



NORTHERN CENTRE FOR SUSTAINABILITY

YELLOWKNIFE, NORTHWEST TERRITORIES

PARTNERSHIPS

Explanation of how the different partners fit in the project

Developing strong relationships with knowledge partners to promote best built environment sustainability solutions in Canada's North.

on

May 30th, 2018

PARTNERHIPS DEFINITION – in development – May 30, 2018
Some information may not have been updated.

WHY PARTNERSHIPS ARE IMPORTANT

Federal funders are asking for it

Most federal funding sources require the demonstration of partnerships and large community support. Whereas letters of support were sufficient in the past, some funders are increasingly asking to demonstrate stronger ties between project partners. (FCM and NSERC, for example, have increased their partnership requirements in the last years).

It is in-line with the United Nations Sustainable Development Goals

In addition, partnerships are recognized as an important factor towards achieving sustainability. *Partnerships for the Goals* is Sustainable Development Goal #17.

It puts in place better conditions for innovation and creativity

Diverging opinions forge stronger ideas. Innovation happens when different parties are confronted to each other; synergies can also be created through shared ideas.

Major role / additional roles	Building occupant ¹	Design partner ²	Research partner ³	Project supporter ⁴	Subject Experts ⁵	In-kind ⁶
Building Occupants						
Ecology North	Own	•	•	•	•	~ 200k\$
YKDFN	Rent?	•	•	•	•	78k\$
The Fat Fox	Own	•		•	•	400k\$
Boreal Flavour	Own?	•		•	•	tbd
NWT Food Network	Rent??	•		•	•	7,5k\$
NWTAC	Own?	•		•	•	4,5k\$
Research Partners						
University of Alberta		•	•	•	•	120k\$ for 4 yrs
Concordia University		•	•	•	•	120k\$ for 4 yrs
NAIT		?	•	•	•	-
Wilfrid Laurier University	?	?	•	•	•	20k\$ over 5 yrs
Design Partners						
White Arkitekter AB		concept	•	•	•	15k\$
Lateral Office		schem.	•	•	•	4,5k\$ +200k\$?
Integral Group		concept		•		Tbd
Fulcrum Projects		tbd		•	•	Tbd
GHG Accounting				•	•	5k\$

¹ To occupy the building full-time, own or rent an important share of the building.

² Will be involved in project design from Design Charrette to Building Monitoring. Design partners have a say in the building design.

³ Will pursue research concurrent, parallel or accessory to Building Design.

⁴ General project support. If a figure occupies the cell, it means they are project funders.

⁵ Active participation in Technical Workshops.

⁶ Partner has already committed to in-kind donation for FY 2018-2019.

Local architect tbd		DD+CD			•	tbd
Technology Partners						
Terragon				•	•	-
Others to be added depending on outcome of Technical Workshops						
Subject Matter Experts (participation in Technical Workshops and Design Charrette)						
Arctic Energy Alliance	alt.			•	•	5,7k\$
International Living Future Institute				•	•	7,6k\$
Goyatiko Language Society				•	•	tbd
Others to be added depending on outcome of pre-Technical Workshops preparation						
Project Funders						
MITACS				60k\$		NA
NRCan CERRC						tbc Fall'18
ECC LCEC						tbc Winter'19
AIP						tbc Winter'19
EcoAction Community ECC						tbc Spring'18
INAC -- REACHE						tbc Fall'19
INAC -- ISEDN						tbc Winter'19
McConnell Foundation						tbc Fall'18
Project Supporters						
City of Yellowknife				•	•	-
NWTAC	?			•		4,5k\$
Pembina Institute				•	•	-
Quality Urban Energy Systems of Tomorrow				•	•	4k\$
Northern Council for Global Cooperation				•	•	4,4k\$
Équiterre				•		-
Youth Climate Lab	?			•		15k\$
NWT Brewing Co.				•		5k\$
Julie Green MLA				•		-
NWT Food Network	alt.			•	•	7,5k\$
GNWT				•		-
Allison McCreesh				•		1k\$
Radio Taïga				•		2k\$
Others to be added						



Ecology North

Environmental Champion, Project Leader

Ecology North is the project leader, project promoter and main building occupant.

Yellowknives Dene First Nation

Indigenous Government partner – potential building occupant

The Yellowknives Dene First Nation have partnered with Ecology North towards the creation of a new position at YKDFN supporting the NCFS : YKDFN's new *Building Retrofit Economy Development & Outreach Officer* will pathfind the creation of new programs to retrofit buildings and reduce energy and GHG emissions in the YKDFN communities, and in other northern communities. YKDFN has committed to 156k\$ in in-kind donation for 2018-2020.



YKDFN will have two roles in the project :

1. Cultural design expert; they will play a major role into getting Dene culture integrated in the building design, with the Elders' participation.
2. Occupy the building through hot desks or shared office space. We will be presenting to Band Council at the end of June and are currently looking at options for them to be able to pay for the space.

University of Alberta

Academic partner – building technology research

UofA has strong expertise in building information model-based building energy management (BIMBEM), dynamic solar façades (DSF) and other green building technologies. UofA will become a strong research partner and has committed to the creation of 2 master's degree and 1 PhD position to design, monitoring and studying the technology to be implemented at the NCFS. UofA has committed to 480k\$ in in-kind donation for 2018-2021.



UofA will be integrated in the design charrette and will be providing help with the design, construction and monitoring. They have also expressed interest in having students in Yellowknife in the NCFS on a "hot desks" basis.



Concordia University

Academic partner – building technology research

ConU has strong expertise in building-integrated photovoltaic with thermal energy recovery (BIPV/T), semi-transparent photovoltaic panels and other building-integrated technologies. They have committed to the creation of 1 master’s degree and 1 PhD position to design, monitor and study the new technologies to be implemented at the NCFS. ConU has committed to 480k\$ in in-kind donation for 2018-2021.

ConU will be integrated in the design charrette and will be providing help with the design, construction and monitoring. They have also expressed interest in having students in Yellowknife in the NCFS on a “hot desks” basis.

White Arkitekter AB

Lead architect – concept design and Scandinavian knowledge transfer

Architecture, Scandinavian best practices, sustainable development. White is a leading architecture group in Scandinavia. They have developed the first eco-neighbourhoods in the 1990’s (Hammarby Sjöstad). Their commitment to sustainability appears in all of their work. White has committed to 15k\$ in in-kind donation for 2018-2019.



I am trying to have White Arkitekter to commit to doing our architectural schematics *pro bono*. They will be partnering up with Lateral Office (see below) who will take over this work and develop it. This way, we can have knowledge transfer from Scandinavian best practices directly to Yellowknife without going through Southern partners...



City of Yellowknife

Municipal partner

The City of Yellowknife is a strong supporter and enabling partner for Ecology North and our initiatives for the recycling (1990) and composting (2010) programs, and the Northern Centre for Sustainability. The City was the 2018 Energy Winner of the FCM Sustainable Communities Award for its Biomass District Energy System. The City and Ecology North have a strong history of working together on sustainability projects. The City is a potential



building occupant (in development) as a municipal government partner, and is supportive of the project.

Project supporter.

NWT Association of Communities

Community Government – potential building occupant

The NWTAC is an association that represents all 33 community governments in the Northwest Territories. They are a potential building occupant, and have offered in-kind guidance (5,6k\$) and communications support for the project partners, as well as help coordinating partnerships within communities. They have offered one week of staff time to the project within the next year.

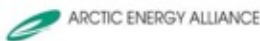


Potential building occupant and project supporter. NWTAC is currently exploring having an office in the NCFS.

Arctic Energy Alliance

Technical support

Energy efficiency, renewable energy production and carbon neutrality. *The Arctic Energy Alliance (AEA) is a not-for-profit society with a mandate “to help communities, consumers, producers, regulators and policymakers to work together to reduce the costs and environmental impacts of energy and utility services in the Northwest Territories.”* AEA has committed to 5,6k\$ in in-kind donation for 2018.



Project supporter and Subject Matter Expert. AEA has committed to participating in our Technical Workshops and are supportive of the project.

Équiterre

Past experience with similar project

Équiterre is a Montreal-based non-profit with a vision to “contribute to the development of public policies as well as civic and business practices that lead to a low-carbon economy and an environment free of toxic substances.” Equiterre has past experience with a similar project: their LEED Platinum Building *House for Sustainable Development*, a five-storey building downtown Montreal that houses 22 not-for-profit organizations



and provides space to meet and share innovative ideas about sustainable development.

Equiterre is very supportive of the project, and has offered in-kind support (5,6k\$) to provide mentoring, guidance, visibility and sharing of lessons learned during the 10-years of hard work they put in to make the House for Sustainable Development a reality.

Project supporter. I have asked Équiterre repeatedly for guidance on funding and project development. They have been very helpful so far, especially for connections with FCM and NRCan.

Northern Council for Global Cooperation

Technical support

The Northern Council for Global Cooperation (NCGC) has been a vital proponent of Sustainable Development Goals (SDGs) in Canada's North since the launch of SDGs in 2015. NCGC supports the project narrative, and has engaged with Ecology North on furthering implementation of SDGs in the North. The NCGC has committed to 4,4k\$ in in-kind donation for 2018-2019.



Project supporter. The ED Tracey Wallace is very supportive and has been providing EN with guidance on funding, especially with philanthropy.

Goyatiko Language Society

Local indigenous language expert

The Goyatiko Language Society (GLS), based in Dettah, Northwest Territories, does important work preserving and bolstering indigenous languages in the Weledeh region. GLS is very supportive of the project, has offered in-kind support (4,8k\$) for technical workshops in the coming year, has helped bolster community support – especially amongst the Elders in Dettah – and has already provided in-kind support by translating the Living Building Challenge into Dene Weledeh.

GOYATIKO LANGUAGE SOCIETY

Project supporter and Subject Matter Expert. The translation of the LBC terminology to Wiilliideh is something that NRCan and other entities value a lot in funding applications, to show community support and engagement.



International Living Future Institute

Technical support

The International Living Future Institute (ILFI) is a non-governmental organization committed to “catalyzing global transformation toward true sustainability.” They are the umbrella group that houses the Living Building Challenge, the most rigorous Green Building Certification Standard. ILFI has committed to 2,8k\$ in in-kind donation for 2018.

Project supporter and Subject Matter Expert. They have been providing me with answers on the LBC and communications material about the LBC.

The Pembina Institute

Advocacy partner

Policies on low-carbon buildings, clean energy. The Pembina Institute is an important advocacy group for matters related to climate change and energy in Canada. They have offered their full support on the project.



Strong project supporter and visibility partner. Pembina is very interested in showcasing our project in their newsletter and they suggested the creation of a stronger partnership in the future.

Quality Urban Energy Systems of Tomorrow

Technical support

District energy systems, smart energy communities; QUEST has nominated the City of Yellowknife as a pilot for their Smart Energy Communities scorecard.

QUEST has committed to 4,4k\$ in in-kind donation for 2018-2019.



Project supporter only.

Terragon Environmental Solutions

Technology partner

Terragon Environmental Solutions (TES) have 14 years experience helping people and projects “use all of the materials we now consider “waste” to generate important resources within their habitats.” As a developer of MAGS (micro-auto gasification system) and WETT technologies, TES has pledged technical support to help the project meet its waste and water-related needs.



Potential technology partner. Their technology might be implemented in our building. Currently still exploring.

Wilfrid Laurier University

Academic partner – water expertise

WLU has offered to participate in the research component of the project; their expertise in water stewardship will come in handy during the research and development of the water and wastewater management on-site system. WLU has offered 4k\$ of in-kind support.



Project supporter. They are currently exploring potential options to participate in the design work.

Northern Alberta Institute of Technology

Academic partner – building technology research

The Northern Alberta Institute of Technology (NAIT) is an enthusiastic collaborator with Ecology North. The Edmonton-based college is supportive of the project, and is interested in collaborating with data analysis and other training opportunities that will be provided by the project as a demonstration site for innovative green technologies.



Project supporter. They are currently exploring potential options to participate in the design work.

Fulcrum Projects Ltd.

Mentoring partner – past experience with Living Building Challenge projects

Fulcrum Projects was involved in other Living Building projects in Canada and has gathered valuable experience in the field. Active participant in the Living Building Challenge Collaboratives, they have pushed the possibilities in the built environment sustainability by thinking outside the box.



Project supporter. Paul Reynolds has been of tremendous help in shaping the project budget. It would be great to work with him either as a construction leader or as a Living Building Challenge consultant.





GHG Accounting

GHG Accountant

GHG Accounting Services brings expertise in GHG accounting and sustainability performance management. GHG Accounting Services plans to provide an in-kind donation in the form of a preliminary evaluation of the GHG emissions associated with the project. Once the project receives adequate funding, the goal would be to provide GHG quantification and validation for the entire project. GHG Accounting has offered their in-kind support for 5k\$.



The Fat Fox

Local Coffee Shop

The Fat Fox is a cafe in downtown Yellowknife that holds the heart of the community. For the last two years, it has offered coffee, a warm place to meet with friends, books to borrow, and treats baked by locals. Its furnishings, floor, and counter were built by neighbours in Yellowknife. Due to structural issues with the building they presently occupy, this small business was forced to close. The owners are interested in collaborating with Ecology North, (with their developer Redcliff) to open a new location in the future Northern Centre for Sustainability, where they will create the same warm, welcoming atmosphere for the Yellowknife community. They have committed to a 400k\$ in-kind donation.



Building occupant.

Youth Climate Lab

Innovation disruptor

The Youth Climate Lab is dedicated to creating projects that amplify climate action through intergenerational collaboration. They serve as a connector, facilitator, and designer and strive to create an environment where youth are activated and mobilized to channel their innovation and creativity into climate policy and climate entrepreneurship.

LATERAL OFFICE

Lateral Office

Canadian Architect

Lateral Office is an internationally recognized design practice whose collaborating partners, Lola Sheppard and Mason White, are associate professors at University of Waterloo and University of Toronto, respectively. Their work and research is focused on architecture's relationship to environment, participatory design processes, and new models of sustainability and resilience. Recently authoring the book *Many Norths: Spatial Practice in a Polar Territory* (Actar, 2017), which compiles about 6 years of research on infrastructure, urbanism, and architecture in northern Canada.



Julie Green

Member of the Legislative Assembly for Yellowknife Centre

Julie Green was elected to the 18th Legislative Assembly of the Northwest Territories representing the constituency of Yellowknife Centre. She expressed her written support for the NCFS.



NWT Brewing Co.

Local Brewer

NWT Brewing Co. has committed to working with the NCFS to make the best use of their leftover mash to create carbon-negative energy. This is a seed product for the first local circular bioeconomy.