

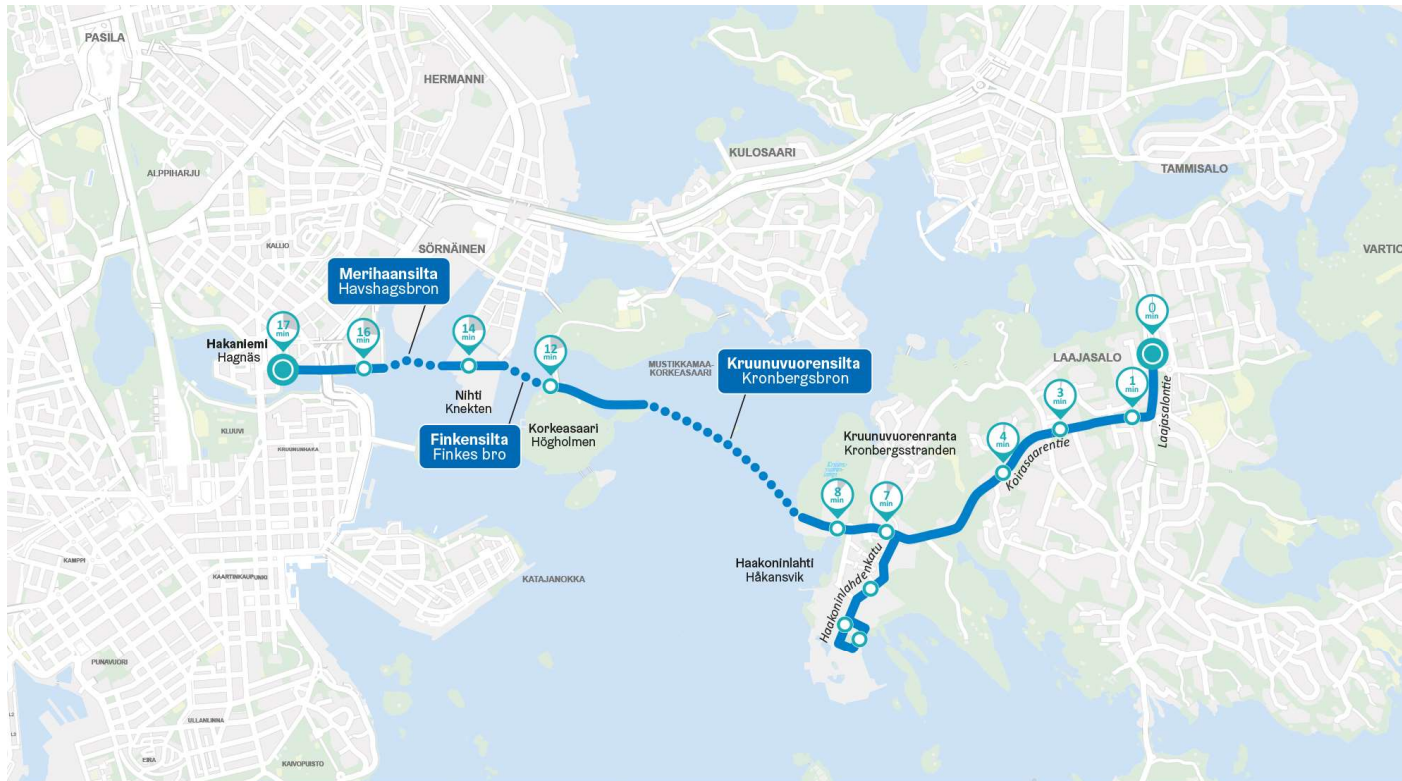


CROWN BRIDGES

Crown Bridges- How to make sustainability part of the project

Minna Tukiainen

Tram route



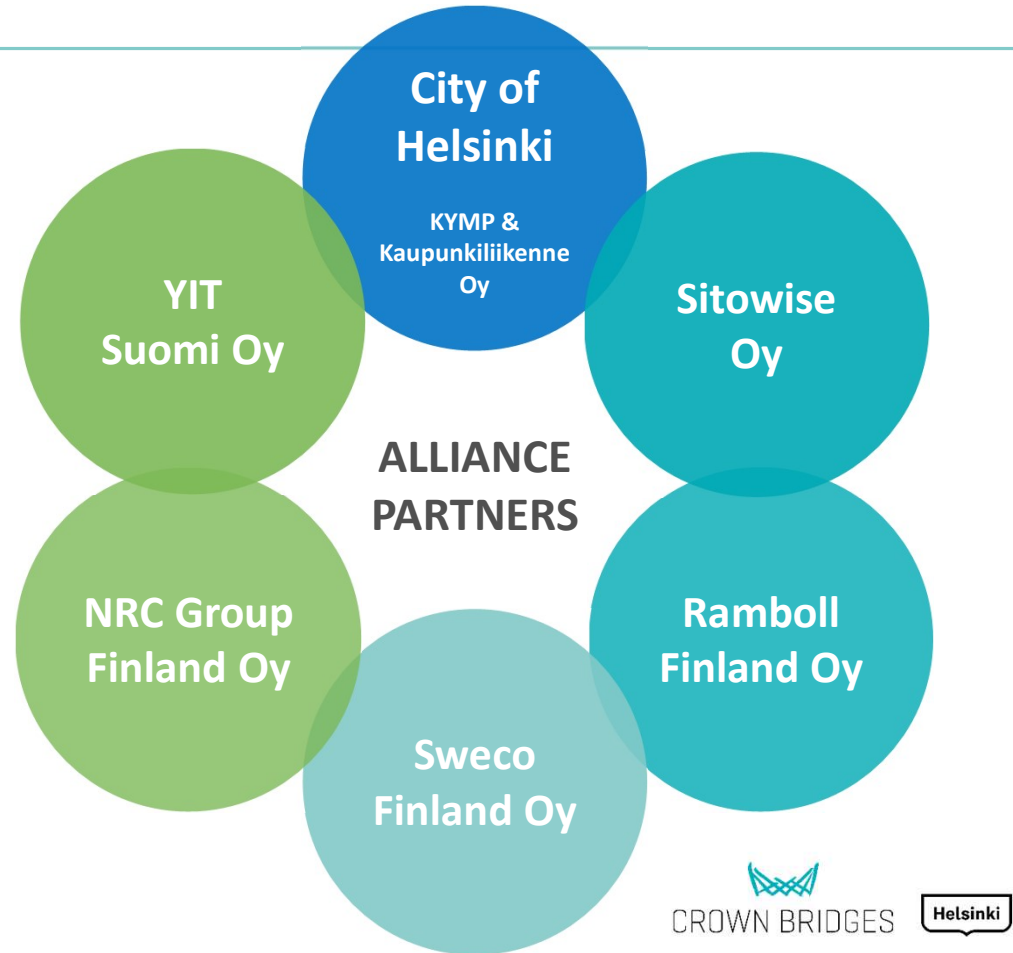
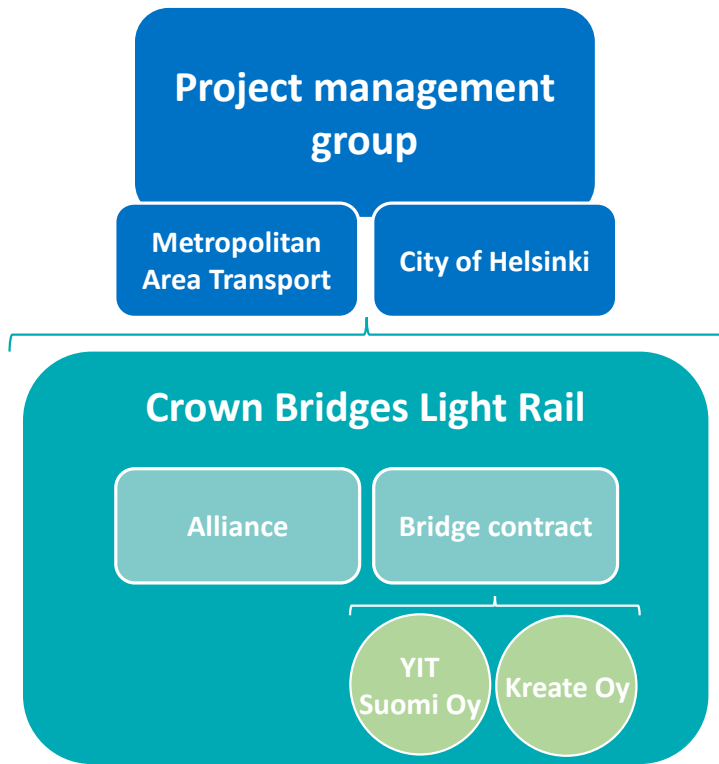
KRUUNUSILLAT-RAITIOTIE 2027 / SPÄRVÄG KRONBROARNA 2027 / CROWN BRIDGES LIGHTRAIL 2027

- Kruunusillat-raitiotie / Spärväg Kronbroarna / Crown Bridges Light Rail
- Pysäkki / Hållplats / Stop
- Uusi silta / Ny bro / New bridge
- ⊙ Päätepysäkki / Ändhållplats / Final stop



The project organization

The alliance



Key figures



Tram traffic

- 1st phase: Laajasalo – Hakaniemi
 - Rail connection length 7750 double track meters
- 2nd phase: Hakaniemi – central station
- Tram rides 23,000/day (in 2030)



Cycling and walking

- Cycling route from city centre to Laajasalo, connected to the cycling network
- Travel time by bicycle from city centre to Kruunuvuorenranta 20 min and from city centre to Yliskylä 30 min
- Route users 3,750/day (in 2030)



Bridges

- Merihaka Bridge 400 m
- Finke Bridge 300 m
- Kruunuvuori Bridge 1,200 m



The purpose of Crown Bridges Light Rail

Safe, smooth and reliable connection for walking, cycling and tram

Improves the efficiency of the transport system as part of a network-like urban structure

Connects growing Laajasalo to the inner city

Promotes sustainable modes of transport

Cityscape-wise and technically high-quality bridge connection as part of maritime Helsinki

Objectives for implementation

The investment cost estimate is committed to

The project is implemented responsibly, in accordance with the principles of sustainable development

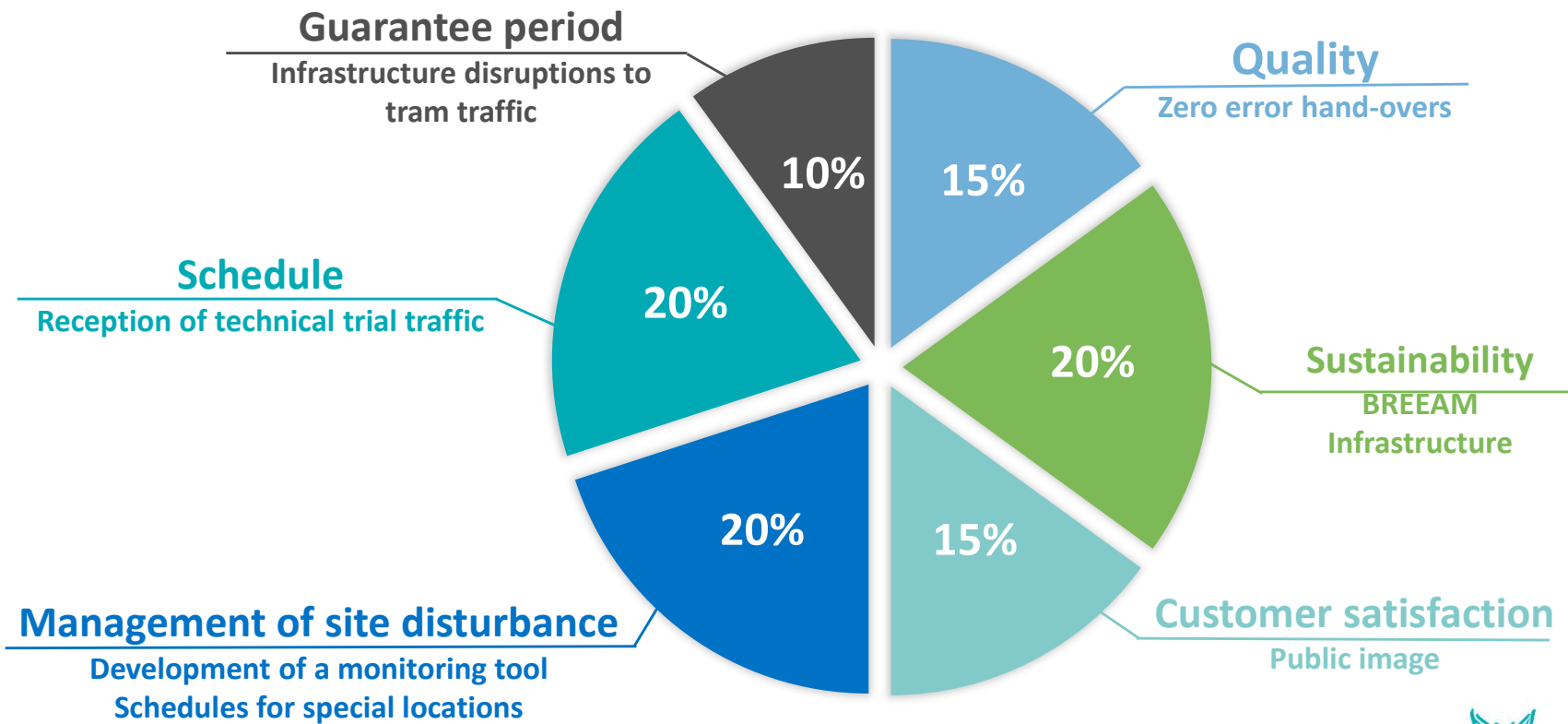
The overall schedule is clear and controlled

Traffic disruptions are avoided and the daily lives of residents and businesses go smoothly during implementation

The various parties involved in the project, the stakeholders and the residents of the city are satisfied with the communication related to the project

Key Result Areas of the alliance

The key result areas are part of the alliance's incentive system
A metric and a target level have been defined for each target area
Success in key result areas produces added value for the customer,
e.g. as better quality, minimizing the disadvantages of the
construction site and realizing responsibility
For service providers, success generates a key result bonus



Breeam and Crown bridges

- The project has been exploring Breeam certification for the project in earlier stages.
 - Many of project targets can be measured through Breeam.
 - A way to measure and demonstrate the project's sustainability was wanted.
 - The client was strongly pushing the implementation of Breeam for the alliance, e.g. already in the tender phase it was wanted that the future alliance would explore the possibilities for Breeam certification.
-
- The Alliance decided to apply for certification and even set Breeam as the one of Alliance's key profit target
 - 20% of alliances bonus depend on Breeam
 - Alliance is educated many assessors

Sustainability is part of everything

Not only environment

Balance between all aspects

Depend on areas

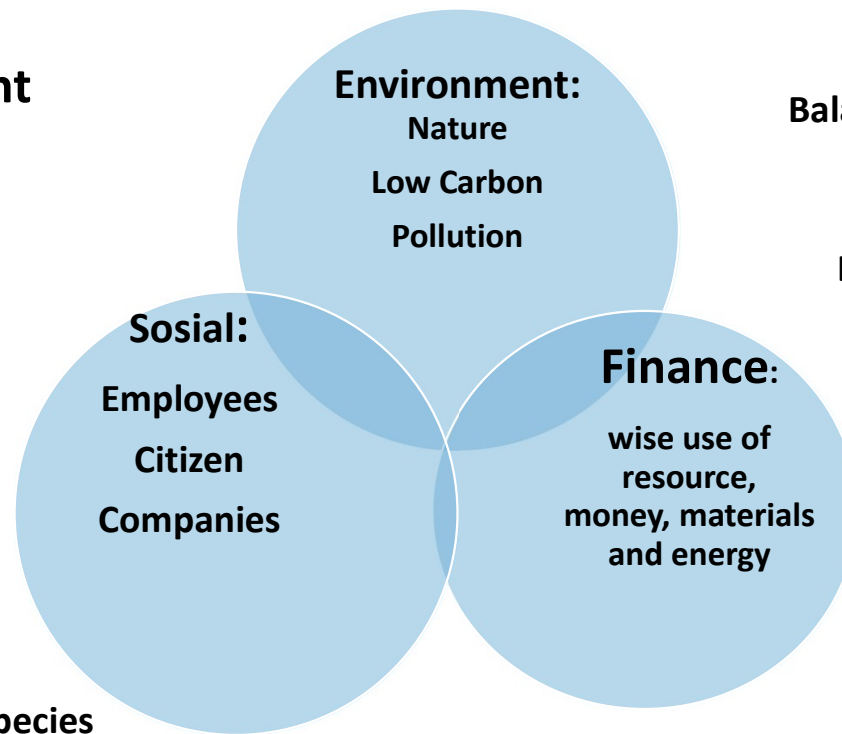
Best practice do avoid any harm

Traffic and noise

Take care of stakeholders needs

Trees and invasive species

Birds, bats and Fish



Sustainability in Alliance

The sustainability of the Crown Bridges project is measured using the international BREEAM Infrastructure assessment, rating and awards scheme.

We implement the project according to the criteria of a low-emission construction site.

We are looking for opportunities to utilize recycled and reusable materials in construction.

We consider the history and environment of the area in the design and implementation of construction.

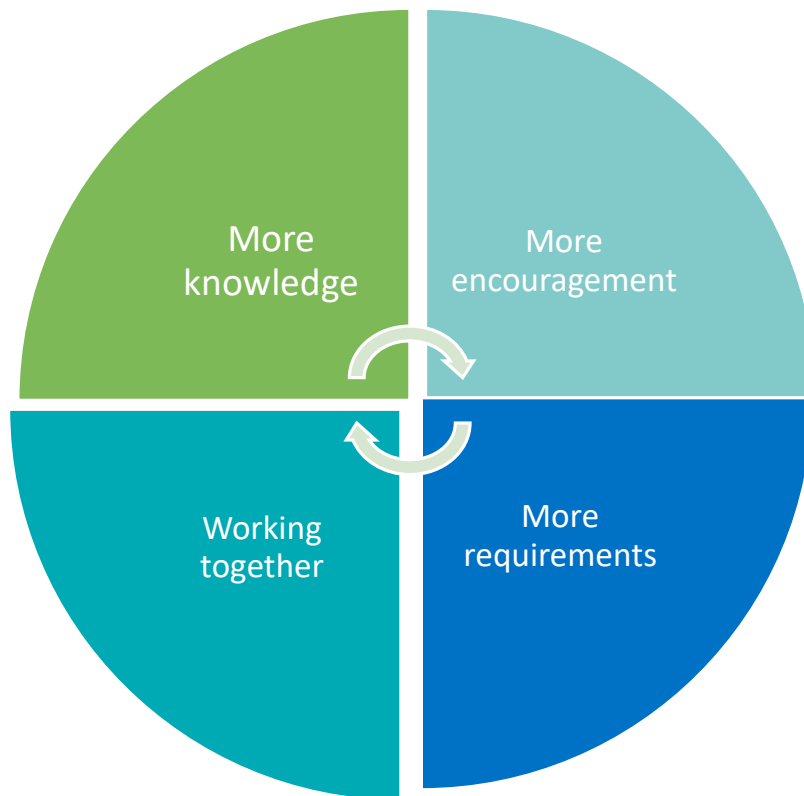
We ensure smooth and safe traffic during construction.

We take care of adequate provision of information and involvement.

Important things to understand when implement sustainability to project

- Every stage must understand how we handle term sustainability
- Every stage must agree that sustainability is important
- Implement sustainability to project is not easy
- You need find best compromise between difference point of view
- Every person must know what sustainability needs for them
 - It depends role of project
- Every person needs to feel that what they do is important
- There is not only one-way how-to project could be sustainable

How to implement sustainability



It is difficult to implement new policies if one of these is missing.

All these are needed for successful implementation

More Knowledge

For example:

- VATULA- Management Sustainable talks
 - 2/year,
 - Subjects chance, But main topics are Safety, quality, and sustainability (environment)
 - Interactive, Like game, no monologies
 - 3 group
 - Project leader, and two groups for subproject leaders

- Weekly information session
 - Approx 15min, to all workers
 - Subject chance Safety, quality or environment

TIETOTUOKIO – Säilytettävät ja suojeltavat elinympäristöt ja lajit



Koirasaarentien ympäristössä olevat lepakoalueet:
➢ Vaikuttaa alueen valaistukseen kesällä niin lopputilanteessa, kuin töiden aikaanakin
➢ Lepakko alueella ei tule olla kirkkaita läpi yön palavia valoja (koskee lopputuotetta ja rakentamisaikaa)

Pesimisajat, linturajoitukset sekä taimenen vaellusajat löydät allianssin vuosikellosta: [KS_000_PRI_Yleinen-KSA-vuosikello](#) (Desktop, Mobile, Classic Web)

- vk 11-32 Lintujen pesimäaika
- vk 13-26 Nihti-Kruunuvuorensillan vesiluvan linturajoitus
- vk 22-35 Yöaikaisen valaistuksen välttäminen Koirasaarentiellä
- vk 33-39 Meritaimenen vaellusaika

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More encouragement

For examples: Free hamburgers to everyone after 100 day an accident-free construction site.



- Highlighting good deeds and ideas in the project weekly newsletter and snapshot.
- Bonus and Prizes
 - ATA bonus to organizations
 - Instant bonuses for employees

More requirements

- Low-Carbon site
- High recycling rate
- High level of Re-use of materials
- Our new environmental meter and it index must be over 90%

Dokumentti

Indeksi: 94.23% **49** **3**

^ Ympäristö mittaus

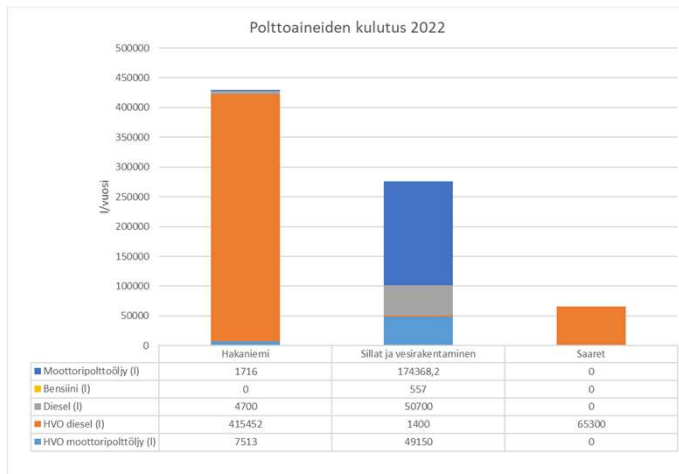
88% **15** **2**

^ Laadun mittaus

97% **32** **1**

^ Vastuullisuus

100% **2** **0**



15

15.9.2023

[Etunimi Sukunimi]

Jätteen tunnusluvut	tn
Lajitteluaste	99,4 %
Kierrätysaste	96,1 %
Hyötykäyttöaste (energia ja muu hyödyntäminen)	3,8 %



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More Working together

Close cooperation between different players



Client, designer and contractor working together and try find best solutions.



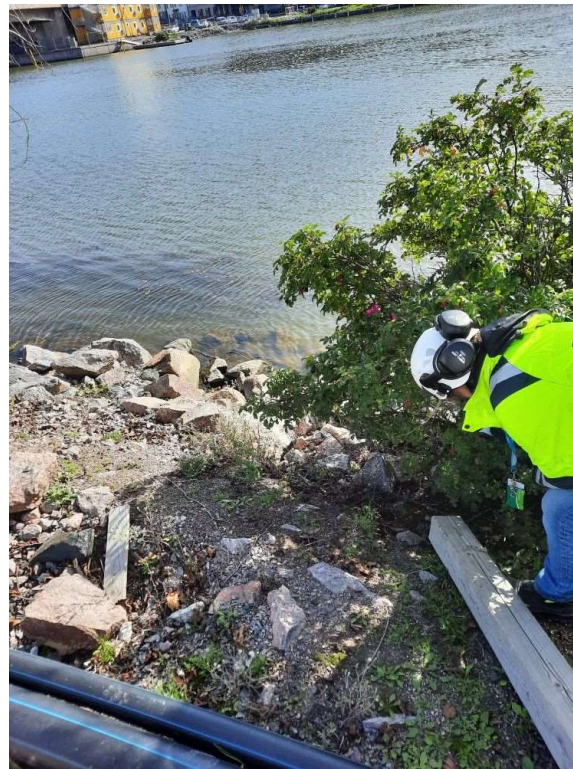
Open internal and external communication



Residents' meetings and social media give them the opportunity to influence, for example, traffic arrangements in the area.

Education through an interpreter, ensure understanding of the instructions

Some examples of practical action



Alliance manufacture and sent some stoves to Ukraine
We fight invasive alien species
And find new solution to handle waters on area