



**CASE
STUDY**

Case Study



Clean Energy

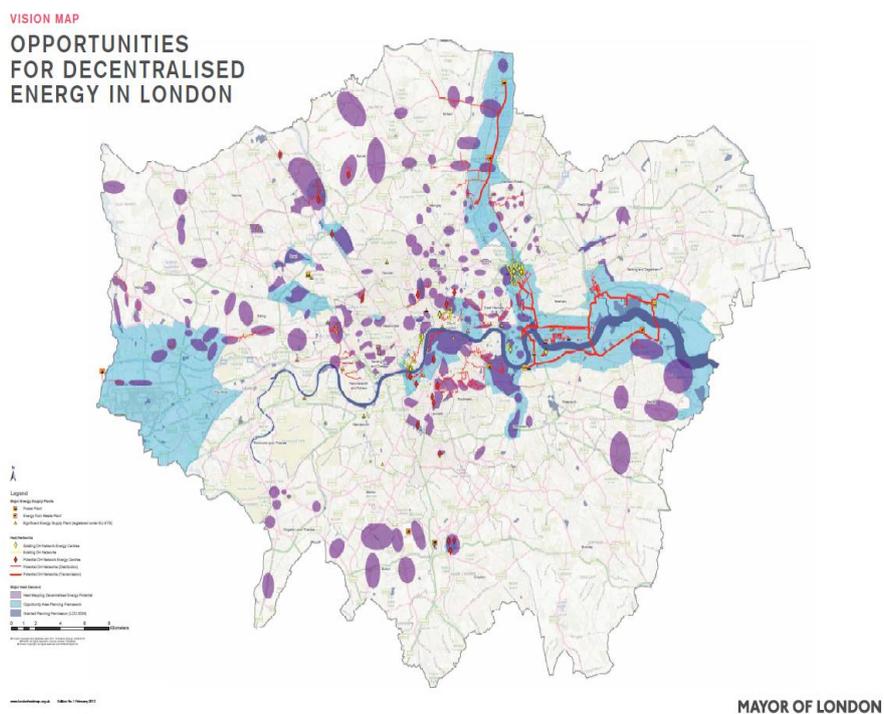
London - Decentralized Energy Master Planning (DEMaP) Program

Situated in the temperate oceanic climate zone; Annual Heating degree days are below 2000. The administrative area of Greater London counts 8.2 million inhabitants. London has developed a concept for decentralized energy unlike Barcelona and Stockholm not in a long term comprehensive plan, but rather in a step by step approach, involving heating and power sectors (Hurst et al 2012). Good practice features are cooperation with developers and financing. In 2007, the Mayor of London set an ambitious target to supply a quarter of Greater London's energy from decentralised sources by 2025; this amounts to over 10 GWh/year from distributed generation for the electricity sector (Government of the United Kingdom). To assist with this goal, the Decentralised Energy Master Planning (DEMaP) programme was introduced by the London Development Agency (LDA) in 2009. The LDA allocated nearly £5 million towards decentralized energy (DE) over four years from 2009, to build capacity and catalyse the development of DE, specifically CHP for district heating networks in London.

The DEMaP programme was developed to enable boroughs to identify opportunities for DE, and to develop the capacity to realize those opportunities. This was based on a trajectory of work packages, broken down into the three energy strategy phases, from initial capacity building through to feasibility study and project delivery. This was further supported by the publication of a free toolkit known as Decentralized Energy Networks Masterplanning Guidance (DENet) (ARUP) which allowed local authorities and other stakeholders to rapidly carry out pre-feasibility stage assessment on potential district heating schemes, so removing some uncertainty and risk from the process. Following on from the successes of the DEMaP programme, the Greater London Authority moved to support further strategic development, and actively support the delivery of more

DE schemes within London, through the Decentralized Energy for London programme (www.london.gov.uk). This was set up in late 2011 with €3.3m in funding, 90% of which was secured from the European Local Energy Assistance (ELENA) facility of the European Investment Bank (EIB), to provide project sponsors, particularly London boroughs, with technical, financial and commercial assistance in developing and bringing DE projects to market. London has been home to district heating networks for a number of years, and the City of London, set to be joined by many more in the near future. Growth in interconnections between some of these existing schemes is anticipated, along with the potential development of a number of high-capacity strategic networks, transporting industrial volumes of heat from power stations over long distances, which could allow for truly significant carbon savings. Existing schemes and those planned for future development are shown in the London “Vision Map” or the London Heat Map’s vision layer (www.londonheatmap.org.uk).

The London Decentralised Energy Vision Map, London, United Kingdom



Source: ARUP, London <http://www.londonheatmap.org.uk/Content/uploaded/documents/DEPDU%20Vision%20Map-new-lr.pdf>

References

Hurst, T., Lam, D., and Ball, M. 2012. Energy Strategy for Green Cities, in: Lindfield, M. and Steinberg, F. (Eds.). (2012) Green Cities, Asian Development Bank, Urban Development Series. Manila.

Government of the United Kingdom, Department of Energy and Climate Change. 2011. *Digest of United Kingdom Energy Statistics*.

ARUP. <http://www.arup.com/Projects/DENet>

<https://www.london.gov.uk/priorities/environment/climate-change/decentralised-energy>

www.londonheatmap.org.uk

Credentials

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