

“Raising awareness of fundamental rights and EU values through sustainable transportation infrastructure”

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Sustainable mobility in Järva Municipality, ESTONIA

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How does Järva Municipality's transportation infrastructure reflect and promote fundamental rights such as accessibility and non-discrimination?

- Järva Municipality in central Estonia faces **unique transportation challenges** due to its rural setting, low population density, and dispersed settlements. These factors shape how the community **seeks to uphold** the fundamental rights of accessibility and non-discrimination in its transport infrastructure.
- Most residents **depend heavily on private cars** because of long distances and harsh weather, but the 2025 national car tax—based on vehicle emissions and age—has made car ownership more expensive, creating *new inequalities* between urban and rural residents.
- Public transport, though officially accessible and even free at the county level for a time, **remains impractical** due to infrequent schedules, poor route coverage, and long travel times. As a result, it *fails to provide* true functional accessibility for daily commuters.

Commitment and effort. Ongoing struggles

- To address these gaps, Järva Municipality operates a **social transport system** for people who cannot use regular public transport, such as the elderly, people with disabilities, and those in remote areas. This service allows residents to **travel for essential needs** like medical visits or shopping and uses vehicles equipped for passengers with mobility challenges.
- It reflects the municipality's **strong commitment** to equity and social inclusion, ensuring that even the most vulnerable citizens can **remain active** participants in their community.
- However, maintaining both accessibility and sustainability is *difficult* in such a dispersed area. The municipality must balance reducing car dependency with ensuring mobility for all. Future solutions may include digital innovations, such as **demand-based transport apps**, shared vehicle systems, and **support for electric mobility**.
- Overall, Järva Municipality's transport system demonstrates a **clear effort** to make mobility a universal right rather than a privilege, despite economic and geographic constraints. It represents both the progress and the ongoing struggles of rural regions in ensuring equal access to transportation and community life.





Photo: Heli Illipe

Incorporating EU values into its transportation planning and development

- Järva County has long been known as the “granary of Estonia,” and this description remains accurate today. Agriculture—especially **dairy farming**—plays a central role in the local economy and identity. In some rural areas, people jokingly say that there are more dairy cows than residents, which captures both the scale of production and the **deeply rooted farming tradition**.
- This agricultural strength has also become a driver of sustainability and innovation, aligning with the European Union’s core values. Several progressive farmers in Järva have invested in **biogas production**, turning agricultural by-products—particularly **methane from manure**—into valuable resources. This gas is used to generate electricity, heating, or even fuel for vehicles, reducing emissions and dependence on fossil energy. Thus, what once was considered waste now contributes to the **green energy transition** and supports sustainable transport solutions across Estonia. As locals humorously note, “Public transport in Tallinn runs thanks to the cows in Järva,” reflecting the interconnectedness between rural innovation and national sustainability goals.
- By embracing **renewable energy**, supporting local entrepreneurship, and maintaining close cooperation between municipalities, farmers, and state institutions, Järva Municipality exemplifies how rural communities can advance EU priorities of sustainability, social inclusion, and innovation—not through grand infrastructure projects, but through **smart, resourceful, and community-driven initiatives** that turn local potential into shared progress.

Local initiatives that successfully raise awareness of citizens' fundamental rights through sustainable mobility projects

- In Järva Municipality, there is recent funding and planning for **new pedestrian and bicycle paths**. For example, this summer the new footpath at Kadastiku was completed in the village of Imavere. It leads from the village to the industrial area in Kadastiku.
- The industrial estate is unusual in Estonian terms: here operates **Stora Enso's** large sawmill and **Graanul Invest's** pellet production facility, with an annual capacity of approximately 350,000 m³ of sawn timber and 100,000 m³ of pellets. The pellet manufacturer Graanul Invest has operations converting wood residues into **high-quality fuel pellets**. And nearby is **Fibenol**, a chemistry firm that transforms wood residues into high-value chemical products and materials.
- The footpath improves **safe access** for employees, visitors and local residents walking or cycling to the area, enhancing local mobility and connectivity. It supports sustainable transport by **encouraging active travel** rather than car-only access.
- In a parallel innovation project in Koeru, a trial road section was paved with asphalt where part of the **bitumen has been replaced by lignin** produced in Fibenol, Imavere. Lignin is the natural "glue-like" component in wood that binds fibres together. By incorporating lignin into asphalt mixes, the project aims to **reduce** dependence on **fossil bitumen** and **lower** the **carbon footprint** of road construction.
- Together, these developments in the Kadastiku-Imavere area and the Koeru test road illustrate how the region's **strong agricultural** and **forest-industry** roots are being **integrated into mobility planning** and infrastructure.

Photo: Fibenol



Aligning local transportation policies with EU principles of sustainability and inclusivity

- One of the main challenges Järva Municipality faces in aligning local transport policies with the European Union's principles of sustainability and inclusion is **limited financial capacity**. While the national government provides support for local road maintenance, the amount allocated to municipalities has remained **virtually unchanged for the past twelve years**. During the same period, the actual **maintenance costs have multiplied**, driven by inflation, higher energy prices, and increasing environmental requirements.
- Järva Municipality is responsible for maintaining **around 500 kilometers of public roads**, many of which are in rural areas with low traffic volumes but still essential for residents' daily mobility and access to services. The limited budget means the municipality must constantly balance between maintaining existing infrastructure, improving safety, and investing in sustainable and inclusive transport solutions such as pedestrian paths or social transport services.
- As a result, while the municipality fully supports the EU's sustainability goals, **financial constraints often hinder practical implementation**. Investments in greener technologies or more accessible infrastructure are desirable but remain difficult without increased national or European funding. In short, Järva's greatest challenge is not the lack of ambition or willingness to align with EU principles—but the **mismatch between long-term policy goals and the short-term realities of a small rural municipality's budget**.



Cultural and historical features influencing the design and implementation of sustainable transportation solutions

- Järva Municipality's has an **unique rural character** and low population density, which fundamentally shape how sustainable transport solutions can be designed and implemented. Järva is a **network-based municipality** rather than one organized around a single dominant urban center. Unlike regions with a clear "core city-hinterland" structure, Järva consists of many small settlements—each with up to about 1,000 residents—that are relatively equal in size and importance.
- This historical and cultural pattern means that local services such as kindergartens, schools, libraries, sports halls, youth centers, senior day centers, and community or cultural houses must be **maintained across multiple villages**, rather than concentrated in one town. As a result, daily mobility needs are spread widely, and travel patterns are highly **decentralized**.
- These cultural and spatial characteristics make the implementation of traditional sustainable transport models—such as centralized public transport networks or dense cycling infrastructure—much more challenging. At the same time, they encourage the development of **flexible, community-based mobility solutions**, such as social transport services or village-to-village connections. In essence, Järva's historical settlement pattern defines both the **limitations** and the **opportunities** for building sustainable, inclusive transport systems suited to a truly rural and community-oriented landscape.



Impact measure of sustainable transportation projects on promoting fundamental rights and EU values

- In Järva Municipality, the impact of sustainable transport projects is measured mainly through **practical data collection** rather than direct assessment of fundamental rights or EU values. In cooperation with the **Estonian Transport Administration**, regular **traffic measurements** are conducted on local and regional roads to monitor vehicle flow, safety, and infrastructure condition. Additionally, the **Järva County Public Transport Centre**, which manages county-level bus routes, collects detailed **ridership statistics**, providing insights into travel patterns and accessibility.
- However, the municipality has not yet systematically evaluated how these projects specifically promote **fundamental rights or European values** such as inclusion, equality, or sustainability. The focus has traditionally been on technical and operational outcomes—road quality, passenger numbers, and service efficiency—rather than **broader social impact**.
- Recognizing this gap, Järva municipality aims to **strengthen future monitoring** by linking mobility data to social inclusion and accessibility indicators, ensuring that sustainable transport is understood as a contributor to citizens' rights and well-being.

Best practices to inspire other regions in integrating EU values into transportation infrastructure

- One of the best practices Järva Municipality can share with other regions is the **innovative use of local bio-based materials** in transport infrastructure.
- In cooperation with companies like **Fibenol**, which produces advanced wood-based chemicals from **forestry residues**, Järva has explored how **circular economy** principles can be applied even in road construction.
- A recent pilot project in Koeru demonstrated this approach by building a **test road** where part of the bitumen in the asphalt mix was replaced with **lignin**, a natural polymer extracted from wood.
- This innovation **reduces fossil dependence** and carbon emissions, showing that sustainability and innovation can literally be built into the road itself.



Photo: Fibenol



International cooperation within the GreenMove project enhances awareness and implementation of fundamental rights and EU values in transportation planning

- We talk, share, and **discuss ideas**, and we also show things through pictures, videos, and other media.
- By exchanging experiences, we **learn** a lot from each other.
- Different perspectives and backgrounds make our **understanding richer** and help us find **better solutions**.
- International cooperation allows us to see what works in other places and **adapt** it to our own context.
- Sharing knowledge and experiences **inspires** everyone to **improve** and **grow** together.