

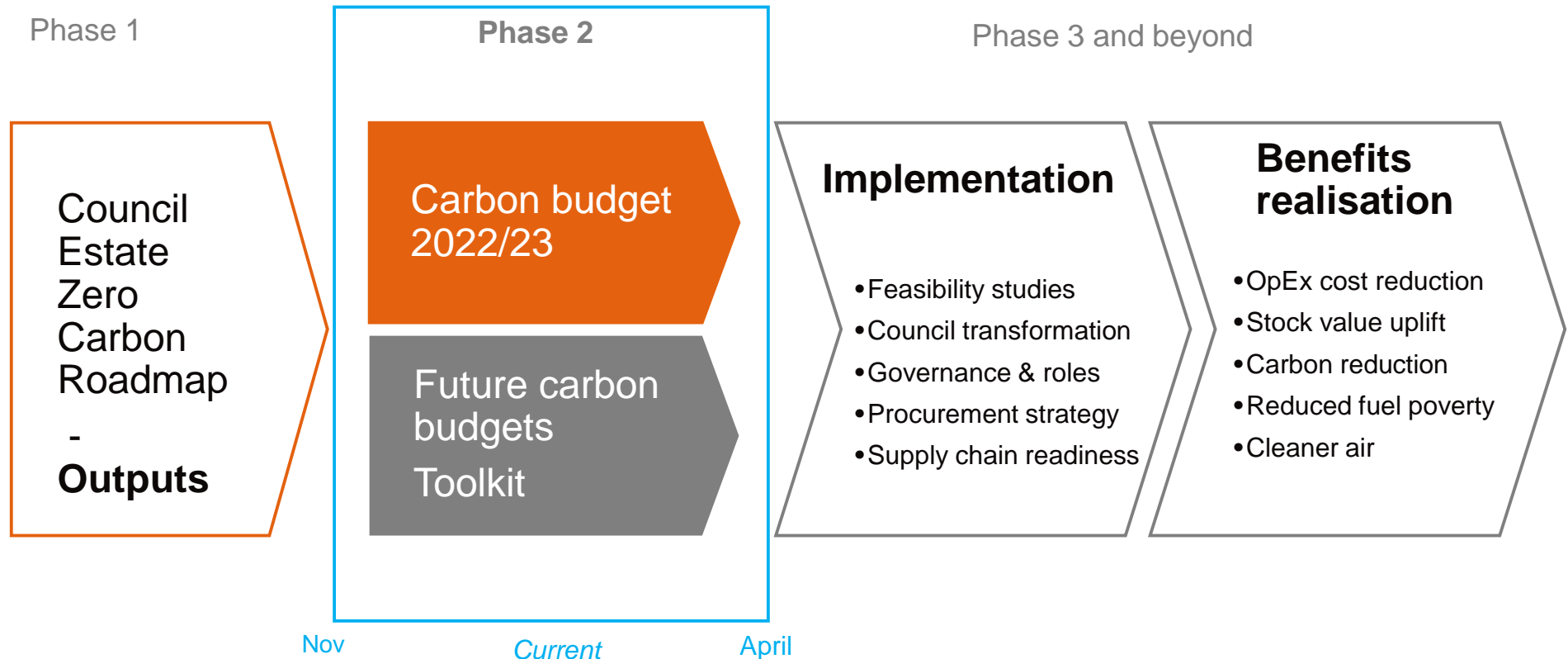
Route Map 2030 Development Update

V2.2 Feb 2022 – Sustainability Committee

Supporting slides



We are currently in the middle of delivering phase 2 of the Council's Zero Carbon Road Map



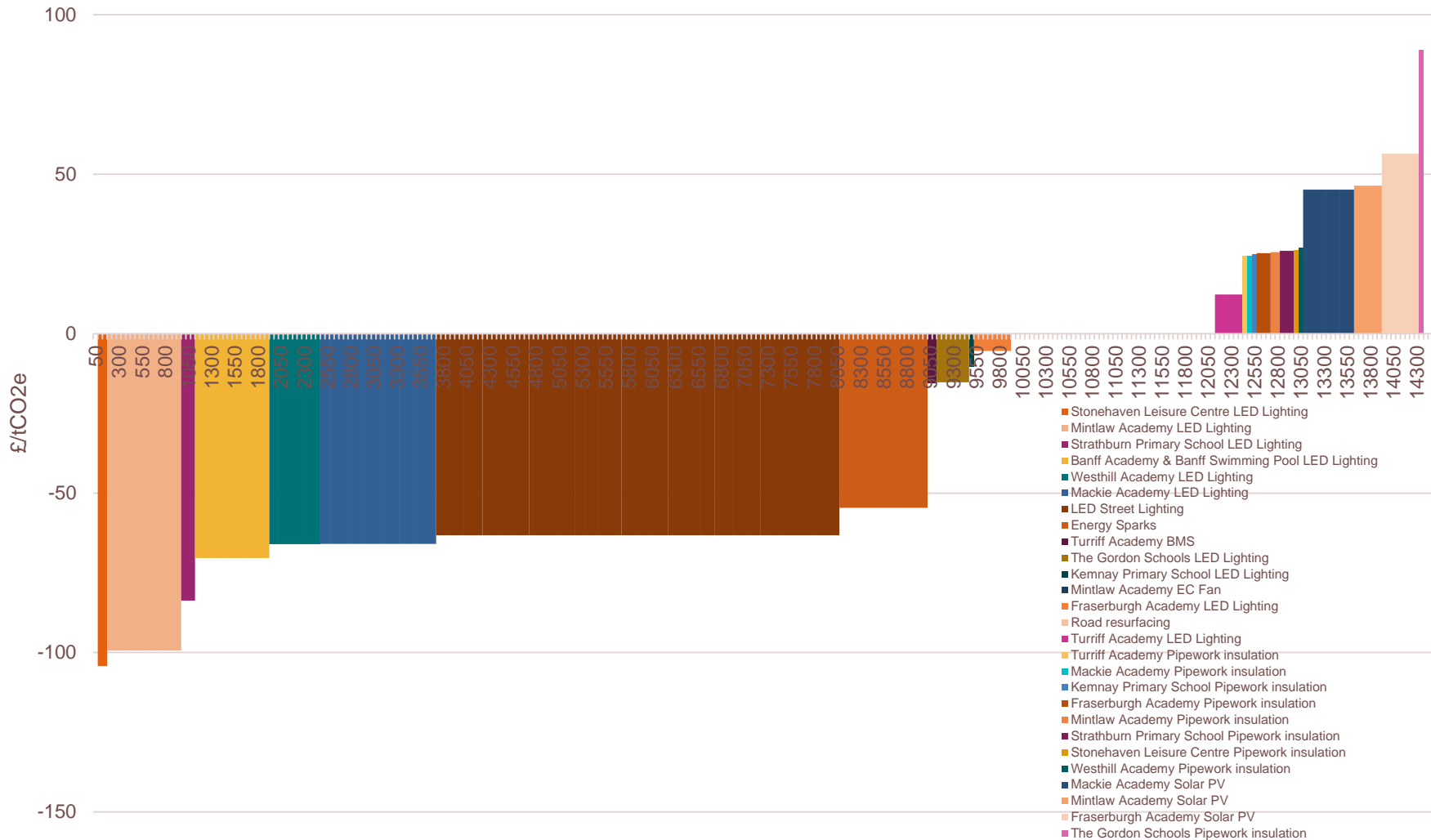
Realisation of the benefits requires addressing a capability and capacity gap in both the Council and local supply chain

A summary of 2022/23 planned and in-flight opportunities, CO2e reduction and estimated cost (draft)

Interventions	Asset name	Carbon saving (tCO2e)	Cost (£)	Annual cost saving (£)	Budget	Budget line
LED Lighting	Banff Academy & Banff Swimming Pool	32	134,893	21,687	Capital	Carbon reduction
EC Fan	Banff Academy & Banff Swimming Pool (Deveron Centre)	9	9,598	5,827	Capital	Carbon reduction
LED Lighting	Mackie Academy	49	213,126	33,311	Capital	Carbon reduction
Pipework insulation	Mackie Academy	4	7,371	586	Capital	Carbon reduction
Solar PV	Mackie Academy	25	176,956	16,859	Capital	Carbon reduction
LED Lighting	Fraserburgh Academy	16	98,545	11,129	Capital	Carbon reduction
BMS	Fraserburgh Academy	16	110,646	5,022	Capital	Carbon reduction
EC fan	Fraserburgh Academy	1	14,598	822	Capital	Carbon reduction
Pipework insulation	Fraserburgh Academy	8	15,473	1,219	Capital	Carbon reduction
Solar PV	Fraserburgh Academy	17	126,455	11,603	Capital	Carbon reduction
LED Lighting	Mintlaw Academy	32	108,964	21,622	Capital	Carbon reduction
EC Fan	Mintlaw Academy	2	9,598	1,500	Capital	Carbon reduction
Pipework insulation	Mintlaw Academy	4	8,961	703	Capital	Carbon reduction
Solar PV	Mintlaw Academy	14	102,265	9,701	Capital	Carbon reduction
LED Lighting	The Gordon Schools	16	89,964	10,640	Capital	Carbon reduction
Pipework insulation	The Gordon Schools	9	17,736	1,407	Capital	Carbon reduction
LED Lighting	Westhill Academy	23	98,814	15,450	Capital	Carbon reduction
Pipework insulation	Westhill Academy	2	4,558	352	Capital	Carbon reduction
LED Lighting	Turriff Academy	12	75,886	7,924	Capital	Carbon reduction
BMS	Turriff Academy	9	12,906	2,663	Capital	Carbon reduction
Pipework insulation	Turriff Academy	1	1,469	117	Capital	Carbon reduction
LED Lighting	Stonehaven Leisure Centre	4	13,646	2,817	Capital	Carbon reduction
Pipework insulation	Stonehaven Leisure Centre	2	4,524	352	Capital	Carbon reduction
LED Lighting	Strathburn Primary School	5	17,604	3,101	Capital	Carbon reduction
Pipework insulation	Strathburn Primary School	6	12,187	938	Capital	Carbon reduction
EC Fan	Arduthie Primary School	0	6,131	202	Capital	Carbon reduction
LED Lighting	Kemnay Primary School	1	3,236	374	Capital	Carbon reduction
Pipework insulation	Kemnay Primary School	1	2,999	234	Capital	Carbon reduction
Warp-it		3	3,912	0	Reserve	Renewable Energy Reserve
Recycling - Compost		16	TBD	TBD	Revenue	TBC
Energy Sparks		32	0	TBD	Revenue	TBC
Road resurfacing		220	0	TBD	Revenue	TBC
Energy from waste		98	TBD	TBD	Capital/Revenue	EfW/Waste disposal
LED Street Lighting		436	1,460,000	287,000	Capital	Street lighting
Grid decarbonisation		500	0	0	NA	
Total		1,626	2,963,021	475,162		

- 2022/23 carbon budget provides a number of opportunities reducing emissions by 1,626 tCO2e. This includes reductions associated with grid decarbonisation.
- The list also includes opportunities, such as NDEEF, LED street lighting. Fleet replacements not planned for 2022/23 other than some landscape equipment.
- The cost of 2022/23 budget are estimated at £3m, with estimated annual savings of £475k.

Marginal abatement cost (MAC) curve for property projects for 2022 - 23 (draft)



The MAC curve and visual presents the costs or savings expected in £/tCO₂e from opportunities -alongside the potential volume of emissions in tCO₂e that could be reduced if implemented

Decarbonisation contributions by source & directorates (draft)

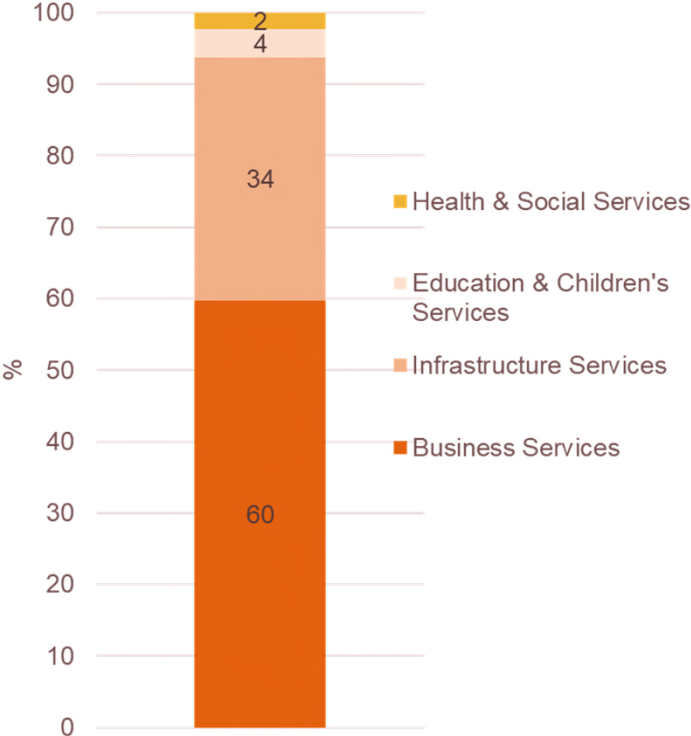


Figure: Distribution of GHG emissions between directorates

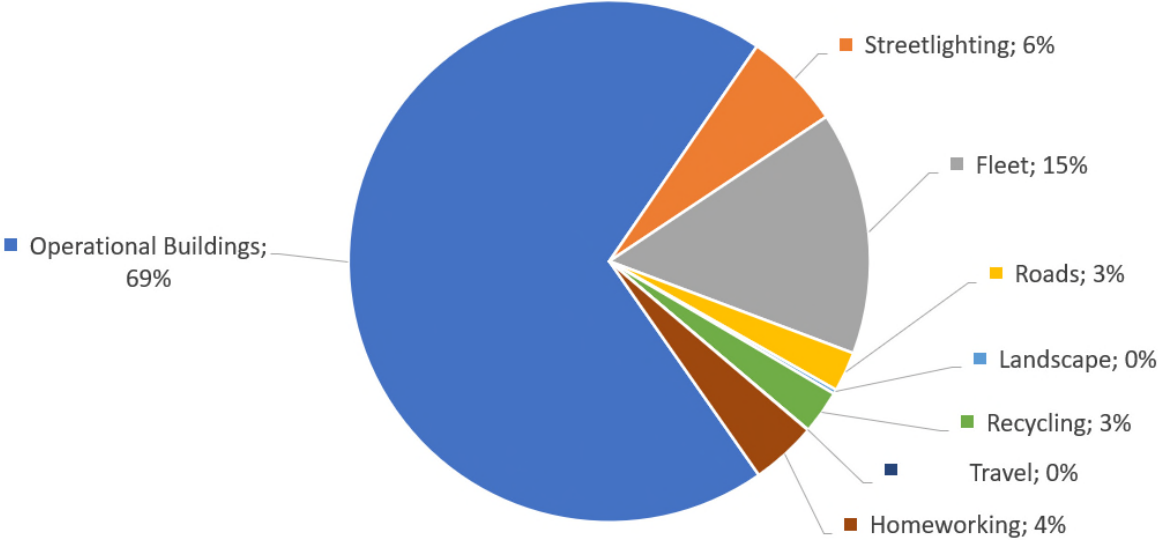
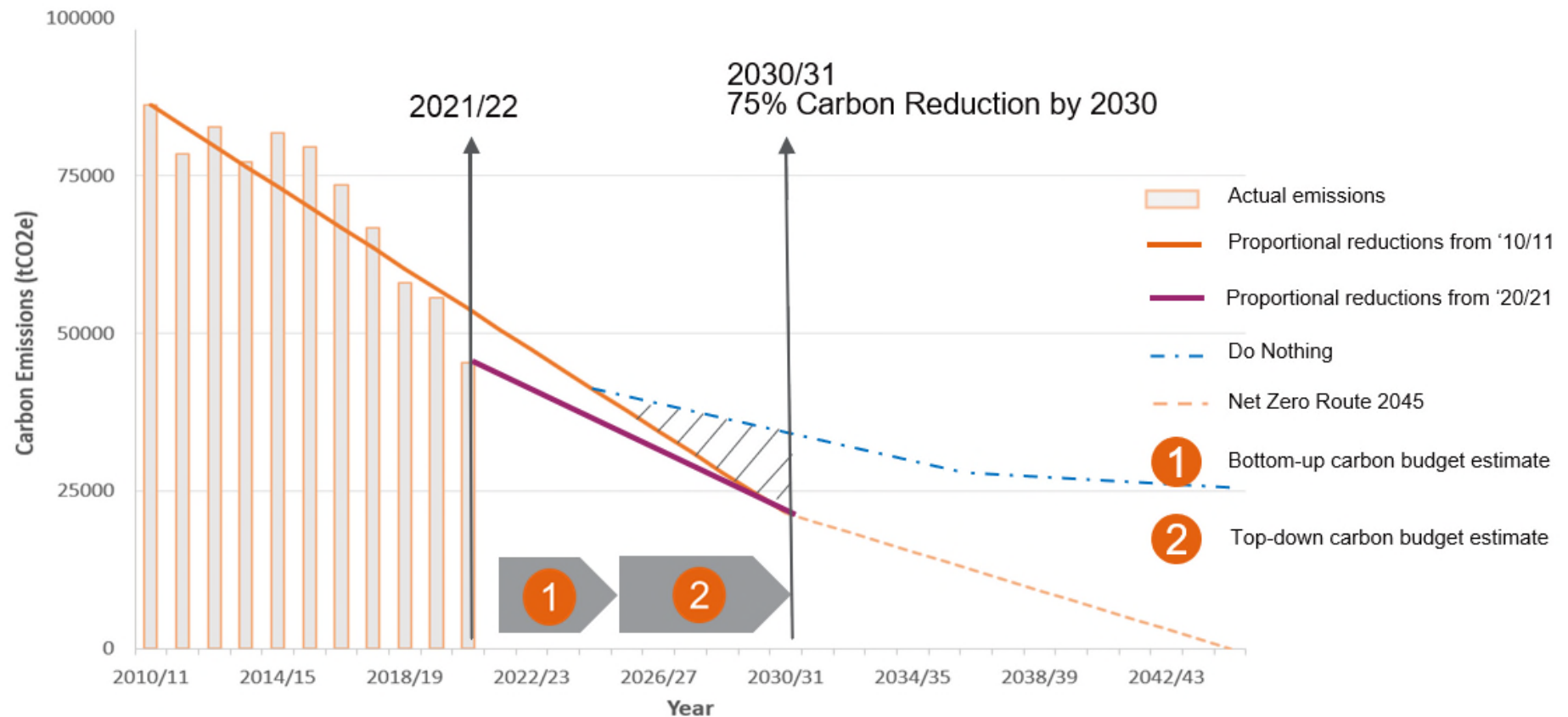


Figure: Build up of the Council's Carbon Footprint in 2020-21 which was 45,282 tCO2e

It is clear that Business Services have the largest ability to influence decarbonisation and are key to successful delivery of the targets. Because property is also the most complex area, we started to develop the future carbon budget in collaboration with this team.

We are applying both a bottom-up and top-down approach to developing the future carbon budget (draft)



A year on year an estimated 2,500t CO₂e reduction should be targeted. Decarbonisation alone is insufficient to meet Council targets.