

# Urban Food from Residual Heat

## Site description three – Bjuv



**OPEN**

# Innovation Competition

Urban Food from Residual Heat  
- DEADLINE JUNE 2, 2017

## The Food Valley of Bjuv – an urban demonstration site in Bjuv's town centre

Bjuv is a small-medium sized town located in the Southwest area of Sweden. The town's economy is largely based on agricultural and surrounded by agricultural farm land. In the near future, a large industrial food production site, known as the Food Valley of Bjuv, is going to be established within the municipality. The food production site will have the goals of being a green impact industry park, a sustainable producer of food – notably fish farming and greenhouse cultivation, having an innovative packaging industry and the development of related supporting industries. To this end, on-going projects include the construction of Sweden's most environmentally friendly large-scale greenhouse and land based fish farm. In addition, northern Europe's largest and most energy efficient automated cold storage facility has recently been constructed and is now operational in the industry park. In short, the Food Valley of Bjuv represents sustainable, climate-smart food production on an industrial scale.



The Municipality of Bjuv wishes to establish a demonstration plant in the town centre using the winning proposal from the Open Innovation Competition, with the intention of promoting and educating the town's citizens and visitors about the sustainable operations of the Food Valley,

### Site description – Bjuv town centre

The municipality of Bjuv wishes to establish a “miniature Food Valley” in the town centre using the winning solution from the Open Innovation Competition. There are two potential location sites one of which will be selected. However, regardless of location, it is the ambition of the municipality that the facility will allow the town’s citizens and visitors to be able to experience and learn about what is happening in the actual Food Valley of Bjuv. It is intended that such a facility will be capable of demonstrating the circular and sustainable nature of the Food Valley’s production of vegetables and fish, food production more broadly and innovative packaging.

### Challenge description

The municipality wants the unit to house showrooms, service facilities, a market hall and a restaurant, all of which they wish to be able to grow and sell their own vegetables, fruit and fish whilst also benefiting from each other’s residual products in a closed cycle. It is envisioned that the building in which this facility is to be housed will be approximately 4-5 storeys high with not only commercial and social functions but also housing, with service functions on the ground floor and apartments located above. There are two potential site locations in Bjuv, in both of which residual heat will be available not from industry but from the town’s district heating system.

Site option A is to add the proposed facility on to an existing property complex located on the city square. Today the property is home to a bank, a fitness centre, a restaurant, a medical centre, a few small shops and a number of apartments.



Picture 1 Pre-existing complex depicted in option one

Site option B is to start from scratch and build a new property within a larger area with park-like surroundings. There is ongoing structural change in this area and up to now there has been a skate park, playground and outdoor



fitness facility installed in the park. There are also plans to build a cultural centre – with an associated library and community centre – as well as high-rise housing. It has also been agreed that an ex-industrial property located in the area will be demolished in order to make room for new opportunities.



Picture 2 Looking Southeast over option two's park area



Picture 3 Looking Southwest over option two's park area

### Specific requirements

Bjuv envisages the “miniature” Food Valley facility as having a number of characteristics including being suitable for residential space on the upper floors whilst having commercial and social functions (shops, showrooms, meeting spaces, public facilities etc.). They also hope to install a closed circuit system for introducing advantageous symbiosis between the users of the complex and to reduce the overall quantity of the facilities waste products. Finally, the municipality hopes to explore the possibility for the facility to use solar generation as a main or significant source of electricity.

### Maps and further information





