



# Action Checklist for Municipalities and Public Transport Providers: E-Buses

How to electrify urban transport? BSR electric has developed five Action Checklists for E-Bikes, E-Buses, E-Ferries, E-Scooters and E-Vans & E-Logistics - to give a brief overview of important aspects to bear in mind for decision-making.

## Transport System

- Set a timeline for the step-by-step transition to a 100% emission-free bus fleet (e-buses, fuel cell buses) with intermediate goals every couple of years and consider EU timelines.
- Make sure you have the right expertise and sufficient capacity to drive forward the transition to emission-free transport (capacity development).
- Create incentives for citizens to change to public transport (e.g. creation of a 365€ ticket for a year) in collaboration with public transport providers.
- Ensure a good collaboration and exchange between transport planning from the municipality and from Public Transport Providers.

## Procurement

- Foster sustainable urban transport systems.: Lobby for financial incentives to be introduced on a national level.
- Have the bravery to be a pioneer of new technologies, but consider sufficient time for troubleshooting and implementation.

- Tendering processes favor emission free vehicles (green procurement as the default option) or grant bonuses for climate friendly solutions.
- Search actively and apply for the various funding programs, both on EU and on local level.
- Engage in dialogue with the public transport companies before defining goals: Commonly assess the technology available and find the best solution.
- Take the time to prepare a comprehensive technical description of the transport system. This facilitates the communication and planning with the transport companies and Original Equipment Manufacturers (OEMs).
- Build networks with other cities in order to bundle and align procurement and thus improve the negotiation position towards OEMs.
- Pay close attention to the planning of timelines as delivery times for electric vehicles, infrastructure and IT systems can be longer than conventional procurement processes. Start the planning process early enough!

## City Development & Planning

- Develop a long term vision for the transport system.
- Provide sufficient areas to the transport companies for the construction of new infrastructure (chargers, depots, workshops).
- Consider e-bus specific requirements, limitations and new possibilities in city planning.

## Public Awareness

- Promote the change: How does e-mobility improve quality of life for the citizens? Quantify the benefits. Highlight positive side effects on health, reduction of pollution and noise, well-being fighting climate change, increasing public transport to achieve less congestion and more livable cities.
- Perform broad campaigning for the positive aspects of the sustainable mobility transition and what the municipality is doing. Make public transport more attractive & enjoyable.

## Strategic Partnerships & Networks

- Partner & Network with business, organizations and academia to facilitate the transition to e-mobility (e.g. CIVITAS partner cities).
- Build networks with other municipalities and transport providers: Look out for knowledge on success and best practice, join forces for procurement of buses, infrastructure and IT-systems.
- Engage energy companies to ensure availability of electric power.

## For Public Transport Providers

- Consider e-bus specific boundaries when planning routes and lines (maximum range, charging infrastructure & strategies).
- Ensure procurement of electricity from sustainable sources for the public transport.

- Implement penalties in the contracts with manufacturers to prevent delays and quality problems, but consider a good balance between penalties and incentives in for a good and successful cooperation.

- Implement data usage requirements in the tendering process: Ensure that all relevant operational bus data is available to the transport provider to enable data analysis and monitoring.

- Pay special attention on the planning of electric infrastructure: Start early with contacting and involving the grid operator and other new stakeholders for the grid- and charging infrastructure.

- Check the infrastructural preconditions: Presence of electrical supply lines, voltage level, amperage and electric power for charging. Get detailed technical information for the grid capacity and the process for permissions for grid connection and charging infrastructure.

- Decide a strategy for charging infrastructure and tender. Who is going to build and own the charging infrastructure, - the transport provider, the infrastructure operator, the grid owner or a separate company with charging infrastructure competence and according business model? If a separate company is chosen as owner for the charging infrastructure, it is important with comprehensive, well-thought-out legal agreements for the operation.

- Driving efficiency has a significant impact on range and charging needs of the e-buses. Tools and processes for supporting the driver to maintain an optimum driving mode will optimize the energy consumption and reduce operational costs.

## BSR electric project partners:

