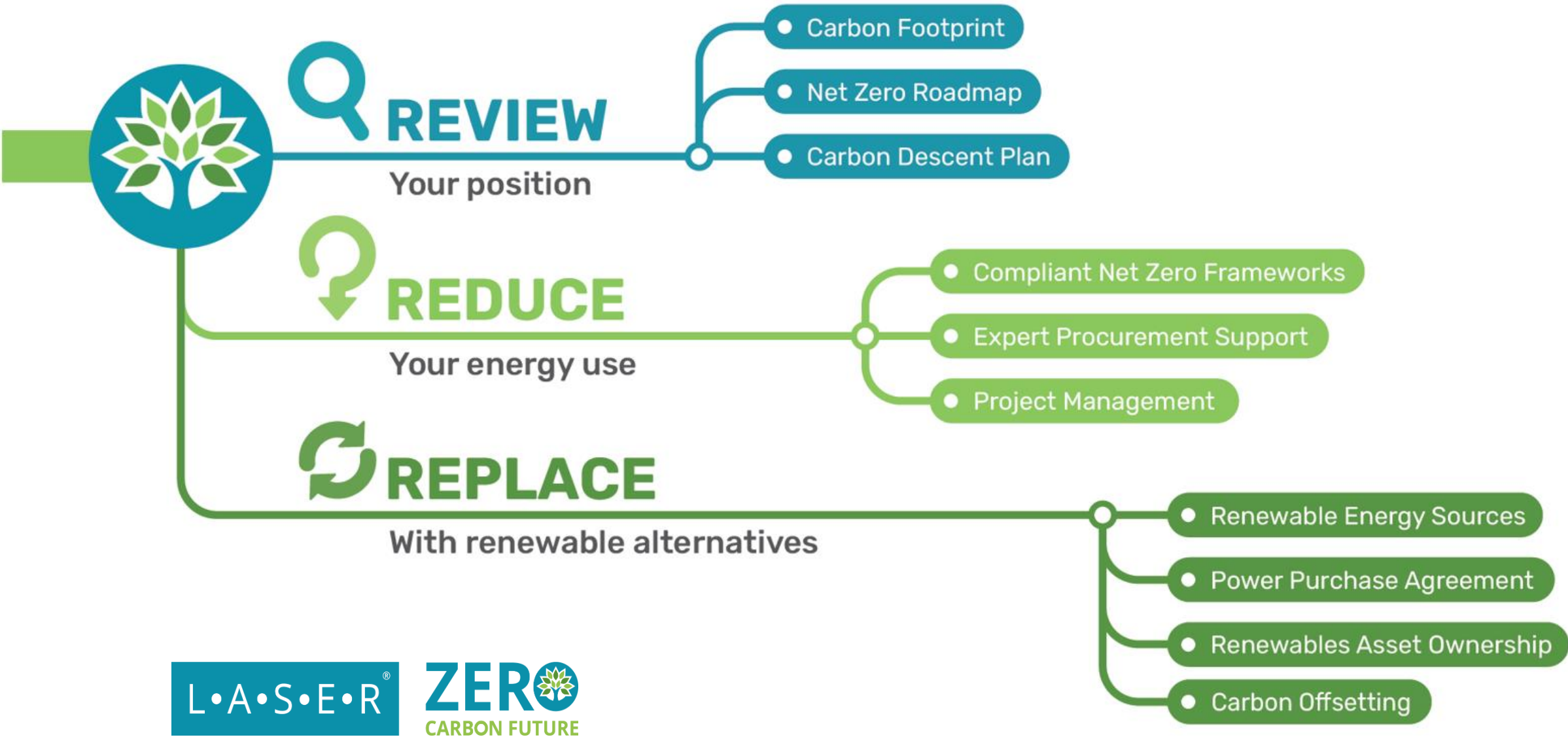
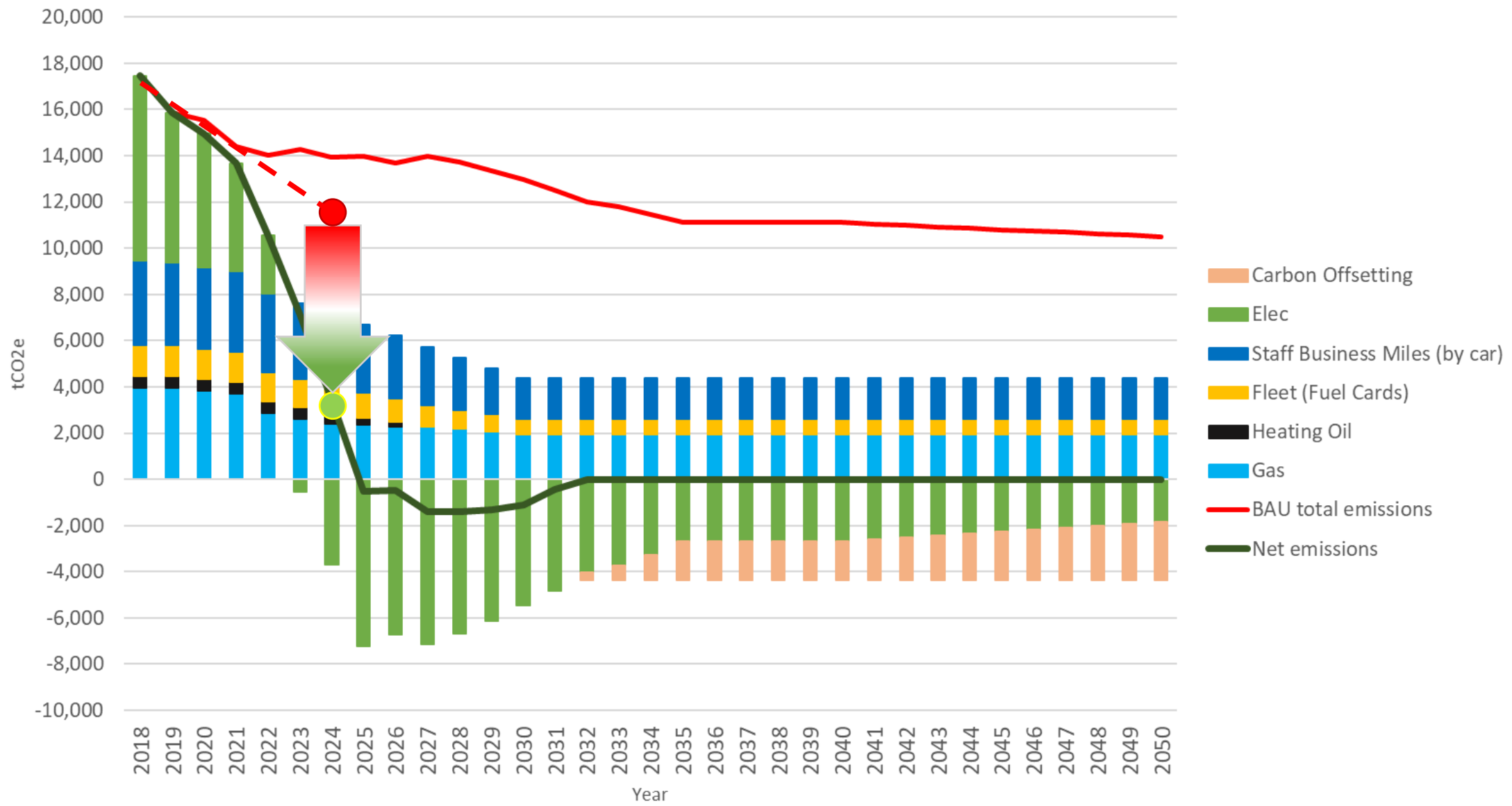




The Road to Net Zero

Steve Marks – Head of Carbon Advisory





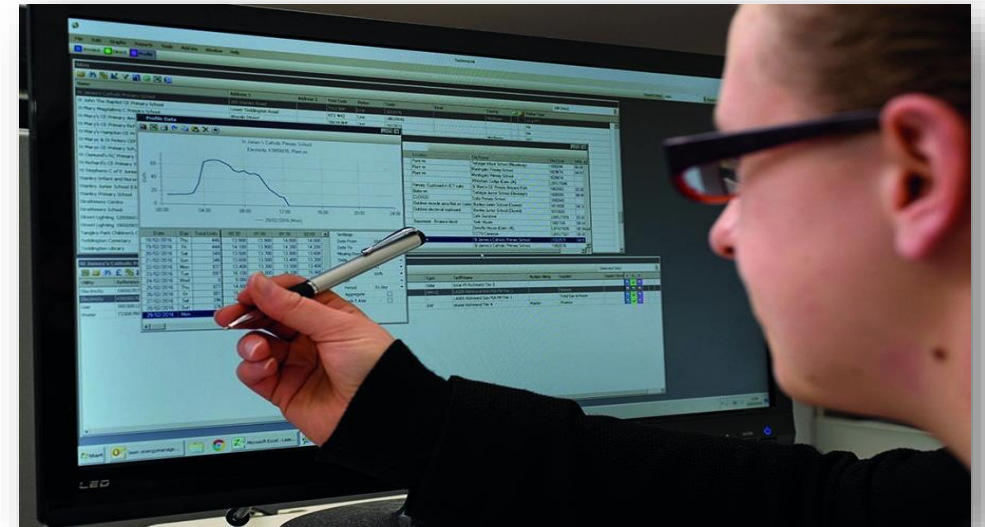
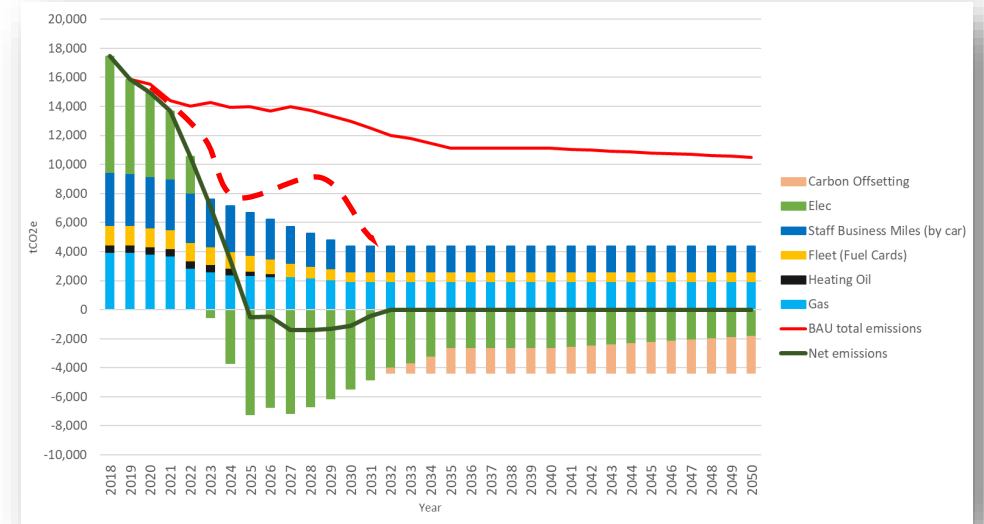
The Reponses

- Move the goal posts
- Large scale projects
- Accelerate project programme
- Attain funding



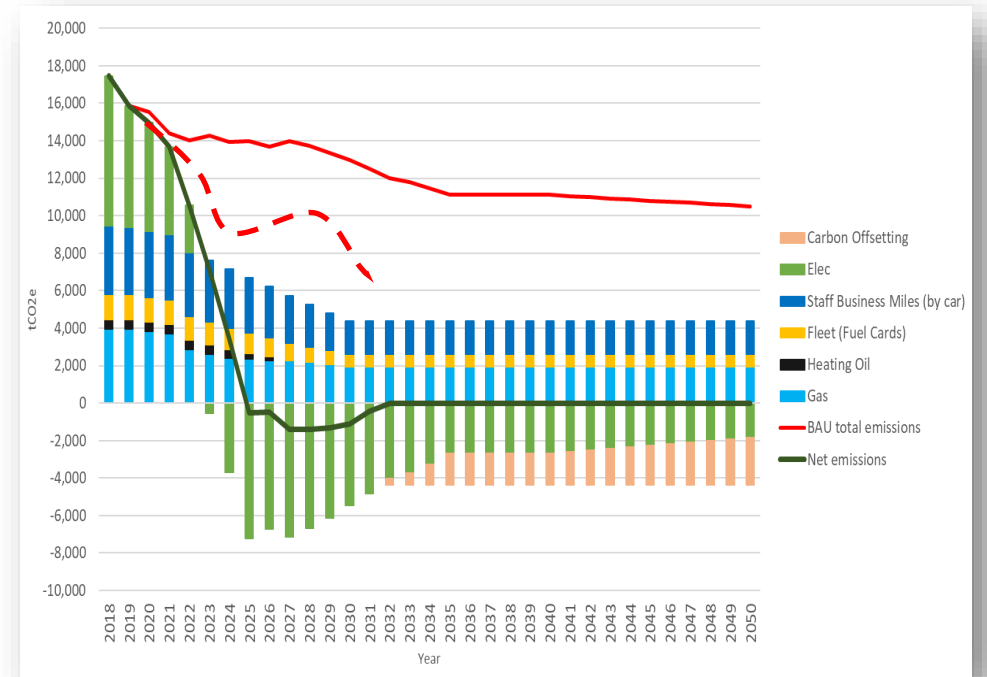
The Solutions

- Large scale action
- Understand long run emissions
- Closer monitoring
- Next level of detail
- Prioritised project programmes



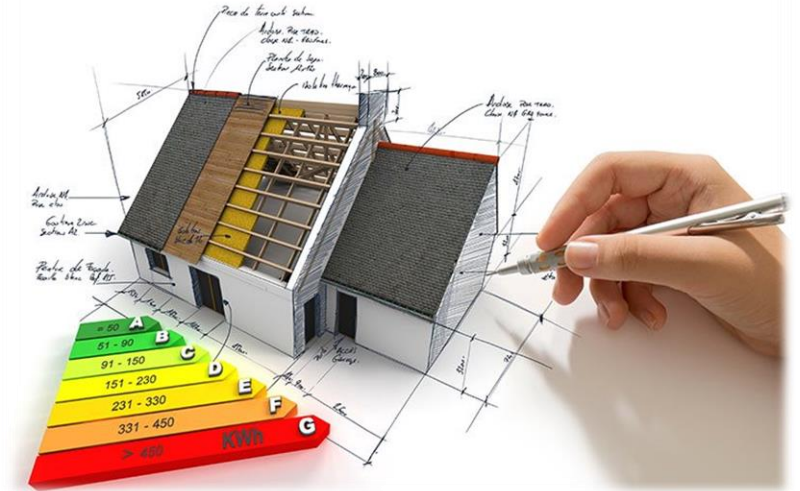
Planning and Strategy

Action	Step
Have a Roadmap!	Short term focus, longer-term understanding
Closer monitoring	Annual monitoring of progress



Planning and Strategy

Step	Name
Next level of detail	Strategy to Action Plan?
Updating Roadmap	Ensure forward looking plan is updated



#	Site Name	kWh/hour/m ² p.a.			CO ₂ e/hour/m ² p.a.	% of Worst Performer			Performance v Benchmarks (kWh)				Performance v Benchmarks (CO ₂ e)				Cost			
		Electricity	Fossil Fuel	Electric Only Sites		Electricity	Fossil Fuel	Electric Only Sites	CO ₂ e/hour/m ² p.a.	Electric kWh/m ² p.a.	Electric v Benchmark	Thermal kWh/m ² p.a.	Thermal v Benchmark	CO ₂ e/m ² p.a.	Benchmark (DEC methodology) (Not Adjusted For Occupancy)	CO ₂ e v Benchmark	DEC Rating?	DEC Letter	Cost per hour/m ²	Cost £/hour
14	Mansfield Annex	0.26	0.05	-	0.09	12%	0%	-	2%	10.5	-60.1	1.9	-196.8	2.4	48.7	47.3	4.3	A	0.178	2.838
26	Tuxford	-	-	1.29	0.25	-	-	45%	8%	-	-	-	-	10.0	88.2	-78.8	11.3	A	0.789	4.336
24	Mansfield	0.27	0.00	-	0.09	12%	0%	-	2%	45.5	-24.5	0.2	-386.0	8.8	84.0	-75.2	10.5	A	0.162	2.676
18	East Leake	1.62	-	-	0.31	72%	-	-	10%	65.0	-5.0	0.0	-384.1	12.6	83.6	-71.1	15.0	A	1.016	2.412
17	London Road	-	-	0.64	0.12	-	-	22%	4%	-	-	-	-	20.8	88.2	-67.4	23.6	A	0.367	4.288
75	Newark	0.21	0.34	-	0.10	9%	2%	-	3%	35.7	-94.3	57.2	-329.0	17.3	84.0	-66.7	20.6	A	0.148	2.135
36	Stapleford	-	-	2.88	0.56	-	-	100%	18%	-	-	-	-	22.3	88.2	-65.9	25.3	B	1.750	4.547
38	Warsop	0.15	2.53	-	0.49	6%	18%	-	16%	5.8	-64.2	101.3	-284.9	19.6	84.0	-64.4	23.4	A	0.114	0.288
22	Workshop (new site)	-	-	0.75	0.15	-	-	26%	5%	-	-	-	-	24.5	88.2	-63.7	27.8	B	0.675	4.283
39	Carlton	0.66	0.15	-	0.15	29%	1%	-	5%	110.2	40.2	24.4	-361.8	25.8	84.0	-58.3	30.7	B	0.378	4.651
4	Misterton	1.20	2.17	-	0.63	53%	15%	-	21%	47.9	-22.1	86.7	-252.0	25.1	82.7	-57.6	30.4	B	0.749	1.934
3	SDC	-	3.65	-	0.67	-	26%	-	22%	-	-	-	-	26.7	84.0	-57.4	31.7	B	0.055	0.808
12	Blidworth	1.13	2.48	-	0.67	50%	17%	-	22%	45.3	-24.7	99.1	-287.1	26.9	84.0	-57.2	32.0	B	0.703	1.912
1	Stockhill	0.23	0.84	-	0.20	10%	6%	-	7%	38.6	-11.4	140.6	-245.6	33.1	84.0	-50.9	39.4	B	0.134	1.992
19	Bingham	0.86	3.76	-	0.85	38%	26%	-	28%	34.4	-35.6	150.2	-236.0	34.1	84.0	-50.0	40.6	B	0.588	2.248
31	Highfields	0.61	0.62	-	0.29	27%	4%	-	8%	102.6	32.6	103.7	-282.5	38.8	84.0	-45.3	46.1	B	0.350	9.493
2	Harworth	1.81	4.38	-	1.15	80%	31%	-	38%	72.5	2.5	175.1	-203.7	46.0	82.7	-36.7	55.6	C	1.249	4.319
27	Southwell	2.02	4.55	-	1.22	90%	32%	-	40%	81.0	11.0	182.0	-204.2	48.9	84.0	-35.2	58.2	C	1.340	2.527
29	West Bridgeford	0.53	1.06	-	0.30	24%	7%	-	10%	89.3	19.3	178.1	-208.2	49.8	84.0	-34.3	59.2	C	0.322	3.785
11	Retford	0.68	1.02	-	0.32	30%	7%	-	10%	114.3	44.3	171.1	-207.6	53.3	82.7	-29.3	64.5	C	0.423	2.813
23	Arnold	0.57	1.93	-	0.46	26%	14%	-	15%	96.6	26.6	323.9	-62.3	77.8	84.0	-6.2	92.6	D	0.370	2.387
20	Ashfield	0.51	2.24	-	0.51	23%	16%	-	17%	86.3	16.3	376.3	-9.9	85.4	84.0	1.3	101.6	E	0.337	3.110
28	Eastwood	1.29	11.26	-	2.30	57%	79%	-	76%	51.6	-18.4	450.2	64.0	92.2	84.0	8.1	109.7	F	0.954	3.055
8	Collingham	2.25	14.21	-	3.03	100%	100%	-	100%	90.1	20.1	568.5	182.3	121.2	84.0	37.2	144.2	F	1.543	2.953
34	Edwinstowe	0.90	7.33	-	1.51	40%	52%	-	50%	151.9	81.9	1231.2	845.0	254.1	84.0	170.1	302.4	G	0.699	1.088

Decarbonisation & Projects

Stage	Name
Large scale projects	Understand options, impact and practicalities
Prioritise projects	Use Roadmap to design programme according to goals and restrictions
Consider Resource	Procurement and project management
Funding	Have a contingency plan?

Conclusion

- Remember to step back
- Plan
- Implement
- Reflect
- Improve

