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# **Local campus report**

# Helsinki | Myllypuro Campus





LIVE BALTIC CAMPUS | LOCAL CAMPUS REPORT

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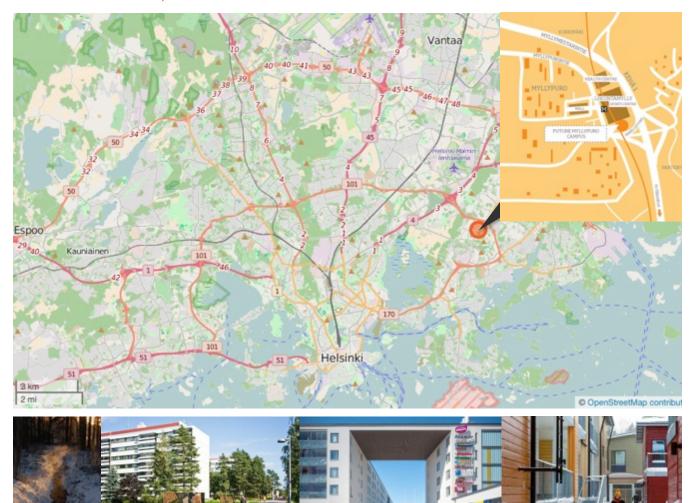


#### **BASIC DATA**

## > Name of the campus

Myllypuro Campus, 'Metropolian Myllypuron kampus' in Finnish

## > Location of the new campus



# > Accessibility

Situated little over 10 km from the Helsinki city centre, Myllypuro Campus sits directly by a metro line and is thus easily accessible by the city public transport. The journey to the city centre takes only 15 minutes. In addition a cycling way is going straight by the campus building and there is good access to the future super highway network for bicycles ('Baana' in Finnish) planned by the City of Helsinki. Bicycles are allowed in metro also. The student housing foundation, HOAS, has plans to build new student apartment buildings nearby the future campus. The campus is also just 200 metres from the mall, health centre and sports services making it easily accessible by foot also.

The Ring I highway (Kehä I in Finnish) also runs directly by the campus building. This is the innermost of the three beltways in the greater Helsinki region and runs from the easternmost part of Espoo to Itäkeskus in eastern Helsinki thus providing excellent access by multiple public bus lines and by private cars. The distance to the international Helsinki airport is approximately 20 kilometres and about 20

minute drive by car. The connection to the airport is from 40 minutes to an hour with bus-train or metro-bus connections.

Distance to other relevant locations:

Mall approx. 100 m / travel time 2 minutes

Sports services 50 m / travel time 1 minute

Metro station 50 m / travel time 1 minute

Health Centre 200 m / travel time 5 minutes

Arabia Campus approx. 7 km / travel time approx. 30 minutes

Leppävaara Campus approx. 17 km / travel time approx. 50 minutes

Myyrmäki Campus approx. 16 km / travel time approx. 55 minutes

Travel times above are estimated with current public transportation connections and do not take into account possible reorganisation of routes and schedules by the time campus will be finished. In the suggested Helsinki Master Plan metro, commuter train lines and crosswise rapid transit rail lines connect the various urban centres to form a network. The current rail connections are complemented by several new connections including a "science tram" line connecting Myllypuro with the campuses of Viikki, Kumpula, Pasila, Meilahti and Otaniemi.

# > General data about Helsinki, Myllypuro neighbourhood and future surroundings of the Campus

Helsinki is the capital and largest city of Finland and situated in the region of Uusimaa. The Helsinki metropolitan area includes the urban core of Helsinki, Espoo, Vantaa, Kauniainen, and surrounding commuter towns. This functional urban region has about 1.4 million inhabitants and 751,000 jobs. Helsinki is Finland's major political, educational, financial, cultural, and research center as well as one of northern Europe's major cities. Approximately 75% of foreign companies operating in Finland have settled in the Helsinki region. The nearby municipality of Vantaa is the location of Helsinki Airport, with frequent service to various destinations in Europe and Asia. Helsinki was also the World Design Capital for the year 2012.

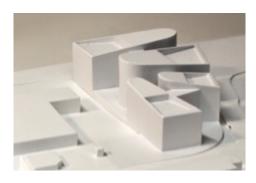
A new City Master Plan for Helsinki is being prepared. With this city plan, Helsinki is preparing for a significant population growth. The new plan is based on an estimate, which predicts a significant growth both in the number inhabitants and jobs in within the city Helsinki by 2050. In order to cope with more people the city has to have a more urban, denser city structure. The city has put a lot of effort in getting residents, neighbouring cities, regional operators and other who are interested to participate and influence what the plan consists of and what kind of city Helsinki will be in the future (http://www.yleiskaava.fi/en/).

Myllypuro, the neighbourhood of the future campus, is currently 3.52 km2 large residential area in eastern Helsinki with 10,705 inhabitants and 1588 workplaces (Helsinki by District 2014 / Helsinki Region Infoshare). Nature is very prominent in Myllypuro and the apartment buildings have been situated between parks, rocks and trees. Myllypuro is well connected by metro line and highways and Finland's largest shopping centre is one metro stop away. Currently the residents are quite mature, over half of them are over 40 years of age and 20% are older than 65 years. There are also greater number families with under age children (compared to the number of residents) than in Helsinki on average. *N.B See appendices for charts about the area and its demography.* 

## > Current phase of planning and planned timeline of construction phases

The construction project is in planning phase where so-called L2- stage has just been accomplished. Construction work commenced with a breaking of the ground ceremony on 4<sup>th</sup> of March 2016. According to the current plans the first part of the building will be finished in August 2018 and the second part in September 2019.

# > The size of the campus area?



Myllypuro campus building consists four U-shaped towers connected together on each floor in line with the design concept "Only4U" created by the architects.

Myllypuro Campus will be the largest of the four future campuses of Metropolia: with surface area of 41 000 square metres (and 56 000 gross square metres) the campus will host 6000 students from the fields of health, well-being, social services as well as construction and civil engineering in the following degree programmes:

- Building Services Engineering, both BEng & MEng
- Civil Engineering, both BEng & MEng
- Construction Architecture
- Construction Site Management
- Land Surveying
- Sustainable Building Engineering

- Advanced Nursing Practise, Master's
- Biomedical Laboratory Science
- Elderly Care
- Emergency Care
- Health Promotion, Master's
- Nursing
- Occupational Therapy
- Optometry
- Oral Hygiene
- Osteopathy
- Physiotherapy
- Podiatry
- Prosthetics and Orthotics
- Radiography and Radiotherapy
- Rehabilitation, Master's
- Social Services, both Bachelor's & Master's

In addition there will be approximately 500 members of staff working on the campus and the administrations of Metropolia UAS will mainly be situated in Myllypuro. All in all approximately 4000 persons are expected to visit and work on the campus premises on daily basis.

# > Historical and thematical aspects of the campus and its surroundings

The name Myllypuro (roughly translates to 'mill brook') comes from a small mill that used to be by a ditch running from nearby fields in Viikki. Up until the 1950's the area was almost entirely untouched rocky forest. The migration from countryside to Helsinki on the 1960's initiated the construction of the area and residential area (with approximately 12 000 residents) with its services was more or less completed by the early 70's. There were not, however, a lot of jobs created to the area and thus the residents of Myllypuro mainly went to work to the city centre. The former mayor (and first apartment building resident of Myllypuro) has reminisced the early days of the residential area as well as close connection to the nature (which - to extend - remains to these days) - on neighbouring lot of the future campus there used to be a spring from which the residents fetched water for their coffee.

Some supplemental building has been done over the year. In 1998 remnants of environmental toxins (PCB residues) were found on an area that had been built over landfill during 70's. Rather quickly the

City of Helsinki decided to demolish the 11 houses (with over 2000 apartments) and one kindergarten that were build on the poisonous land. (YLE)

In an attempt to raise the image and brand of the area a lot has been done during last few years - for example a small wooden urban village has been built to southern side of the area based on a plan received from an international architecture competition. On the year 2009 old mall was demolished and replaced by new one which has shops and services on the ground floor and apartments from there up. Currently there are many vacant spaces in the mall, mainly due relatively high rents and close proximity to Itis, the largest shopping centre in Finland, situated in Itäkeskus. Shared health centre for Myllypuro and Itäkeskus areas including dental care, home nursing and laboratory facilities was completed in 2012. Also the Neighbourhood Project run by the City of Helsinki has focused on improving the area.

The sport services are arguably the best in the whole city: there is the sports park (one of the largest in Helsinki) with multiple football courts and hall, tennis centre and ice stadium for youth. Beside the park there are a centre for floorball and Liikuntamylly with total of 12,060 m2 of indoor space for various different sports. In addition the basketball, Finnish baseball and baseball courts are planned. In addition a plot is currently reserved for a larger ice stadium.

Myllypuro has very active and future-orientated resident association. In Myllypuro there is also one of the most famous bread lines in Helsinki (i.e. where food is handed out to those in need), which serves people from all around the city. The president of the resident association sees this mainly as an example of the caring spirit of Myllypuro and the will to take care of those less fortunate. The residents are seemingly proud of their neighbourhood and its nature and many who have lived their childhood there have within recent years returned to the area with their own families. (Helsinki by District 2014 / Helsinki Region Infoshare)

Thematically Campus connects to the City's Health Capital Helsinki initiative, which is a leading European hub of Life Science (health, food, environment) and Health Tech related research, knowledge and business. The City of Helsinki, the University of Helsinki, Aalto University and the Hospital District of Helsinki and Uusimaa (HUS) are together developing the local research based innovation and business ecosystem, with the aim of making this the leading European region of Life Science and Health Tech. The activities will improve the commercialization of scientific research, increase the number of startup companies and jobs, support business growth and accelerate export. This hub is planned around the hospital and research area in Meilahti in western part of Helsinki. However, creating a second hub for wellbeing and services related to that would complement this objective very nicely. The excellent sports facilities, health centre and other public services combined with the Metropolia's education and development activities and the overall caring spirit of the surrounding neighbourhood will provide an excellent starting point for the cluster.

Some practical examples of what new campus will bring to the area and under the same roof:

- Positia, a part of Metropolia which offers well-being and therapy services (incl. Prosthetics, Orthotics, Physiotherapy, Podiatry and Osteopathy services as well as Optician's Shop) tailored to clients' individual needs. These are carried out by students, and rely on highquality research and teaching.
- The teaching clinic of oral hygienist students, a collaboration with Social Services and Health Care Department of the City of Helsinki, receiving real patients from the public health care.
- Six modern learning environments developed in the faculty of Health care and nursing i.e.
   HealthPro Learning Environment of Health Promotion, PharmaPro Learning Environment
   of Drug Management, Learning Environment of Evidence-based Practice, Simulation Learning
   Environment, SkillsPro Self-directed Learning Environment and DigiPro Digital Learning
   Environment
- The workhop utilities for e.g. Prosthetics and Orthotics and laboratory spaces. The ways in which these can be co-utilised with business and industries is currently been looked into.
- Modern laboratories and facilities for building and real estate engineering

- MINNO® Innovation project means a collaborative team project, where multidisciplinary student groups solve authentic problems by innovating a novel, practical and concrete solution. Every undergraduate in Metropolia takes part in a 10 ECTS innovation project, where the challenges arise from labour market needs and surrounding society.
- Multible RDI projects, open courses, Studia Generalias etc.

Within the Live Baltic Campus-project Metropolia and The City Executive Office will explore the possibilities of collaboration between these two hubs.

# **SOCIETAL / REGIONAL CHALLENGES**

> The reasons and motives for why the new campus will be built

What are the key drivers and key issues going on in the university and the city-region?

Helsinki Metropolia University of Applied Sciences, Finland's largest university of applied sciences, educates the future professionals in the fields of culture, business, health care and social services and technology. Altogether it has 16,500 students and around 1050 staff members. Metropolia is owned by the cities in the Helsinki metropolitan area (Helsinki 42%, Espoo 27 %, Vantaa 26%, Kirkkonummi 4%, Kauniainen 1%). Metropolia was born in 2008 as a merger of two universities of applied sciences (EVTEK and Stadia). Since that Metropolia has prepared the campus strategy for decreasing the number of premises in order to get a more compact campus network to enable collaborative and multidisciplinary learning and co-working. Other drivers has been getting modern learning environments to enable the strategic goals of Metropolia, gaining more efficient use rate of the learning and working spaces (- 20 %). Also economical necessity and cost efficiency were drivers for the project. The board of Metropolia UAS accepted the current campus strategy in 2012.

According to the campus strategy Metropolia in compressing it's activities into 4 campuses from the existing 20. The campuses are located in Arabianranta and Myllypuro in Helsinki, in Leppävaara in Espoo and in Myyrmäki in Vantaa. The whole project includes two new buildings and one big renovation project and will be accomplished till the year 2019. These campuses aim to become concentrations of many fields of expertise, and networks of open learning that radiate new vigour around them connecting and contributing into the regional innovation system.

From the City's perspective, the decision to place Metropolia's new campus in Myllypuro was a strategic choice. The City sees the campus as bringing value to the eastern suburbs benefitting the image of the whole district and creating new opportunities. The campus is a big investment for the city, costing 165 million euros. The expectations of the impact of the campus on economic development are high. The campus will promote an open approach and collaboration with companies and citizens of the surrounding area. As a condition for the new campus to be built the City Council requires a study to be made on how campus can contribute to the economy and industry within Helsinki. This study is currently conducted in collaboration between Metropolia and the City Executive Office of Helsinki and is expected to be ready by the end of year 2016.

Helsinki is a testbed and a living lab for academia and businesses. The City enables the implementation of new services and business activities. An open Helsinki speeds up the development of digital services, improves the usability of services, facilitates their interoperability, and creates new innovations and speeds up the business activities. It is important that the knowledge and innovation potential of the Myllypuro campus is utilized and further developed through cooperation with companies, citizens, city actors, and other partners, especially in the fields of in Health and welfare and construction industries. Metropolia. Creating suitable, modern learning environments is an important factor also.

Metropolia's vision is to be an active facilitator in creation of Vibrant Metropolitan area and pursues towards contributing inspiring learning environments and being an energetic and active university community as the world of work transforms as well as championing for the sustainable economy. All of

these objectives are aligned with those pursued by the City when selecting Myllypuro as the location for the new campus.

From Metropolia's side the campus development activities and the aim to reduce the number of premises is also strongly motivated by the necessity of becoming more cost-effective – another main motivation being the ambition to strengthen internal cross-disciplinary collaboration. Many of the current premises are not originally designed to be learning environments and the new campus is offers a chance to create better facilities for learning. From students' perspective current situation does not make it possible for them to utilise the full educational potential Metropolia has to offer: it's difficult to take courses from other disciplines and conduct joint projects with them due the geographical distances. For the staff e.g. the travel time between premises takes up valuable working hours and makes collaboration difficult in practise. The scattered location of the premises also makes it difficult to strengthen the community spirit and build a shared culture within the university.

The current structure is also very expensive to maintain. Due to cuts to the government funding, there is a need to increase the financial efficiency of Metropolia's operations. Also as of 2018, Metropolia will cease to receive subsidies from its shareholders, the cities of Espoo, Helsinki, Kauniainen, Kirkkonummi and Vantaa. Due the scattered location of premises it's not really possible to make much savings from the supporting services (i.e. libraries, study affairs guidance, ITC services) without compromising the quality level of services. In addition many of the current buildings are not in a good condition and require continuous repairs. Some of the premises are also impossible to modify to modern learning environments either due considerable financial costs or due that they are protected in their current form. (Metropolia's Premises Strategy)

# > Links to current and on-going local and regional development strategies and plans

One of Helsinki's biggest assets is its highly educated population. 47% of all citizens of the age 25-64 years have a tertiary level education degree/higher education degree. The higher education institutes and student city issues, such as housing, campus traffic and services for students are valued very highly within the city government.

As a trend, institutions of higher education in Helsinki prefer centralizing their functions into larger campuses, which are located near good services and are easily accessible by public transport seeking synergy benefits by clustering similar disciplines near each other – thus creating districts of innovation and competence. Unified campus models are favoured as they seem to foster multidisciplinary cooperation between different disciplines and partnerships with businesses and other collaborators.

Along with Metropolia, another recent change has been the fusion of previously three independent universities into Aalto University and the decision to locate its largest campus in Otaniemi, City of Espoo. Aalto is moving its University of Art and Design away from Arabia Campus in Helsinki. The Arabia area has been developed around arts and design for a long time, so the new situation opens for many opportunities, especially for Metropolia, which will centralize its cultural education to Arabia.

The education in the fields of health and welfare and construction industries that is situated in the Myllypuro campus strongly links to the strategic key branches that the city of Helsinki focuses on accelerating. The five key branches are health and wellbeing, smart and clean, ICT, design and tourism.

The City of Helsinki has a broad range of responsibilities and provides its residents with many statutory services. Thus, the City has an important role channelling innovation to people's daily lives, especially in housing, energy, transport, education, and children and the elderly, as well as social services and health care. Helsinki wants to be a testbed for new innovations and is working to create a vibrant innovation and entrepreneurship ecosystem across the metropolitan area to help entrepreneurs succeed. An innovation ecosystem consists:

- 1. Knowledge and skills (from e.g. the higher education institutes)
- 2. Functioning public policies and services for startups and entrepreneurs

- 3. Financing for startups and innovations
- 4. Interaction between the actors to turn an idea into a process, product or service on the market
- 5. Functioning business

Metropolia, along with the other higher education institutes, is an important part of the ecosystem together with participants from all major cities in the area, Finnish Business Angels Network (people investing in early-stage high-growth companies) and accelerators.

In the regional strategy of Uusimaa, there are several relevant strategic objectives, which relate to campus plan i.e. Human Health Tech, Welfare City and Urban Cleantech.

#### > Dilemmas and obstacles addressed

Discussion has mainly revolved around the costs. Building the campus is big investment to the City of Helsinki and moneywise the campus is the largest construction project for a public building surpassing even Central Library project, which is also underway in Helsinki city centre.

In addition the plot itself is also challenging, being fairly small for the building and being situated partly above metro line and in the junction of Ring I highway. The fact that metro needs to continue operating during the build, makes building phase challenging.

Actually, there has been at least one prior attempt to build a campus Eastern Helsinki. In the early 2000 in one of the Metropolia's predecessors, Helsinki Polytechnic (Metropolia itself was formed from a merger of two universities of applied sciences in 2008) planned to have a campus for engineering studies in Myllypuro or in Herttoniemi. This initiative was driven by the field of construction and civil engineering and their need for more modern and suitable facilities for their education.

However, at that time there was quite loud opposition to the proposal by the staff and students arguing that the brand and image of the school would receive damage, if linked to the Eastern Helsinki with its social and brand issues. The main opposition came from engineering staff and students who were situated right in the city centre of Helsinki, and was fuelled by their unwillingness to leave premises. At the same time, there was another group advocating for the move to gain more suitable environment for modern education as the premises in the city centre were listed and any larger alteration works were not allowed. This time around there has been no similar opposition to the relocation of operations towards the new campuses.

# > The pressures new campus poses on the nearby local community

The campus poses a big change for the area, although the local community mainly seems to see it as a positive one. The current local community together with the community rolling in with the new campus is in volume similar to a mid-sized Finnish city. Having an extra 4000 people around every weekday will undoubtedly have its effects on the area: although the campus is conveniently situated by the metro line, without careful planning the now calm area might have to deal with the congestion and deprivation in parking lots for both bicycles and cars.

On the other hand campus can be expected to have a positive effect on the business life and services provided in the area by inserting a mass of new customers to the neighbourhood. This is in a sense much needed development - the shopping centre has struggled to find and keep tenants to its commercial premises and there are currently many vacant spaces. In addition to the campus building itself there are plans for new student apartment buildings as well. As can be seen from the statistics, there are currently a less of 20-40 year old residents than in Helsinki generally. The students coming to study at the campus are mainly this specific age group, which is most likely to have some effect to the dynamics and atmosphere of the neighbourhood.

# **INFLUENCE / PARTICIPATION / USERS**

> The role of different stakeholders in campus design process To what degree are people able to influence the design of the campus?
Who are (formally and informally) the decision makers in campus development?

The Helsinki City Council made the decision on the construction of the building and about the budget. Nevertheless, the campus will be planned according the requirements and wishes of the user i.e. Metropolia. For this reason Metropolia has official representatives in the planning groups where the essential decisions are made. Practical planning matters are discussed in so called user meetings where staff and student members are involved. These meetings are guided by the architects and also the building designers attend whenever needed. In addition to these the users, designers and the owner are in regular contact to ensure the user requirements on the campus.

The building will be owned by the property company called Kiinteistö Oy Myllypuron Kampus (owned by the City of Helsinki). The president of the Metropolia UAS is a member of the board in that company. The Premises Centre of the Real Estate Department leads the construction process in practice.

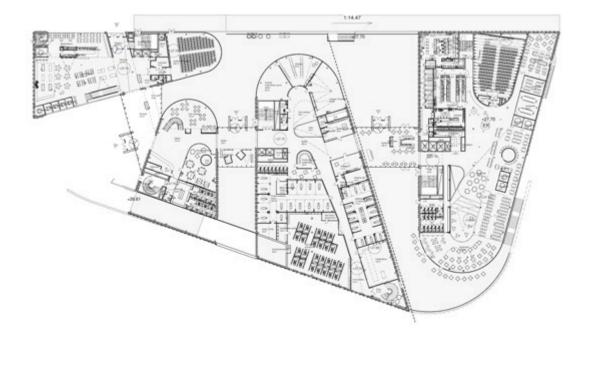
The staff and students of Metropolia have been involved as co-creators of the Myllypuro Campus via user meetings, workshops, campus manual co-creation process and representatives in the design team. In addition the project User-centered Campus Design ('Käyttäjälähtöinen hybridikampus' in Finnish) included two hundred students from different fields to the process as designers and had them to collect user data and insights from different stakeholders and then develop the findings further to service and spatial design concepts to support the architects in their planning. The project ran two years 2013 - 2015 and was funded by the Innovation Fund of the City of Helsinki. However, the project was run in bit out of sync with the actual campus planning, so there have been difficulties in implementing the students' ideas into actual plans. The overall planning schedule of the campus has been tight, which has added its own challenges.

# > Property-rights issues

The legal owner of the campus building will be the City of Helsinki and more precisely a real estate company founded for the purpose and owned by the city. Metropolia will be the tenant in the premises. In earlier plans the idea to have spaces for business and industries within the building was discussed, but then later cut from the plans due the costs.

Some of the spaces will be co-managed, such as 'Megora' hangout spaces (Me = Us in Finnish + Agora), which are collectively held together with students. Student union will also have their office and cafeteria spaces within the building. There are no set implementation plans yet about the involvement of student in the maintenance of the building and these will be discussed as the construction progresses. However, the campus will be exceptional in sense, that also technical spaces (maintenance of air conditioning etc.) can be used as learning environments for the construction and building engineering education. In addition there is an idea to have each degree programme's spaces close to each other, to enhance the opportunity for communal spirit within the student body of different years.

There is an interest to collaboration with actors such as folk high schools, Open University etc. to increase the utilisation rate of campus facilities also during evenings and weekends. These, however, have not been yet discussed in detail either. Also the local residents association has interested of the possibility of using campus spaces, such as the auditoriums, meeting rooms and lobbies for their meetings and events. The services and other spaces that are estimated to be most interesting for visitors are mainly located on ground floor, which service design is inspired by town square (see floor plan below).



> In what ways will local businesses and local residents be involved in creating and using the campus? Will there be opportunity for staff and students to be co-creators of the campus? Will the outside local community have access to and make use of the campus area?

As mentioned the staff and students of Metropolia have been involved as co-creators via user meetings, workshops, campus manual co-creation process and representatives in the design team. During the project User-centered Campus Design also the local residents' association Myllypuroseura, the community house Mylläri (Miller in English) and the Neighbourhood project of the City of Helsinki were actively involved. In addition the network was created and collaboration started with other NGO's (such as the Martha Organization), Citycon (the property owner of the nearby mall) and Metro Helsinki network of enterprises and entrepreneurs in Eastern Helsinki. This project ran two years from August 2013 to July 2015 and addressed mainly the future Myllypuro campus, but also to a smaller extend the Arabia campus. Due to scheduling differences, however, between the project and the official Campus development process the participation of students took place during the project planning phase of the campus building. The utilisation of the students' ideas remains to be seen as the construction process progresses.

The first floor including the library and cafeteria will be open access to everyone. The auditoriums and wellness services provided by students are also situated in the first floor. Also other rooms and spaces are to be available for rent outside their educational use. There have been ideas of collaborating with folk high schools etc. to increase the use of the premises also during evenings, weekends and summer. The aim is that part of the campus can be open 24/7 (that at least is what we are prepared to do; the final decision will be made later).

## > Communication to the society

A joint communication team has been established between Helsinki Metropolia UAS, the building consultant and the City of Helsinki - including the Real Estate Department, the Executive Office, City Planning Department and the Neighbourhood project of the City of Helsinki.

The shared objective of the group is to inform the society about the progress of the biggest public building process in Helsinki. The objective is also to get different target groups and stakeholders

(residents of Myllypuro and Helsinki area, companies specialising in Health and welfare as well as construction industries, students and staff of Metropolia and the media) attention to how the city has developed Myllypuro and to the strengths and potential the area has. In addition the objective is to spur discussion how residents can benefit from the future campus and how students can benefit from having campus situated in Myllypuro.



Students of Metropolia organised e.g. outdoors workout and blood pressure measurements as part Myllypuro Day event in September 2014. The main aim was to make Metropolia known in the area.

There is an effort to start a dialogue between city dwellers, third sector representatives and entrepreneurs and having them join the communicational activities and co-creation of the campus area. Presence and communication through multiple platforms and channels is seen as a must to implement these objectives. A lot has already been done: for example Metropolia has been present at the local "Myllypuro Day" neighbourhood party (or Myllypuropäivä in Finnish) for the last two years and has organised parts of the programme for the event. The main focus has been to make Metropolia the acquaintance with the people of Myllypuro. Metropolia has also attended the neighbourhood meetings to keep local residents updated on the campus plans and currently has several development and study projects conducted in the area with local stakeholders.

In regards of the construction project communication there is a webcam installed already at the building site with online feed, and plans how to utilise social media for discussion and to organise series of events in close collaboration between Metropolia and the City of Helsinki.

Suggested key message for the Helsinki-Metropolia collaboration:

"Cosy and comfortable Myllypuro, which already has excellent sport services is now well on its way of becoming strong hub for well-being within Helsinki area."

# **SUSTAINABILITY ASPECTS**

> Campus area as a role model for sustainable urban and regional development How would you define a sustainable campus: what are the key aspects/indicators?

Similarly to the Finnish national strategy of sustainable development, in Metropolia sustainability is understood almost as a synonym for well being and good life – by acting in sustainable way people maintain and create culture, which cherishes the sanctity of human dignity and secures desirable living conditions for the current and future generations. In practise Metropolia integrates sustainability thinking as part of the education within its different degree programmes and also offers elective modules of Sustainable Communities and Sustainable Development (both 15 ECTS), which students from any fields of study can include into their degree in addition to their professional major subject. This knowledge is something to be shared with the surrounding community also.

In addition Metropolia has made following commitment to reduce its carbon footprint and increase the teaching of sustainable development as part of commitment2015.fi initiative (the Finnish National Commission on Sustainable Development secretariat, and an expert panel will follow and support the commitment and its progress):

"A new, energy-efficient campus with good traffic connections for 6,000 students will be built in Myllypuro, Helsinki, which will replace some of the old campus buildings. The new campus will be constructed in accordance with the low-energy building instructions of the City of Helsinki. The new model will provide savings of about 20% in electricity, heating and water consumption. Due to the proximity of the metro, private motoring will decrease by at least 30%. The resource efficiency of the campuses will be improved and the production of renewable energy at campuses increased. The environmental operations at all campuses following the new campus model will be directed by at least one certified environmental system."

The discussion has, up until now, mainly dealt with the functionalities of the building. Nevertheless, there is a great potential with how mobility issues are resolved as well (in addition to the metro line, bicycle services etc.). The student body has made multiple propositions of having multifunctional green roofs and terraces, which could be used for both for leisure and education. The terraces will actually be implemented as part of the construction project, but the situation with the roof is still under discussion. There is a plan to utilise part of the roof as a solar panel test lab for construction engineering education, but this will be implemented separately when the building is finished. There is also on-going discussion of including a box garden to contribute the solar panel on roof, but this too will be a separate implementation from the construction project and no final decisions have yet been made.

There has also been plans to allow local construction firms to test some of their new sustainable building methods as part of the construction work and then utilise these as educational examples for students and simultaneously provide the businesses with examples that they can showcase for future clients. The practical implementations are still under discussion and there are no official decisions yet made about this.

Perhaps the most interesting aspect is, however, how the campus as a community can become a catalyst for the surrounding area. How it can provide a nurturing setting for wellbeing and healthy sustainable construction expertise to grow. How the campus can act as an inspiration for the neighbourhood and as an interpreter and bridge-builder for people coming from different backgrounds and disciplines. These are not things that we can measure during the Live Baltic Campus project, but perhaps are something for what we can plant seeds for. This will joint effort of Metropolia and the City of Helsinki to continue and monitor for the years to come.

# > Environmental aspects in the campus design

Myllypuro campus will be built within dense urban structure and by good public transport connections and metro station. Also the student housing will be built close by which will reduce the need to travel longer distances by car. During the project planning phase an energy inspection report has already been made and more detailed one is currently underway.

In the planning and construction of the campus there is a set goal to reach level "Good" within the BREEAM International New Construction 2013 system, although there are no plans to actually apply for the official BREEAM certificate due the costs of the certificate.

There is a set goal that the campus building would be in use at least for 70 years. To achieve this the campus is planned so that the technical systems can updated without major construction works. In the design process there is a special thought put into the adaptability spaces/rooms, so that their size and use can be modified according to the need. The accessibility is also seen to be very important.

In User-Centered Campus Design project students' made multiple proposals green roofs / terraces to the Campus. The original plan already had a small roof terrace for educational purposes, but due

financial reasons these will be implemented as terraces annexed to the floors instead. There is also plan to reserve space in the roofs for solar panels, which can be also utilised for testing and other the educational purposes.

In addition there are plans to operate on finished campus with Green Office (currently in use in Metropolia) or a similar system.

# > Key aspect of sustainable urban development that the campus area provides

There is still plenty to explore in regards of sustainability in the Myllypuro Campus context. Currently from the City's perspective the social and economical aspects of sustainability are the main focus. These aspirations have perhaps not been written into a policy or implementation plan (yet), but they are something of an undercurrent in all of the political discussion and decisions made concerning the campus. Bringing the campus to this particular neighbourhood and to Eastern Helsinki is a political act of urban planning to improve both the liveability and the competitiveness of the area.

The future campus and student housing will balance the local demography and create new opportunities for the whole neighbourhood e.g. in shape of well-being services, innovative students, new learning and workshop environments which can be utilised for professional collaboration with businesses as well as general liveliness that will be added with the hustle and bustle of the campus.

The ecological aspect is taken into account mainly in the construction process and by selecting a plot within dense urban structure and by metro line. What is still needed is exploration on how the sustainability knowledge and know-how available within Metropolia (in form of elective study modules etc.) could be accumulated and spread also to the surroundings: what sorts of collaborations would be needed?

# **RESEARCH QUESTIONS**

# > The problems campus owners would like to deal with as part of Live Baltic Campus pilot project

In a way the whole Myllypuro Campus development is a lab for the research questions: "Can a HEI campus become a catalyst and driver for its surrounding area? Can campus indeed enhance the liveability of its neighbourhood and what are the steps to be taken for this to happen?" The idea in itself is not new, similar approach has been conducted in the provinces of Finland with e.g. university filials, but the difference is that in this case it's still urban area within 15 minutes of travel from the centre of the capital city.

From Live Baltic Campus project's perspective the question is, how different stakeholders can be taken as partners to collaborate and co-create a joint development plan for the future campus and how can the methods of design be utilised for this joint process. In Myllypuro's case the emphasis will probably be in the campus as a community rather that the actual building or even the geographical area: "What are the interests and motivations of different stakeholders towards the campus?" and "Are there common goals to be pursued together?" and even further "What are the actions and steps each stakeholder can take to bring the campus community a bit closer to that goal?". The sustainability thinking provides a framework to evaluate the feasibility of those common goals and individual actions, but also the usefulness of the method and the process itself.

In design process it's good to have only broad description of the actual problem to be solved, when you begin. In this sense the question of "How can the future campus contribute to its neighbourhood liveability and help it to grow into an exemplary area and knowledge community of well-being and sustainable construction" is sufficient at this stage. This question can of course be broken down to smaller question such as the questions raised from an economic development point of view (City of

Helsinki): What functions and measures can facilitate that the education and knowledge in the fields of health and welfare industries in the Myllypuro campus interacts with businesses that could benefit from the campus activities? How can the city serve as a testbed for the education and innovation activities at the campus? How can we advance student entrepreneurship at the campus?

Detailed development cases (or research questions) will, however, be formed during the design process together with the stakeholders.

#### **APPENDICES**

Resources: webpage of the campus, other relevant links, literature

Web page of the campus (in Finnish):

http://www.metropolia.fi/tietoa-metropoliasta/kampukset/myllypuro/

User-centered Campus Design website presenting the concepts by students (in Finnish): http://hybridikampus.metropolia.fi

According to the vision of the City of Helsinki, Helsinki is the capital of Finland and the center of the region being an evolving world-class business and innovation center. The city is based on the strength of science, art, creativity, learning ability and good services that are the key to the prosperity of its citizens and the whole of Finland. The Metropolitan Area is being developed as a unified region, which is close to the nature and a good place to live, learn, work and do business in. http://en.uuttahelsinkia.fi/myllypuro

# Myllypuro in Charts

Source: Helsinki by District 2014 / Helsinki Region Infoshare



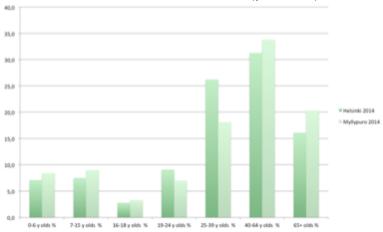


Chart 2: Breakdown between age cohorts in Myllypuro compared to overall situation in Helsinki, the estimated situation in the year 2024

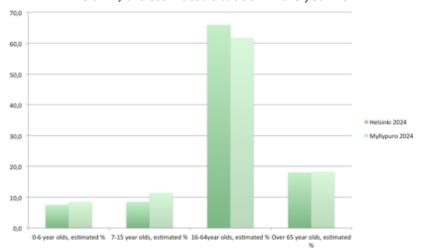


Chart 3: Development of Myllypuro population based on statistics beginning from 1986 and estimated until 2024



Chart 4: Breakdown of residents by language in Myllypuro and in Helsinki on average. Foreign language means other than Finnish, Swedish or Sami (situation 1.1.2014)

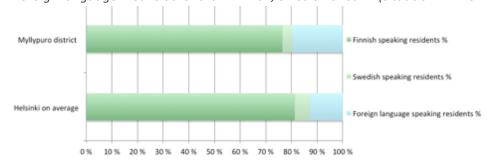
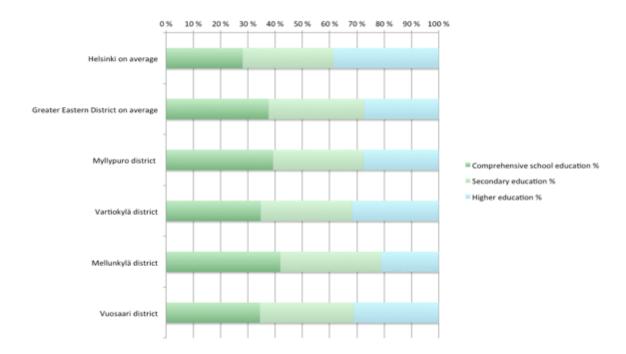


Chart 5: Like the Eastern Helsinki areas in general, the residents of Myllypuro have statistically lower educational than in Helsinki generally (situation 31.12.2012)



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Chart 6: Like the most Eastern Helsinki areas, Myllypuro has fewer workplaces ratio and higher inhabitant ratio per kilometre than Helsinki in general

Chart 7 (left below): In the 2013 Myllypuro had higher unemployment rate than Helsinki in general. However, the unemployment rate was still a bit lower than average in neighbouring areas in Greater Eastern district. The difference in youth unemployment was even more significant in Myllypuro 12.4 % (Helsinki average 8.1 %).

Also the long term unemployment in Myllypuro was quite high 28.4 % (Helsinki average 26.4 %).

District on

Chart 8 (right below): Average yearly income is also lower in Myllypuro than in Helsinki generally.

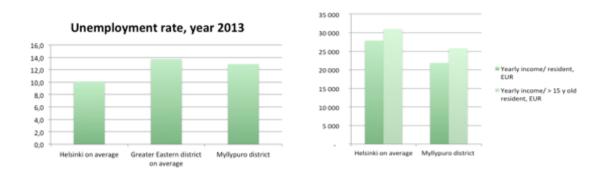


Chart 9 (below): The workplaces situated in Myllypuro are heavily emphasised on public services.

# Share of the places of employment

