



European Innovation Partnership on Smart Cities and Communities 'Towards a Joint Investment Programme for Smart Cities'

The Humble Lamppost – The Connectivity Platform

We live in a hyper-connected world, yet our public spaces lack the hardware platform that can support the growing need for connectivity. A platform that can stimulate economic progress, deliver healthier cities, improve mobility, and the like. The public lighting infrastructure is perfectly situated to take on this new role as a connectivity platform, due to the substantial investments (over 200¹ billion) that have already been made into the poles and energy grids.

The return on investment on energy efficiency alone is attractive, considering that 75% of public lighting assets in the EU are more than 25 years old and mostly use energy inefficient lamps. By simultaneously turning this highly distributed infrastructure into a connectivity platform, we can save money and accelerate new (potentially revenue earning) services that allow us to address current and future environmental, mobility, energy, and security challenges. Investing in the EIP-initiative-target to upgrade 10 million lampposts (some €10+ billion²), partly financed by existing budgets, can help the public lighting infrastructure to become the necessary connectivity platform for cities, regions, and nations.

The EIP Integrated Infrastructure Action Cluster initiative, the 'Humble Lamppost', has made considerable progress in the last years by engaging the market and investors on both demand and supply sides. The Humble Lamppost stimulated work on common solutions and helped develop standards to become more attractive for investors and industry. This bottom-up approach has created a window of opportunity to now scale-up the smart lamppost solutions.

This 7-point action plan seeks to accelerate progress.

It blends both top-down and bottom-up activities.

1. Moving to the next phase: Scale up

Similar pilots are being executed in multiple cities, but too little is learnt from each other. The majority of the technology has lived up to the challenge and successful business cases have been developed. The pilot stage is at an end: it is time to distribute and use the common findings and move to scale. We see the need for nationally supported implementation plans in order to bundle demand and scale projects.

2. Enroll high level sponsorship

There is a clear need for an internationally recognized champion to stimulate high level national and regional politicians and decision makers to become involved. This is necessary to challenge conventions; to break down silos; to push for innovation; to reach for new forms of value.

¹ 60-90 million lamppost in EU with an average investment of €2,500 per unit for lighting and energy grid

² Upgrade of 10 million lampposts with average costs of €1,000 per lamppost



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3. Engage Citizens

Smart City developments succeed through the joined efforts of multiple stakeholders. The involvement of citizen is essential to take full advantage of this new type of public lighting grid. Participation will stimulate innovation and accelerate new services and business models.

4. Aggregation of demand

The current business model for public lighting has limits. By involving related domains such as Utilities, Environment, Mobility, and Public Security, new applications can be developed that increase the investment potential of lighting infrastructure upgrades. Stimulating these actions on the regional or national level allows for real economies of scale to emerge.

5. Standardisation

The interchangeability of data is key to scaling. We endorse updating the Spatial Data Infrastructure, developing international standards for the Internet of Things in public places, and taking practical steps to achieve standardisation in the design of smart lampposts.

6. Innovative financing & business models

There are many ways to finance the operational costs an upgrade to smart lampposts, such as grants, loans, and private equity. We communicate these financing possibilities actively to stakeholders on both demand and supply side.

7. Serving EU programs

The Humble Lamppost is the perfect platform for other EU programs such as the Smart City Lighthouses, Mobility, and Energy transition. More attention is needed to emphasise this potential.

Yes, we support this action plan and will actively assist in its realisation

The Integrated Infrastructure Action Cluster, Humble Lamppost initiative, asks all relevant stakeholders to support this strategic action plan and help with its realisation.