ZERO CARBON RUGELEY
WP6-D5: FINAL VERSION OF RUGELEY SLES DESIGN

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Element	Description
Title	ZERO CARBON RUGELEY WP6-D4: FINAL VERSION OF RUGELEY SLES DESIGN
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Subject	Keywords – Distribution Networks (DNs), Energy demand, Prosumer tool, Basecase models, Improvement scenarios, SLES Design, energy systems solutions, Heating technologies, energy converters, nodes, lines, CAPEX, OPEX, electricity market, gas market, ASHP, PV, batteries, thermal storage, electric boiler, gas boilers, retrofit, eVs
Description	WP6-D5 has created: 1) A **first design iteration** that includes energy solutions for all type of users (residential, commercial, industrial and public buildings) in Rugeley. Part of the first design iteration are: i) a Design table that shows all technical and cost details of the different solutions per postcode cluster, ii) GIS maps that enable the visualisation of the different technologies per substation area for the residential and non-residential users and iii) PowerBi booklet that shows graphs of the technologies' capacity and cost as well as fabric retrofit per substation area and type of user. In this iteration we haven't allowed for distribution network expansion. 2) A **final design iteration** that includes the final energy recommendations for all type of users (residential, commercial, industrial and public buildings) in Rugeley. . In the final design, we have allowed for the distribution network to be expanded. Part of the final design iteration are: i) the updated Design table that shows all technical and cost details of the different solutions per postcode cluster as well as network expansion cost per substation area and ii) GIS maps that enable the visualisation of the different technologies per substation area for the residential and non-residential users
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Zero Carbon Rugeley (ZCR) Smart Local Energy System (SLES) design demonstrator is funded by the government's Department for Business, Energy and Industrial Strategy (BEIS) as part of the Industrial Strategy Challenge Fund (ISCF) (link).

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