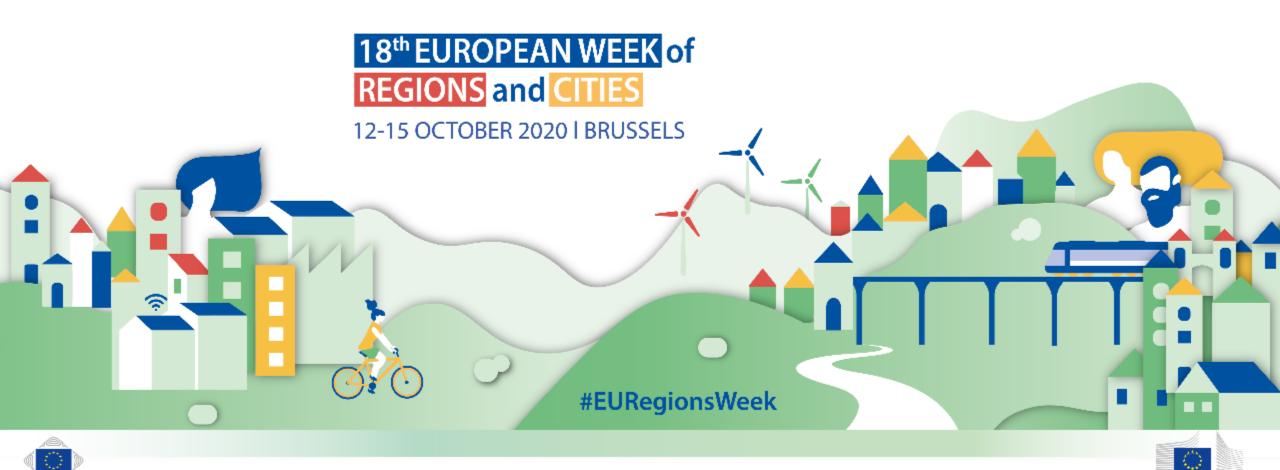


European Committee of the Regions











E-buses: from procurement to deployment

Wednesday 14 October 2020 - 14:30 - 15:30 (CET)

Interreg Europe - Policy Learning Platform

Moderators:

- Elena Ferrario Thematic Manager
- Arnault Morisson Thematic Expert in Research and Innovation
- Simon Hunkin Thematic Expert in Low-Carbon Economy













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Agenda











- Technical details and Introduction
- Procurement: prior market consultation process; good practice presented by Arvis Bernics, SIA Ventspils reiss, Latvia
- Deployment: transition to electric buses in Stockholm; good practice presented by Anna Forsmark, Stockholm County Council, Sweden
- Panel discussion Q&A
- Conclusions











INTERREG EUROPE:

12-15 OCTOBER 2020 I BRUSSELS

Sharing solutions for better regional policy



















Policy Learning Platform

- A space for **continuous learning**, for practitioners of **regional development policies**
- We take stock of all the knowledge and results of the Interreg Europe projects and share it with the community
- We believe in the power of cooperation and facilitate networking among peers
- We help people deliver better policies by finding inspiration in what others do





Good practices database

Personalised policy advice

www.interregeurope.eu/policylearning













Let's get to know each other



Tell us in the chat:

- Your name
- Where you are from
- Why you are interested in our session













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E-buses: from procurement to deployment



E-buses—an urban mobility solution where local and regional authorities have an essential role to play in encouraging uptake—from public procurement of e-mobility to the electrification of public transport infrastructures.

Some challenges to e-mobility:



- Charging infrastructure
- Range of motion
- Cost
- Perception











Policy Learning Platform can help

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Webinar

procurement of innovation (PPI)



17/06/2020

Type: Platform





The Policy Learning Platform can help you find solutions to your policy challenges



E-mobility

Electric mobility (e-mobility) has emerged as one of the most promising technological solutions to replace fossil fuels,...

Economy







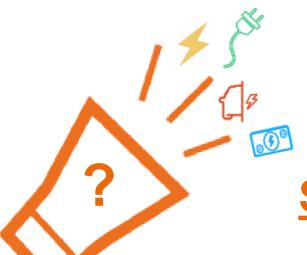




Questions & Answers



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Send us your questions in the chat.











PROCUREMENT Arvis Bernics and Didzis Štelbaums



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Ventspils: Facts and figures

- Located in the Northwest of the Kurzeme region bordering the Baltic Sea
- Area of 58 sq. km
- Population of Ventspils City 38 600 inhabitants













Ventspils: Public transport

- Public transport is provided by «Ventspils Reiss» Ltd.
- 18 public transportation routes 32 buses
- 94% environmentally friendly Euro 5 and Euro 6 buses
- Most popular low-capacity buses—up to 22 passengers
- Interval 3 up to 6 min

Ventspils: Average passenger

- Short time on the way
- Get on and off the bus upon request
- The interval between buses must be short















Current Market

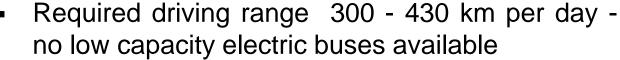
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 Currently manufactured electric buses are mainly high or medium capacity (weight of 12.5-18 t)



Local needs - peak load efficiency, zero-emisson cannot be met by large or medium capacity buses





Promote comfortable public transportation

Find a solution to buy an innovative electric bus adapted for the needs of Ventspils City













Local needs

- 14 low-capacity electric buses (vehicule weight ~ 5.5 tonnes) and construction of charging stations
- Sufficient charge in 3 minutes while passengers are boarding
- Range not limited by charging and exceeds 450 km per day

PUBLIC PROCUREMENT















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In-depth market research

















- Currently available products do not meet our requirements
- Some manufacturers have developed low-capacity bus prototypes. But:
 - their specifications do not meet Ventspils' needs
 - seem to be developed with engineering solutions and not customers needs in mind.
- Several manufacturers are in the process of development. It is unclear if their products will be suitable for Ventspils







Innovative product development



- Incentives for potential manufacturers to develop innovative products:
 - Relativelly unoccupied market niche
 - City of Ventspils as a potential customer
 - Ventspils assists in product development through defining potential customers' needs and desired specifications
 - Many European countries already have restrictions on diesel-powered engines
 - European Union policy on climate change management











REGIONS and CITIES

18th EUROPEAN WEEK of First prototype was manufactured in Latvia in 2018 **Procurement contract signed on 31 January 2020**

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Drive eO CEO Andris Dambis had the pleasure of meeting FIA President Jean Todt, ITF **Secretary-General Young Tae Kim** to demonstrate electric minibus



The bus is undergoing refinement and the necessary tests













Advantages

- carried out without <u>financial participation of the client</u>
- the client was able monitor the progress of the project make suggestions
- prototype is being developed by engineers with significant experience in electric vehicle development
- promotion of fair competition; opportunity for other manufacturers to customise their products













Procurement Conditions



- A prototype must be ready by the time the offer is submitted
 - Some departures from specifications are allowed if:
 - supplier can eliminate them by the time the first bus is delivered
 - must include documents providing the supplier's capabilities (projects, contracts)
- Ability to test prototype in real environment
- Supplier can customise the product and deliver the first 4 buses within 12 months 31st of January 2020, 10 by the end of the 2022











18th EUROPEAN WEEK of REGIONS and CITIES

12-15 OCTOBER 2020 I BRUSSELS

- Project implementer «Ventspils reiss» Ltd.
- Project partner Ventspils City Council
- Public procurement procedure is organised by commision of Ventspils City Council under the rule of Public procurement

- Project coodinator Director
- Mr. Arvis Bernics
 - author of the idea
 - definition of functionality and required specifications
 - calculations
 - prior marketing consulattion
 - cordination of the co- project implementation







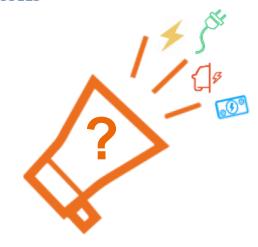




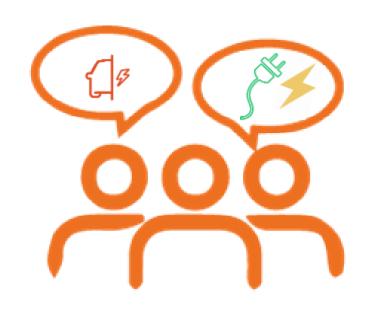


Procurement - Questions & Answers

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DEPLOYMENT

Anna Forsmark and Sigrid Colnerud Granström



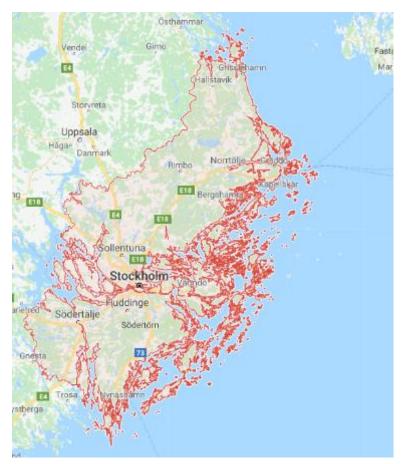
1. Public transport in Stockholm

- Inhabitants: 2,3 million in urban and rural areas
- Bus, metro, light rail, rail, tram and ferries
- 2 200 buses, 11 contracts, 26 municipalities
- 100 % of the bus fleet runs on renewable fuels: biodiesel, biogas, ethanol
- Electric buses: ~15 e-buses today, around 900 in 2030











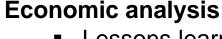




2. Good practice

Large pre-study to cover all aspects:

- System perspective
- Business models
- Energy and peak hour issues
- Sustainability and environment
 - Batteries
 - Local benefits
 - External effects
 - Recycling



- Lessons learnt from pilots
- Land in central areas
- Depots and terminals as strategic hot-spots for charging
- Operational costs efficient bus traffic















2. Guiding principles from the study

- Develop goals and plans for electric and zero emission operation
- Cooperate with municipalities and other stake holders
- Analyse potential before each tendering, and invest in technique on a mature market
- Encourage initiatives in on-going contracts

- Keep a mix of renewable fuels
- Prepare for electric buses when building and renovating
- Adapt organization, policies and guidelines
- Extend the requirements in contracts to include battery's production, traceability, recycling and re-use.







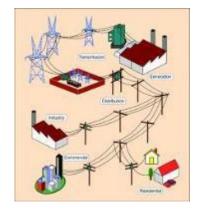






3. Challenges

- Lack of electric power grid capacity
- Lack of best practice
- Lack of investment funds
- Lack of competence inhouse
- Patience work with change management
- Responsibilities and mandate who can decide what?
- Rapid technique development continuous benchmarking



















3. Recommendations

- 1. Make sure you have enough **resources** to work (both hours and money) and that you **cooperate** with other stakeholders
- 2. Make sure someone **brave** can take uncertain decisions about the future, and celebrate each step
- 3. **Communicate** how your organization needs to grow, develop and change due to new tasks, challenges and developments















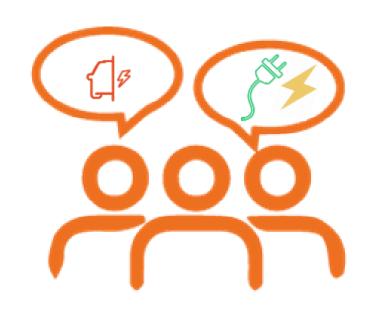




Deployment - Questions & Answers



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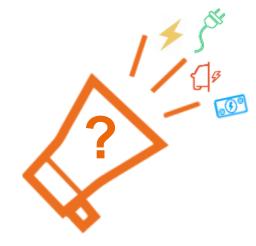




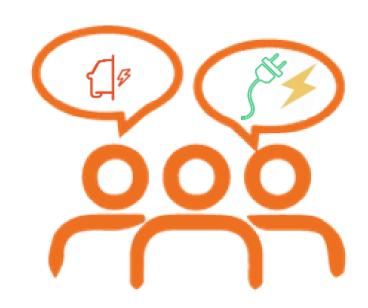


Panel Discussion - Q&A

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Send us your questions in the chat.















Conclusions



E-buses: from procurement to deployment

- Main messages
- Some insights



The Policy Learning Platform can help

- o Interregional onsite or online peer reviews
- Policy digest
- Policy helpdesk









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Thematic Expert - Research and Innovation



Arnault Morisson

Thematic Expert – Research and innovation

Contact us



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Thematic Expert – Low-carbon economy



Simon Hunkin

Thernatic Expert - Low-carbon economy









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MANY THANKS!











