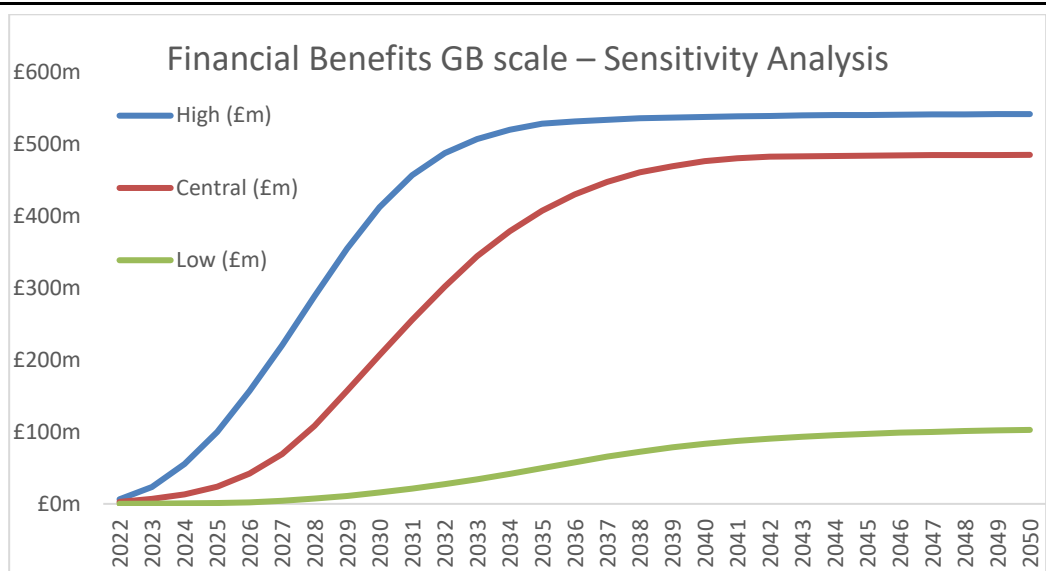


*Electricity Network Innovation Competition Full Submission*  
**Supplementary Answer Form**

**Project:** Optimise Prime

Tick if this answer has been provided verbally: ☐

Project code	UKPNEN03	Question Number	Q25
Question date	13/09/2018	Answer date	17/09/2018
Submission section question relates to	-		
Topic	a) Low carbon/environment and net financial benefits		
Question	How sensitive are results to the EV uptake profiles?		
Notes on question			
Answer	<p>As described in section 10.3.1.1 of our submission the input assumptions for EVs are those developed from our NIA project Recharge the Future. This does not include commercial fleet data (as it is not yet available until we produce a dataset as part of the Optimise Prime project) and is applied to both the base and method cases. As such we expect variations to these background figures to have a limited impact on the benefits case.</p> <p>We have considered the sensitivity to the commercial EV uptake assumptions we have made that are described in section 10.3 of the submission.</p> <p>Our central case for fleets electrifies ahead of the UK Road to Zero Strategy due to pressures on air quality improvement and public opinion. Our "Low" case aligns to the strategy and has greatly reduced acceptance of network flexibility. We have included a "High" case which exceeds our current EV uptake expectations by 25%, similar to the increase we have seen in our forecasts over the last few years driven by policy and other external incentives.</p> <p>The graph below plots the financial benefits of each scenario through to 2050.</p>		



The following table shows the numbers clearly. Should commercial EV uptake simply follow the Road to Zero strategy, something we see as unlikely<sup>1</sup>, then the project will breakeven by 2030 and deliver a 6 times return on investment in benefits to GB customers by 2050. Even in this low scenario we see the project being a worthwhile investment of customers money and compliant with the NIC governance.

	2030	2040	2050
<b>High (£m)</b>	£413	£538	£542
<b>Central (£m)</b>	£207	£476	£485
<b>Low (£m)</b>	£16	£83	£103

Attachments	
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<sup>1</sup> Road to Zero considers all vans. Commercial vans are likely to have a higher turnover rate as latest statistics show. VEH0402 shows that in 2017 45% of all Light Commercial Vehicles (LCVs) were company registered and VEH0452 shows that 92% of all new LCV registrations in 2017 were company registered. (<https://www.gov.uk/government/statistical-data-sets/veh04-licensed-light-goods-vehicles>)