

September 11, 2024,

Press Release: LCCH Co-op Asks City for a \$2.29M Line of Credit to Advance Attainable Housing

As problems in the world and locally accumulate, as shortages of housing grow, as the cost of housing becomes more unaffordable for more and more, as inflation limits all our options, as we become more polarized, as community decreases, as distrust increases condemning many to loneliness and isolation, as the cost-of-living increases with food prices rising faster than wages, as climate change makes an uncertain future more and more scary, at a time that the traditional models to help solve these problems are not working, something new, innovative, and different must be tried.

On September 17, 2024, Limestone City Co-operative Housing Inc. (LCCH) will asking the City of Kingston for a loan of \$2.29M to move forward on a first of its kind non-profit housing co-op and vertical farm.

LCCH's project seeks to advance human flourishing by providing for each of Maslow's hierarchy of needs and with opportunities to positively resolve each of Erikson's stages of psychosocial development. Simultaneously, LCCH's project fights seven societal crises in one project: 1) the housing supply crisis, 2) the housing affordability crisis, 3) the food security crisis, 4) the access to nutritious food crisis (also known as the obesity crisis), 5) the epidemic of loneliness and isolation, 6) the climate crisis, and 7) the energy crunch crisis coming to North America.

LCCH seeks to build a 248-unit non-profit, non-share capital, co-op housing complex integrated with an industrial sized vertical farm that is intended to produce healthy nutritious food through a farm to table in one building model. Most vertical farms are limited by labour costs. LCCH's model uses co-op volunteer labour to farm thereby making the farm viable while providing a common cause and a direct benefit to members and the community. They will see the benefits with food on tables and reduced household cost of living in their housing, utilities, food, water, and transportation budgets.

LCCH's building will maximize onsite renewable energy harvesting. We seek to achieve Passive House certification, and through the Canada Green Building Council, certifications for Zero Carbon Building Standards, LEED Platinum, and TRUE. Using next-generation Toronto based Mitrex (www.mitrex.com) solar panels that can be made to look like wood, glass, steel, stone, and marble, the entire surface area of the building envelop will generate electricity. Coupled with a full geothermal system and bidirectional EV car share program to store surplus energy, LCCH believes we can achieve zero energy use from the local electrical grid.

LCCH's building seeks to emit the least amount of GHG emissions. It will be a zero-carbon building built out of Cross Laminated Timber manufactured in St. Thomas Ontario by Element5 (www.elementfive.co) mass timber manufacturer and will feature many Biophilic design

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elements such as little edible forests on the roofs. Full composting of food scraps which will be re-inserted into the vertical farm's growing medium, biochar, will generate an increasingly rich soil over time. Rainwater collection will water the vertical farm and as many other non-potable water services as possible such as toilets and laundry. The geothermal system will help maintain a livable temperature all year and preheat water to minimize the amount of power needed to get hot water. We may even be able to achieve a negative carbon building by pumping human created CO₂ from the housing units into the vertical farm thereby providing plants with an enriched growing atmosphere while providing the human service of removing stale air from people's homes.

LCCH's project will feature a viable number of rent-geared-to-income units for developmentally challenged people and for women and their children fleeing domestic violence.

LCCH is contracting Toronto based NORR (www.norr.com) an architecture and engineering firm to design and build a building with a 200-year lifecycle and that is ready for the new climate, energy, and social reality emerging in the world. We are also partnering with Planetary Harvest Projects to build an easy to use, hard to break, simple to repair, low tech, labour intensive, high production vertical farm that can last 200 years. LCCH, understanding that over the next 200 years there will be problems that are unimaginable today is preparing by building a learning organization along the lines of the writings of Peter Senge, David Garvin, Peter Drucker, Michael Porter, etc. With a culture of personal mastery, continuous improvement, and learning LCCH will build up the co-op residents' education, skills, capabilities, and capacities to deal with current and future challenges.

With the City of Kingston's help, initial investment, and this current loan request, LCCH seeks to validate that we can build this project and 1) lower the cost of housing, 2) lower the cost of utilities and energy use, 3) lower the cost of food, 3) provide food security, 5) offer food sovereignty, 6) create a co-operative community, 7) lower our carbon footprint, 8) demonstrate climate change resiliency, 9) exemplify one model of climate change adaptation, 10) eliminate loneliness and isolation, 11) demonstrate a non-government funded internal financial and social safety net, 12) build common cause in community, 13) build up human capacity and skills, and 14) facilitating human flourishing and self-actualization.

Please visit our website www.lcch.ca for more information.