Image: City of Vaasa

72 hours traffic challenge 2021

26.10.2021



Trafikledsverket

Bright ideas. Sustainable change.



Welcome to the 72 hour transport challenge kick-off event, we start at 12!

12:00 Kick-off and welcome words

- Ramboll Finland Ov
- City of Vaasa, Finnish Transport Infrastructure Agency, ABB Oy
- Universities

12:30 General information about the Transport Challenge/ Ramboll

13:00 Announcing the Competition task

13:20 Introductions considering the topic

- Sustainable cities / Virve Hokkanen, Ympäristöministeriö, Kestävä kaupunkiohjelma
- Land use/ Päivi Korkealaakso, City of Vaasa
- Mobility in Vaasa Vision, Demand, Challenges and Potential/ Jukka Talvi, City of Vaasa
- ABB and Strömberg Park / Jukka Parkkamäki, ABB Oy

15:00 Further instructions / Ramboll







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WELCOME TO THE 72 HOUR TRANSPORT CHALLENGE!



Väylävirasto

Trafikledsverket

Ympäristöministeriö Miljöministeriet Ministry of the Environment





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Ramboll



-JUKKIS PITKÄNEN, RAMBOLL









2018

Tampere 2019



Vaasan yliopisto



Vantaa 2020



Väylävirasto Trafikledsverket



KESTAVÁ KAUPUNKI

n iv)

RAMBOLL

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Poikkitieteelllisvys kannattaa kolmea eri oppilaitosta edustanut tiimi voitti 72tuntisen liikennekilpailun



Pekka Sauri @nekkasauri - 9h #Helsinki: 72 tunnin liikennehaasteessa haetaan uusia. liikenneratkaisuja Helsingin seudulle. Parastaikaa käynnissä

> Liikennehaasteessa haetaan innovatiivisia liikenn 72 tunnin liikennehaaste on kilpailu, ionka tavoitteena on löytää innovatiivisia ratkaisuia tulevaisuuden liikenneiäriestelmään kasvavalla Helsingin seudulla

kinearilae ia korkurtae utilille mite

ntibussikuijetusta. Lisaksi end matkakeskuksen siirtämistä ke imälle paikalle, jolloin rautatie yöräilijöitä priorisoivia älyliikennev nia soka liikkoosta aktivnitussa valai an is unfor matkakeskukson väld lusta cantacatilla Dussion portocaar obalisi suportussidares Helsinai condition metritolinaiti inter balan icket ori kulkumuotoion uhdi a alfukennetavine kinnarilan ia koskust an puhtaampaa jouk valilla tehden jouk sliikoonetta Lisaksi likenteesta missis initian oritanni houkuttolar houkuttelevamman kilpailukykyisemmä kulkutavan. Lappeenran-nassa järjestetty euvojen palveluita. 2558 työssä koros ttiin myös kestävän liil tunnin liikennehaaste tunnin liikennehaaste oli sarjassaan jo neljäs, ja se on aiemmin järjestetty Tampe-t, Helsingin sekä Outun seudulla. aitun järjestivät Lappeenrannan isen ja ymnäristökasva akutuksia pitkällä aikavälillä upunki. Lii Opiskelijat visionat Lappeenra nen FLY-keskus. Lanneenrannan tekn an kehittämiseksi mytis lennokkaan nen vlionisto. Saimaan ja Lahden amm nidemmän aikavälin visinita kuter









Uusia innovaatioita Helsingin liikenteeseen – 72 tunnin liikennehaaste käynnistyy huomenna

Radiohaastattelut:

8.12.

LIIKENTEEN KEHITTÄMINEN

Radio Pooki

72 tunnin liikennehaaste on nyt

ratkaistu - "En voi kuin ihmetellä"



72 tunnin liikennehaaste järjestettiin ensimmäistä kertaa viime vuonna Tampereella. Tällä kertaa innovoinnin keskiössä or Helsingin liikennejärjestelmä

LIKENNE I Feva Törmänen (0 12 10 2018 kie 10:01

Opiskelijoilla 72 tuntia aikaa ratkoa liikennehaaste Lappeenrannassa -"Odotamme rohkeita ehdotuksia"



kilpailovat 72:n tunnin liikonnohaasto kiipalevat 72n tunnin liikennehaastee sektorijohtaja Jukka-Pekka Pitkästä ha Tampereen 72 tunnin liikennehaaste ratkesi – voittaiat Dutun ydoposton ja Outun ammastikorkoakoutun og toisivat palvelut liikenteen luokse konnohastoossa Tavoittoona on ktutaa innova

> Tuomariston arvion mukaan voittaiaioukkue onnistui luomaan selkeän ja realistise Tampereen Koilliskeskuksen solmukohdasta, loukkue koostui tamperelaisista +5 tetro korkeakouluopiskelijoista.

Jutiset Tampere

Opiskelijat pohtivat Oulussa tulevaisuuden

Julun vliopiston ja Oulun ammattikork

ratkaisuja liikkumisen ja maankäytön

kehittämiseen









FTSITKÖ







kaan välillä, liikenneintinööri Saila Räinä Oult

kampukset yhdistyyät, Räinän mukaan j oita ovat kestävä ja terveellinen liikkuminen, mutta mietittävä on n tion is releasing maldellisureria



Joukkueet etsivät 72 tunnin aikana ratkaisuia iotka tukevat kampukser kehittymistä parhaiten

ESKIVIIKKONA 8 MARRASKUUTA 2017 KALES

LAPPEENRANNAN

TULEVAISUUTTA VISIOITIIN

72 TUNNIN LIIKENNEHAASTEESSA

HELGE MURTOVAA

ruonna 2030 ja 2050?

Miten Oulun Linnanmaan kehitty vä kampusalue vaikuttaa ihmisten liikkumiseen, asumiseen ja elina millainen liikenneiä: nä tukisi kamnuksen kehi

tta miettii vastau

kuutta pitäisi tehostaa, kehittää että Oulun vlioniston ja Oulun amnemuotoia sekä autoimaa ciirtää foeeiiliele inen eri liiken-

erest Ouder jinojasoorja oulur ana bastigi anakamas čri je inamoloj od in sastoji arotinecem mattikorkeadoulum kampukset yh- tin kehittämiseen Oulum seudulla. distyvät: Räinä muisaan pohdita-via asiota ovat kestävä ja terveel- kilpaluun ilmoittautui 30 eri alo-**Heikkilä** dottaa opisk nemuodoilla tulee järjestää kam-linen liikkuminen, mutta mietittä-jen opiskelijaa Oulun yliopistosta va on myös digitalisaation ja robo-la Oulun ammattikorkeakoulusta.



tuvat hvvin hektiseen projektimaa

ilmaan. He myös saavat opintopis- Petri Saarnio Oulun vliopistost tisaation mahdollisuuks Räinä Oulun kaupungista sel-72 tunnin liikennehaaste on kil-pailu, jonka tavoitteena on löytää verkottumisesta kaikille osallistu-Tvön taustalla on toisaalta se. innovatiivisia tulevaisuuden rat-kaisuja liikkumiseen ja maankäyville tahoille. Positiivisen näkyyyy-

ideoita kuin saman taustan oma den lisäksi tavoitteena on löytää alalle uusia osaajia. ien ryhmätyössä Liikennehaasteen voittaia inööri Pasi -Tāmā on neljās opiskelijatyö, kalla Kööpenhaminaan.

vin liikenne- ia maankäytön kohd

uusia ajatuksia, Hautaniemi sane

Lössätkää itsenne irti, löstäkä

Yliopisto-opettaia, arkkiteh

rvioi, että kun eri koulutusta

teen, he saavat en

inen on se attä jok

oulu ja Ramboll Finland Oy. Stäjien edustajat toimivat työn ajina ja tuomareina. Koordi-Pohjois-Pohjanmaan ely-keskuk-

- Ensimm

apuolille hyvä juttu. Vaikka

steen ideoinut sek-

opisacijoten valita nate nerustamalia vhteistv

Greetings from the organisers

City of Vaasa, Finnish Transport Infrastructure Agency, ABB, Wasaline, Ympäristöministeriö



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Greetings from the universities

University of Vaasa, Novia, VAMK



Bright ideas. Sustainable change.





Miljöministeriet Ministry of the Environment

Ympäristöministeriö







Vaasan yliopisto



About the Transport Challenge



Vävlävirasto

Bright ideas. Sustainable change.





72h transport challenge organisers and participants

Students Creating design solutions and presentations

City of Vaasa & Finnish Transport Infrastructure Agency Funding

- Specification of assignment
- Lectures, sparring
- Judging

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- Connection and coordination between different actors
- Sparring
- Arrangements

Ympäristöministeriö

Miljöministeriet Ministry of the Environment

• Judging

Universities

- Linking syllabus
- Specification of the assignment
- Judging

Trafikledsverket



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UNIVERSITY OF APPLIED SCIENCES

Vaasan yliopisto

INIVERSITY OF

Ramboll

72 transport challenge win-win situation for each party

- The Challenge enables new ideas and innovations
- City of Vaasa and Finnish Transport Infrastructure Agency recieve new ideas for developing regions and transportation
- Students get to practise project working on a real case
- Students are granted with credits
- The competition enables connections between the decision makers of universities, companies and regional development and the transportation
- Positive visibility for the field



Trends & new policies that will impact transport and urban planning. EU's new strategy for sustainable and smart mobility



AASAN AMMATTIKORCAROURS UNIVERSITY OF APPLIED SCIENCES

Vävlävirasto Trafikledsverket

Ramboll

New challenges and focus areas for the industry









CITIES are facing new challenges and opportunities





Schedule

Tuesday 26.10.

11:45-13:00	 11:45 Coffee service 12:00 Kick-off and welcome words / Jukkis Pitkänen, Ramboll 12:05 Greetings from the organisers / City of Vaasa, Finnish Transport Infrastructure Agency, ABB Oy 12:15 Greetings from the Universities / University of Vaasa, Novia, Vamk 12:30 General information about the Traffic Challenge / Ramboll 12:45 Formation of teams / Ramboll 	
13:00- 15:15	 13:00 Publication of the topic 13:20 Introductions considering the topic Sustainable cities / Virve Hokkanen, Ympäristöministeriö, Kestävä kaupunkiohjelma Land use/ Päivi Korkealaakso, City of Vaasa Mobility in Vaasa – Vision, Demand, Challenges and Potential/ Jukka Talvi, City of Vaasa ABB and Strömberg Park / Jukka Parkkamäki, ABB Oy 15:00 Further instructions / Ramboll 	
15:15	Independent team work	
18:00	Questions for Resident Panel	

Wednesday 27.10.

12:00-15:00	Team sparring
15:00	Resident Panel results for teams
8:00-21:00	Independent team work



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Thursday 28.10.

7:10-00:00	Uumaja
7:10	Meeting in the harbour
8:00	Breakfast
8:15	 Presentations: 4 x 20 min Energy / Mika Hakosalo, Vaasan kaupunki Sustainable mobility: best practices in the Nordic / Robin Åkebrand, Ramboll Norge ITS / Jukkis Pitkänen, Ramboll Finland Oy International connections / Aimo Huhdanmäki, Väylävirasto
10:30	Arrival, bus transfer to Nolia
11:00	Presentation: City of Umeå, connecting Vaasa and Umeå (contact person), at Nolia
12:00	Lunch at Nolia
13:00	 Site visits, bus transfer Bicycle parking facility Pedestrian tunnel Charging station for electric buses Station of being - Smart bus stop
14:30	Working spaces for the teams, coffees&buns, at Nolia
18:15	Bus transfer back to the harbour
19:30	Departure & buffet
20:30-23:00	Rehearsal presentations

Friday 29.10. Ramboll office Teräksenkuja 1-3 E

12:00

Return of the competition entry (Word + Ppt) on a memory stick

Friday 5.11. Vaasan kaupungintalo Senaatinkatu 1 65100 Vaasa

8:10-11:00	The presentation of the competition work
11:00-12:00	Jury scores works — Lunch break / free time
12:00-13:00	Feedback, winner disclosure and award ceremony



EVALUATION CRITERIA (a total of 100 points)

Team work 10 p

Meeting goals 15 p

Innovativeness and vision 15 p

Utilization of media 10 p

Feasibility 15 p

Impact evaluation 15 p

Report 10 p

Presentation 10 p



EVALUATION CRITERIA (a total of 100 points)

Team work 10 p

Assigning roles in team Participation Team spirit and caring

Meeting goals 15 p

Conforming to assignment Depth and scope Evaluation from different perspectives User-centrism Impactfulness

Innovativeness and vision 15 p

Novelty value Innovativeness and attention value Modifiability Multi-functionality Competency Diversity of considered changes and impacts Creativity

Utilization of media 10 p

Using social media Publicity Cooperation with media representatives

Feasibility 15 p

Technical feasibility Considering short and long term Scalability of idea Acceptability Affordability

Impact evaluation 15 p

CO2 Impacts Changes in mode shares Attractiveness of sustainable mobility solutions Realistic correlation with measures and proposed changes in travel patterns

Report 10 p

General appearance Clarity and level of illustration Visuality Depth Originality Degree of innovation and storytelling in the presentation method Used methods and sources (reporting them)

Presentation 10 p

Clarity Enthusiasm Means of illustration used Time management



Jury and evaluation of the entries

- The winning entry is selected by preformed jury
- Each judge rate the entries based on predetermined criteria
- The entry awarded the most jury points wins and the winning team is awarded
- The jury will be chaired by Jukka Talvi, whose vote will rule in the event of a tie

- Vaasan kaupunki: Jukka Talvi, Päivi Korkealaakso, Mika Hakosalo
- Väylävirasto: Aimo Huhdanmäki
- ABB Oy: Jukka Parkkamäki
- Vaasan yliopisto: Tommi Lehtonen
- VAMK: Asseri Laitinen
- Novia: Tom Lipkin
- Ramboll: Inna Ampuja



#72tuntia – Traffic challenge in social media

- The official hashtag of the challenge is **#72tuntia**, and it is also shared with the media
- The organisers are tweeting daily on the events of the challenge

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Teams are encourage to share highlights of their daily activities, lessons learned and the team spirit & overall atmosphere through social media — there are special prizes for the most active people, the best photos and tweets!



Prize

- The winning team will be awarded a two-day "Liveable Cities" learning excursion to Copenhagen. The prize includes return journeys (train tickets and flights), accommodations in two-person rooms, transport in Copenhagen between sites and meals.
- The excursion will be in early 2022 (exact date will be agreed on with the winning team).
- Note! The prize excursion will be organised if the Corona situation allows. If travel is not possible, the members of the winning team will receive another prize of the same value.

Teams





Altre

Making the teams

- Teams have been formulated with students from different Universities and majors
- Each team picks a name for the team
- Each team picks a projects manager from the team, whose responsibilities include:
 - Contact person of the group
 - Announce the name of the teams and the project manager to the organiser by Tuesday at 18:00 → <u>inna.ampuja@ramboll.fi</u>
 - Deliver short reports to the organiser about the progress and athmosphere in the group. The reports will be submitted at the end of each day (Tue-Thu). The reports will be forwarded to the panel of judges. A short, informal reporting is adequate
 - Ask at least one group member to join the WhatsApp group







Schedule

12:00 Kick-off and welcome words

12:30 General information about the Transport Challenge/ Ramboll 13:00 Publication of the topic

13:20 Introductions considering the topic

15:00 Further instructions / Ramboll



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ASSIGNMENT: TOWARDS CARBON-NEUTRAL EVERYDAY LIFE IN 2030

In 2030, Vaasa will be the happiest city in the world with the lowest carbon impacts. Describe the daily life in 2030 in the case area and from regional perspective.

ASSIGNMENT: Towards carbon-neutral everyday life in 2030

In 2030, Vaasa will be the most happiest city in the world with the lowest carbon impacts. Describe in team's concept:

Urban life and urban environment in one case area in year 2030 (eg. effect on Urban structure and traffic system)

Collaboration between Vaasa and Umeå

Include these viewpoints in your concept

Digitalisation of commerce and services

E-Mobility and low-carbon transportation

Future of work and multilocality

Attractiveness and the brand of the city

ASSIGNMENT: TOWARDS CARBON-NEUTRAL EVERYDAY LIFE IN 2030

Each team chooses one case area from the options below

Vaasa centrum

Strömberg Park and the surrounding area

GigaVaasa



VAASA CENTRUM

- Residents
- Tourists
- Students
- Entrepreneurs and companies

Etc.

HTTPS://WWW.WARTISILA.COM/FIVPAKALISUJTINEV/2605-2020-VAASAN-KALPUNGISTA-HILINEJIRAALPDATAA

Case: Vaasa city centrum

Pros

- · Compact centre area.
- Retrofitting possibilities of existing urban structure.
- Developing city, Wasa station one of the flagship projects at the centrum area.
- Inhabitants of different age groups, tourists and services.
- Visible student activity.
- Diverse cultural life, areas bilingualism gives character.
- Still unexploited areas at the shore.
- Extensive recreational use of parks and urban green spaces.
- Possible free space next to centre after Wärtsilä has moved.

Cons

- Preconditions set by the existing urban structure.
- Diverse and possible cross-purpose needs of users.
- Relocation of business activities from centrum to eg. Kivihaka, and the withering of the centre area caused by it.
- Increased feel of insecurity.
- Built for cars, still not easy to drive.



STRÖMBERG PARK

- Employees
- Service providers
- Entrepreneurs and companies
- Etc.

English M

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Case: Strömberg Park

Pros

- Well connected to the centre.
- Potential recreational use of the area.
- Huge parking areas behind the gates, new possible purposes?
- Potential for walking, cycling and public transport development.
- Nearby nature and the possibilities associated with it.
- New urban district of Ravilaakso is planned close by.
- Historical values and their exploitation.
- Belongs to nationally significant built cultural environments.
- Railroad access.
- Alvar Aalto's land use plan, sets also limits.

Cons

- Preconditions set by traditional factory area.
- The area is unknown for the residents of the city.
- Jobs only? Could there be potential for services/leisure activities et al? (skate park, parkour, etc)
- Unwelcoming feeling created by the gates, possible to turn as advantage?


GIGAVAASA

- Employees
- Companies

Contraction of the second

• Etc.

Case: Gigavaasa

Pros

- Still unbuilt, varied possibilities, large surface area (1000 ha).
- Chance to think outside the box.
- Future workplace area, attracts business, other actors, and activities.
- Opportunity to overlap the industrial environment with nature.
- An excellent opportunity for carbon neutrality in industrial business, logistically in the middle of raw material reserves.
- In the vicinity of the airport and the railroad.

Cons

- No existing urban structure, services, area users, or reputation to rely on.
- The increased amount of commuter traffic positive or negative?
- Significant changes to the nature of the area that may affect to reputation and acceptability.
- Battery industry divide opinions
- Still short of connections to the centrum and surrounding areas.



Impact evaluation

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Bright ideas. Sustainable change.









CRITERIA OF THE TRANSPORT SYSTEM IMPACTS CONSIST OF QUALITATIVE AND QUANTITATIVE ELEMENTS

- **1.** Each proposal will be evaluated from the perspective of HOW WELL THEY CAN CONTRIBUTE TO THE CARBON NEUTRALITY.
- 2. EVALUATION OF TRAFFIC IMPACTS COVER traffic behaviour and transport system changes.
 - Traffic behaviour covers the travel needs by individual. Needs relate to work life (Commuting, business travel), shopping and use of different services and leisure. Future cities may facilitate these needs differently in comparison to precovid times. Remote working, web-shopping and delivery services etc. will affect the travel needs and behavior. However individual preferences (values etc.) is assumed to be constant over the time, as we do not have data about how preferences will change.
 - Transport system and urban structure impacts how easily different activities can be reached (accessibility), length and duration of trips, and availability of different modes.
 - This evaluation takes into account the 1) changes at accessibility,2) changes at travel needs and 3) so called "generalised cost" (Combination of length and duration). Each proposal will be evaluated to 1) assess how much CO₂ emissions they will induce in comparison to current situations and 2) how feasible they are. The feasibility is one criteria which will have impact on overall evaluation.



IMPACT EVALUATION WITH TRAFFIC MODEL - INTRO

Traffic model will be used for evalution the CO2 impacts of solutions.

The model calculates the CO2-emissions based on travelled kilometrage by each mode (walking, bicycle, bus, private car, e-scooters, etc.).

The presented solution will most likely affect **both transport system and travel behavior** (trip purpose (work, leisure, business, personal business/shopping), used modes or number of trips). These changes can be reflected to model variables and change of travelled kilometrage by each mode.

Therefore we ask each team to give their **1**) **numerical** and **2**) **verbal** description of the following variables related to the assignment subthemes.

Theme	Possible variables
Urban life and urban environment	 Land use (accessibility) Transport system: Length and duration of work trips. Mode shares
Digitalisation of commerce and services	 Travel demand: Number of personal business / shopping trip / week
E-Mobility and low- transportation	 Measures to promote alternative fuels and low carbon modes. Share of vehicle fleet propulsion.
Future of work and multilocality	 Travel demand: Daily work trip frequency (x times / month) Accessibility: Work trip distance (km)



TRAFFIC MODEL – LAND USE

Traffic model needs the future land use as input.

- 1) Estimate how the land use will change in your case area.
- Is the total volume realistic?
- How the balance between areas will change? Is it realistic?

2) Open the reasoning.

- How did you end up to the proposed total volume and or change of balance between areas?
- What kind of population and jobs are created?

Area	Population 2019	Jobs 2019	Population 2030	Jobs 2030
Vaasa	67078	35156		
Centrum	13091	9176		
Strömberg	0	2571		
Giga-Vaasa	6	0		



TRAFFIC MODEL – TRANSPORT SYSTEM

The transport system and the land use location affects the vehicle kilometers and the vehicle hours made by

travelers.

- 1. Estimate how these figures will change in the future in your planning area.
- 2. If you have a vision that the travel speed of certain mode (e.g. bicycle traffic) will increase in the future tell how this will be done.

The average length of commuting in kilometres 2019	Vaasa	Vaasa centrum	Strömberg	Giga-Vaasa
pedestrian	1,1	1,0	1,9	-
bicycle	3,4	2,7	3,3	-
public transport	7,8	7,5	-	-
car driver	11,2	8,1	9,1	16,6
car passenger	9,1	6,5	8,1	-

The average duration				
of commuting in		Vaasa		
minutes 2019	Vaasa	centrum	Strömberg	Giga-Vaasa
pedestrian	16,1	14,5	26,7	
bicycle	12,1	9,6	11,9	-
public transport	40,7	37,5	-	-
car driver	10,8	8,2	9,0	16,5
car passenger	9,3	7,1	8,2	-



TRAFFIC MODEL – TRAVEL DEMAND

Traffic model calculates the travel demand based on the current travel behavior. E.g. digitalization, remote working and new kind of services can change the need to travel.

- 1. Estimate what will be the share of different trip purposes in the future year as a whole
- 2. Estimate also how the total number of trips will change in your planning area if different from overall.
- 3. Justify your vision, why the travel behavior changes.

Väylävirasto

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TRAFFIC MODEL – MODE SHARE

Traffic model calculates the future year mode share as output.

- 1. Define target for the future year mode share in your planning area.
- 2. Describe the measures how the target can be reached (eq. how the travel speeds of specific mode should change in order to increase mode share and how this increase will take in the place).

Väylävirasto

Trafikledsverket





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15:00 Further instructions / Ramboll





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Land use

26.10.2021

PÄIVI KORKEALAAKSO City planning director

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Ympäristöministeriö Miljöministeriet Ministry of the Environment



Sustainable Urban Development From Global Goals to National and Local Action



Why urban sustainability matters?



- Cities play increasing role in sustainable development and are forerunners in facing and solving new challenges:
 - An increasing proportion (in Finland more than 72 %) of the population and jobs are located in cities.
 - Cities are major contributors to consumption and pollution but also important actors in innovation dynamics.
 - By getting cities and urban development sustainable, we enable better life, wellbeing and living environments.
 - These underline cities' importance in responding to current and future challenges: climate change, biodiversity, equality, well-being, aging etc.
- Finnish cities have wide range of functions related to sustainability and are actively developing and enabling sustainability solutions. Many has climate targets, but not always enough means to follow the measures.
- We need more cross-sectoral approach and multidisciplinary cooperation to combine the dimensions of sustainability: ecological, social and economic.



UN Agenda 2030 SDG goals

Consists of 17 goals and 169 targets. Monitored by over 200 global indicators, and national indicators. All countries have committed to promoting the Agenda 2030.

- **GOAL 1: No Poverty**
- **GOAL 2: Zero Hunger**
- **GOAL 3: Good Health and Well-being** •
- **GOAL 4: Ouality Education** .
- **GOAL 5: Gender Equality** •
- **GOAL 6: Clean Water and Sanitation** .
- **GOAL 7: Affordable and Clean Energy** .
- **GOAL 8: Decent Work and Economic Growth** •
- **GOAL 9: Industry, Innovation and Infrastructure** •
- **GOAL 10: Reduced Inequality** .
- **GOAL 11: Sustainable Cities and Communities** .
- **GOAL 12: Responsible Consumption and Production** .
- **GOAL 13: Climate Action** •
- **GOAL 14: Life Below Water** .
- **GOAL 15: Life on Land** .
- **GOAL 16: Peace and Justice Strong Institutions** •
- **GOAL 17: Partnerships to achieve the Goal**



2 ZERO HUNGER

8 DECENT WORK AND ECONOMIC GROWTH

1 NO POVERTY

....

7 AFFORDABLE ANI CLEAN ENERGY

13 CLIMATE ACTION



10 REDUCED INEQUALITIES





G



KESTÄVÄ

6 CLEAN WATER AND SANITATION

KAUPUNKI



9 NDUSTRY, INNOVATION AND INFRASTRUCTURE



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Objectives of sustainable urban development in the programme of Prime Minister Marin's government



Means to achieve the goal of "Supporting sustainable urban development and increasing housing in growing urban areas"

- Finalizing the reform of the Land Use and Building Act
- Long-term development of housing policy
- MAL agreement procedure
- State-subsidized housing production
- Measures in growing urban regions (including ARA housing) and areas with shrinking populations (including grants)
- Housing for special groups
- Development of suburbs
- Sustainable urban development
- New forms and affordable costs of owner-occupied housing
- Strengthening the position of tenants



The Ministry of the Environment's activitie on sustainable urban development

•



What makes a sustainable city?



Kuvat: Susanna Kekkonen

Sustainable development commonly divided into ecological, social and economic sustainability

In cities for example

- Low carbon solutions (heating, transport etc.)
- Biodiversity
- Sustainable urban structure and land use
- Healthy living and green environments
- Sustainable social environment
- Equality
- Inclusion and communities
- Education
- Employment and standard of living
- Sharing economy / shared services
- Cultural and economic vibrancy
- Active collaboration and integrating perspectives



Kuva: Susanna Kekkonen

KFSTÄVÄ

KAUPUNKI



The Sustainable City programme (2019-2023)

- A partnership-based approach catalyzing and supporting the sustainable urban development. Supports cities' work towards sustainable urban development and cooperation between cities and the state.
- Themes: carbon reduction, smart solutions, social sustainability, healthy living environment. Focuses on finding solutions that integrate these.
- Actions include for example strengthening sustainability management, developing new solutions through experiments, offering expert and peer support for municipalities, and scaling up good practices.
- Coordinated by the Ministry of the Environment. By October 2021 the program has involved appr. 80 municipalities and 50 other actors.
- Implements the goals of the New Urban Agenda (NUA), UN Agenda 2030 SDG goals and Urban Agenda for the EU in Finland.



Guides and analysis for sustainability in cities and municipalities



Vipinää kestävään kehitykseen - Agenda 2030-työkirja kunnille

A spark for sustainable development - Agenda 2030 workbook for municipalities supports the utilization of the UN Sustainable Development Goals (SDGs) in local cross-government sustainability management.

Elämänmittainen lähivihreäpolku

Life-long green path includes research information and inspirational examples of adding a healthy and comfortable green neighborhood.

Saa kuulua! Oivalluksia osallisuuteen kaupungeissa ja kunnissa –opas

Be heard! Insights for promoting inclusion in cities and municipalities guide offers advice and tips for promoting resident participation.

Reilun kiertotalouden käsikirja

Guide for socially sustainable circular economy offers advises and examples on how to combine social sustainability and circular economy.





Picture: Jenni-Justiina Niemi, HSY

Sustainable station areas: Climate-smart area tool

The experiment produced a tool for planning climate-start station areas to assist urban planning The tool is based on the Low Carbon District concept developed in the EU-funded SMART-MR project. The concept consists of four areas: Land use, housing, mobility, and services and livelihoods.

RESULTS

- The project created a user-friendly tool that comprehensively examines sustainability themes for urban planners and regional development actors.
- The ready tool at <u>www.ilmastoviisasalue.fi</u> can be used in regional planning.
- The experiment produced information on how proposals for regional planning measures can be visualised and compiled into a service package.

EFFECTS

- The tool will make it possible for low-carbon and circular economy urban planning to be more streamlined.
- Workshop cards facilitate interactive planning of sustainable areas and the definition of objectives









Walking city labs for young people

Young people's analyses of the walkability of routes and public places. The tool was tested in the cities of Kangasala, Espoo and Tampere. In addition to urban planning, young people taking part in the labs learned the basic skills of participation: Questioning, listening, viewing, brainstorming and teamwork.

RESULTS

- Two ways to analyse the walking environment together with young people: **Digital** and **analogue**
- The key areas of public spaces were identified, i.e. the areas with the most potential as event and meeting places (young people's own places) and how these could be improved (quality criteria for urban space).
- "We learn much more by doing this through a concrete programme than by reading about it in books." Flexible comprehensive education class teacher (Hervanta, Tampere)

EFFECTS

- Young people's competence and participation in urban planning will increase.
- The land use planners will get new insight.
- Transport planners will receive concrete improvement proposals for the traffic environment.
- New tools for teachers









Communal vertical farming

The project examined more sustainable and communal urban housing opportunities with the aim of creating a space where the residents of the area can get their fingers dirty the soil and spend time together planting. Instead of an instructed environment, city-farmers can create their own space in the city by combining module-based, wooden farming structures, such as plant walls that divide the space. So far, the project has been fruitful for both InnoGreen and farmers, and it has created its small farmer community in Kera's logistics centre.

RESULTS

- A multifunctional space that can be tailored to the needs of the community is essential for generating a sense of community.
- The outside green wall is an effective place to grow herbs and is well suited for urban farming.
- Ecological materials have produced positive results in structures and growth platforms.

EFFECTS

- Close cooperation between companies, residents and communities as developers of regions.
- A replicable model for creating a more sustainable cultivation area in the courtyard.
- The experiment is linked to future urban development, in which the attractiveness and greenness of cities determine their appeal.



InnoGreen City of Espoo Stadin Puutarhuri Keran Hallit Kera-kollektiivi Tired Uncle Brewing CO Ministry of the Environment



Ympäristöministeriö Miljöministeriet Ministry of the Environment



Contact information

Sustainable City Programme

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Twitter <u>@kestavakaupunki</u>, #kestäväkaupunki

Newsletter (in Finnish) https://www.kestavakaupunki.fi/fi-FI/Ajankohtaista/Tilaa uutiskirje









Mobility in Vaasa – Vision, Demand, Challenges and Potential

26.10.2021 JUKKA TALVI Director of Municipal Infrastructure

Vision / Strategy



Mobility and logistics involved in all

Demand for Climate Actions

Road traffic soon the biggest source for CO₂

> What is the 202x maximum? How to follow the progress? How to plan the actions?

Amount of carbon sinks and ways to enlarge those? How much can we share to mobility?

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From 60,5 to 15 ktCo₂?!?

Demand for a Lively City in a Mobility Perspective



Challenges

- Private car dependency and culture
 - "Must own a car"
 - Limited charging infrastructure
- Car-centric traffic network
 - Poor level of service for active mobility
- Covid-19 bad for public transport
- Big investment program
 - Buildings
 - Logistics infrastructure
 - New industry and housing areas
 - Room for enhancing mobility?



Modal shares 2013

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Potential

- A Truly compact city with no hills
 - 80 % of population within 5 km from the market square
 - Avg. Distance to jobs 4,3 km
 - Avg. distance to schools 3,2 km
- Room for improvement (wide streets, etc.)
- All transport modes





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New Ways for Better Results



Vetokannas bridge - Construction prize 2020

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ABB and Strömberg Park

Jukka Parkkamäki, Country Real Estate Manager





ABB is a leading global technology company that energizes the transformation of society and industry to achieve a more productive, sustainable future.

By connecting software to its **electrification**, **motion**, **process automation and robotics & discrete automation** portfolio, ABB pushes the boundaries of technology to drive performance to new levels.



ABB Values Courage Care Curiosity Collaboration
ABB Way – performance with purpose

We succeed by creating superior value.



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We push the boundaries of technology to drive performance to new levels.

We energize the transformation of society and industry to achieve 5 a more productive, sustainable future.











Main sustainability targets

Striving to achieve all targets by 2030



Sustainable Value Chain

We enable a low-carbon society

- Carbon neutrality in own operations
- Support our customers in reducing annual CO₂ emissions by >100 Mt¹
- Supply chain emission reduction

We preserve **resources**

- 80% of ABB products
 & solutions covered by circularity approach
- Zero waste to landfill²
- Supplier Sustainability
 Framework

We promote social progress

- Zero harm to our people and contractors
- Comprehensive D&I framework³; 25%
 women among ABB leaders
- Top-tier employee engagement score in our industry
- Impactful support for communitybuilding initiatives

INTEGRITY AND TRANSPARENCY ACROSS OUR VALUE CHAIN

Savings in the year 2030 from solutions provided to customers 2021-30
 Wherever local conditions allow

3. Diversity & Inclusion framework

Strömberg Park, Vaasa

Brief facts:

- Largest business Hub in Vaasa
- First buildings built in 1940s
- Land area over 70 hectares
- Over 250 000 sqm of office and production area
- 50 various companies as tenants
- Over 2000 people daily works at the Campus
- Unused building rights and empty plots to further develop the Campus area

Latest larger investments:

- 1. ABB office HUB completed in 2019
- 2. Infrastructure developments together with City of Vaasa 2020-2022

Future:

- Investments in smart energy concepts in line with Sustainability 2030 strategy
- Digitalization and smart business Hub in focus

Slide 76

Stronger integration of the area to both City Center and Giga Vaasa

Wärtsilä & Hitachi

3rd party tenants

ABB

ABB

ABB

3rd party tenants

ABB office HUB ABB & 3rd party tenants

ABB & 3rd party tenants

Hitachi

3rd party tenants

October 26, 2021



Schedule

12:00 Kick-off and welcome words
12:30 General information about the Transport Challenge/ Ramboll
13:00 Publication of the topic

13:20 Introductions considering the topic

15:00 Further instructions / Ramboll





CALIPLINKI

Ympäristöministeriö

Milioministeriet

RAMBOLL

wasaline









Further Instructions for the teams



Rules of competition

The rules can be read on the Traffic Challenge website: https://projektit.ramboll.fi/liikennehaaste2021/saannot.html

Main points:

- **Obligation to participate in** compulsory occasions (min 2 persons from each team)
 - exceptions possible only by agreeing with the Ramboll organising committee
- Compliance with deadlines
 - final deliverables (Word+PPT) to be delivered in a USB stick on Friday 29.10. by 12.00 at Ramboll office (Teräksenkuja 1-3 E, 65100 Vaasa)



Project managers, team names and communication

- Each team selects a project manager from among them, as well as a name for the group, and tells the selected Case they choose (done already)
- Project Manager delivers a day report (video, ppt or word file) on the team's work and greetings daily (Tuesday-Thursday) by 20:00. Submit all reports to Inna Ampuja & Pauliina Koskinen
 - The reports will be submitted to the jury and taken into account in the evaluation
- The project manager ensures that at least one of the group members belongs to the WhatsApp group for adhoc communication
- The project manager ensures that at least one member of the group is present at sparring and at the lectures
- The project manager ensures that the entry (Word, Ppt and any other material) is returned on time



Working spaces

- Each team has a workspace in Campus
- There is also a dinner booked every night at 7 pm
- When you go to your own space for the first time, please put a sign on the door with your team's name





Reporting and submission of entries

- Entries should be reported and returned in electronic form
- Entry should include a **PowerPoint presentation**
 - In addition, a working report (Word) of 1-2 pages should be prepared
- The final materials should be prepared in Finnish, English or Swedish
- Returning of the final presentation (Ppt) and work report (Word) in memory stick at the Ramboll office, Fri Oct 29 by 12:00
- Late submissions will not be considered



Background material

- During the competition, teams can use different information sources, such as interviews, Internet materials and literature
- Used sources must be stated in the competition entry with good reporting practice
- Each team will be given a memory stick at the beginning of the competition, which includes background material and information about the competition
- The memory stick will be returned to the organizer at the end of the challenge



Sparring sessions

- In sparring sessions, teams present their thoughts and can interview experts in the field, as well as receive feedback in support of drafting and brainstorming competition work.
 - You can prepare for interviews by thinking about questions for experts experts don't have a presentation for teams!
 - Themes of sparring:
 - Mobility
 - Attractiveness
 - Regional development
- Each group has time for a 20 min/sparring group.
- At least one member of the group should participate in sparring, but we recommend sparring for everyone!
- Time: Wednesday 27.10.2021 between 12-15, each team will be informed more specific times and place after this event



Practice presentations and closing seminar presentations

- 20 minutes/group is allocated for the performance of the entry stick to the given time limit, it is not possible to stretch the performance time!
 - Work should be presented in Finnish, Swedish or English
 - The whole group must be present at a remote intercourse, both at the practise presentation and at the closing seminar*
 - Order of presentations are drawn
- The practise presentations will be held between 20.30 23.00 on Thursday, one group at a time. (On boat)
 - Groups will later be informed of a more accurate group-by-group schedule
 - Presentations of the closing seminar will be held on Fri 5.11.2021 between 8-11
 - All groups on site throughout the occasion

* Potential absences only if agreed in advance with the organizers!



Resident panel

- For the competition, a Resident Panel has been assembled with a comprehensive representation of residents of Vaasa
- The mission of Resident Panel is to give teams their own insights and experiences on the urban environment of Vaasa and its development.
- The information is collected through an electronic Webropol survey conducted by Ramboll according to questions received from the teams.
- Teams must submit their 2 questions today to the resident panel by 18:00
- The Panel will be sent a link to the survey on Tuesday night 26.10. and the answer time to the survey will be until Wednesday morning on 27.10. Ramboll will deliver the results to questions posed by the teams at noon on Wednesday.
- The Resident Panel will also have the opportunity to comment on entries during 5.11. Friday's presentations through a survey, and the feedback provided by the Panel will be served to the jury.



Process

Day 1

- Case selection
- Introduction to assignment
- Introduction to background materials
- Defining the key challenges in planning
- Questions for the Residental Panel
- Early brainstorming
- Day report

Day 2

 Sparring lectures

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- Brainstorming
 - Expert interviews and testing the ideas in sparring
 - Rethinking the key challenges to face the feedback from the resident panel
 - Day report

Day 3

- Excursion to Umea
- Drafting the entry for the practice presentation
- Rehearsal of the practice presentation
- Testing the entry in the practise presentation
- Day report

Day 4

- Report and
 presentation
- Finalizing the entry

Closing seminar 5.11.2021

- Presentation of the entries
- Jury's feedback
- Announcing the winner and award ceremony

Questions

CONTACT DETAILS

- Groups have the opportunity to submit specific questions in terms of mission statement, evaluation criteria and rules in writing by email <u>inna.ampuja@ramboll.fi</u>
- Questions are compiled and answers sent to project managers of all teams
- Questions about the course of the competition, as well as a discussion possible also on the WhatsApp group
- <u>The group can be joined by an invitation link, which</u> <u>is delivered to everyone by email</u>

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NEXT LOCATIONS

Working Spaces

- **TEAM1** A201 PALOMÄKI
- **TEAM2** A213 LIIKESIVISTYSRAHASTO-SALI
- TEAM3 B203 KPO-SALI
- **TEAM4** D215 LAIHIAN MALTAAN SALI
- **TEAM5** D219
- **TEAM6** D115 SK-TUOTE LUENTOSALI
- **TEAM7** D118

GOOD LUCK!



Trafikledsverket

Ympäristöministeriö Miljöministeriet Ministry of the Environment

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KESTÄVÄ KAUPUNKI

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Ramboll