

Completed carbon & water projects 2017/18

| Project Ref | Project description | Building(s) | Est CO ₂ savings | Est annual savings | £ 2017/18 spend inc VAT | Notes |
|-------------|---|---|-----------------------------|--------------------|-------------------------|---|
| UoR122a | District heat connection - Chem Research & Hopkins | Chemistry research, Hopkins | 163 | £ 49,500 | £ 300,600 | Completing in early 2018/19. Additional contribution from £134,270 Maintenance from 2017/18 |
| UoR123b | Central vacuum + chiller system - Chemistry | Chemistry - lab 244 | 9 | £ 21,114 | £ 185,915 | Primarily water savings |
| UoR109 | Re-commissioning of heating, ventilation and Air Con (HVAC) systems - phase 2 | Maths, Eat @ Square, Whiteknights House, Henley Business School, Cedar Hotel, Archaeology, Foxhill House, Carrington, Minghella, MERL, STC, Ent Centre, Palmer, Greenlands, London Rd | 8 | £ 1,500 | £ 12,833 | Minor follow on works from 2016/17 |
| UoR108 | Air Conditioning control upgrades | Agriculture | 3 | £ 1,000 | £ 3,859 | Minor trial - Climateq |
| UoR123 | Water efficiency implementation | Harry Nursten | 0 | £ 600 | £ 3,000 | Contribution to School water distillation equipment |
| UoR109d | Window natural ventilation control improvements | Henley Business School, Minghella | 30 | £ 3,000 | £ 53,715 | Minghella complete, Henley Business School in 2018/19 |
| UoR110 | Energy efficient pumps on heating systems | Multiple | 25 | £ 4,000 | £ 21,197 | |

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|-----------------|--|---|-----------------------------|----------------------|-----------------------|--|
| UoR041c | Boiler burner replacement | TOB1 | 14 | £ 2,050 | £ 13,500 | |
| UoR35f | Lighting upgrades | Chemistry Lab 244, SportsPark | 9 | £ 2,937 | £ 24,293 | Contribution to SportsPark corridor/gym lighting upgrade |
| UoR054b | Sub-metering rollout - Elec | Multiple, inc Chemistry and sub-stations | 0 | £ - | £ 5,379 | |
| UoR054b | Sub-metering rollout - Mech (water & gas) | Multiple; inc Glasshouses | 0 | £ - | £ 20,037 | |
| UoR44c | Solar PV | Windrush | 6 | £ 3,000 | £ 40,192 | (excludes FIT income) |
| UoR44d | Solar PV | Edith Morley | 50 | £ 14,800 | £ 137,415 | |
| UoR44d | Solar PV | Wager (with Maintenance roof replacement works) | 15 | £ 5,500 | £ 22,318 | Equipment being installed Sept 2018 |
| UoR122c | Surface Water Source Heat Pump - heritage/licencing advice & refined feasibility | Greenlands | | | £ 44,989 | Feasibility/design works |
| UoR123c/ | Lab equipment upgrade/scrappage scheme | Chemistry, Hopkins, Food Bioscience, Knight, Harborne, Lyle, Wager, Russell, JJ Thomson | 10 | £ 2,000 | £ 1,500 | Contributions to more efficient School equipment |
| UoR134 | Batteries | Sub station tbc | 0 | £ - | £ 1,996 | Grid connection agreement |
| UoR028 | Awareness Campaign 2017 | Multiple | 10 | £ - | £ 21,561 | |
| Total: £ | | | | | | 914,300 |

APPENDIX 5: Planned carbon and water projects 2018/19

| Project Ref | Project description | Building(s) | Est CO ₂ savings | Est £ savings p.a. | Approx 2018/19 spend inc VAT |
|---------------|--|---|-----------------------------|--------------------|------------------------------|
| UoR122a | District heat connection - Chem Research & Hopkins | Chemistry research, Hopkins | 163 | £ 107,500 | £ 126,700 |
| UoR122c | Surface Water Source Heat Pump design | Greenlands Main House complex | 140 | £ 85,785 | £ 100,000 |
| UoR108 | Air Conditioning control upgrades | Multiple | 10 | £ 4,000 | £ 25,000 |
| UoR35d | Lighting upgrades | SportsPark (<i>contribution</i>) | 4 | £ 6,000 | £ 2,000 |
| UoR054a | Sub-metering rollout - Elec | Multiple | 0 | £ 0 | £ 10,000 |
| UoR054a | Sub-metering rollout - Mech | Multiple | 0 | £ 0 | £ 10,000 |
| UoR127 | Lab equipment upgrade/scrappage scheme | Chemistry, Hopkins, Food Bioscience, Knight, Harborne, Lyle, Wager, Russell, JJ Thomson | 2 | £ 400 | £ 2,250 |
| UoR134 | Battery storage trial | Energy Centre | £ | 2,000 | £ - |
| UoR130 | IT energy efficiency feasibility study | Whiteknights, London Rd, Greenlands | 5 | £ | £ 15,000 |
| UoR028 | Awareness Campaign 2018 | Multiple | 10 | £ | £ 28,000 |
| TBC | Low cost/re-active in-year opportunities for efficiency improvements | Multiple | 15 | £ 1,500 | £ 2,000 |
| Total: | | | | | £ 320,950 |