

# Study visit (SV No.2) Report



Doc. 6E-SV-PP3-2

# Partner n. 3, Regional Council of Central Finland

Date 17.5.2024

Rev. 1

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# Jyväskylä Study Visit Report

PP03 - Regional council of Central Finland

24-04-2024



PROMOTER



<b>Project Name</b>	PROMOTER
<b>Study Visit</b>	No.2 Jyväskylä
<b>Good practices</b>	GP1: Etrucks & Keulink GP2: Mustankorkea biogas production plan GP3: Kangas's area GP4: Public transport of city Jyvaskyla GP5: Merus Power- Energy storage -non documented practice GP6: Cefmof- non documented practice
<b>Period</b>	16/04-18/04/2024
<b>Partners</b>	Province of Livorno (IT) Rezekne City Municipality (LV) Central Finland Regional Council (FI) AG MOBIL-O (BE) DEX Innovation Centre (CZ) Federation of Municipalities of the Region of Murcia (ES) Sintra Municipality (PT) South Transdanubian Regional Innovation Agency (HU) City of Bystrice (CZ) Brasov Agency for Sustainable Development (BASD) (RO)
<b>Stakeholders</b>	3 person (Es) 2 persons (LV) 6 persons (Ro) 2 person (Por) 1 person (Cz) 1 person (It) 1 person (Hu)

## PROMOTER

# 1. Overview of the Study Visit

## General Introduction

The second study visit of the PROMOTER Project took place in Central Finland (PP3) in Jyväskylä from 16<sup>th</sup> to 18<sup>th</sup> of April. PROMOTER Project focuses on promoting the establishment of prosumer energy hubs and facilitating their spread across urban areas. These hubs would allocate a portion of their energy output to meet the demands of green mobility. The final objective is to facilitate or augment the production of green energy, supporting environmentally sustainable urban mobility to advance towards a carbon-neutral economy. This aligns with the European Union's objectives of achieving climate neutrality and rejuvenation.

The project is grounded in a bottom-up approach. The goal is to improve policies identified by each partner and this is done by sharing knowledge and expertise. Study visits are used as a tool for disseminating good practice. The second of these visits took place in Jyväskylä.

Before the Study Visit, PP3 had documented four good practices which were further explored and discussed during the study visit. Besides these two non-documented good practices were presented.

The three-day event began with a comprehensive presentation of the region and the goals region has regarding carbon neutrality. Then participants heard more about etruck conversion. The day ended with a field visit to a local biogas plant. The second day started with a field visit to Kangas area. On the afternoon, participants gathered at Crazy Town to hear more about public transport in City of Jyväskylä, Merus which is private company focusing on energy storages, and the future actions of newly founded Central Finland Mobility Foundation.



The third and final day of the Study Visit featured a workshop where participants evaluated the experiences gained, considering potential replication and adaptation in their respective regions. Each participant received a survey to gather their opinions and impressions on each good practice and the overall study visit (Please refer to the Appendix for further details). These responses will offer valuable insights for organizing upcoming Study Visits scheduled for July and September 2024 in Latvia and Czech Republic.

## First day

The Study Visit started on the 16<sup>th</sup> of March, with partners and stakeholders gathering at Crazy Town in the first morning. The session began with registration and networking opportunities, allowing participants to connect with each other. Regional Council of Central Finland presented the strategy of the region and the roadmap to carbon neutrality in Central Finland. Region has set a goal to be carbon neutral by 2030.

After lunch in Kirkkopuisto Bistro, presentations of two good practices were conducted.

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### GP1: etrucks & Keulink

There are currently only a few dozen electric trucks in Finland, but their number is expected to grow exponentially in line with the development of charging infrastructure. This development will also be supported by lower battery costs and improved energy density of batteries.

Keuruu RDI-center was started in 2022 with the help of European Regional Development Fund. Project is coordinated by Keulink Oy. The aim is to retrofit electric trucks. Conversion of diesel trucks is significantly cheaper, faster, and more environmentally friendly than building brand new trucks.

Although the first retrofitted trucks have been produced in Keuruu and they are taken in test-use, the practice is still in its early stages. Posti, Finland's main postal operator, has put the first car on trial, and the truck is currently being used for delivery tasks in Tampere.

The work Keulink has done more than just engineering and executing retrofits. Local R&D operators and companies are collaborating on creating an ecosystem to support usage of e-trucks including driver education, charging capabilities, test track and measurement systems for e-truck testing, programming, monitoring and development of autonomous driving.

There is a strong belief in Keuruu that electric trucks will play a significant role in the future, especially in delivery traffic. In this future, existing fleet should also be utilized by retrofitting them into electric trucks.

### GP2: Mustankorkea – biogas ecosystem

Municipal separately collected biowaste was earlier composted in Jyväskylä region, creating carbon emissions. As the composting facility capacity was getting too small, the options were either to invest in biogas plant or a bigger composting facility. Biowaste is a great raw material for biogas production, decreasing emissions and providing green fuel option for the community. The scale of the biowaste collection in Mustankorkea area,

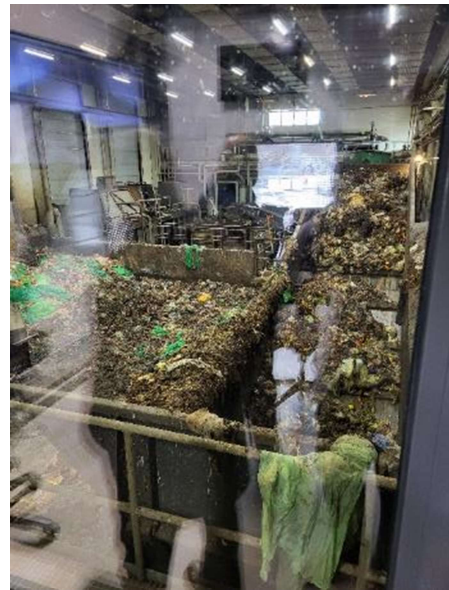
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about 15 600 tn (2022) provides profitable basis for biogas production. Locally produced biogas increases regional resilience, provides jobs, and decreases emissions.

After a long study period (several studies on years 2004-2014) the decision for building a biogas plant was made in 2015. Key factors for the investment decision were decision to invest also on biogas trucks for waste collection, and commitment from the city of Jyväskylä to also invest on biogas cars for the city employees and busses for local traffic. This created a basis for biogas traffic use and belief that the investment could be profitable. The environmental permit was accepted in 2016 when also the construction started. After the start-up in 2017, the biogas volume produced has increased each year. The first fuelling station was opened in Mustankorkea site in 2017 and another one on the other side of the city in 2019.

In 2018, the biogas plant supplier went bankrupt and Mustankorkea had to take responsibility on finalizing the construction. New equipment had to be purchased and installed, and the control system needed to be rebuilt. This created significant additional costs. The start-up phase took approximately 2 years in total.

Current emissions of waste collection are one quarter of the emissions in comparison to a situation where all waste was collected by diesel trucks. The contractors collecting the waste are contractually encouraged to use biogas trucks. Mustankorkea biogas ecosystem enables not only collection of waste by biofuel, but Jyväskylä city cars running on biogas (over 50 biogas cars in use currently). There are 4 biogas busses in public transport, and there are 987 biogas vehicles in Central Finland in total (2022).



### Second day

On the 17<sup>th</sup> of April, the agenda for the second day of activities began with a visit to Kangas area, focusing on the Kangas development project.

After a lunch break, the meeting continued in Crazy Town with presentations.

### GP3: Kangas area

Kangas area development started when City of Jyväskylä bought an old papermill area located only 1 km away from the centrum in 2010. The city council accepted Kangas area development principles: Foot, Green, Heart and Sustainable and Smart.

- Foot means that Kangas is accessible also without owning a car. Parking is centralized in parking houses to enable more green areas and parks. Shared and safe bicycle parking is offered in common areas and parking houses. Cycling and walking routes are constantly developed.

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- Green means that Kangas is a green and attractive area with proximity to nature. Protected Tourujoki natural habitat is right next to Kangas area, and parks and greenery provides wellbeing to inhabitants as well as to visitors
- Heart means that Kangas is a communal residential area where people can live, study and work in different phases of life. Kangas has an open meeting area and event center. Kangas combines working, living, services and jobs.
- Sustainable and Smart means that in the development of Kangas sustainability is considered at every step. The area presents dense urban structure, ecological way of live and carbon neutral city.



Kangas has been designed to be a sustainable area aiming to carbon neutrality with own energy production. The guiding principles for area development are ecological design, responsible consumption, taking care of the nature and sustainable development.

The parking houses in Kangas area are overbooked by the number of parking spaces. This is enabled by commuters utilizing the parking slots to come to the offices located in the area, and the residents during other times. This decreases the overall need for parking spaces so that the space is used efficiently and improves the quality of the parking with safety and charging options for electric cars. The parking houses also have solar panels on the rooftops, providing renewable energy for the community.

A new cycling highway has been planned and partly built through Kangas area to the city centre, enabling fast and safe cycling and walking route from Laukaa direction.

The area has made One Planet certification development and digital solutions for waste management have been developed in CircWaste-life project. Waste management in the area is also centralized in order to minimize traffic inside the area.

Network infrastructure in the area is provided through "Black net" which means that the city has built pipes under the area and space or transfer capacity can be rented from the city by operators. This decreases the need to reopen and close the already built areas constantly for building infrastructure and provides the residents the freedom to choose between a variety of network operators.

The City of Jyväskylä is responsible for the development of the Kangas. Together with construction developers Skanska Talonrakennus Oy and YIT Suomi Oy, City of Jyväskylä has founded Kankaan Palvelu Oy (Kangas Service Oy). Each of the founders owns 1/3 of company. When the area is ready, the ownership will move to the housing companies of the area.



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GP4: Public transport in city of Jyväskylä

Since the beginning of 2024 Jyväskylä regional road traffic authority is responsible for organizing public transport in seven municipalities covering total population of 205 614. In 2024 incomes of public transport are forecast to be 18,5 million euros and costs are 26,2 million euros. Driven kilometres per year are 9,3 million and there are 1700 departures per day. Total size of the fleet is 113 busses.

There are two reasons why public transport in Jyväskylä can be labelled as good practice.

The first is successful and systematically increased numbers of passengers using public transport. The target is 15 million trips per year in 2030. In 2023, there were a record 8,7 million trips and 2024 has started better than previous years.

Success in this has required a number of actions. Public transport authority has visited schools to make travelling by bus more interesting for children and young people. The customers' board meets regularly to discuss and solve the difficulties in public transport. The public transport authority has also carried out several campaigns targeting different user groups in order to increase the interest in public transport among this group.

The second reason to label public transport in Jyväskylä as good practice is the sustainability. Since the summer 2024, there will be 64 electric busses and 4 biogas busses in use. The rest of the fleet will use biodiesel. There are still few open questions how electric busses will work in Jyväskylä region, but by one decision the public transport in Jyväskylä will be one of the cleanest and most energy-efficient in Finland.



GP5: Merus Power- Energy storage- non documented practice

Merus Power is a technology company headquartered in the city of Ylöjärvi, Finland where they design and manufacture innovative Finnish battery energy storage systems and power quality solutions. Scalable and modular power electronics, intelligent software technologies, and electrical engineering expertise are the base of their business. Their innovative Merus® technology enables the use of their products and services in a wide range of different application needs.

They accelerate the renewable energy transition by enabling easy grid connection, ensuring grid stability and grid code compliance. Their energy storage system supports the grid by balancing production and consumption while allowing participation in the Frequency Reserve markets. They turn the challenges of renewable energy into a brand-new source of income.

Their power quality solutions reduce electrical disruptions caused by poor power quality, improving the profitability and energy efficiency of customers' operations, and achieving significant energy and cost savings. In addition, by enabling better power quality in industrial and commercial applications, they contribute to the reduction of CO2 emissions and help customers achieve sustainability goals.

Merus™ ESS applications and benefits

- Revenues from
  - Ancillary services
  - Energy arbitrage
  - Capacity auctions & PPA's depending on country
  - Revenue stacking
- Savings
  - Optimizing own production
  - Peak shaving
  - Grid code compliance
  - Power ramps / movements etc.
- Security
  - Back-up power supply
  - Black start
  - Virtual inertia





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Merus Power is a Finnish technology company operating in the global market, focusing on innovative and scalable energy storage systems and power quality solutions. With world-class technical competence, they are contributing to the global shift towards sustainable energy and enabling the use of renewable energy sources in growing markets.

**Merus Power Plc**

- 2008**  
Founded
- 115+**  
Personnel  
04/2024
- 29 M€**  
Revenue  
2023
- 70+**  
Countries with  
our solutions

We design, manufacture and sell Finnish innovative energy storage and power quality solutions (STATCOM, SVC & active harmonic filters).

Merus Power headquarters, R&D, production and test laboratories are in Ylöjärvi, Finland. Sales offices in Helsinki, UAE, Singapore and Germany.

Merus Power – scalable & modular power electronics, control & trading software, full ESS project development capabilities and ESS simulation models

As a Nordic ESS market leader with most delivered ESS systems Merus Power is now expanding to other European ESS markets.

They provide a wide range of support services together with our local and global partner network.

Their growth is supported by global megatrends such as climate and emission targets from public and private players, green transition with various related investment programs, and sustainability goals.

**Merus™ ESS**  
Energy Storage System

Merus Power is not only a battery supplier as we add value throughout the entire ESS project from design phase to end of life.

- Merus Power provides MW-scale modular MV solutions
- Scalable, modular and reliable li-ion battery energy storage for smooth integration of the sustainable energy production technologies and electric grid stabilization
- **Engineering and manufacturing in Finland**
- Simulation resources & in-house testing laboratory
- Strong power quality background – part of Merus ESS delivery
  - Full responsibility on grid code compliances
- Experience in ESS revenue stacking



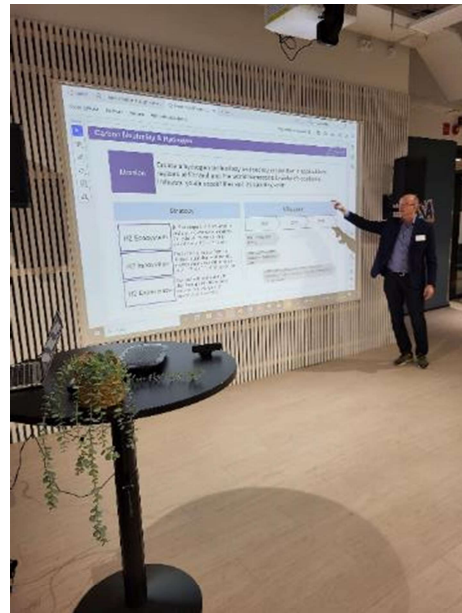
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**GP 6: Cefmof and carbon neutral society- non documented practise**

Foundation has been established January 2024. The goal of foundation is realizing carbon neutral and sustainable society together with local community. To achieve this goal the foundation is going to carry studies to determine the contents to realize a carbon neutral society and provide citizens with information on available transportation, road conditions, etc. during the harsh winter season.

**Objective**

Promote urban development where people and nature can co-exist in harmony through realizing a carbon-neutral and sustainable society.

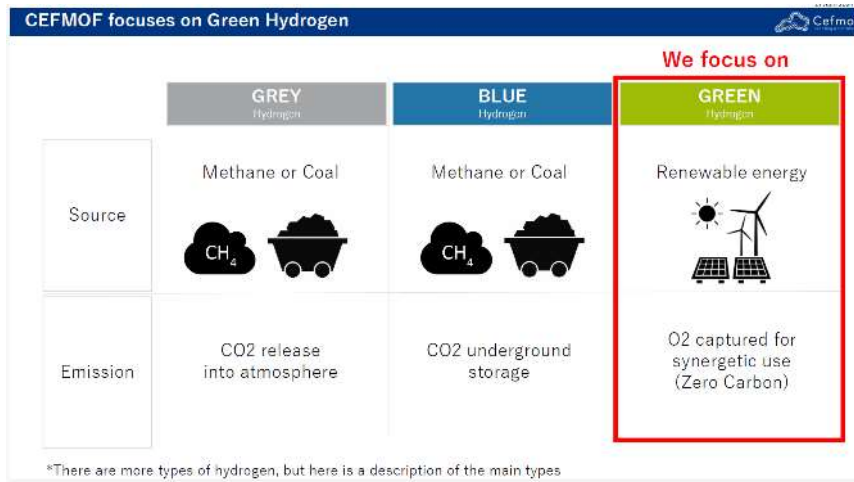


**Carbon Neutrality & Hydrogen**

**Mission** Create a hydrogen technology and society model that is applicable to regions of Finland and the world harnessing Jyväskylä's academia, industry, youth capabilities and its sporting spirit.

Strategy	Milestone
<p><b>H2 Ecosystem</b> Define scope (solutions, enablers and players) and setup projects for Jyväskylä to contribute to overall Finland CN / H2 plans</p>	<div style="display: flex; justify-content: space-around; margin-bottom: 10px;"> <span>2024</span> <span>2025</span> <span>2026</span> </div> <p>PART 1: Study and research</p> <p>PART 2: Define scope and create long-term plan</p> <p>PART 3: Utilizing local assets, environment and intelligence and involve local community in developing CN / H2 society</p>
<p><b>H2 Innovation</b> Foster H2 innovation from / in Jyväskylä utilizing local assets, environment and intelligence inc. new TGR WRT Technology Center</p>	
<p><b>H2 Experience</b> Involve local community in developing CN / H2 society: enhance knowledge and demonstrate feasibility</p>	

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## 2. Workshop session in the third day

### Group activities

On the third day, all partners and stakeholders convened at Crazy Town Learning café room. During the morning session, a concise summary of all the study visits was provided. This provided partners and stakeholders with the opportunity to ask questions about specific areas of interest or request additional information on particular topics.



Following the Q&A session, guests were presented with a brief overview of the upcoming study visit scheduled in Latvia. This allowed partners and stakeholders to familiarize themselves with the agenda and key focal points of the forthcoming visit.

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### Study visit feedback forms

At the end of the morning, after the completion of the thematic work groups, each delegation filled the Study Visit Feedback forms together. The primary objective is to employ a trial-and-error approach, which involves identifying and rectifying errors or failures encountered during the Visit to determine the most effective methods for structuring future Study Visits and implementing good practices. This post-project assessment ensures a comprehensive understanding of partner and stakeholder satisfaction and aids in refining future project strategies. A detailed survey is essential for this purpose. The survey was structured to enable each participant to evaluate every good practice observed during the visit and to provide feedback on the overall experience.

The questionnaire was focusing on individual good practices – both documented and non-documented, and the final section of the form centred on an overall evaluation. Evaluation of the good practices involves considering various elements such as the level of agreement on different aspects of the good practices and the identification of key issues including success factors and constraints. Furthermore, the relevance of the good practices was tested by assessing different macro-categories. Lastly, significant attention was devoted to examining the potential transferability of the practices, as this aspect is crucial for achieving the PROMOTER goal of searching for solutions capable of enhancing the delivery of regional development policies and increasing their effectiveness and sustainability.

All delegations answered to the questionnaire.

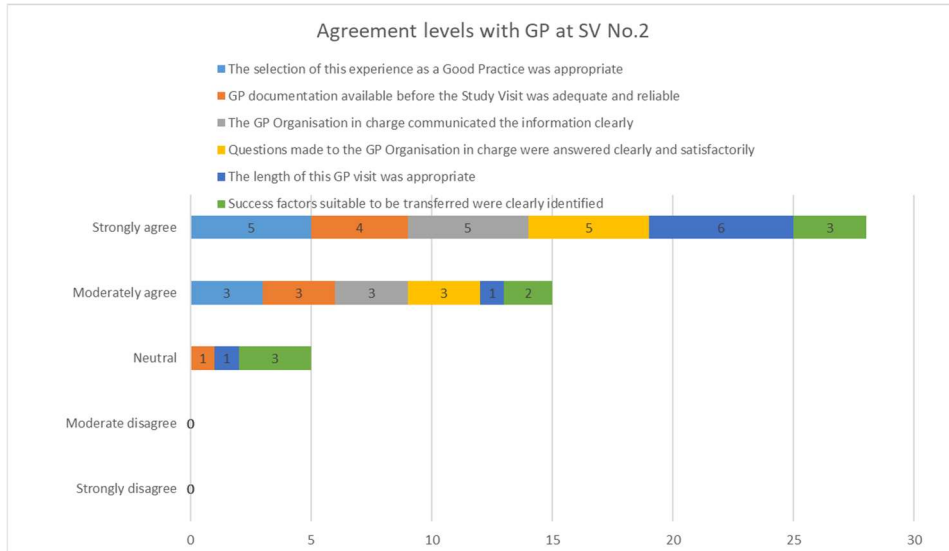
### GP 1 – Etruck&Keulink

#### Agreement levels

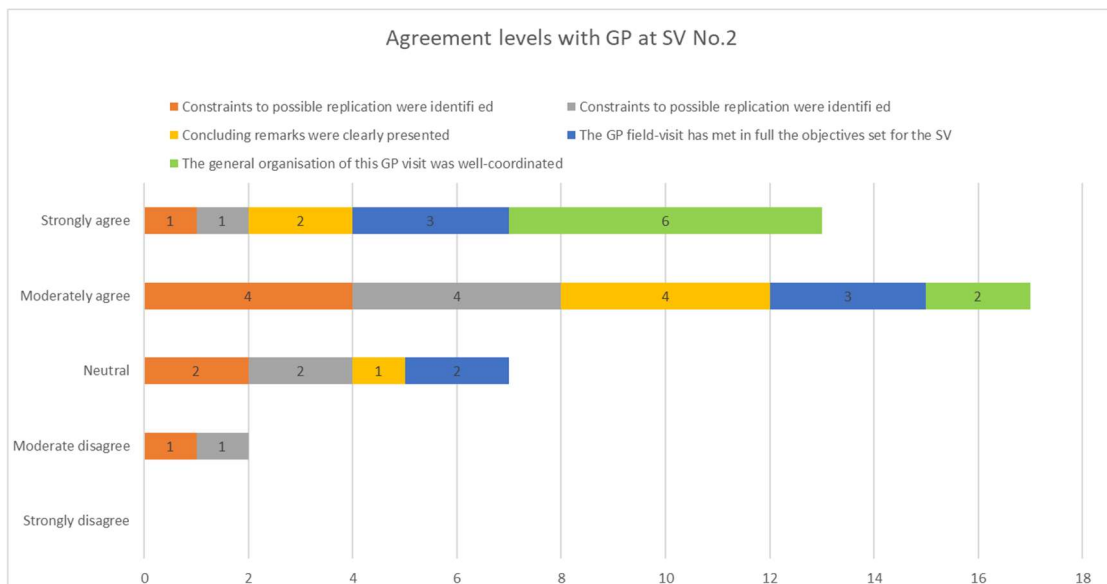
As depicted in the graph, none of the statements were deemed particularly problematic. The statement garnering the highest level of agreement pertained to the length of the presentation, which was predominantly regarded as appropriate. Additionally, the quality of responses and the coordination facilitated by the GP organization were generally deemed satisfactory. Conversely, while there were no negative comments, it is worth noting that certain areas warrant improvement, including giving more information about the visit before it starts, the identification of transferable success factors and the achievement of study visit objectives.

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Strongly agree- 28 answers (59%), Moderate agree 15 answers (31%), Neutral 5 answers (10%)



Strongly agree- 13 answers (33%)  
Moderate agree 17 answers (44%)  
Neutral 7 answers (18%)  
Moderate disagree 2 answers (5%)

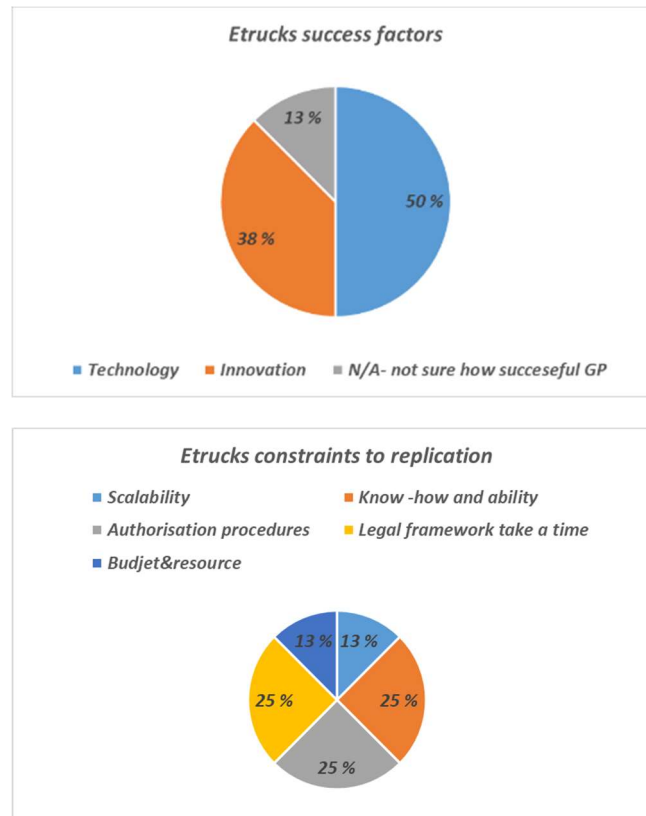


Key issues of the Good Practice visited

Participants were tasked with outlining both the success factors of the Etrucks and the obstacles to its potential replication. Responses answers weighted either moderate agree or strongly agree. All main factors were praised as highly effective aspects of the good practice: the structure of the Etrucks presentation and the comprehensive strategy employed in its

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development. It can be noticed that PP8 South Transdanubian Regional Innovation Agency has not given any response on this questionnaire of GP Etrucks.



When respondents were asked about potential constraints to replicating the Etrucks in their respective countries, a majority (25 %) indicated that know-how, authorisation and validation take a time and fundings. There was also one concern of a lot of question marks of GP itself.

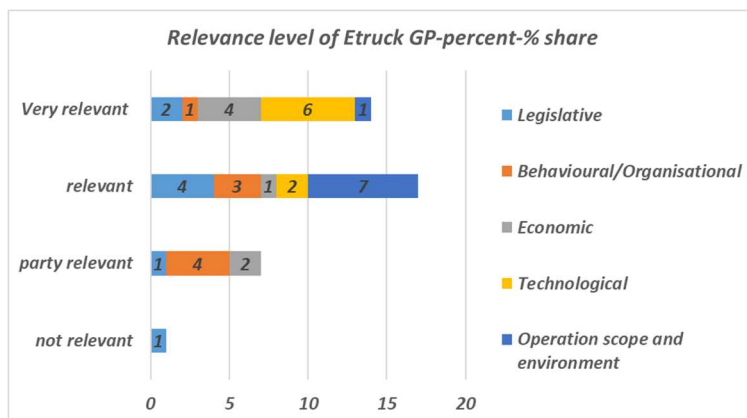
There was discussion during SV how this validation process was complicated and time consuming. It also mentioned that local authorizes is not ready at present moments and legal aspect is also under processing right now. The cost of validation can be varied country by country and value was quite expensive.

**Relevance levels**

The form also aimed to evaluate the relevance levels across five macro-categories of the PROMOTER project. It is noteworthy that this good practice received at least one comment for each category either a highly or partly relevant practice. Upon analysis, it was evident that the categories with the highest relevance levels were "Technological" and "Operation scope and environment". Conversely, "Behavioural/Organisational" demonstrated the lowest relevance levels.

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Very relevant- 14 answers (34-%)  
 Relevant 19 answers (46-%)  
 Party relevant 7 answers (17-%)  
 Not relevant 1 answer (3 -%)



**Transferability potentials**

The final section of the form aimed to explore the transferability potential of the good practice, which involved assessing whether the practice could be implemented in the countries that participated in the visit. Specifically, the focus was on three main points: identifying transferable features/components of this Good Practice, recommending steps to transfer the Good Practice to partner regions, and suggesting specific actions to be implemented when designing corresponding actions for partners. These questions were open-ended, allowing participants to provide detailed explanations regarding why this good practice could or could not be transferred.

**Table. Etrucks Transferable features/components**

In order to be transferable some criteria would have to be met and service providers
The biggest challenge here is the business case and scalability
Transferability in buses
Technologically it is transferable, the most complex being the legal and normative framework.
It is potentially possible to use this good practice for waste transport vehicles or urban cleaning equipment
If we can identify a private entity interested to turn diesel vehicles into electric vehicles (especially trucks) we will disseminate the practice for those interested and able to implement it
Not able to answer
Due to the size of the territory, it can be used for local transport

The most identified transferable feature among all was related to strategic planning e.g legal and normative framework, scalability, business cases of technology.

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**Table. Etrucks Recommended steps to transfer to GP to your region.**

Technology partner to Charging facilities
Research whether there is a market for this solution.
Verify legislative constraints and implementation of charging point for heavy vehicles
Study the difficulties posed by legislative aspects. Economically encourage the conversion from diesel to electric. Train qualified personnel for change and maintenance
Check the availability and estimated the distance between charging stations a traffic zones.
not sure
improve the network of charging stations - now a shortage

As depicted above in the table, the recommended steps to facilitate the transfer of the good practice to other regions, partners seen the strategy of charging infrastructure itself is a main role on their own region.

**Table. Etrucks recommended actions for corresponding action design.**

Locate vehicles in wnd use for testing
Verify the status quo in each region
Resolve technical/ legal aspects and propose to the competent administrations the financing of this GP
Check the possible of obtaining financing, the possibility of cooperation with developers and stakeholders
-
-

When participants were asked about specific actions recommended when designing their corresponding actions, the response rate was notably low, with 25% of answers left blank.

## GP 2 – Mustankorkea- biogas production plan

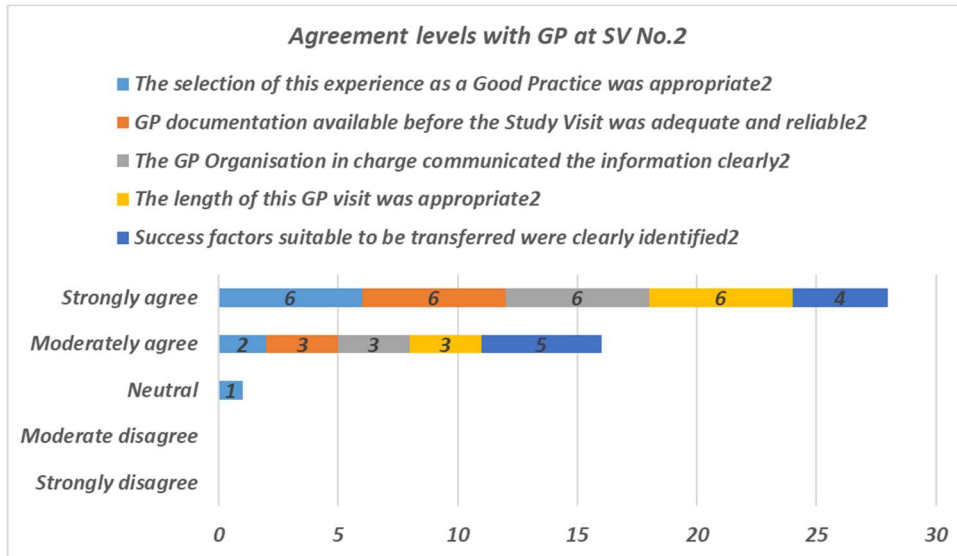
### Agreement levels

The statement receiving the highest level of agreement was the Appropriateness of the selection of the good practices, along with the Identification of transferable success factors. Respondents also expressed satisfaction with the Quality of answers provided by the GP organization. However, it's important to highlight areas for potential improvement, such as the duration of the visit and providing more information about the visit before it starts.

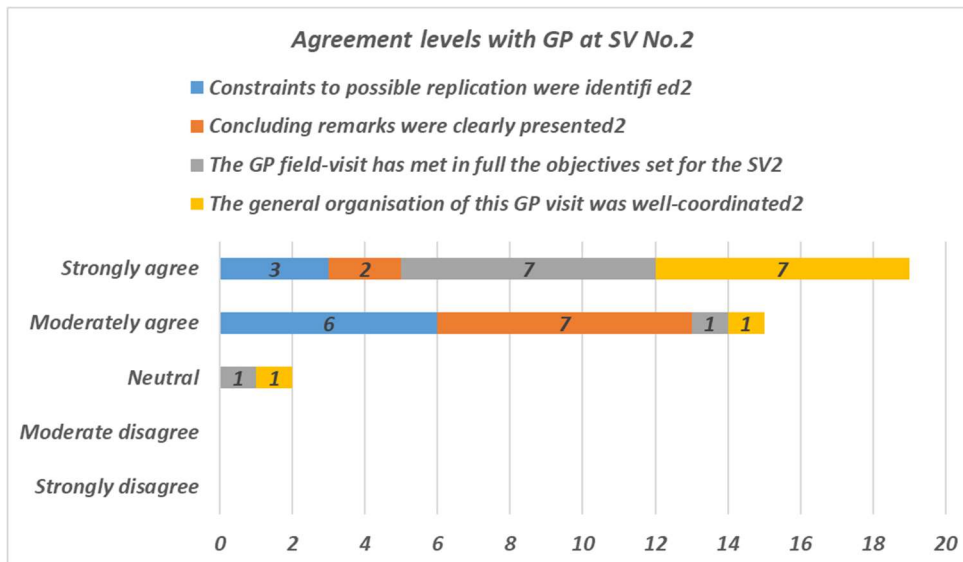


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Strongly agree- 28 answers (62-%)  
Moderate agree 16 answers (36-%)  
Neutral 1 answer ( 2-%)



Strongly agree- 19 answers (53-%)  
Moderate agree 15 answers (42-%)  
Neutral 2 answers (5-%)

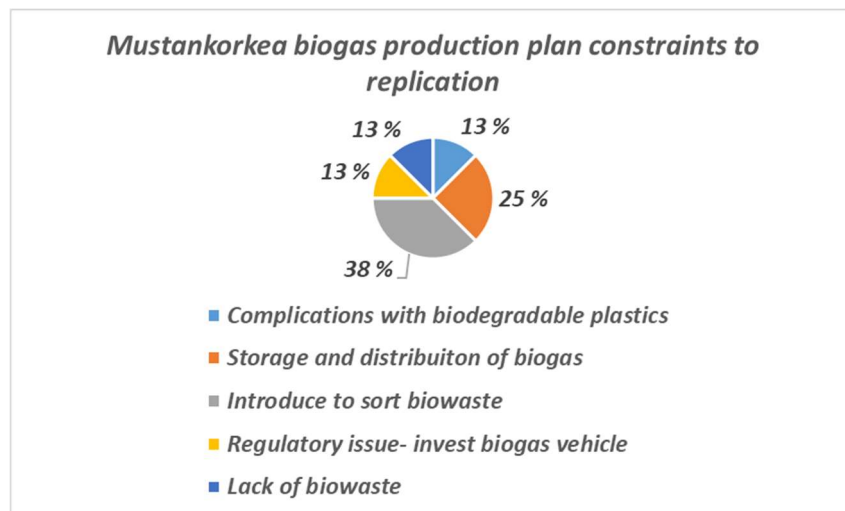
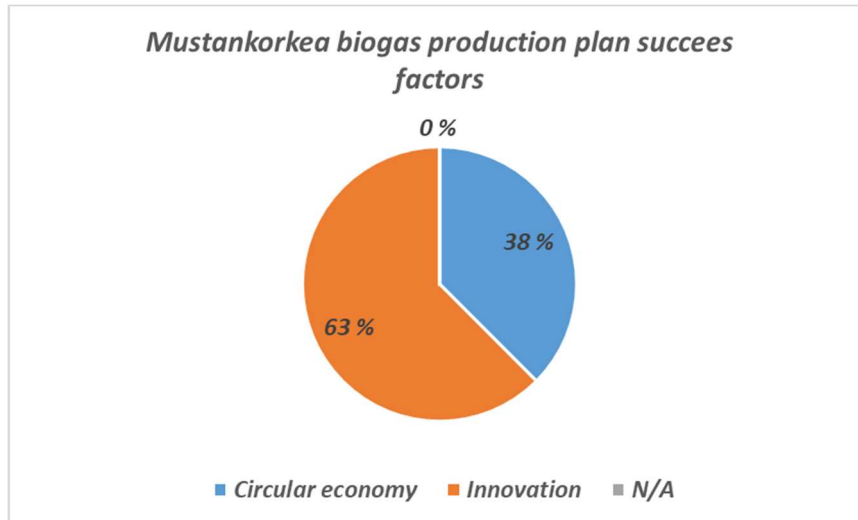


**Key issues of the Good Practice visited**

When summarized about the success factors of the Mustankorkea biogas plan good practice, 63 % of the responses emphasized it to Innovation project. Another significant success factor, noted by 37 % of respondents, was the circular economy aspect, which was effectively elucidated during the presentation of the good practice. Actually what comes on innovation in Czech and Portugal there have already similar technology in use.

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It should be also mentioned one comment regarding link of municipalities in a common project and solving problems together.



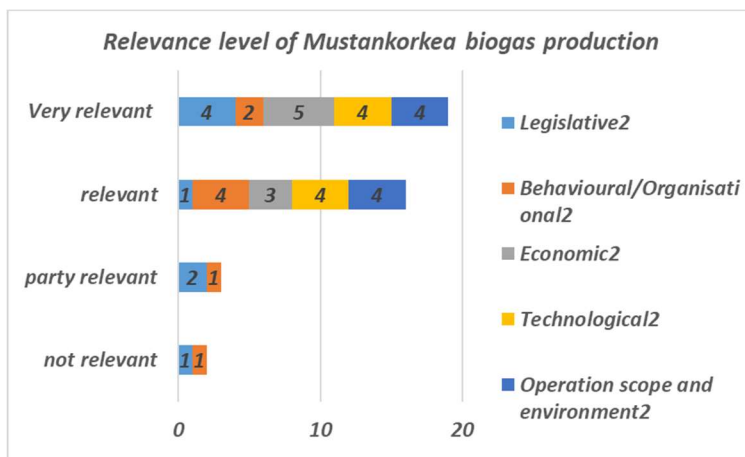
When addressing the constraints to replication, while 25% of respondents indicated that storage and distribution of biogas has constraints to replicating the good practice, the majority, comprising 38% of responses, identified the biogas as a significant constraint. Lack of biowaste, regulation and complications with biodegradable plastics have 13 % share of responses.

**Relevance levels**

Respondents primarily emphasized the economic and legislative aspects, aligning well with the project's focus on legislative assessment. In their explanations, guests emphasized the positive impact of biogas production and biowaste circulation as a technology benefit.

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Very relevant- 19 answers (42-%)  
 Relevant 16 answers (36-%)  
 Party relevant 3 answers (7-%)  
 Not relevant 2 answers (4-%)



**Transferability potential**

When assessing the transferability potential of the good practices, respondents primarily focused on identifying the features or components of the practices that could be transferred to other projects. Analysis of the open-ended questions revealed that all of the responses emphasized the overall transferability of almost every aspect of the project to other countries' regions.

**Table. Mustankorkea biogas production plan Transferable features/components**

It is a very similar to an existing situation on Portugal so not very innovative.
The core of this practise is transferable as a whole.
Electric transport charging facilities and also putting this kind of energy in main grip.
Have a biogas charging station for vehicles.
Waste stream can be recovered into energy.
We think it has got great potential for the future since waste is increasing, but also the capabilities to collect and select properly biowaste. since there is also existent technology then it can be promoted from more points of view: both like a business but also as a environmental opportunity.
We have a same GP in Cz
Biogas waste collection cars

**Table. Mustankorkea biogas production plan Recommended steps to transfer to GP to your region.**

Not applicable.
Provide in an effective way of distribution in order to limit storage needs.
Verify status quo in each region about studies and practical application of biogas to realize hub for public transport.
Manage with the waste consortium the implementation of a biogas plant with a charging station included.
Check the physical parameter inside the station. Limitation of plastic bags.
We will try to identify interested parties in this practice and promote the proposed solutions and technologies.
We have a same GP in Cz.
Contracts with the owners of bioplan plants and Start buying biogas waste collection cars

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Regarding the recommended steps for transferring Mustankorkea to the regions of other partners, the responses emphasized the importance of first seeking technological & innovative projects.

These points were also prominently mentioned in responses to the question about specific actions recommended during the design of corresponding actions. What comes on corresponding action design almost all responses pointed out that region decision makers need to build guidelines to facilitate of waste economy.

**Table. Mustankorkea biogas corresponding actions design.**

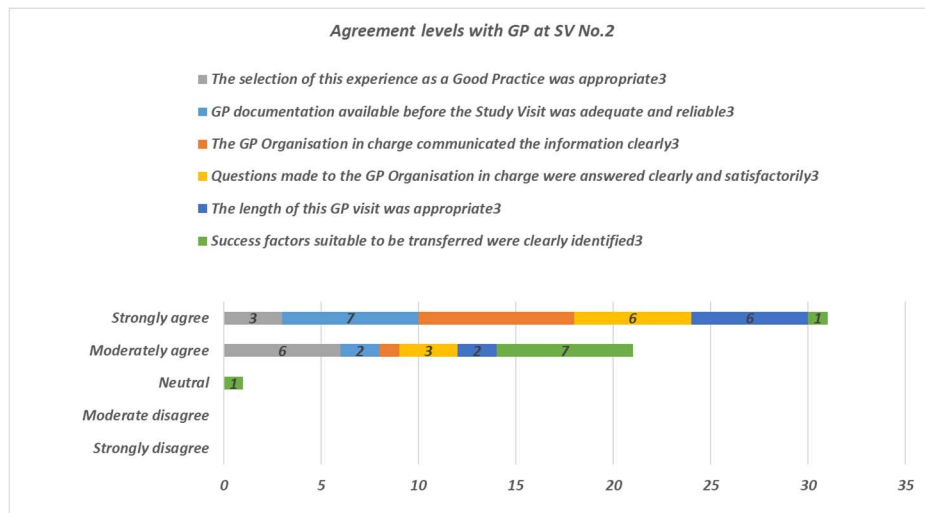
Not applicable
Identify the potential “demand” for public transport in each regional area.
Manage with the waste consortium the implementation of a biogas plant with a charging station included.
People education and motivation to separate waste
-
We have a same GP in Cz.
Contracts with the owners of biogas plants, subsidy programs for the purchase of a biogas car.

GP 3 – Kangas area

Agreement levels

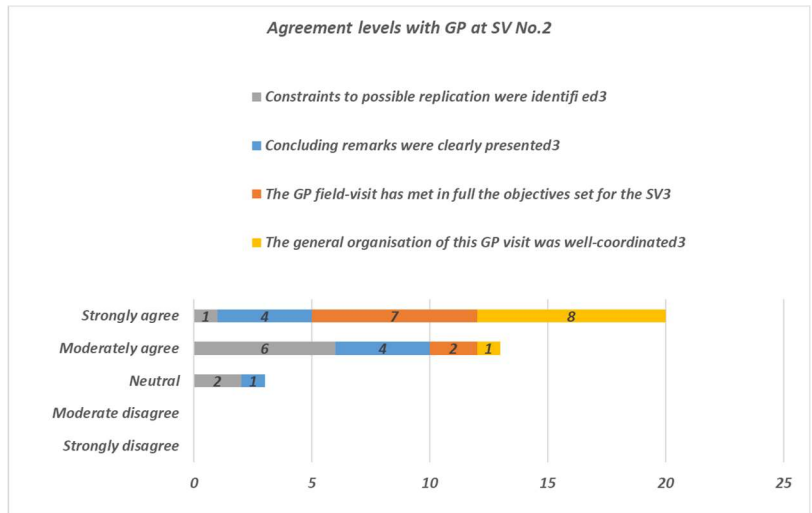
As evident from the graphic below, Kangas area received more similar opinions compared to others regarding the appropriateness of the selection of the GP, the adequacy of the pre-visit documentation, and the achievement of the study visit objectives. The selected items got following answers.

- Strongly agree- 31 answers (58-%)
- Moderate agree 21 answers (40-%)
- Neutral 1 answer ( 2-%)



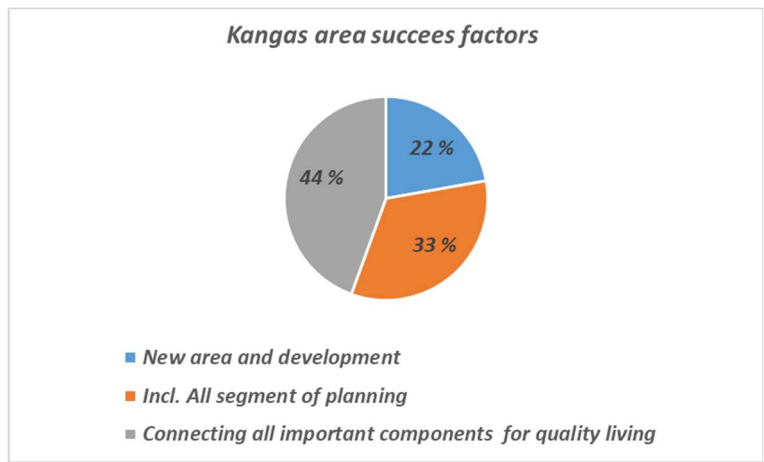
PROMOTER

Strongly agree- 20 answers (56 -%)  
Moderate agree 13 answers (36- %)  
Neutral 3 answer (8 -%)

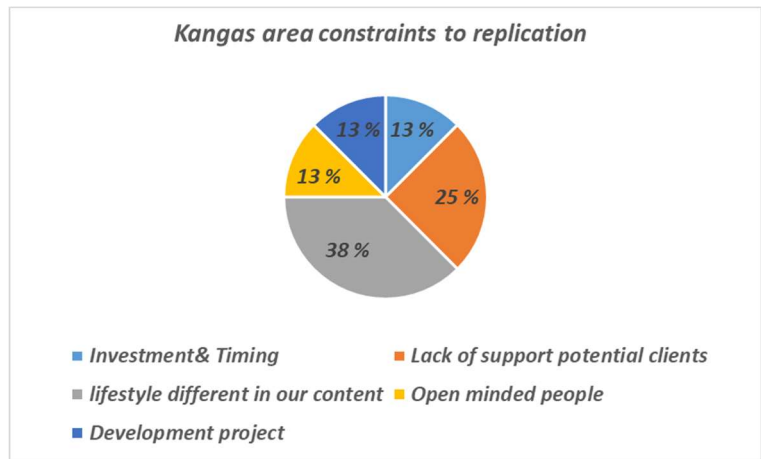


Key issues of the Good Practice visited

The factors that were deemed most successful for the good practice included the overall connecting all important components for quality living (43% of answers) and the including all segment of planning methods used (33% of answers).



**PROMOTER**



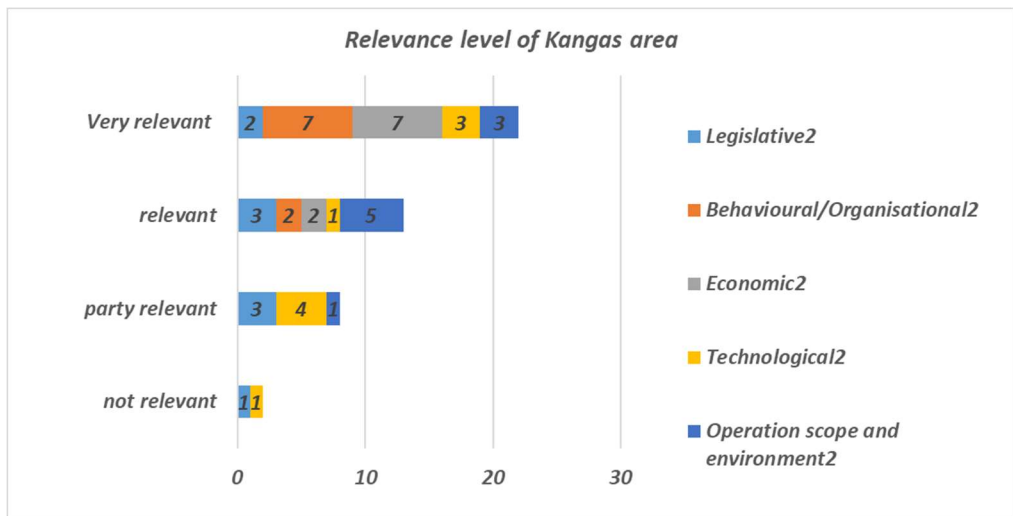
When addressing the constraints to replication, 38% of respondents indicated that lifestyle different in our content, and 25% of responses, identified the lack of support potential clients as a significant constraint were the major parameters on this study. The other constraints (investment timing, development project and open minded people), got 13-% share of answers.

**Relevance levels**

When assessing the relevance of the PROMOTER Project, respondents primarily emphasized the economic and behavioural aspects. One response was also that this good practice is only partially relevant to the PROMOTER Project, due to the fact that it has few components regarding the mobility connected to green energy (for example the bicycle path partially built connecting the neighbourhood to the city centre).

As depicted in the graph below, all participants unanimously agreed on the high relevance of the legislative aspect of the good practice. Overall, there was considerable agreement regarding the behavioural/organisational, as well as the economic relevance.

- Very relevant- 22 answers (49-%)
- Relevant 13 answers (29-%)
- Party relevant 8 answers (18-%)
- Not relevant 2 answers (4 -%)



PROMOTER

**Transferability potentials**

When assessing the transferability potential of the good practice, respondents primarily focused on identifying the features or components of the practice that could be transferred to other projects. Analysis of the open-ended questions revealed that all of the responses emphasized the overall transferability of almost every aspect of the project to other countries' regions.

**Table. Kangas area Transferable features/components**

Community yards The river recovery.
The core is very well transferable.
Discussions with local people.
It depends on the context.
The new urbanism can integrate new spaces from "depressed" areas, denaturalizing them and adapting them to climate change and functional for the citizen, respecting symbolic buildings.
Cycling and walking routes, shared parking houses, shared common areas and parks, waste management, culture.
As I mentioned above, we have this kind of areas in Romania, so it is possible to transfer part of the practice to our country.
-
Support of non-motorized and mass transport.

**Table. Kangas area Recommended steps to transfer to GP to your region.**

Still in a early stage to be able to transfer.
Put the necessary legislation in place within a sensible public space management.
Identifications of stakeholders, democratic decision making.
to face off political and governance conditions at the first.
Identify "depressed" areas susceptible to this transformation. Make it known to influence the city council that plans.
Services like waste management, percentage culture as well as the overall development of the area.
Not applicable
It is good to be inspired by similar projects across Europe. Similar projects are being set up in Vienna, for example, where they offer even more services and social activities for citizens.
Education, construction of infrastructure for non-motorized transport, better public transport planning.

Regarding the recommended steps for transferring Kangas area to the regions of other partners, the responses emphasized the importance of waste management, education, legislation and democracy of decision making.

What comes on corresponding action design responses pointed out that it a too early, integrate mobility and waste management, verify political and governance conditions and co -operation with developers.

**Table. Kangas area corresponding actions design.**

Still in a early stage to be able to transfer.
Inform possible stakeholders of the model in order to reinforce support for it.
Clear communication
Verify political and governance conditions.
Integrate mobility and waste management in the design of new model.
The taken a new approach to building a sustainable and smart city. Adopt similar development approaches and methods for developing their own neighbourhoods.
Not applicable.
-
Co-operation with developers and public transport providers.

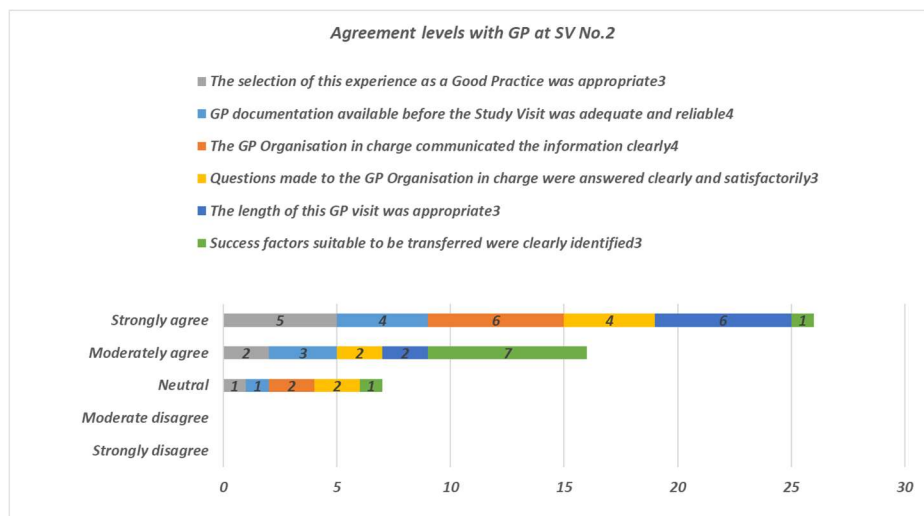
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GP 4 – Public transport in city of Jyvaskyla (Linkki)

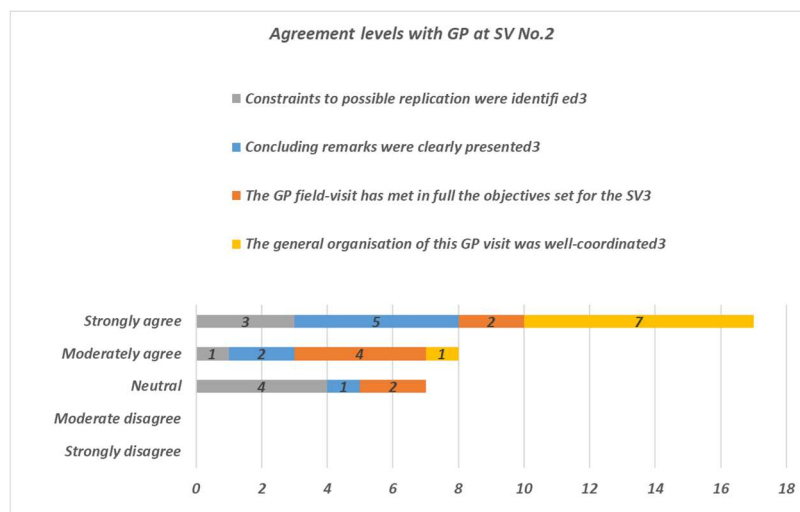
Agreement levels

Linkki emerged as the good practice receiving the highest level of agreement among respondents. Each statement received a notably high level of approval. Specifically, partners and stakeholders expressed high satisfaction with the success factor and length of the GP. There were no negative comments, indicating that this GP was widely regarded as excellent by participants. There were also some neutral answers of responses (7 pcs).

Strongly agree- 16 answers (41-%)  
 Moderate agree 16 answers (41-%)  
 Neutral 7 answers ( 18-%)



Strongly agree- 17 answers (50-%)  
 Moderate agree 8 answers (24-%)  
 Neutral 9 answers ( 26-%)

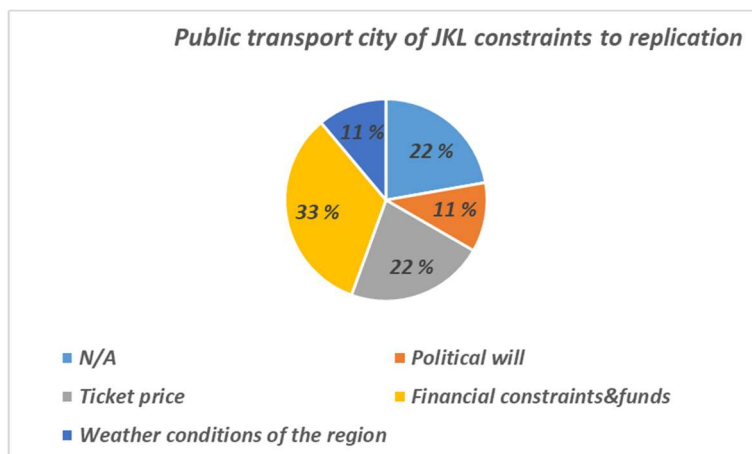
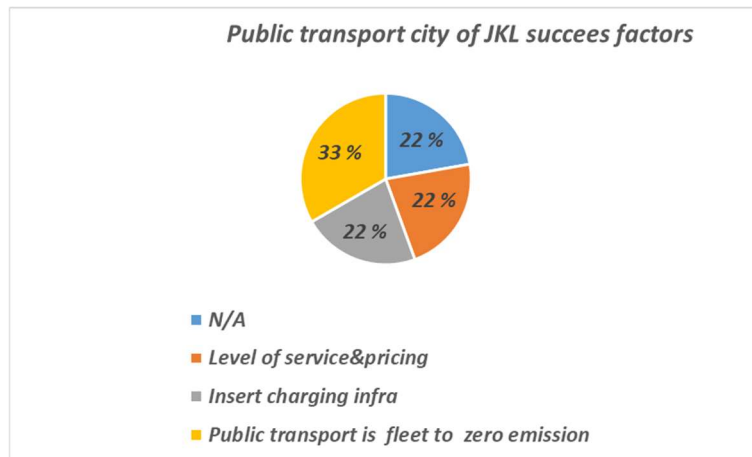




**PROMOTER**

**Key issues of the Good Practice visited**

The Linkki, as also shown by the agreement levels session, got similar responses from everyone. In fact, nearly 1/3 of the responses (33%) emphasized that public transport is fleet to zero emissions as a key success factor. The rest noticed parameters got an equal amount of share (22 %).



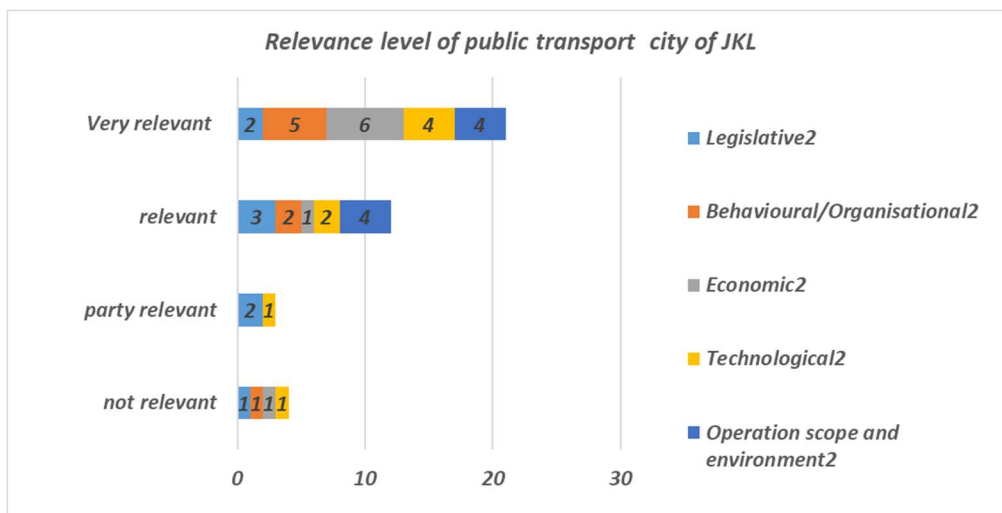
This was the case with the Linkki, where 33% of the answers identified financial & funds as a potential constraint to replication. Additionally, 22 % mentioned ticket price and N/A were as a constraint.

**Relevance levels**

As depicted in the graph below, 53 % of participants agreed on the very relevance of the good practice. Overall, there was considerable agreement regarding the legislative, as a relevant level.

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Very relevant- 21 answers (53-%)  
 Relevant 12 answers (30-%)  
 Party relevant 3 answers ( 7-%)  
 Not relevant 4 answers (10-%)



Transferability potentials

Overall, respondents agreed on the transferable features of the Linkki project, reinforcing the importance of electric buses and biogas buses and charging facility. Two delegations felt that this practice could not be transferred to their region.

**Table. Public transport of city Jyväskylä Transferable features/components**

Not applicable.
The practise is transferable in its core.
Make the public transportation cool.
Electric transport charging facilities.
Public -private collaboration and the public entities involved.
Electric and biogas buses.
Conducting an analysis for public transport future planning and development, the idea of taking into account the following elements: the transport demand, available technology for the green buses, the main characteristics of the region.
Not able to answer.
use of biogas or ebuses.

Regarding the recommended steps for transferring Public transport of city JKL to the regions of other partners, the responses emphasized the importance of financing, investors interest and support to electromobility.

**Table. Public transport of city Jyväskylä Recommended steps to transfer to GP to your region.**

Not applicable was not identified.
Identify the needed level of service in the area.
Rationalization of the lines.
Recovery of the funds and drawing sustainable mobility plan.
Have an entity that coordinates competencies on local and regional regulations regarding public transport. Plan vehicle charging infrastructure, investment to be made in the purchase of vehicles.
Possibility of financing, investor interest, number of transfers.
Identifying key research companies that could conduct such an analysis and the necessary financial resources.

**PROMOTER**

Not able to answer.
support for electromobility, a sufficient number of charging stations.

Regarding specific actions recommended for designing corresponding actions for partners, those actions included campaigns, and recovery funds and drawing sustainable mobility emphasized the importance of planning. This planning includes considerations such as budget allocation, resource management, selecting appropriate locations, identifying potential partners and stakeholders, and determining initiatives beneficial for the community.

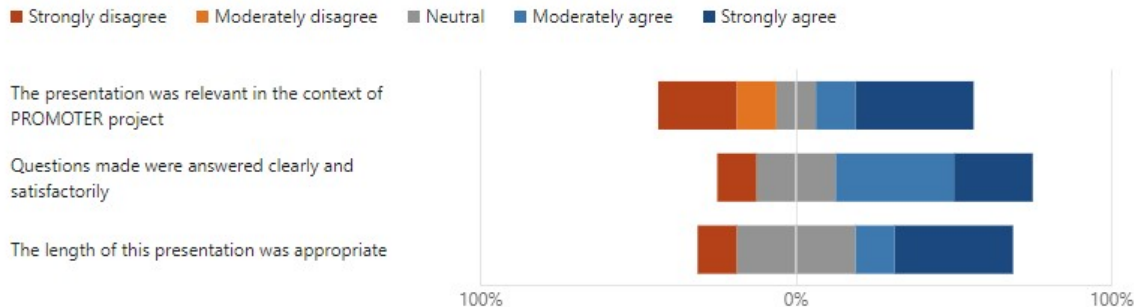
**Table. Public transport of city of Jyvaskyla corresponding actions design.**

Was not identified in order to replicate.
cfr.36
Campaigns for the users
Recovery of the funds and drw sustainable mobility plan.
Have an entity that coordinates competencies local and regional regulations regarding public transport. Plan vehicle charging infrastructure, investment to be made in the purchase of vehicles.
Check sustainability of facility operations in the medium term, verify potential cooperation among energy suppliers and transport operators.
Identifying key research companies that could conduct such an analysis and the necessary financial resources.
Not able to answer.
-

**GP 5 – Merus Power (MP)- Energy storage- non documented practice**

**Relevance levels**

The relevance levels graph reaffirms the consistent satisfaction of respondents with the MP project.



**Transferability potentials**

Overall, respondents agreed on the transferable features of the MP project, reinforcing the importance of technology and energy storage importance in future. Overall, respondents expressed satisfaction and confidence regarding the transferability of the project as a whole as it can be seen on table below.

PROMOTER

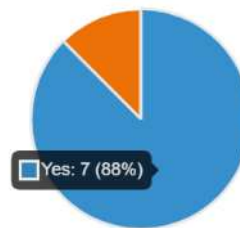
**Table. Mersu powers and energy storages transferability and learning potential of the practice to transfer to GP to your region.**

not applicable
Technological aspect is transferable. The challenge is the economical aspect.
Technologies
The storage component is the essential issue in the realization of the REC. We strongly recommend the transformation of this presentation in a good practice even if it has been developed in another region (LEMENE energy community).
Interesting because of the concept of energy storage. In Spain it depends on the distributors.
Energy storage devices can be useful in our region.
It was interesting from a technological point of view, and even more interesting would be to document the creation and development of the REC community, that the company supported.
Not able to answer
due to the increase in PV power plants, energy storage is an important topic and there is great potential for use.

40. Merus Power and energy storages

My region or institution would benefit from hearing more about the practice

[Lisätietoja](#)



It can be concluded from the above picture, that all responses see this non documented practice a quite useful and interesting topic on this SV session.

GP 6 – Cefmof- non documented practice

Transferability potentials

Overall, respondents agreed on the transferable features of the Cefmof project, reinforcing the importance of co-operation with different partners & departments and a big company. Overall, respondents expressed satisfaction and confidence regarding the transferability of the project as a whole as it can be seen on table below.

**Table. Cefmof transferability and learning potential of the practice to transfer to GP to your region.**

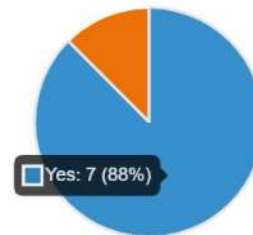
The dynamic of the association and approach to hydrogen.
The cooperation between private partners, RnD and public partners.
Cooperation with a big company.
To realize this kind of private and public partnership in each region.
Interesting because of the concepts of development of this technology.
Using of applications based on weather conditions.
It would be interesting from the point of view of the hydrogen use and development, as well as from the point of view of the application for winter mobility (since we sometimes encounter the same challenges during the winter in our county).
Suitable for larger cities or region.
-

PROMOTER

43. **Central Finland Mobility Foundation (Cefmof)**

My region or institution would benefit from hearing more about the practice

[Lisätietoja](#)



It can be concluded on above picture, all responses seen this non documented practice a quite interesting topics on this SV session.

The PROMOTER project must deliver various outputs, one of which includes four Tutoring session reports. Hence, respondents were given the opportunity to select a good practice for the tutoring session. According to the data presented in the graph, 37,5 -% of the responses indicated a preference for the Etruck &Keulink and respectively 31,2 -% to Kangas region. Upon further inquiry, participants explained that they chose both Etruck and Kangas region Projects as primarily because these are closely aligned with the goals of the PROMOTER project and holds significant potential for replication in their respective regions. Many noted the clarity in the project's approach to energy consumption reduction and highlighted the effective implementation of green mobility initiatives as key factors influencing their decision. In accordance with the goals of the PROMOTER project, a minimum of 18 documented good practices will be identified, tailored to the specific needs of each partner, and effectively integrated into the Policy Learning Platform of the Interreg Europe Programme. Once again, in response to this question, Etruck&Keulink and Kangas region emerged as the most preferred good practice among the others, with 70- % of the preferences. These results echo those of the previous question, validating a trend indicating the most successful and impactful good practices presented during the study visit. As previously noted, respondents highly valued the comprehensive planning and presentation of the Etruck&Keulink and Kangas region Projects, emphasizing its ability to foster connections among communities and individuals from the same locality. Additionally, it was underscored that these projects are particularly relevant to the objectives of the PROMOTER project.

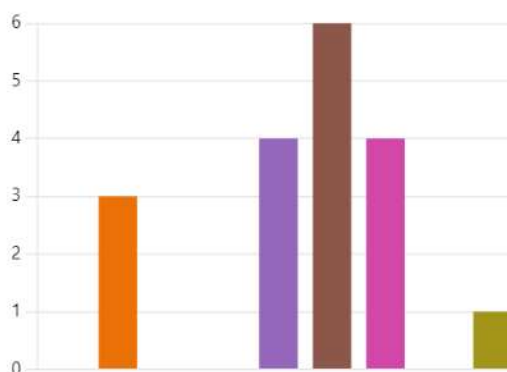
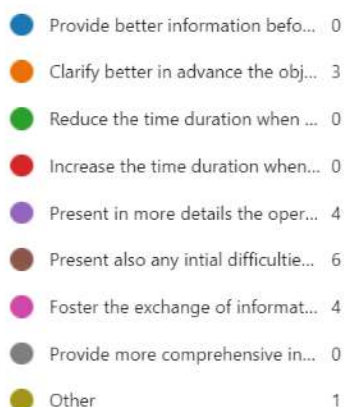
### 3. Recommendations about future Study Visit organization

In the conclusion section, an important aspect is the recommendations provided by participants to enhance the organization of future study visits. Guests were asked to select one or more suggestions or provide additional feedback through the "other" option.

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Your suggestions to improve the organization of the next Study Visits (check all that apply):

### Lisätietoja



According to the graph, the suggestion "Present also any initial difficulties encountered and solutions provided" received the highest number of responses (6/18 ~ 33%). This was followed by "Present in more details the operation method for implementing a GP" (4/18 ~ 22%). Additionally, 22 % of the answers suggested "Foster the exchange of information/comments/queries among stakeholders during the SV." There was also one selection of other and explanation for that was: presentation should be fully in English, including diagrams, legends and tables.

These insights are significant as they underscore the need for partners and stakeholders to receive comprehensive information about the study visit well in advance, including clear goals and relevant information. Furthermore, participants emphasized the importance of not only showcasing the results of each good practice but also detailing the entire project journey, including any challenges encountered and the solutions implemented.

It is important to note the valuable insights derived from the last suggestion section. These practical and useful advices, which could inform the design of future study visits, were generated when participants selected the option "Provide more comprehensive information about Good Practices in general," the "Other" option (Refer to the graph above), and when responding to the open-ended question "Additional suggestions."

Overall, the Study Visit was deemed successful, with many participants highlighting the smooth execution of all activities. Nevertheless, the main suggestions for improvement included:

- Present in more details the operational methods for implementing a Good Practice.
- Present also any initial difficulties encountered and solutions provided.
- Foster the exchange of information/comments/queries among stakeholders during the Visit.
- Clarify better in advance the objectives and relevance for the stakeholders being invited to attend the SV.
- Foster interactive collaboration between participants.
- Consider having the form completed by the Country group rather than individuals.
- Display roll-up banners or posters in the meeting room.
- Present more results of the Good Practices.
- Arrange additional on-site visits of the Good Practice.
- Introduce a designated section in the agenda for partners to ask compulsory questions.
- Enhance the networking session by incorporating more breaks.
- Outdoor activities and during it give more information and clarification.
- Request permission in advance to publish pictures which were taken during SV.

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- Workshop agenda and how to fill questionnaire; Is it possible that one team /GP, now it takes a lot of time to go through all GP with one team.

These suggestions mainly focused on enhancing the thorough documentation, workshop experience, and streamlining communication and networking opportunities during the study visits.

46. Which Good Practice would you propose to be uploaded in the IE Policy Learning Platform? (indicate 1-2 GP maximum)

Lisätietoja

	E-trucks R&D Centre and conve...	6
	Mustankorkea biogas ecosystem	3
	Kangas Area	5
	Public transport in Jyväskylä	2



## 4. Thematic Workshop session



Agenda	
09:05	Good morning!
09:10	Next Study Visits (Latvia + Czech Republic)
09:25	PROMOTER-project updates (Ivo)
09:35	Thematic workshops <ul style="list-style-type: none"> <li>• Keulink (E-trucks)</li> <li>• Mustankorkea (biogas)</li> <li>• Kangas (urban development area)</li> <li>• Public Transport in Jyväskylä</li> <li>• Non-documented practices (Merus and energy storages; Cefmot)</li> </ul>
10:10	Completion of feedback questionnaires by delegation
11:20	Ending of the Study Visit + lunch

The 3<sup>rd</sup> day stated one thematic workshop in which all teams shall answer to guiding questions of GP's during this SV No. 2 Jyväskylä. The used agenda showed on above and guiding questions were.

1. What in practical was innovative and / or interesting in this practice?
2. What can be learned from the practice?

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3. Do you have already experience from which SH in Central of Finland could learn?

4. Which question remained unanswered?

After that each team had 15-20 min time to prepare their answers and then they had 5 min time to show their outcomes.

### GP 1 etruck & Keulink:

1. retrofitting old diesel trucks & adding old truck life cycle
2. how to transfer diesel truck to etrucks
3. not at the moment
4. bureaucratic procedures, length of validation process of different countries

### GP 2 Mustankorkea biogas ecosystem:

1. biogas production for waste and use fuel to public transport
2. induce people to use of biowaste, useful for educational purposes, use of selected micro-organisms to optimize the kinetic fermentation and produce more biofuels
3. yes we have
4. how to educate and motivate people to separate waste, how much pollution is generated by this plant



### GP 3 Kangas area

1. The decision to recover old industrial site with a city project.
2. The importance of asking local people before the investment.
3. We have a similar case study in Italy, in Fiento, and Hungary.
4. Why didn't start to build services? Why didn't choose a whole plan? Why didn't choose more renewable sources? Why didn't build an energy community?

### GP 4 Public transport a city of Jyvaskyla

1. The incorporation of electric vehicles into public transport
2. Investment effort public and private sector in the innovation about electric vehicle
3. In Spain- charging station to buy in 2025- several buses that can travel between the different cities of the region (42 vehicles). In Italy they have charging point with solar panels
4. What will payback time for Electrical buses? What would happen if the current company doesn't get the next contract? How would you amortise the project?

### GP 5 Cefmof- Hydrozen project Touota foundation

1. H<sub>2</sub> can be a viable energy source for big transport (HD). Practical solutions are at the beginning as producing, distributing, and storing. H<sub>2</sub> are now very expensive.
2. Implementing H<sub>2</sub> need a good planning strategy, which include estimates about the number of possible clients, quantities, logistic planning for storage and distributions. intending to have a project competition for funding the most promising projects. It is a very good idea. Education campaign for citizens, where they learn about this technology, safety and advantages of using H<sub>2</sub>.
3. We tried (in Brasov public transport) to make a joint venture with a private company in order to reduce the final price of H<sub>2</sub>. Unfortunately, the deal was off, but can be a way to accelerate implementation. We have to improve the cooperation with research and development institutes.
4. How feasible is the idea of replacing classic combustion engine with H<sub>2</sub> engine?



## 5. Conclusion

The Jyväskylä Study Visit showcased a range of innovative initiatives with potential to be considered in PROMOTER Project. These good practices were in close alignment with the project's overarching goals, emphasizing renewable energy, environmental sustainability, and sustainable mobility. Through detailed presentations and immersive on-site visits, participants gained invaluable insights into the practical implementation and potential adaptability of these initiatives to their respective regions.

Furthermore, the feedback received from participants underscored the success of the study visit in fostering knowledge exchange and creating networking opportunities. This positive engagement reflects the efficacy of the event in promoting collaboration and sharing best practices among project partners.

In conclusion, the Jyväskylä Study Visit not only provided significant insights into ongoing projects but also served as a source of inspiration for future endeavors. The lessons learned and experiences gained during the visit will enhance the planning and organization of future study visits, contributing to the continued success and impact of the PROMOTER Project.

The presentations delivered are available here:

[J:\Promoter 2024 siirto\PROMOTER\\_SV2 Report\\_Regional Council of Central Finland.docx](J:\Promoter 2024 siirto\PROMOTER_SV2 Report_Regional Council of Central Finland.docx)

## 6. APPENDIX

A1 Agenda of the Study Visit

A2 List of participants with signatures

A3 Logistic note of the Study Visit nr. 2

A4 Template of SV feedback form

A5 Workshop feedback form GP1

A6 Workshop feedback, GP2- etruck &Keulink

A7 Workshop feedback , GP3- Mustankorkea biogas ecosystem

A8 Workshop feedback , GP4- Kangas area

A9 Workshop feedback , GP5- Public transport a city of JKL

A10 Workshop feedback ,GP7- Cefmof -non documented practice

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