

SmartHUB Centre

OFFGRID - NET ZERO

In our Pocket and Tiny Town communities, the SmartHub centre is the focal point of the community, providing a place where residents gather inside during inclement weather and outdoors when the weather permits. It includes spaces for a variety of different activities, and which vary based on the location and size of the community.

We plan to include a SmartHub centre in communities of 12+units, and in smaller communities, we will look to repurpose any existing structures.

The name SmartHub centre was created because it will function as the community centre with all infrastructure services managed through the hub. The hub monitors the utilities used by the community, as well as managing renewables. Our goal is to make each community as sustainable as possible given its size and budget.

Indoor space will vary based on the size of the community, and its location to the host city. Outdoor spaces will include covered and open decking providing outdoor eating/lounging space for the community along with a firepit. Off-grid communities are planned to include a minimum of 32-homes on 4-acres of land. Multiple communities (2 or more) can be connected to create Tiny Towns.

FEATURES

MAIN FLOOR



Commercial Kitchen

This is a common kitchen that the residents can use to prepare and share meals. We feel one of the best ways to stay connected with others is to sit down together and share meals. The kitchen is run and maintained by the residents of the community.



Dining/Common Room

The dining room provides an opportunity for the community to come together, share meals, a potluck, or a meal made in the community kitchen, for everyone to enjoy together. The dining room also acts as the common room for the community where card and board games can be played, as well as various group social gatherings and meetings can be held.



Fireside Lounge

The lounge is simply a few couches arranged around a fireplace, and/or TV providing a place where friends can gather to relax, talk, watch a show or game.



Retail store

Some centres may include a small store, for its own or a small art/craft gallery that may be open to the public. The function of the space will be determined by the residents.



Washrooms

We plan to include 2-all gender accessible washrooms containing a sink & toilet. Due to the proximity of the tiny homes to the centre, it is expected that more facilities will not be needed.



Elevator/Stairs

When the community is large enough that the SmartHub has a second floor to accommodate extra features, both stairs and an elevator will be added, for access to the second floor.

SECOND FLOOR

Where the SmartHub centre is not large enough to warrant a second floor, some of the following key features may be included on the main floor.



Office/counselling spaces

Depending on the size of the community, general use offices are planned, 1 office for each 4 homes. These offices may be used as temporary workspaces, provide offices for traveling medical/dental/vision professionals, or be used as private counselling spaces. The spaces will be able to be booked for use.

Gym/Yoga Centre



A small gym and yoga studio is planned, that may include a rowing machine, bike, elliptical, treadmill, and open floorspace. Residents will be able to schedule time on the equipment, and group sessions as well.



Library/reading/study room

This space with a few easy chairs, is intended to provide a quiet space for individuals, outside of their homes. (This was suggested by several college/university students when asked about community centre features.)

LOWER LEVEL

Where the SmartHub centre includes features to make the community sustainable, they are housed and managed in shipping containers on the lower level. These containerized services are what makes the SmartHub, smart. We have elected to use containerized systems because they can be built and configured in the manufacturer's factory. They are then brought onsite and using our standardized connections, plugged in and to operate. Should a service require extensive maintenance, the container can be removed, and a substitute connected.



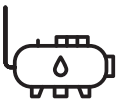
Waste & organic processing

We have teamed up with Waterloo Bio-filter (WBF) to provide community organic and waste processing. They are approved for use in Ontario, they monitor the system remotely and maintain the system under contract.



Vertical garden containers

We have teamed up with CropBox to include their shipping container garden systems. These enclosed vertical gardens can produce the equivalent of an acre of small fruits, mushrooms, and/or vegetables, without using pesticides, using about 70% less fertilizer, and water than growing outdoors. Additionally, they produce year-round, so they are ideally suited to supply the community. We plan to include 1 CropBox for every 8 community homes.



Rainwater collection, storage, filtration, and distribution

We have teamed up with CleanFlo Water Technologies (CFWT) to provide rainwater collection, storage, filtration, and distribution throughout the community. They are approved for use in Ontario, they monitor the system remotely, and maintain the system under contract. We will have a well that will supplement the rainwater system if needed.



Crafts & light manufacturing

Craft & hobby space are planned to be available on the lower level, as well as some component manufacturing and repairs for the tiny home community.



Solar/Wind Power collection, storage, and distribution

We have teamed up with MobiSmart to use their containerized system for solar/wind energy storage and distribution. Where 2 or more communities are connected, we will operate a mini grid, to ensure sufficient power to all homes. We plan to use RNG produced in the WBF system to power a backup generator for the community. We will also tie into the municipal grid where available.

