

ENERGY EFFICIENCY PROGRAMME - CABINET BUDGET PROPOSAL (No.15)

	Annual Saving	Capital Cost	Pay Back
Lighting Retrofit & Redesign			
Internal Lighting Retrofit & Controls – Enhanced Savings			
City Lab	-£4,273	£29,129	-7
Town Hall	-£6,303	£38,322	-6
Old Fire Station	-£970	£5,834	-6
Ryelands House	-£1,780	£18,209	-10
Ashton Memorial	-£865	£5,087	-6
Butterfly House	-£1,604	£4,179	-3
Pavilion Café	-£466	£2,739	-6
Salt Ayre Sports Centre	-£15,236	£205,488	-13
Internal Lighting - Pool & Gym			
Salt Ayre Sports Centre	-£14,828	£112,379	-8
Mechanical Modifications			
Variable air flow to Pool Hall (inc new VSD & O/S to AHU1 & 2)			
Salt Ayre Sports Centre	-£2,993	£12,568	-4
Variable air flow to wet changing (inc new VSD to AHU 5)			
Salt Ayre Sports Centre	-£1,225	£7,594	-6
Low loss air filters in AHU - wet side (VSD to be fitted to fans)			
Salt Ayre Sports Centre	-£1,979	£7,232	-4
Low loss air filters in AHU (1 2) - dry side			
Salt Ayre Sports Centre	-£369	£1,607	-4
Variable Speed Drive to main LTHW pumps 11kW each - Wet Side			
Salt Ayre Sports Centre	-£1,164	£7,594	-7
De-aerator and dirt separator in Wet LTHW circuit only			
Salt Ayre Sports Centre	-£2,040	£3,536	-2
Variable Speed Drive to AHU fans			
Butterfly House	-£1,175	£8,036	-7
Heat Recovery/Recirculation Fans			
Butterfly House	-£193	£2,411	-12
Heating Pipe Re-insulation			
Ashton Memorial	-£289	£2,194	-8
Building Control and Building Management Systems			
Optimise BMS Timeclock/Setpoints			
City Lab	-£819	£4,018	-5
Town Hall	-£2,082	£3,214	-2
Old Fire Station	-£144	£482	-3
Butterfly House	-£245	£2,411	-10
D02 - Connect LTHW systems of Phase 1 (Dry) and 2 (Wet) together			
Salt Ayre Sports Centre	£0	£86,785	-
Pool Water Management			
C01 - New Trend Outstation to Pool Water Control Panel			
Salt Ayre Sports Centre	£0	£7,425	-
New PHX Heat Recovery on Filter Backwash			
Salt Ayre Sports Centre	-£6,129	£40,178	-7
Recalibrate & commission VSD on Pool Water Pumps			
Salt Ayre Sports Centre	-£2,919	£2,411	-1
Time control override to 4kW spa pool bubble seat air blower P7			
Salt Ayre Sports Centre	-£303	£1,519	-5
Building Fabric			
Attic Insulation			
Old Fire Station	-£170	£643	-4
Renewable Energy			
Biomass Boiler			
Butterfly House	-£10,847	£255,567	-24
Mechanical Modifications			
Change out of R22 AC systems - Gym Area Sauna and			
Salt Ayre Sports Centre	-£1,825	£137,995	-76
Building Control and Building Management Systems			
BMS Upgrade to Trend o/s to Pool Side Boiler Room			
Salt Ayre Sports Centre	£0	£9,546	-
BMS Upgrade to Trend o/s to Pool AHU 1 & 2 Control			
Salt Ayre Sports Centre	£0	£8,664	-
BMS Front end (& Comms Link)			
City Lab	£0	£3,214	-
Salt Ayre Sports Centre	£0	£15,027	-
Replace/Upgrade Controller/Control Panel			
Ryelands House	-£1,043	£27,321	-26
Ashton Memorial	-£1,731	£28,928	-17
Central Plant			
Side			
Salt Ayre Sports Centre	-£25,062	£219,051	-9
D03 - New Condensing LTHW boiler			
Ryelands House	-£818	£10,125	-12
Ashton Memorial	-£534	£11,092	-21
Salt Ayre Sports Centre	-£2,216	£26,035	-12
Program Total Base Net Saving / Capital Cost / Overall Payback			
	-£114,640	£1,375,790	-12

ANNUAL NET SAVINGS		
	Baseline Position	2017/18 factoring in inflation from DECC
Gas	-£22,529	-£25,185
Electricity	-£89,757	-£115,338
Energy Savings	-£112,286	-£140,523
RHI Income	-£10,053	-£10,455
STOR Income	-£2,100	-£2,184
Income Generation	-£12,153	-£12,639
Total Savings / Income	-£124,439	-£153,162
Maintenance Saving	-£6,554	-£6,685
Wood Chip Cost	£16,354	£16,681
Net Ongoing Costs	£9,800	£9,996
TOTAL NET SAVINGS	-£114,640	-£143,167

CAPITAL FINANCING COST	
Average Asset Life	15 Years
Effective Annual Interest Rate	1.5%
Annual Cost	£103,100

Total Savings / Income	-£153,162
Ongoing Costs	£9,996
Capital Financing Costs	£103,100
NET ANNUAL SAVING	-£40,067

KEY:

DECC - Department of Energy & Climate Change

RHI Income - Renewable Heat Incentive Income

STOR Income - Short Term Operating Reserve