Johanneberg
Science Park

# Johanneberg Science Park
## Annual Report 2019

## TURNOVER 35 642 tkr

The founders are the two largest owners, the City of Gothenburg and Chalmers University of Technology. The revenue comes from our shareholders, partners, project funds and property owners, Chalmersfastigheter and Akademiska Hus, as well as from the Västra Götaland Region.

## EMPLOYEES 23

In 2019, 23 people (15 women and 8 men) were employed at Johanneberg Science Park AB, which is an increase of two persons compared to the previous year.

## NEW PARTNERS 0

No new partners joined Johanneberg Science Park in 2019. Our largest partners include the owners Chalmers and the City of Gothenburg together with the Västra Götaland region. In addition, 15 private companies are involved as either owners or partners of Johanneberg Science Park.

## EVENTS - VISITS 3 060

Johanneberg Science Park welcomed 3,060 visitors to 54 activities in 2018, such as breakfast seminars, workshops and study visits.

**The need for close** collaboration aiming to solve the major challenges of our time continues to increase.

Johanneberg Science Park continued its positive development during 2019 with the ambition of becoming Sweden's best collaborative environment for issues concerning urban development.

To succeed in this, the community around Johanneberg Science Park needs to continue to develop. We see a constant need to offer an environment where many different industries meet, exchange experiences and share challenges that we can thus solve together.

The collaborative process requires trust and a willingness to develop. Together we become stronger which is necessary in a world whose complexity is constantly growing.

Our ability to think sustainability from the molecular level to the design of cities was very positively strengthened during the year and we look confidently forward to meeting tomorrow's challenges.

**Mats Bergh**, CEO Johanneberg Science Park

## AREA DEVELOPMENT

The second phase of developing the area around Johanneberg Science Park was completed in 2019. The innovative new building, A Working Lab, brought more companies to enrich the area. Among those who moved in were RISE, Akademiska Hus and the new restaurant Waste, which has a clear mission of minimizing food waste.

Johanneberg Science Park moved its own offices into this new building and now runs its operations from both sides of Sven Hultins Plats. The company also has a strategic role in creating a common culture throughout the whole area.

The JSP-led project Fossil-free Energy Districts (FED) completed its task of establishing a local, integrated energy system during 2019, laying the ground for a new energy-oriented testbed on campus Johanneberg.

## NEW PROJECTS

Nine new projects in which Johanneberg Science Park has a leading and/or collaborative role started in 2019. Among which, the testbed Sustainable Smart Parks was launched in collaboration with Husqvarna and the City of Gothenburg.

The service innovation accelerator, TJIVA, responded to a need from the SME community to get support to increase the service content of their offerings.

Two mobility projects on Campus Johanneberg received funding - MoJo, a continuation of a mobility solution developed within our IRIS Smart Cities project, will offer employees on campus a new mobility service for business trips and KUL will test a robot for package deliveries.

## NEW TESTBED FOR SUSTAINABLE SMART PARKS

Gothenburg is launching the latest in a series of testbeds to futureproof the city. The idea behind the 'Sustainable Smart Parks' testbed is to develop and test solutions for fossil-free and efficient maintenance of the future urban green spaces.

Through digitalisation, electrification and automation, focus will be placed on increasing the efficiency of daily operations, enhancing the recreational value and reducing environmental impact.

The first test area is The Garden Society of Gothenburg, where robotic lawnmowers are being installed and new sensor technology is being tested.

Sustainable Smart Parks is a collaboration between several of the companies and administrations of the City of Gothenburg (Park and Nature Management, Sports and Association Management, Environmental Management, Local Government, Bostads AB Poseidon, Gothenburg City Leasing AB), Johanneberg Science Park and Husqvarna AB.

The initial work supporting the development of the test bed is funded by Vinnova and is led by Johanneberg Science Park. Additional partners in this work are the Swedish University of Agricultural Sciences and Decerno.

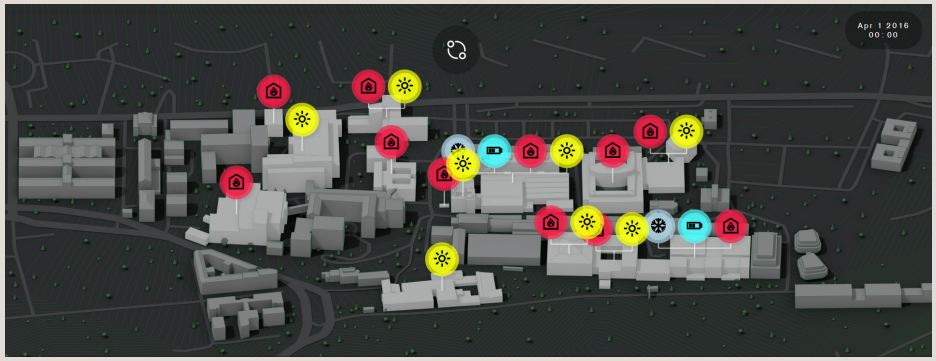
## TJIVA - THE SERVICE INNOVATION ACCELERATOR

TJIVA is a collaboration between Johanneberg Science Park, Framtidens Företag and RISE. It has received funding from the Västra Götaland Region and the European Regional Development Fund in order to increase the level of service innovation within small and medium-sized enterprises (SME).

TJIVA is the first accelerator in Sweden, and probably in Europe, focusing entirely on small and medium-sized service companies as well as manufacturing companies seeking to increase the service content of their offerings.

The project will test several components and processes, such as targeted education, service innovation labs and peer-to-peer networks, while establishing a physical space for SMEs at Johanneberg Science Park. The long-term ambition is to provide companies with tools that enable them to continue working innovatively on their own.





## RESULT: FOSSIL-FREE ENERGY DISTRICTS COMPLETED

**The collaborative project, Fossil-free Energy Districts (FED) ended in October 2019. The nine partners in the project had then successfully established the first local energy market that combines three energy carriers - electricity, heating and cooling - at the campus of Chalmers University of Technology. By doing so they have proven that local energy systems can be an important piece in solving the energy transition puzzle.**

"It is a great success that we have managed to create and demonstrate this unique energy system that is now in operation on campus. Our ambition is to contribute to a future renewable energy system and the great deal of attention and interest FED has attracted, both nationally and internationally, confirms that the concept of local energy systems is on the rise," says Stina Rydberg, project manager at Johanneberg Science Park.

By connecting the buildings on campus to a digital marketplace, the FED system is programmed to independently manage a constantly ongoing trade between buildings that can both consume, produce and store energy. The system continuously gets external input such as weather forecasts and electricity prices and it is also connected to the city's energy grid.

This way the system can control the energy consumption, for example by heating a building a few hours before the weather turns cold, and ensure that locally produced, renewable energy is used efficiently within the area. Hence, power-intensive peaks are avoided and imports of fossil-based energy can be reduced.

Through the FED project, Gothenburg was, one of the first European cities to win the EU-call for Urban Innovative Actions in 2017, with the aim of finding innovative ways to meet societal challenges. The project is the result of a close collaboration between the City of Gothenburg, Johanneberg Science Park, Göteborg Energi, Business Region Göteborg, Ericsson, RISE Research Institutes of Sweden, Akademiska Hus, Chalmersfastigheter and Chalmers University of Technology.

"We know that the societal challenges ahead are something that individual actors will not be able to manage by themselves. Therefore, it is important for us as a city to become a good player in different forms of collaboration together with business and academia. Projects such as FED contribute to two of the goals of the innovation program; to create benefits for our citizens and for the City of Gothenburg to become a recognized, innovation-leading city, says Gunilla Åkerström, who leads the Innovation Program of the City of Gothenburg.


## BIOEKONOMIRIKSDAGEN 2019

In 2019 Johanneberg Science Park and our West Swedish Chemical and Material Cluster received the honor of arranging the annual conference Bioekonomiriksdagen (“The Parliament of Bio-economics”) together with IKEM, the Swedish Forest Industries and the Västra Götaland Region.

For two days in October, 180 guests from all over the country gathered to learn about the latest developments in bio-based materials, products and fuels. Parallel deep dives were made in the maritime area, housing and buildings as well as cars and fuels.

The speaker list included, among others, State Secretary Per Callenberg, parliamentary politicians; Rickard Nordin (C), Emma Hult (MP), Betty Malmberg (M), Kristina Yngwe (C), Marlene Burwick (S) and Kjell-Arne Ottosson (KD); experts such as Markku Rummukainen (SMHI) and Filip Kjellgren (Vinnova) and representatives from companies such as Stora Enso, Preem, Nouryon and Chalmers.

In addition, comedian Jesper Rönndahl entertained the audience and rhetoric expert Pontus Christoffersen offered tips on how to argue for change.

An exclusive tour and dinner at Universeum Science Center was an appreciated grand finale.



## AWARDS

Several of the buildings coming out of Johanneberg Science Park’s collaboration projects received prestigious awards in 2019.

For example, Riksbyggen’s **Housing Association Viva** was named Gothenburg’s best house and the Green Building of the Year by Sweden Green Building Awards.

Akademiska Hus’ A Working Lab was named West Sweden’s Smartest Real Estate and Johanneberg Science Park partner Wallenstam became the Real Estate Company of the Year at the Property Gala 2019.

## DISSEMINATION

Johanneberg Science Park welcomed over 3,000 participants to various activities in the area during the year. For example, the annual **brännboll** (a Swedish bat-and-ball game) tournament and the Johanneberg Relay contribute to the sense of community in the area.

The FED project was presented during a **final conference** a seminar at the West Swedish Arena at Almedalen and together with the Johanneberg Science Park-led European project Celsius Initiative at its Celsius Summit conference in Brussels.

In Almedalen we also arranged a seminar on the transition to a fossil-free industry in Västra Götaland, which is led by the Vinnväxt initiative Climate-Leading Process Industry.

During the Smart City Expo in Barcelona Johanneberg Science Park represented Gothenburg’s commitment as Lighthouse city in the EU project IRIS Smart Cities and at the Switch conference at the Swedish Exhibition & Congress Centre, we held a seminar with our partners.

A highlight ending the year was the half-day seminar ahead of the climate meeting COP25. Speakers included Katarina Graffman, Anders Wijkman, Björn Wiman and students from Fridays for Future.


## Partners

City of Gothenburg

CHALMERS UNIVERSITY OF TECHNOLOGY

AKADEMISKA HUS

BENGT DAHLGREN

CHALMERSFASTIGHETER

Framtiden
Vi bygger det hållbara samhället för framtiden

Göteborg Energi

HSB – home of opportunities

Husqvarna Group

MÖLNDALA FASTIGHETS AB

PEAB

Riksbyggen

SKANSKA

TYRÉNS

VOLVO

Wallenstam

white

## Funding Agencies

eit Climate-KIC

Swedish Energy Agency

Funded by the Horizon 2020 Framework Programme of the European Union

Interreg North Sea Region
European Regional Development Fund
EUROPEAN UNION

Interreg Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

EUROPEAN UNION
European Regional Development Fund

VINNOVA

REGION VÄSTRA GÖTALAND

UIA URBAN INNOVATIVE ACTIONS


**Johanneberg Science Park - Sweden's leading collaborative arena for urban development**
We co-generate innovations for a society that is good for people and the environment. We bring together academia, society and a variety of large and small companies. Together we run national and international innovation projects and test solutions for future challenges.

Our partner network consists of the City of Gothenburg and Chalmers University of Technology together with AB Volvo, Bengt Dahlgren AB, Förvaltnings AB Framtiden, Göteborg Energi, HSB, Husqvarna AB, MölnDala Fastighets AB, Peab AB, Riksbyggen, Tyréns AB, Skanska, Wallenstam, White Architects, Akademiska Hus, Chalmersfastigheter, Region Västra Götaland, West Sweden Chemicals and Materials Cluster, and more than 150 small and medium-sized companies.