

Completed energy, carbon & water projects 2021/22

Revenue funded

Project Ref	Project description	Building(s)	Est kWh savings	Est CO ₂ savings	Est annual £ savings	2021/22 spend inc VAT	Notes
UoR035i	LED lighting & controls	TOB2/URS	23,513		6 £	3,500 £	16,220
UoR155a	Whiteknights Energy Centre/district heating - optimisation	Multiple	-		- £	- £	72,040
UoR155b	Energy Centre stage 1 decarbonisation feasibility/design	Energy Centre	-		- £	- £	108,477 £50,227 from GHNF grant
UoR156	Air Source Heat Pump retrofit design	SportsPark & SportsPavilion	-		- £	- £	27,372
UoR141a	Lag exposed heating pipework	Harry Nursten	77,526		13 £	2,686 £	16,529
UoR139	Re-connect Chemistry hot water to district Chemistry heating network		-		10 £	9,000 £	55,302
UoR158	TOB2 double glazing	TOB2	59,789		11 £	1,378 £	376,549 Paid by Maintenance
UoR159	TOB2 roof replacement	TOB2	-		57 £	7,142 £	367,644 Paid by Maintenance
n/a	Utility meter connections	London Road, Meteorology, Psychology	-		- £	- £	3,628
UoR160	Cheestah demand control for catering ventilation savings	Park Eat	42,342		22 £	20,127 £	26,268 Paid by Catering
TBC	No Watt Energy Monitoring	Park Eat	-		- £	- £	8,880
n/a	Low cost/re-active in-year opportunities for efficiency improvements	n/a	-		- £	- £	8,970
n/a	Health & Life Science energy monitoring	HLS	-		- £	- £	7,650
n/a	GHNF grant funding application consultancy	Energy Centre	-		- £	- £	7,920
Total:						£	1,103,449

Completed energy, carbon & water projects 2021/22 (cont...)

Funded by Salix Finance's Public Sector Decarbonisation Fund

Project Ref	Project description	Building(s)	Est kWh	Est CO ₂	Est annual £	2021/22 spend	Notes
			savings	savings	savings	inc VAT	
UoR157	Earley Gate Heat Decarbonisation Plan study	TOB2, Agriculture, Meteorology, Harry Pitt, Met/Psych link	n/a	n/a	n/a £	76,764	<i>£27,364 paid by UoR</i>
UoR145	Elec BMS improvements	Harry Pitt, Met/Psych, Meteorology, Agriculture	22,444	6 £	3,409 £	38,303	
UoR145	Heating BMS improvements	Hopkins, Harry Pitt, Met/Psych, Meteorology, Agriculture	57,103	10 £	2,149 £	45,805	<i>£1,012 paid by UoR</i>
UoR04i	Rooftop PV installations	460 kWp solar - SportsPark, Met, Agric, Psychology, Harry Pitt, Archaeology, Energy Centre	n/a	99 £	59,369 £	436,527	<i>£24,559 paid by UoR inc planning</i>
UoR146	Metering improvements	12 Whiteknights buildings	-	--	£	31,259	<i>£9,614 paid by UoR</i>
UoR035l	Lighting upgrades	London Rd campus	177,261	45 £	27,177 £	382,771	<i>£118,394 paid by UoR</i>
UoR035k	Lighting upgrades	Whiteknights campus (3 buildings)	426,253	107 £	64,452 £	678,924	<i>£60,717 paid by UoR</i>
UoR035j	Lighting upgrades	Greenlands Henley Business School	239,471	60 £	36,230 £	381,421	<i>£35,383 paid by UoR</i>
UoR035m	Studio Lighting	Minghella Studio Lamps	42,741	13 £	7,791 £	172,919	
UoR147	Heating pipework improvements	URS		76 £	15,549 £	308,806	<i>£78,891 paid by UoR</i>
UoR148	Heating pipework improvements	Greenlands Main House		56 £	12,987 £	260,145	<i>£91,172 paid by UoR</i>
UoR141c	Pipework insulation	Greenlands + other ad hoc plant rooms + URS internal	77,526	14 £	2,917 £	50,971	
UoR151	AHU replacements	Multiple	101,482	26 £	15,315 £	95,526	<i>£15,048 paid by UoR</i>
UoR152	AC replacements	Multiple - as identified in TM044 surveys	34,039	12 £	7,113 £	58,233	
UoR152	AC insulation	Multiple - as identified in TM044 surveys	12,783	4 £	2,671 £	13,492	<i>£5,500 paid by UoR</i>
UoR101c	Farms refrigeration upgrades	CEDAR Farm	192,000	27 £	16,295 £	84,338	<i>£75,598 paid by UoR</i>
Total:					£	3,116,204	<i>£543,252 paid by UoR</i>

Planned energy, carbon and water projects 2022/23

Revenue funded

Project Ref	Project description	Building(s)	Est CO ₂ savings	Est £ savings p.a.	Approx 2021/22 spend inc VAT
UoR155a	Whiteknights Energy Centre/district heating - Edith Morley, Harry Nursten optimisation	Energy Centre	4 £	6,500 £	70,000
UoR155b	Energy Centre decarbonisation design	Energy Centre	-	-£	150,000
UoR155b	Energy Centre decarbonisation borehole drills	Energy Centre	-	-£	500,000
UoR156	SportsPark heat decarbonisation design	SportsPark	-	-£	60,000
UoR156	SportsPark heat decarbonisation	SportsPark	-	-£	440,000
UoR136c	Data Centre partition	Maths/IT	TBC	TBC £	20,000
UoR140	Fume cupboard face velocities - review and reduction	Multiple	32 £	20,000 £	20,000
UoR141b	Improve loft insulation (inc pipework)	Edith Morley	40 £	5,000 £	45,000
TBC	Review of/feasibility for grant-eligible heat decarbonisation projects	TBC	-	-£	20,000
TBC	Feasibility to de-gas Harry Nursten steam provision	Harry Nursten	-	-£	10,000
TBC	Estate-wide A/C controls review - inc potential for PIRs	Multiple	2 £	2,500 £	5,000
TBC	Catering monitoring and cellar cooling	Park Eat	TBC	TBC £	-
TBC	CEB - LED lighting in Growth Rooms	Multiple	24 £	15,000 £	-
TBC	Whiteknights electrical capacity review	Multiple	-	-£	30,000
TBC	Water metering improvements	Multiple	-	-£	20,000
UoR054d	Sub-metering rollout	TBC	-	-£	10,000
TBC	Small power electricity metering trial	TBC	2 £	2,500 £	10,000
TBC	Solar PV	Erlegh House	TBC	TBC £	-
TBC	Solar panel inverters	Multiple	TBC	TBC £	20,000
TBC	Air Conditioning refrigerant gas phaseout	Multiple	TBC	TBC	TBC
TBC	Lab equipment upgrade/scrapage scheme	Multiple	2 £	1,500 £	5,000
n/a	Low cost/re-active in-year opportunities for efficiency improvements		-	-£	7,552
n/a	Behaviour change, comms, events	n/a	-	-£	25,000
n/a	Health & Life Science energy monitoring	n/a	-	-£	5,000
n/a	Compliance	n/a	-	-£	8,500
n/a	Utility billing forensic audit	n/a	-	-£	-
Total:			£	1,481,052	