Planning and building a new tramway system in Tampere - 1st phase

The planning and building of a new tramway system in Tampere has reached its first milestone – the 1st phase is now ready and has started its operation in August 2021. The 1st phase was under construction between 2015-2021, finalized ahead of time and also ~11% under budget. It is the largest public infrastructure project ever in Tampere (252 M€).

BACKGROUND AND MAJOR SUSTAINABILITY CHALLENGE ADDRESSED
The first phase of the tram was carried out through an alliance model, formed by the City of Tampere, Tampere Tramway Ltd, YIT Suomi Ltd, NRC Group Finland Ltd, AFRY Ltd and Sweco Finland Ltd. The main goals of the tramway project are to support city growth through urban structure densification and accelerate the shift to a greener and more efficient transport system. The Tampere tramway has been included in all local and regional strategies, such as Tampere City Strategy, Tampere Mayor Programme and Carbon Neutral Tampere 2030 roadmap. The second phase of the tramway is already under construction.

PROCESS AND RESULTS
The construction, maintenance and operation of the Tampere tramway is carried out through alliance model. The construction of the 1st phase finished on time and ~11% under budget. Operation started in schedule and the first few months have gone as planned.

SOLVED AND UNSOLVED CHALLENGES
The evaluation of the effects, especially the cost-benefit analysis in 2016 was a huge task, with political pressure before the construction decision in the City Council - we tried to provide the decision-makers as thorough and neutral evaluation material as possible, so that they could take the final vote based on information. The zoning of the tramway in certain areas with delicate nature conditions, such as Siberian flying squirrels: two complaints led to court processes. For the zoning challenges we could only make the schedule as flexible as possible so we would have enough time to wait for the court processes. The Alliance model helped with this as we could adjust the schedule with a bit more flexibility. Building in the heart of the city also leads to many challenges: major construction sites causing inconvenience for many enterprises and citizens for several years is not an easy entity. This challenge we tried to tackle by putting more resources in communication and interaction.

The first phase of the tramway system is now in full operation, so all of the challenges in the planning and construction phases have been resolved. But the major benefits, which were evaluated back in 2016, are yet to be fully realized. These are for
example the increase in ticket revenues and the increase in city revenues for urban densification. According to the city strategies, we are working to further densify the urban structure and make the public transport as appealing as possible. We might have a few tram stops too many, especially in the city centre. With fewer stops the tram would be a bit faster and so more appealing.

**FUNDING**
The financing model was a pretty traditional one, completely publicly funded: 70 % City and 30 % State. Tampere tramway has been included in a Land use, housing and transport agreement between the State and the Region, which guaranteed 30 % state aid for the planning and investment costs. A city-owned company (Tampere Tramway Ltd) was founded to finance, build and run the system. The company loans the money for investments and charges the city for using the system.

**GOOD PRACTICE AND LESSONS LEARNED**
The alliance model has worked very well for us in many sense. We have been able to direct the project as a whole, without sub-optimization. The model with shared goals, bonuses and sanctions has led to a success for both, us as clients and our alliance partner companies. We were able to finish the biggest public infrastructure investment in Tampere history on time and under budget. And the first few months of full operation look promising: the success story doesn't seem to end here.

Lessons learned from the process: make a realistic schedule, especially if you are doing something for the first time. Alliance model is a useful tool, especially in longer and larger projects with a lot of variables expected on the way. Keep the politicians on board by providing enough information before the decision and also the possibility to track the progress of the project transparently.

**ADDITIONAL MATERIAL:**
Here you can find the links for our two major reports in 2016: Tampere Tramway Implementation Plan and Tampere Tramway Evaluation of the Effects (pdf format):
Here you can find the basic information from the operation phase:
https://www.tampereenratikka.fi/en/