Johanneberg
Science Park

Johanneberg Science Park
Annual Report 2021

A come-back year

2021 was a year that also began strongly affected by the ongoing pandemic. Our physical meeting place still felt empty and there was great uncertainty about how investments in projects and the recruitment of new partners would develop. At the same time, the lessons and experiences gained in 2020 had strengthened us and created a common strong desire to continue even better. The transition to a sustainable society is more important than ever and a pandemic is just another obstacle to overcome.

Through great commitment from our owners, partners and employees, the business therefore developed very positively in 2021. Now that we have learned to socialize via digital tools, the number of partners grew, the project volume increased and we could also meet the increasing demand for large-scale urban development projects. I'm proud to say that our business now seriously covers the entire scale, from cutting-edge technology development projects to large systemic projects, where we can address the issues concerning sustainable community building and the Agenda 2030 goals from several perspectives and perspectives.

Through diversity and commitment among owners, partners and employees, there are many driving forces within Johanneberg Science Park which are united in the goal of constantly developing our common ability to be a little better than we have been before. We take that strength with us into the coming year and strengthen our position as Sweden's leading collaborative environment for sustainable urban development.

As always, we look forward to new collaborations and innovations and not least a proper anniversary celebration to mark our ten (or now twelve) years as soon as possible!

Mats Bergh, CEO Johanneberg Science Park

The year in figures

Turnover SEK 37 500K

Our revenue comes from our co-owners, partners, project funding and Region Västra Götaland.

29 new network members

Together, Johanneberg Science Park's two major member networks attracted a total of 29 new members in 2021. 5 of them joined the West Sweden Chemicals & Materials Cluster and our network for small and medium-sized enterprises (SME) welcomed 24 new members 17 at its basic level and 7 at the 'Gold' level.

28 employees

In 2021, 28 individuals (18 women and 10 men) where employed by Johanneberg Science Park – 1 more than the year before.

2 new partners

Consulting companies Ramboll and Norconsult joined as partners in Johanneberg Science Park with the ambition to drive innovation within urban development and energy forward. The total numbers of partners is now 20.

3 468 guests attended 78 events

An increase by 44 procent compared to 2020. Through digital workshops and webinars during the Corona pandemic we have been able to reach a broad national audience. During the autumn eased restrictions meant that we could once again welcome visitors to our physical environment.

New projects

Several new projects, initiatives and collaborations, run by, or with the participation of, Johanneberg Science Park, started in 2021.

REKA - Regional Electrification through Joined Forces Arena
Johanneberg Science Park has, together with RISE, been tasked with mapping current and future electricity and power needs in the Region Västra Götaland by 2023 and to develop an action plan on how to deal with challenges. The initiative is part of the region's joined forces for electrification, which will facilitate the transition from fossil fuels to electricity.

In the final stage of the **TJIVA** - **Service Innovation Accelerator** project, six SMEs are now in the process of developing or creating new service offerings. Through TJIVA, they receive methodical coaching and continuous exchange of experience.

Effective Communication of the Termo program
Energiforsk and Celsius Initiative, run jointly by Johanneberg Science Park and IMCG, will together, on behalf of the Swedish Energy Agency, handle the external communication of the research and innovation program Termo - heating and cooling for future energy systems, for at least two years.

Together with the City of Gothenburg, Volvo Cars and several other partners, Johanneberg Science Park participates in the **Gothenburg Green City Zone**, started in January 2021. The goal of the initiative is a completely climate-neutral and emission-free transport system in a zone that extends from Lindholmen through Korsvägen and all the way to Forsåker in Mölndal. Here, new technology will be tested that makes it possible for a part of Gothenburg to have 100 percent emission-free modes of transport by 2030.

Small meets Large – Innovation in Collaboration
To remain innovative, small and large companies need each other in various ways. But the community-building sector hasn't yet developed a systematic way for the two types of companies to meet. Johanneberg Science Park wants to change that. Its new concept, 'Innovation through Cooperation – Small Meets Large', has received funding for a feasibility study in 2021. The goal is to develop a cooperative process that large companies automatically gain access to when they join Johanneberg Science Park.

In 2021, Johanneberg Science Park became the new host of the **Recycling West network**, which works to increase the knowledge exchange regarding practical recycling in the construction sector. Among other things, the hosting is based on the **Building Challenge Recycling**, which Johanneberg Science Park arranged together with Byggföretagen i väst during the spring of 2021.

An electric compact crawler excavator and an electric compact wheel loader are being tested in Färjenäsparken within the Electric Worksite project.

New collaboration electrifies construction sites

Tests of electrical work machines within the ElectriCity collaboration's new initiative - the Electric Worksite project - began in September 2021 in Färjenäsparken.

Different types of work machines account for about one sixth of the transport sector's total greenhouse gas emissions in Sweden. Work machines used in the industrial and construction sector (including road works) account for a significant part. Emissions from these machines have increased by 40 percent since 1990.

The construction sector in Sweden has agreed on a joint roadmap with the goal of reducing greenhouse gas emissions by 50 percent by 2030 and reaching net zero emissions by 2045. Electrification in the sector is a central part of the transition.

Electric Worksite has the ambition to speed up the process and the tests with the emission-free and quiet work machines are the first step. With a focus on, among other things, building and construction projects and street maintenance, electric work machines are tested in real environments in Gothenburg.

Johanneberg Science Park's role in the project is to lead the work of identifying and preparing major construction sites to be fully electrified.

Electric Worksite is funded by the Swedish Energy Agency and consists of: Volvo Construction Equipment, NCC, City of Gothenburg, Chalmers University of Technology, Lindholmen Science Park, Gothenburg Energy, Johanneberg Science Park, City of Gothenburg Leasing, RISE Research institutes of Sweden, ABB Electrifications Sweden, Riksbyggen, HSB Gothenburg and Halmstad University.

RESULTS AND ACHIEVMENTS

Five Star Campus finishes

The Five Star Campus initiative, which Johanneberg Science Park ran together with Chalmers, came to an end in 2021. Five Star Campus reached and surpassed its set goals on number of new projects, student involvement and visualization of research and innovation on campus.

Seven new projects, using campus as a testbed, were initiated, with a total scope of SEK 108 million. 350 students participated in 13 different student projects and 36 visualization and communication projects were completed. Not least the testing of autonomous vehicles on campus received a large media coverage with several articles and features in local media.

A delivery robot and a self-driving bus will be tested on Chalmers campus in a new project starting in 2022, to see how freight and passenger transport can work together in an urban environment. The project is a direct result of previous collaborations within Five Star Campus.

From demonstration to business

Within the EU project IRIS Smart Cities, Johanneberg Science Park connected the ElectriCity project with Riksbyggens Brf Viva, enabling used bus batteries to be tested for energy storage in residential buildings. Based on these tests, the project partner Volvo began a collaboration with Stena Recycling's subsidiary Batteryloop, where bus batteries are part of a circular business flow. The area was also considered so interesting that Volvo 2021 launched the Volvo Energy business area.

Two construction challenges

Two construction challenges were launched by Johanneberg Science Park, within its commitment to Region Västra Götaland's Climate 2030, together with Byggföretagen i väst. During 2021, 40 construction companies received support on into how they can work with **recycling** and make a **climate budget**. The challenges have resulted in two practical handbooks that have been presented to a wider audience during webinars and are available for download.

Selected Events

In addition to a number of seminars, webinars and workshops for a wider audience, Johanneberg Science Park continued with its exclusive gatherings for owners and partners. During these meetings, our partner representatives have discussed important issues, such as energy supply and capacity challenges and design for behavior change.

For the first time, Frihamnsdagarna was organized in Gothenburg and Johanneberg Science Park was of course there. We arranged a panel discussion around the question: How can we promote future innovations in a city for all? The conversation was moderated by Eva-Lena Albihn, Vice President and Sustainability Manager at Business Region Gothenburg and on stage were Professor Björn Sandén and our own Katarina Nordström together with some of the innovative small and medium-sized companies in our network.

In April, HSB Living Lab welcomed viewers to a full day of live research! A total of 60 program items were produced, more than 100 people appeared in the features and over 1,500 unique visitors watched during the day. Johanneberg Science Park presented the projects IRIS, Minshed and Climate Neutral Urban Logistics. Thanks to the digital format, all content remain to be seen on HSB Living Labs Youtube channel.

The JSP days were launched at the end of the year, as a result of the intensified collaboration between Johanneberg Science Park and the property owners Akademiska Hus and Chalmersfastigheter to create an environment where people active in all the different buildings in the area will meet, enjoy and collaborate. For three days, our environment was filled with activities from morning to evening - cooking classes, networking, seminars, training sessions and dancing.

Partners

CHALMERS

City of Gothenburg

VOLVO
VOLVO GROUP

AKADEMISKA HUS

BENGT DAHLGREN

CHALMERSFASTIGHETER

Framtiden

Göteborg Energi

Husqvarna Group

HSB – home of opportunities

MÖLNDALA FASTIGHETS AB

Norconsult

PEAB

RAMBØLL

Riksbyggen

SKANSKA

TYRÉNS

VOLVO

WALLENSTAM

white

Funding Agencies

Swedish Energy Agency

EUROPEAN UNION
European Regional Development Fund

Interreg
Baltic Sea Region
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Interreg
North Sea Region
European Regional Development Fund
EUROPEAN UNION

VINNOVA

tillväxtverket

REGION VÄSTRA GÖTALAND

Our partner network consists of the City of Gothenburg and Chalmers University of Technology together with AB Volvo, Akademiska Hus, Bengt Dahlgren AB, Chalmersfastigheter, Förvaltnings AB Framtiden, Göteborg Energi, HSB, Husqvarna AB, MölnDala Fastighets AB, Norconsult AB, Peab AB, Ramboll, Riksbyggen, Tyréns AB, Skanska, Volvo Cars, Wallenstam, White, Region Västra Götaland, West Sweden Chemicals and Materials Cluster, and close to 250 small and medium-sized enterprises.

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