

## IV. Low carbon mobility and urban air quality

This topic contributes to SO 2.3 “To improve capacities for mobility planning in functional urban areas to lower CO2 emissions”.

<b>THEMATIC FOCUS</b>	<p>The topic of <b>low carbon mobility and urban air quality</b> selected for the fourth call contributes to SO 2.3 and aims to address the current challenges through introduction of efficient measures enabling to counterbalance negative effects of urbanisation processes and growing transport demand, which lead to increased greenhouse gas emissions and amplification of climate change impacts but also deterioration of air quality in functional urban areas in central Europe.</p> <p>As a starting point for exploitation of existing results, eight Interreg CE projects with direct and relevant contributions to this topic were identified and are listed at the end of this document. They address this topic from different and complementary perspectives and target different types and specific elements of low carbon mobility and urban air quality, such as e.g.:</p> <ul style="list-style-type: none"> <li>&gt; Smart solutions for low emission zones and low-carbon mobility policies in FUAs,</li> <li>&gt; Institutional mobility plans for city administrations to change the commuting and business travel behaviour,</li> <li>&gt; Sustainable urban freight transport planning,</li> <li>&gt; Sustainable planning for smart commuting,</li> <li>&gt; Integrated low-carbon urban mobility planning and related capacity building,</li> <li>&gt; Low carbon mobility planning for smart and multimodal integration of airports into FUAs,</li> <li>&gt; Environmental management capacities to tackle severe air pollution episodes and</li> <li>&gt; Common approaches to air pollution management in border regions.</li> </ul>
<b>CHALLENGES</b>	<p>In central Europe transport is the second largest energy consuming sector and the fastest growing in terms of energy use. Its strong reliance on fossil fuels means high greenhouse gas emissions driving climate change as well as lowering air quality (e.g. nitric oxides emissions, particular matter and ozone). Due to the existing urbanisation tendencies these developments challenge especially central European cities, where transport demand is constantly increasing and negative externalities are most evident.</p> <p>For addressing these issues and achieving the overall goal of reducing CO2 emissions there is a need to improve the energy efficiency of urban transport. However, due to the importance of interactions between cities and their hinterlands (e.g. for commuters), urban mobility challenges are to be considered at the level of functional urban areas (FUA). According to the OECD, European Commission and Eurostat (OECD, 2012), a functional urban area is defined as a functional economic unit, which is characterised by densely inhabited “urban cores” and “hinterlands”, whose labour markets is highly integrated with the cores.</p> <p>A high potential for the reduction of greenhouse gas emissions and air pollution lies within the public transport sector. However, capacities of the public sector and related entities for low-carbon mobility planning at the level of FUAs are unevenly spread across central Europe and need to be improved through better governance and integrated approaches to planning. This calls for a closer vertical and horizontal coordination and integration of mobility planning and solutions between urban cores and their hinterlands.</p>
<b>POLICY FRAMEWORK</b>	<p>Central Europe includes many regions in which urbanisation processes generate urban environmental challenges, including poor air quality. The EU Ambient Air Quality (AAQ) Directive<sup>11</sup> provides the current policy framework for the control of ambient concentrations of air pollution in the EU. Limiting emissions from transport through severe traffic management measures, such as restricting the use of private cars with old and outdated engines, are under way in order to improve the air quality in cities. The Urban Mobility Package (2013)<sup>12</sup> provides important elements of the relevant EU policy framework. It notably underlines the role of sustainable urban mobility planning and its integration in wider urban and territorial development strategies, the use of smart urban access regulations, and the need for better interoperability of ITS solutions between urban and surrounding interurban (FUA) transport networks. Low-carbon mobility is also addressed in the European Strategy for Low-Emission Mobility (2016)<sup>13</sup>, which outlines the importance of: digital mobility solutions, efficient and fair pricing in transport, multi-modal transport with a focus on the shift to active travel modes and infrastructure for alternative fuels. In particular cities and urban areas, which are often in breach of air pollution limits, are expected to act and integrate mobility demands into spatial planning and encourage modal shift towards low-carbon modes.</p>
<b>EXPECTED RESULTS</b>	<p>Transnational cooperation can help to increase planning capacities of the public sector and related entities for low-carbon mobility by bringing together territorial fore-riders with those lagging behind, thus enhancing low-carbon mobility in central European functional urban areas and reducing air pollution. This will allow for the development and implementation of integrated mobility concepts, the setting up of coordinated management structures and the deployment of innovative technologies. The promotion of innovative low-carbon mobility solutions at transnational level will support authorities in their efforts towards the goal of sustainable mobility and air quality.</p> <p>The main result envisaged can be summarised as: <i>“Improved capacities of the public sector and related entities for low-carbon mobility planning in central Europe’s functional urban areas achieved through transnational cooperation”</i>.</p>

<sup>11</sup> DIRECTIVE 2008/50/EC, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02008L0050-20150918&from=EN>

<sup>12</sup> Further information on Urban Mobility Package available at [https://ec.europa.eu/transport/themes/urban/urban\\_mobility/ump\\_en](https://ec.europa.eu/transport/themes/urban/urban_mobility/ump_en).

<sup>13</sup> European Strategy for Low-Emission Mobility available at [https://ec.europa.eu/transport/sites/transport/files/themes/strategies/news/doc/2016-07-20-decarbonisation/com%282016%29501\\_en.pdf](https://ec.europa.eu/transport/sites/transport/files/themes/strategies/news/doc/2016-07-20-decarbonisation/com%282016%29501_en.pdf)