



Executive Summary

New emerging technologies suitable for the urban level together with citizens' initiatives will likely drive an energy transition at the urban scale. However, the conditions in which this energy transition is going to be achieved are today quite unclear, which hampers the development of new projects. Clean Horizon proposes in this project to identify clear conditions upon which distributed energy systems could trigger a paradigm shift in energy generation at the urban level. These conditions are assessed technically, economically and politically.

A. State-of-the art

This section aims at showing an overview of the different possibilities to install a distributed energy system at the urban level. First, generation and storage technologies are listed, then existing systems are presented.

B. Parametric model of the technico-economic feasibility

This section aims at defining clear criteria upon which a transition towards distributed systems in urban environments can be considered profitable. In order to achieve this, a technico-economic model based on defined parameters is constructed and identifies, for several types and sizes of urban areas, which parameters values allow the best profitability and feasibility.

C. Political analysis

This section aims at better understanding the legislations that are currently in place and analyzing which political moves should be taken to drive forward the transition towards distributed generation. A proposition of incentives and policies supporting the transition is proposed.

D. Test of the model and limits identified

The part aims at assessing the robustness of the model developed in section C by applying it to real cases. In parallel, this analysis will help assess the influence of non-quantifiable parameters on the model.