



Carl Duivenoorden's Carbon-Neutral Quest

Early exposure to heavy pollution ignited Carl's curiosity about environmental pollutants and their impact on the world.

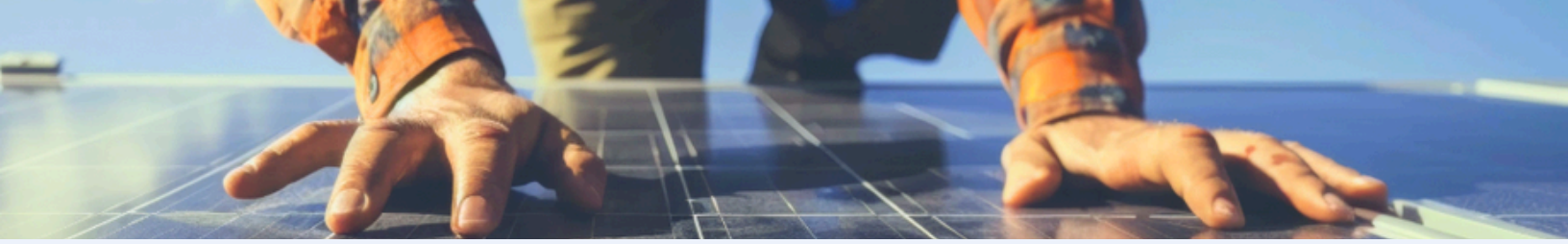
The birth of his second son in 2001 transformed this curiosity into a passionate commitment to combating climate change. Carl eventually became a speaker, writer and consultant on environmental issues. He also took significant action within his home to fight the climate crisis.

Growing up between a smelter and a fertilizer plant, Carl Duivenoorden experienced air quality so poor as a child that outdoor recess was often cancelled.

"I knew what any kid knows, which is that you don't keep a car running in a closed garage, so then I'd wonder, but wait a minute, isn't planet Earth kind of like a really big garage? So where does that stuff go?" Carl said.

"I learned about climate change, but it didn't seem that there was much of a concern at that time."





Carl's Carbon Neutral Challenge

In 2019, still considering his son's future, Carl and his wife, Karen, committed to becoming carbon-neutral within three years.

So, to achieve their goal, Carl and Karen implemented structural and **personal lifestyle changes**.



Pic. Carl and Karen achieved their goal of becoming carbon-neutral by the end of 2023

Carl's Personal Changes

Energy consumption habits ✓

Carl practices energy-saving habits like turning off unused appliances and shortening showers.

Electric vehicle ✓

To reduce transportation-related emissions, Carl and Karen bought an electric vehicle.

Carl recognizes that most energy-efficiency measures are costly. "(But) there are some really good programs out there to help."

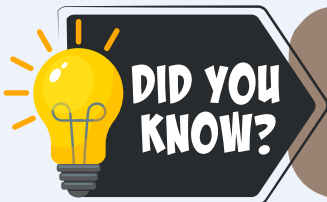
"If you're going to talk the talk, you walk the walk."

"Aside from striving to be a messenger of sustainability, we try to live it here, too."



Changes to their Home

ENERGY-EFFICIENT HOME	Carl prioritized buying an R2000 house for its energy efficiency. These homes feature airtight construction, high insulation, efficient HVAC systems, advanced ventilation, and environmentally responsible materials, enhancing energy savings, indoor air quality, comfort, and sustainability.
UPGRADING APPLIANCES	Carl replaced old appliances with energy-efficient ones, which reduced energy costs. For instance, an Energy Star-rated refrigerator uses about 15% less energy than non-rated models, saving homeowners around \$50 annually on electricity bills.
GOVERNMENT REBATES	In 2020, Carl used the Greener Homes Grant (\$5,000) and the Save Energy Whole Home Program (\$1,200) to install a six-kilowatt solar panel array. As a result, he produces all the energy he consumes and has reduced his energy bills to \$0.



LED light bulbs use up to 75% less energy than incandescent bulbs and last 25 times longer, significantly reducing waste and energy use.

By taking structural and personal steps, Carl and Karen achieved their goal of becoming carbon-neutral by the end of 2023. They are now enjoying low energy costs and a comfortable, warm home.

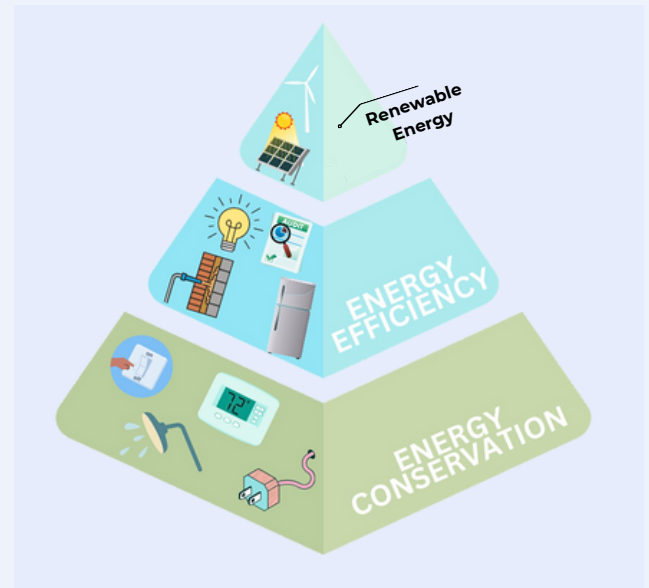


Key Takeaways

Energy efficiency pyramid

Prioritize energy efficiency, Carl says, whether building a new house or upgrading an existing one.

He recommends starting with simple **behavioral changes** and using the energy efficiency pyramid to guide further improvements.



If, like Carl, you're concerned about environmental issues, but not sure where to start, check out the energy efficiency pyramid.

Next, take a look at our educational [website](#) and [newsletters](#).

The Energy Efficiency Pyramid recommends beginning with small energy-saving measures and gradually progressing to more complex upgrades.

“It's a rewarding feeling to know I've done what I can for my son's healthy future environment, but there is still lots of work to do.”

Recommendations

By using the energy efficiency pyramid, many homeowners have made significant efforts to conserve energy and become mindful energy consumers.

However, these efforts alone are insufficient in New Brunswick. The province experiences harsh winters and summers, necessitating highly energy-efficient homes, which many people find prohibitively expensive to upgrade.



To address this challenge, the Conservation Council proposes reducing the upfront costs associated with energy efficiency upgrades, such as insulation and home audits.

This can be achieved through zero-interest loans or other financial assistance programs. Additionally, more programs should be created to replace old and inefficient heating systems and inefficient household appliances. These programs should not be limited by household income but should also consider transitional needs.

By implementing these measures, we can ensure that no one is left behind in achieving a comfortable, affordable and energy-efficient home, enhancing the quality of life for all residents.

Established in 1969, the Conservation Council of New Brunswick is the province's leading public advocate for environmental protection.

A member of the United Nations' Global 500 Roll of Honour, we work to find practical solutions to help families and citizens, educators, governments and businesses protect the air we breathe, the water we drink, the precious marine ecosystem and the land, including the forests, that support us.



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