ZERO CARBON RUGELEY

Smart Local Energy System Design Demonstrator



ZERO CARBON RUGELEY WP6-D3: PROSUMER MODEL FOR RUGELEY SLES

Version: 1.1 Date: 14/12/2020

Element	Description		
Title	ZERO CARBON RUGELEY		
	WP6-D3: PROSUMER MODEL FOR RUGELEY SLES		
Creator	Maria Briola (ENGIE UK) and Chris Mazur (ENGIE UK) and Louise Alter (ENGIE UK)		
Subject	Keywords – Distribution Networks (DNs), Energy demand, Prosumer tool, Basecase models,		
	Heating technologies, energy converters, nodes, lines, CAPEX, OPEX, electricity market, gas		
	market, gas boiler, electric boiler, thermal store		
Description	Zero Carbon Rugeley project aims to design a Smart Local Energy System (SLES), which consists		
	of different individual energy solutions that are integrated with each other and seek to decrease		
	carbon emissions, reduce energy bills by at least 25% and provide wider benefits to the local		
	area by 2030. In order to achieve that, WP6 aims to analyse the current energy system in		
	Rugeley, which covers new and existing buildings, mobility and energy assets and create energy		
	models of the existing energy system (infrastructure and energy users). WP6-D3 includes the 6		
	basecase sub-models of Rugeley project area, built in PROSUMER, and a concept design map,		
	which represents the SLES models. Each sub-model represents one or two different feeders in		
	Rugeley. Additionally, an Energy Solutions and Technology Inventory tracker was created in		
	order to collect cost and technical information on the different energy technologies that could		
	be tested in ZCR SLES as well as gather all the assumptions used for the basecase sub-models.		
Publisher	ENGIE UK		
Contributor	ERIS, CADENT, WPD, SHAP, Energy Systems Catapult, REGEN, ENGLE		
Dale	End date: 2020-09-11		
Туре	Excel		
Format	xlsx		
Identifier	https://engie.sharepoint.com/sites/SLESZeroCarbonRugeleyConsortium/Shared%20Documents/		
	Forms/AllItems.aspx?RootFolder=%2Fsites%2FSLESZeroCarbonRugeleyConsortium%2FShared%2		
	0Documents%2FWP6%20Energy%20Systems%2FWP6%20%2D%204%20Draft%20Deliverables%		
	2FWP6%20%2D%20Deliverable%203&FolderCTID=0x012000F52F8390890B0848A5DC69960335		
	BA90		
Source	ERIS, CADENT, WPD, SHAP		
	https://www.westernpower.co.uk/network-flexibility-map-application		
	https://www.westernpower.co.uk/our-network/embedded-capacity-register		
	https://www.westernpower.co.uk/downloads-view/129382		
	https://www.mygridgb.co.uk/map/		
	https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2018		
Language	ISO 639-2: eng		
Relation	SHAP, Energy Systems Catapult, ENGIE		

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).

ZERO CARBON RUGELEY

Smart Local Energy System Design Demonstrator



Coverage	LSOA code: E01029368
	LSOA code: E01029369
	LSOA code: E01029371
	LSOA code: E01029402
	LSOA code: E01029372
	LSOA code: E01029373
	LSOA code: E01029401
	LSOA code: E01029403
	LSOA code: E01029404
	LSOA code: E01029345
	LSOA code: E01029346
	LSOA code: E01029347
	LSOA code: E01029348
	LSOA code: E01029374
	LSOA code: E01029481
	LSOA code: E01029370
	LSOA code: E01029498
	LSOA code: E01029711
Rights	Shared with consortium and ERIS/ IUK consortiums
Disseminati	Public/ ZCR webpage/ Social media
on /	☑ ERIS/ IUK Consortiums
confidential	⊠ Funder
ity	⊠ Consortium
	Internal

Change log	Updated by	Date
Version 0.1 created and shared with consortium	Maria Briola and Chris Mazur and	14/12/2020
	Louise Alter	