energy Efficient

With our innovative building envelope, no thermal bridging, and high R-Value; KTECT is one of the most energy efficient building technologies on the market today.

Performance & Savings part 2





FIRE

Passed. ASTM E119-07a Fire Test with Hose Test (30 psi @ 20 ft) 2,208 lbs per linear ft live load.



	Furnace Probe						Furnace Probe		
Time (min)	#4 (°F)	#5	#6 (°F)	#7		#9		#11	Min
60	1721	1712	1727	1697	1556	1728	1722	1732	64

Max Temp Max Allowed

64

377

A closer look...

2 materials: EPS, Steel



The role of EPS:

- -insulation
- -vapour barrier
- -air barrier/rain screen
- -structural

Why (as compared to other insulation)?

- performance is not adjusted for age
- -no industry standard end of life

The role of Steel:

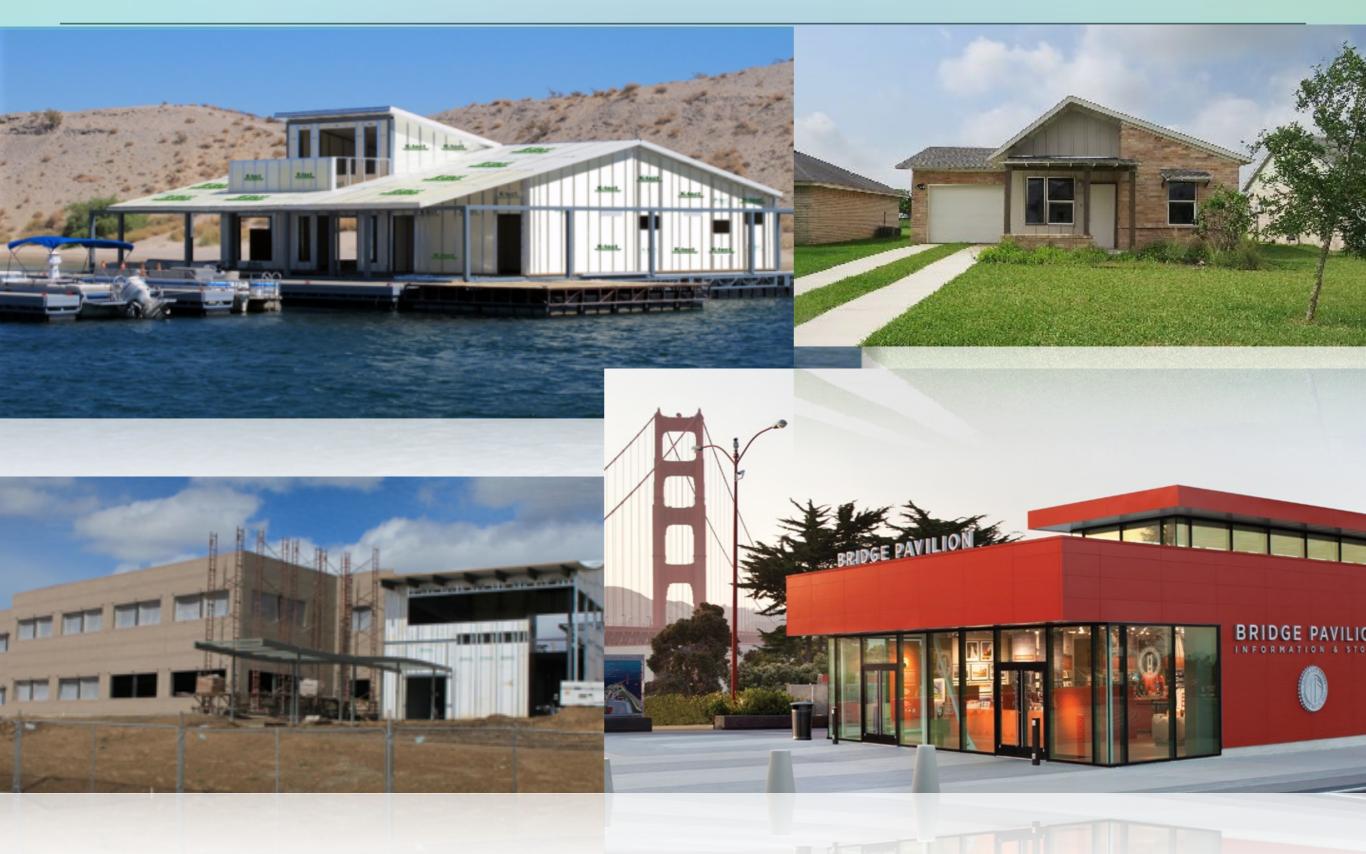
- -structural without thermal bridging
- -integrated with the EPS for a composite system

Why (as compared to wood)?

- highly customizable without thermal compromise (think radius walls)
- -mould, mildew and pest resistant
- -G90 "Time to first maintenance" in rural areas is rated as high as 60+ yrs (5% rusting on steel surface)

In the USA...





In Canada...







from research & development

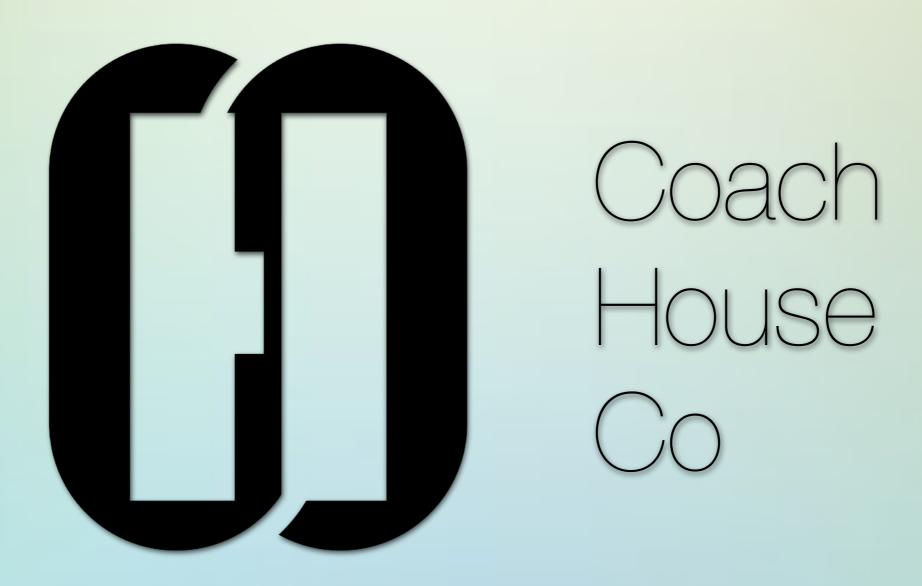
the transition

to commercialization

Proud Supporters

Of the Net Zero Movement





Launch Markets

X

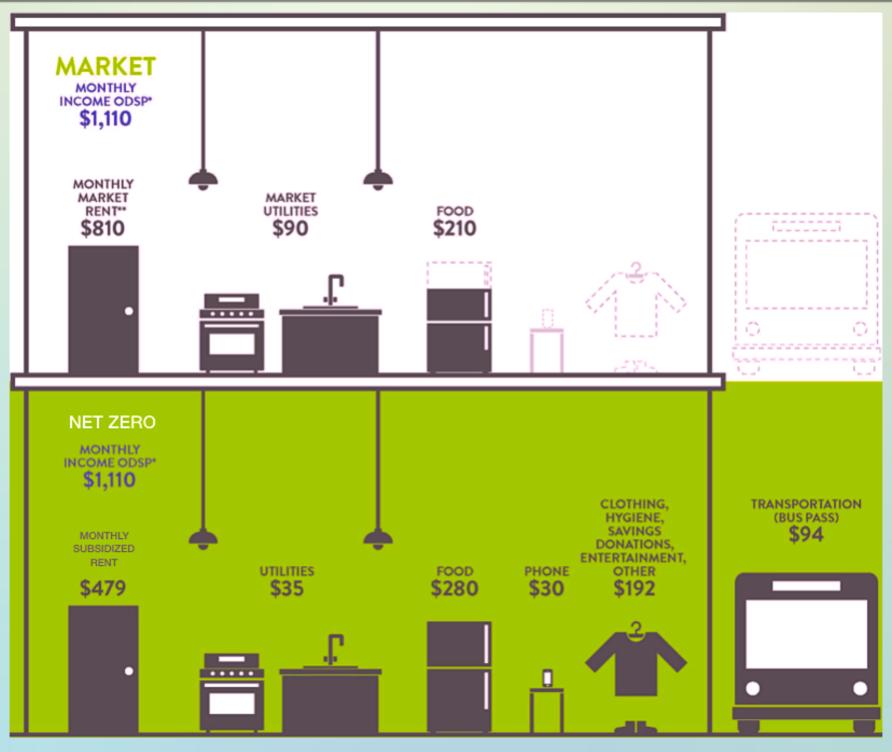
affordable small homes, custom homes, upgrading existing stock



Fixed Income



The Power of Net Zero when combined with affordable housing



*Ontario Disability Support Plan **Avg Market Rent, CMHC

The ROI of Connectedness



People, Planet, Profit...



People

Socially Restorative



Planet

Environmentally Responsible



Profit

Fiscally Innovative