

Cargo bikes for local business use

Esch-sur-Alzette - Luxembourg

Short description

The city of Esch-sur-Alzette has implemented a two-phase project to promote cargo bike adoption and enhance urban mobility. Phase 1 focuses on small retailers in the city center, where the adoption rate and user experience will be evaluated through a survey after six months. Based on the results, the city will decide whether to proceed to Phase 2. This second phase targets private shoppers who aim to reduce their carbon footprint, engage in light exercise, and contribute to improved traffic conditions in the city center. Key measures include monitoring cargo bike usage rates, developing a maintenance and replacement plan through collaboration between the department of economic affairs and a social employment initiative (CIGL), and establishing a 24/7 assistance service with ACL for breakdowns. This service includes phone support, onsite repairs, towing, and user or cargo repatriation. Comprehensive insurance will cover theft, vandalism, and transport damage, while a dedicated contact point within the department of economic affairs will manage onboarding, training, and complaints. This staggered approach ensures thorough testing, user support, and a gradual shift toward sustainable urban transport.



Industry/Sector

Mobility & transport

- The Local Government of Esch-sur-Alzette
- ACAIE asbl (local business association)
- Transition Minett (non-profit organisation)



- Environmental objective: by introducing cargo bikes as an alternative to traditional delivery vans, this LGD directly reduces carbon emissions and local air pollution, supporting the city's goals for improved air quality and reduced greenhouse gas emissions;
- Social objective: the initiative promotes a healtier, more accessible urban environment, reducing noise and air pollution and improving the quality of life for residents. Additionnally, it may foster job creation in the maintenance and management of the bike-sharing system.
- Economic objective: encouraging the use of cargo bikes can reduce operational costs for local retailers and businesses by decreasing fuel consumption and maintenance costs associated with motorized delivery vehicles.
- Competitiveness objective: enhancing the efficiency and sustainability of local deliveries can improve the competitiveness of local businesses by demonstrating a commitment to green practices, appealing to environmentally conscious consumers.

Concrete measures/commitments

- LGD contributing to reducing automobile traffic in the city center
- LGD contributing to reducing the carbon footprint of retailers and shoppers.



Facilitate e-mobility for citizens by increasing the level of charging stations for electric vehicles

Esch-sur-Alzette - Luxembourg

Short description

The LGD of Esch-sur-Alzette focuses on the renewable energy and sustainable mobility sectors. The primary objective is to integrate solar power generation with electric vehicle (EV) charging infrastructure by constructing solar-powered carports in public spaces. This initiative aims to decarbonise the city's energy use and enhance e-mobility options for residents.



Industry/Sector

- Energy & renewables
- Mobility & transport

Parties of LGD/Participating parties

- The Local Government of Esch-sur-Alzette
- Sudstroum (SME)

Scope of LGD

Integration of solar power generation and electric vehicle charging infrastructure;



- Construction of solar-powered carports in public spaces;
- Decarbonisation of the city's energy use;
- Enhancement of e-mobility options for residents.

Concrete measures/commitments

- LGD contributing to the City's Climate Pact 2.0 and broader decarbonisation strategy;
- LGD contributing to climate neutrality goals targeted for 2050.



Heat pump deployment and energy consulting

Esch-sur-Alzette - Luxembourg

Short description

Esch-sur-Alzette, second largest city in Luxembourg with over 37,000 inhabitants, is marked by an ongoing transformation from a former industrial city into a modern multicultural, university and knowledge-inspired city. With an existing quite inefficient building park that is overwhelmingly heated by natural gas, there is an urgency to decarbonise this fossil gas heating in order to achieve climate neutrality goals by 2050. In addition to the imperative of decarbonising heating systems through the utilisation of heat pumps, it will also be crucial to assist individuals in renovating their homes with complimentary consultancy services. "Sudstroum" will install at least 50 Heat pumps and at least 500 kWp of additional photovoltaic power until end 2026.



Industry/Sector

- Construction & built environment
- Energy & renewables

- The Local Government of Esch-sur-Alzette
- Sudstroum (SME)



- Energy efficiency in the building sector;
- Deployment of heat pumps and providing energy consulting services;
- Broad scope, targeting the city's residents as well as the public and private sector.

Concrete measures/commitments

- the City of Esch's work program concerning "Climate Pact 2.0";
- existing environmental policies and decarbonisation strategies;
- the city's wider sustainability objectives, including the reduction of greenhouse gas emissions.

The LGD is not an isolated initiative but is integrated into the city's overarching sustainability strategy.



Measuring industrial pollution and implementing a transparent communication to citizens

Esch-sur-Alzette - Luxembourg

Short description

The Local Green Deal (LGD) in Esch-sur-Alzette is a collaborative initiative focused on environmental monitoring and transparency to tackle industrial pollution, particularly emissions from the steel industry. It aims to improve air quality through advanced pollution tracking technologies, fostering public trust with transparent data communication. This LGD supports the city's Climate Pact 2.0 sustainability strategy and seeks to achieve measurable environmental and social impacts, including reduced emissions and enhanced community engagement.



Industry/Sector

Construction & built environment

- City of Esch-sur-Alzette
- Biomonitor



The scope of the LGD focuses on environmental monitoring and transparency, targeting industrial air pollution, particularly from the steel industry. Its goals are to reduce emissions, improve air quality, enhance public health, and foster community engagement through transparent communication of pollution data. This includes measuring and reporting industrial emissions using advanced monitoring technologies, establishing and maintaining pollution monitoring infrastructure, and ensuring policy alignment through oversight by the local government. The initiative also involves community engagement through stakeholder forums and regular public updates, alongside the publication of a comprehensive pollution report by early 2025. Further steps include reviewing and adjusting environmental policies based on data findings and expanding the monitoring network in subsequent years.

Concrete measures/commitments

The City of Esch-sur-Alzette commits to

 overseeing and coordinating the implementation of the LGD, and establishing and maintaining the necessary infrastructure for pollution monitoring.

Biomonitor commits to

 measuring industrial pollution and creating transparent reports while providing technical expertise for accurate pollution data analysis and interpretation.



Photovoltaic Solar Plant TMB in ArcelorMittal plant of Belval

Esch-sur-Alzette - Luxembourg

Short description

The Local Green Deal (LGD) between the City of Esch-sur-Alzette and ArcelorMittal is centred around the installation of a photovoltaic (PV) solar plant at the ArcelorMittal steel plant in Esch-Belval. This initiative is designed to significantly contribute to the local production of renewable energy, aligning with the city's climate action and decarbonisation strategies. By leveraging the still-active industrial site, the project aims to reduce carbon emissions and demonstrate the potential for large-scale renewable energy integration within heavy industry sectors.



Industry/Sector

- Construction & built environment
- Energy & renewables

- The Local Government of Esch-sur-Alzette
- ArcelorMittal (large international company)



The LGD is centred around production of electricity via PV solar plant. It specifically targets on the installation of a photovoltaic solar plant on the steel plant of Esch-Beval, notably from the still-active steel industry near the city.

Concrete measures/commitments

- The LGD supports the local government's Climate Pact 2.0 and broader decarbonisation strategy by promoting renewable energy generation and reducing reliance on fossil fuels;
- The installation of solar powerplants accelerates the transition to clean energy and supports climate neutrality goals targeted for 2050.