

## Abattoir BIGH farm

by [steven beckers](#) / 2018-05-29 22:16:41 / Belgique / 12864 / FR



**Year of commitment** : 2018

**CO2 Impact** : The cultivation of edible plants, fruits and herbs, captures around 30 to 40 kg / m2 of production area / year, or between 42 and 56 tons of CO2 / year for the farm. CO2 comes from the activity of the bio-filter of fish farming and the recovery of CO

**Green energies** : Recovering of fatal energy

**Digital services** : Water, Automation, Other

**Sustainable mobility** : Urban Logistics, Accessibility

**Water cycle** : Collection, Purification, Groundwater capture, Used water recycling

**Circular economy and waste management** : Eco-Design, Industrial Ecology, Reuse, Optimization of ressources, Bio-based materials, Save of ressources, Organic recycling

**Biodiversity & Ecosystems** : / Roof Agriculture, Vertical Farm, Hydroponic cultivation, Buffer zone, Carbon capture, Environment education, Eco-tourism /



2 700 000 €

**Manager / Dealer**

BIGH Anderlecht SA

### GENERAL INFORMATION

**The first urban farm BIGH is the Farm Abattoir, built in the heart of Brussels, in the priority development zone of the canal, on the roof of the Foodmet (a food market, designed by the ORG architects, on the historic site of the Abattoir) .**

The Abattoir site is famous for its cellars, its classified market and its bustling market, which attracts more than 100,000 people each week in three days. It houses the last artisanal slaughterhouse located in the center of a European capital. All these food activities have earned the site of the Abattoir the nickname of "belly of Brussels".

**It took about a year to develop the Abattoir Farm: work began in 2017 and the first gardening trials were conducted in 2016, while the greenhouse and the fish farm were completed in 2018.** The farm will be fully operational at the end of 2018.

### Progress Status

Delivered

### Data Reliability

Self-declared

### Funding Type

Public/Private Partnership

### Infrastructure Video



## Website Enterprise / Infrastructure

<https://bigh.farm/fr/home-fr/>

## Sustainable Development

### Attractiveness :

Located in the district of Cureghem, slaughterhouses Anderlecht, the project participates in the priority area of the canal and has already positioned the site on the European map of urban agriculture. Attractiveness is reinforced for the arrival of restaurants, shops and quality shops bringing social and cultural diversity.

In a general way the profitable valorization of roofs allows the valorization of the real estate support and its attractiveness.

### Well Being :

Circular, qualitative, local and healthy food from what the city can offer as life through the mix of use, participates in awareness and training in a urban area in demand. Replacing an asphalt roof with a lively and soothing farmhouse at the same time takes part in a new interior atmosphere of Islet and from the street.

### Social Cohesion :

Our social partners are TRAVIE, an adapted workshop that employs people with disabilities from the surrounding area and Atelier Groot Eiland, our partner for the exploitation of outdoor productive gardens, offer professional reintegration training through urban agriculture activities. Garden products are destined for their restaurant near the canal.

### Preservation / Environmental Improvement :

We have developed a state-of-the-art aquaponics system where fish, fruits, vegetables and aromatic herbs grow in a zero-waste closed circuit, preserving water, increasing biodiversity and recovering the lethal energy of all cold rooms. Butcher's fridges from Foodmet.

### Resilience :

The year-round production of plants, fruits, vegetables and fish contributes to the creation of a resilient network for the Brussels Capital Region, without interruption and keeping a seasonality of products with the outdoor garden and tomatoes in greenhouses.

### Responsible use of resources :

The greenhouse and techniques are built to be disassembled according to Cradle to Cradle, with over-cycling and non-toxic materials.

Rainwater and drilling are entirely used by fish and plants, without waste. The box formula in the box of fish farming in the greenhouse saves energy for the benefit of partly photovoltaic power supply and recovery heat pumps on the cooling of the covered market and its cold rooms. The substrates and organic support used are valued after prolonged use of 2 to 3 years in the greenhouse and permanent outdoors, in the form of compost and peat usable in the ground or on the roof.

## Testimony / Feedback

*The magazine Gondola, aimed at businesses, takes a very positive analysis of the BIGH project and provides a glimpse of the possibility of modifying food distribution in the future*



*The interview on demand at the magazine "le sillon belge" is also an approach towards farmers in order to improve the vision of these on their own work and societal role.*

## Governance

Building Integrated Greenhouses SCA

**Holder Type :** Private Company

**Builder Type :** Other

BIGH Anderlecht SA

**Manager / Dealer Type :** Private

The company is designed to develop a network of farms at the regional and European level, with each of the farms considered as a profit center relying on the experts of the holding, BIGH SCA.

BIGH is at the same time co-developer, operator and seller of short circuit products.

BIGH relies on local companies for urban logistics services, food processing and the social economy for part of its workforce.

### Business Model :

An investment of 2.7 million euros for an annual figure of 1.1 million euros, ebitda of 25% and pay-back 6 years; 36-year lease guaranteed on 4000m2 of roofing of Foodmet.

The objective is to develop a network of farms co-financed by the owners of sites to which BIGH will lease the greenhouse built according to its technical specifications.

## Sustainable Solutions

Building Integrated Greenhouses SCA

Description :

- fish farm

**Each year, the fish farm of Abattoir Farm can produce 35 tons of high quality striped bass.**

The BIGH experts selected striped bass because it met different criteria: market demand, water quality, renewable heat available to maintain a temperature of 24 ° C and the ability of these fish to grow as well. well in freshwater than in their natural habitat (the estuary). From the solid excrement of striped bass, the water naturally rich in fertilizer that comes out of the biofilter will be used for both hydroculture and outdoor gardens, as well as for other purposes.

- Greenhouse

**The greenhouse of the Abattoir Farm produces aromatic herbs, tomatoes and micropousses** in three horticultural zones, which represent a production area of 2,000 m². Production capacity depends on variety, size and temperature.

The greenhouse benefits from organic pollination with bumblebees and biological pest control methods to manage any disease. We do not use chemicals or pesticides.

- Outdoor garden

**The first 700 m² of the outdoor garden have been cultivated since 2016. With its 2000m² BIGH is probably the biggest productive roof in Europe.**

We are also innovating new agricultural techniques on external substrates, and aim to become economically viable with the sale of products. The outdoor garden is an opportunity to create a living and productive living space on a roof so that you can replicate the experience elsewhere.

CO2 Impact : 56 000,00

- Economic development :
- Biodiversity :
- Urban project governance
- Infrastructure
- Low-carbon materials/ infrastructure

Company (es) Website :

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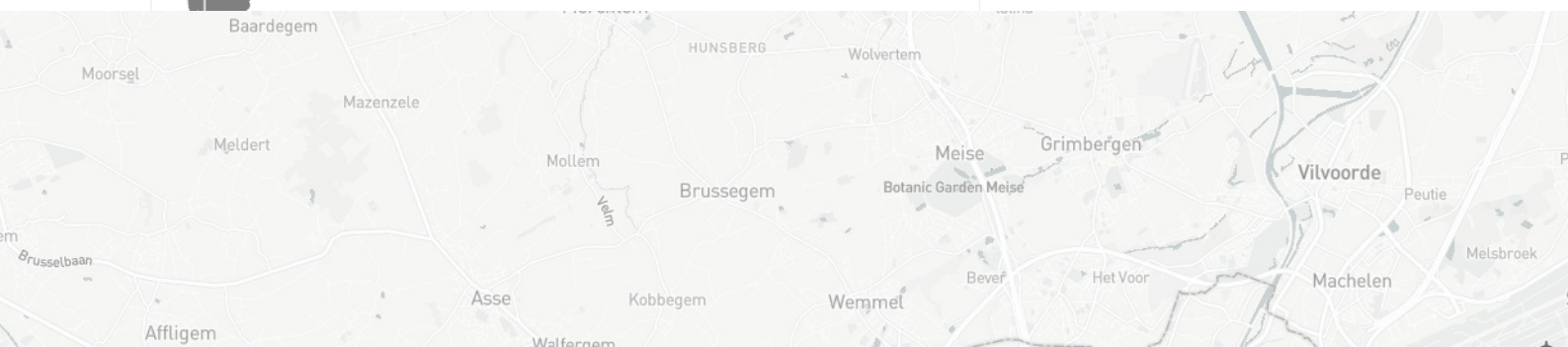
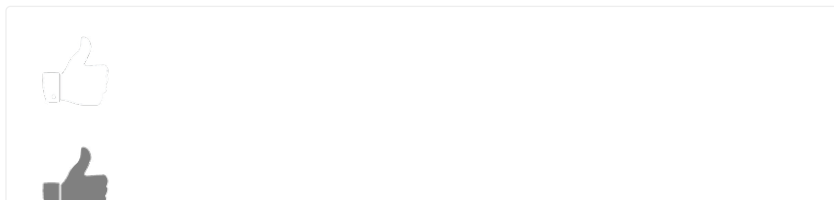


## Contest

### Reasons for participating in the competition(s)

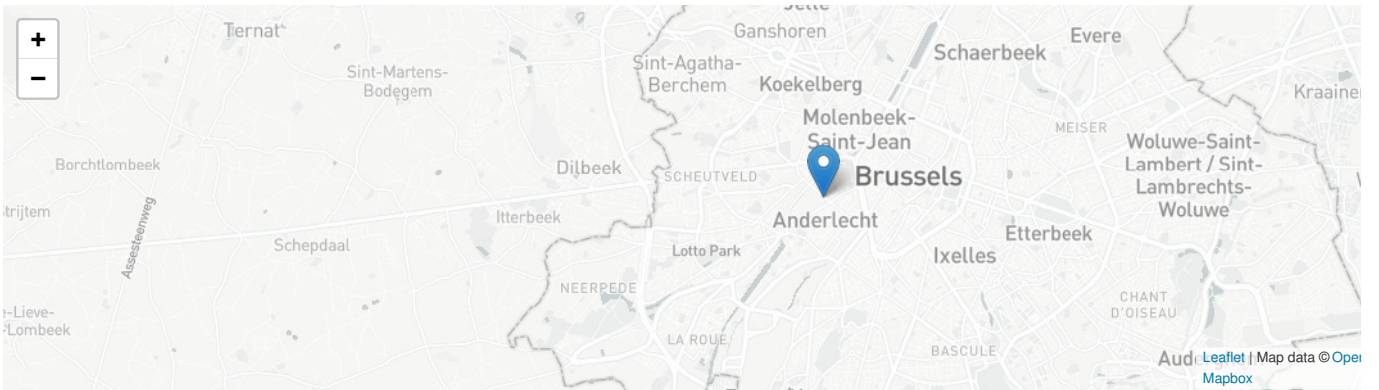
- La ferme dispose de sa propre pompe à chaleur, qui emmagasine la chaleur provenant du système de réfrigération du Foodmet (permettant ainsi de produire toute l'année) tout en réfrigérant les chambres froides des bouchers et des détaillants du Foodmet. Elle est complétée par un dispositif de chauffage au gaz si besoin dont le CO2 est récupéré et destiné à faciliter la photosynthèse des plantes durant la journée.
- La ferme dépend le moins possible de l'eau courante : nous utilisons de l'eau de pluie filtrée et stockée, ainsi que l'eau d'un forage.
- La consommation d'électricité est partiellement compensée par les panneaux solaires des installations photovoltaïques de la halle alimentaire.
- Durant le fonctionnement de la ferme, nous chercherons des synergies supplémentaires basées sur un partage des équipements.

### Building candidate in the category





Grand Prix Infrastructure Durable



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