Agenda item: 5

Report to: Performance Scrutiny Committee

Date of Meeting: 23<sup>rd</sup> February 2012

Lead Member/Officer: Lead Member for Modernising the Council/ Head of Finance & q

**Assets** 

Report Authors: Head of Finance & Assets

Title: Energy Efficiency Update

#### 1 What is the report about?

1.1 The report is being presented to:

- give an overview of the Council's progress in becoming more energy efficient;
- appraise Performance Scrutiny Committee of ongoing and proposed areas of work to further reduce the Council's energy consumption and carbon production.

#### 2 What is the reason for making this report?

2.1 A report to Cabinet on 24<sup>th</sup> January 2012 highlighted the concerns of Performance Scrutiny Committee regarding the Councils' performance in meeting targets contained within the Corporate Plan (EEF002) and progress overall in respect of improved energy efficiency.

#### 3. What are the Recommendations?

- 3.1 That Performance Scrutiny Committee note the progress made on improving the Council's energy efficiency.
- 3.2 That Performance Scrutiny Committee note and comment on the range of measures to be developed (subject to approval) for improving the Council's performance in energy efficiency and carbon reduction.

#### 4. Report Details:

- 4.1 Regular meter readings are essential for effective energy management. At the outset of 2010/11 the Council was only receiving accurate meter readings from approximately 30% of its sites. By January 2012, this figure had increased to over 80%. Progress on meter readings between the months of April 2011 January 2012 is indicated in Appendix 1.
- 4.2 The increase in meter readings is encouraging, particularly as the sites being regularly monitored represent in excess of 98% of the Council's expenditure on energy. However, inconsistencies still remain and a previously agreed protocol for imposing financial penalties on poorly performing services has not been implemented, mainly due to lack of resources to administer a protocol based on monitoring performance and enforcing sanctions. It is also questionable, based on the significance of the data not being regularly collected, whether such a system represents a reasonable cost/benefit return.

Details of site monitoring returns, categorised into Service Area, are included in Appendix 2

- 4.3 While the current target of 100% monitoring should remain, this needs to be balanced with a more pragmatic approach. Identifying sites in order of energy use and prioritising monitoring needs would focus the limited resources available both within the Energy Management Team and building users. The protocol on sanctions is proving unmanageable and it is proposed that this is replaced with the introduction of Automatic Meter Reading devices (AMR's) at sites where manual readings are not regularly forthcoming and based on an assessment of significance in terms of consumption. It should be noted that the introduction of an AMR will attract a £200.00 per annum increase per site in standing charges which will need to be met by the building user.
- 4.2 In terms of the Council's energy usage, the latest consumption figures (April 2011 December 2011) indicate a reduction of 13% in electricity consumption and 24% in gas consumption over the same period last year. Figures are included in Appendix 3. This clearly translates into a saving for the Council as its energy bill will reduce as will its liability for Carbon Tax payments.
- 4.3 These savings have largely been achieved through improved housekeeping procedures and improvements to building fabric, services and controls. Physical works are funded through a combination of Capital Allocations and bids to Salix Finance Ltd (this funding is awarded based on invest to save the savings being utilised to reimburse the initial capital outlay, but thereafter benefiting the Council).
- 4.4 Capital works (DCC & Salix funded) are usually undertaken where efficiency payback can be realised within a 5 year period. A list of proposed works (subject to available funding and excluding the Salix bid [which is currently being developed]) is included at Appendix 4 together with anticipated annual savings. The Council does not currently use any of the savings realised to reinvest in further energy efficiency works.
- 4.5 Renewable energy schemes have been investigated but high capital outlay, exacerbated by cuts in Feed In Tariffs, have extended the payback period of such schemes to 10 years plus. The Council does not currently have the capital funding required to undertake such schemes. It is likely that as technology costs reduce and energy costs rise, there will come a time when these schemes will become more costs effective.
- 4.6 Notwithstanding the above barriers, the Council has entered into an agreement with E.ON Energy Solutions for the provision of a biomass boiler at Rhyl Leisure Centre. E.ON will be responsible for installation and maintenance costs of the required plant, with the Council agreeing to purchase the energy produced. It is expected that this will realise an annual saving in the region of £5,000.00. Should this project realise its potential, additional schemes will be considered. The Council has also entered into preliminary discussions with Quiterevolutions, a vertical axis wind turbine manufacturer, investigating the potential for external investment which could have positive implications for renewable energy production and use at selected sites throughout the County.
- 4.7 The Energy Management Team are working closely with the Carbon Trust to bring forward training programmes for building users initially Leisure Centre Managers and hopefully extending to school caretakers. This training is focused on good housekeeping arrangements. The Carbon Trust has also agreed to undertake free energy audits of high consumption buildings owned by the Council during 2012.

- 4.8 The Carbon Trust has recently issued the initial findings of a Local Government Carbon Management Review. Examples of performance were given for Wet Leisure Centres throughout Wales in terms of production of kgCO<sub>2</sub>/m<sup>2</sup> – included at Appendix 5. It can be seen that three out of four of the Council's buildings are well within the top quartile for performance. While it is recognised that this is not representative of all building types, wet leisure centres are a priority area for improvement both within the Council and throughout Wales (being high energy consumers) and this is an indication of the impact completed projects are having on reducing the Council's carbon production. The fourth wet leisure centre (Corwen) does not appear on the list. However, figures indicate that it would currently be in the lower quartile. This is reflective of the fact that improvement works have only recently been completed (improved lighting controls and an energy saving pool cover) and it is expected that performance will improve over the next 12 months. The introduction of improved housekeeping procedures at Llangollen Royal International Pavilion has also been recognised as an exemplary demonstration project at the Carbon Trust Annual Conference in Cardiff, realising in excess of £6,000.00 reduction in energy costs compared to previous years.
- 4.9 Additional staff members have been/are being recruited to assist with energy management and reduction and to provide backfill for a staff member on long term sick leave. Staff training is programmed for February 2012 which will provide the Council with an "in-house" Eco Schools assessor. A programme of assessments and improvements will then be implemented during 2012.
- 4.10 Following the Cabinet Report of 24<sup>th</sup> January 2012, the Energy Management Team presented a range of proposals to Senior Leadership Team (SLT) and will be reporting regularly regarding progress. Proposals presented to SLT were to:

Improve the profile of the Energy Management Team and promote the services it can provide, together with schemes completed and savings realised, through implementation of DCC's Intranet and Headlines;

Instigate a programme of review and improvement in housekeeping practice with a view to more efficient use of buildings;

Improve corporate awareness by attending and addressing manager forums (School Cluster Group Meetings, Building User Groups etc.);

Identify poorly performing sites and take active intervention;

Instigate a proactive training programme for building users in efficient energy control;

Implement a scheme which recycles savings made, based on energy usage, for reinvestment in further energy efficiency schemes, irrespective of funding source;

Investigate and promote potential for renewable energy schemes based on:

- Potential to attract outside investment, minimising the Council's capital outlay but generating clear long term benefits (cheaper energy, land rental etc.):
- Integration into large scale maintenance works (boiler replacement etc.) and/or new build/extension/refurbishment schemes where initial outlay can

be incorporated into the overall scheme and clear benefits can be realised within the project lifecycle;

#### 5. How does the decision contribute to the Corporate Priorities?

- 5.1 The Council has set itself a target to reduce carbon emissions by 3% a year until 2020. The work in progress will help it meet that target.
- 6. What will it cost and how will it affect other services?
- 6.1 By being more Energy Efficient the Council will make monetary savings by spending less on utilities allowing funds to be released for other priority areas.
- 6.2 Costs and benefits realised are dependent on capital resources available.
- 7. What consultations have been carried out?
- 7.1 SLT has been consulted regarding improvements to energy management. Any proposed changes to existing protocols or policies will be subject to full consultation in line with current DCC practice.
- 8. Power to take a decision

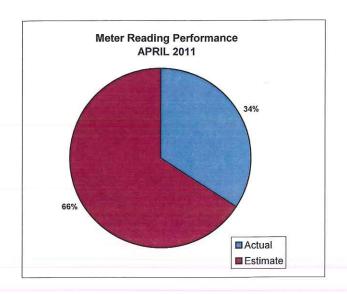
Article 6 of the Council's Constitution

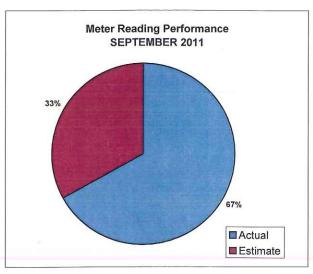
#### **Contact Officer:**

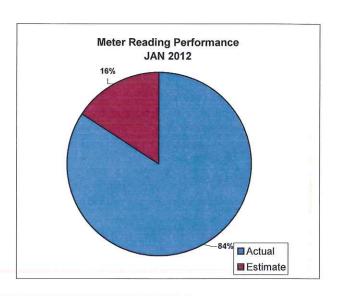
Strategic Assets Team Manager Tel: 01824 706969

# Meter reading performance 2011 / 2012

#### Appendix 1







# **DENBIGHSHIRE M REGISTER 2011/2012**

## **Social Services**

Phil Gilroy

										1	MONTH	ł					
CODE	PROPERTY NAME	V	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR
1 S21 210	AWELON					С	С						С	С	С		
2 S21 211	CYSGOD Y GAER					С	С	С	С	С			С	С	С	ļ	
3 S21 212	DOLWEN					С	С	С	С	С	С	С	С	С	С	ļ	
4 S22 221	HAFAN DEG						С				С	С	С	С	С	<u> </u>	
5 S34 340	A8 PINFOLD WORKSHOPS														С		
6 S43 432	23 WESTBOURNE AVENUE,														С		
7 S46 305	MEIFOD WOOD PRODUCTS (S79 249)					С	С	С			С		С		С		
8 S46 307	ABERWHEELER NURSERY					С	С	С		С	С		С	С	С		
9 S54 810	21 MAES Y FELIN												С		С		
10 S56 706	COMMUNITY LIVING PROJECT															ļ	
11 S68 013	TREM Y DYFFRYN unit B1					С	С			С	С	С	С	С	С	ļ	
12 S78 600	TREM Y DYFFRYN unit B5					С	С			С	С	С	С	С	С	ļ	
13 S68 013	TREM Y DYFFRYN unit B7					С	С			С	С	С	С	С	С	<u> </u>	
14 S89 701	CEFNDY Health Care									С	С	С	С	С	С		
15 S93 016	19 BEDFORD STREET																

5 10 8 13

# **Highways and Infrastructure**

#### Stuart Davies

											ľ	MONTH	1					
C	ODE	PROPERTY NAME	٧	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1 D28	003	BODELWYDDAN DEPOT FLEET WORKSHOP					С	С	С	C	С	C	C	C	С	С		ł
2 D25	005	BOTANICAL GARDENS Depot								C	С	C	C	C	С	С		ł
3 D25	007	MESS ROOM Prestatyn						С										
4 T13	002	BARKERS WELL LANE CAR PARK													С	С		1
5 T13	003	UNDERGROUND CAR PARK					С	С	С	O	С	O	O	O	С	С		
6 T15	030	GLASDIR													С	С		

E/O

7 T16 002	LON PARCWR DEPOT		С	С	С	С	С	С	С	С	С	С	
8 T16 004	EX LIFEGUARD		С	С	С	С	С	С	С	С	С	С	
9 T16 006	KINMEL PARK DEPOT			О						С	С	С	
10 T16 011	TY NEWYDD DEPOT		С	С	C	C	C	С	С	С	С	С	
11 P26 006	TAI TREFOR GAS WORKS LANE DEPOT		С	С	С	С	С	С		С	С	С	<u> </u>
12 P26 013	PUMPING STATION LON PARCWR							С				С	<u> </u>
13 P26 019	FOUL WATER PUMP STN TYN LLIDIART											С	<u> </u>
14 P23 008	FFORDDLAS PUMPING STATION												<u> </u>
14			6	8	6	7	7	8	6	8	10	12	

# Economic Regen Keith Bowler

		Neuri Bowiei										MONTH	1					
	CODE	PROPERTY NAME	٧	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR
1	P26 013	LLYS CLWYD LON PARCWR RUTHIN													С	С		
2		STUDIO 2 CROWN LANE DENBIGH						C						С		С		
		STUDIO 1 CROWN LANE DENBIGH														С		
4		CROWN HOUSE RUTHIN														С		
		TY COCH - LANDLORD Llangynhafal						С	С	С	С	С	С	С	С	С		
		TY COCH - BIG BARN Llangynhafal						С	С	С	С	С	С	С	С	С		
		TY COCH - FIRST FLOOR Llangynhafal						С	С	С	С	С	С	С	С	С		
		TY COCH - SMALL UNIT Llangynhafal						С	С	С	С	С	С	С	С	С		
		14 - 18 EDWARD HENRY STREET RHYL														С		
		MORFA CLWYD UNITS RHYL									С			С				
		BRICKFIELDS POND - D7 PINFOLD RHYL					С	С	С	С	С	С	С	С	С	С		
12		TAI TYWYN													С	С		
		KINGS AVENUE PRESTATYN													С	С		
		WESTBOURNE CENTRE													С	С		
		PUMPING STATION LON PARCWR										С				С		
		FOUL WATER PUMP STN TYN LLIDIART														С		
		BOAT HOUSE							С	С			С	С	С	С		
		PROM SECURITY OFFICE											С	С	С	С		
		LAND TRAIN STATION											С	С	С	С		ļ
		LAND TRAIN KIOSK											С	С	С	С		ļ
		COACH BOOKING OFFICE											С	С	С	С		<b></b>
22	P23 008	FFORDDLAS PUMPING STATION														С		l

12 21

#### Education

Jackie Walley

	Jackie walley										MONTH	1					
CODE	PROPERTY NAME	V	F	R1	R2	APR	MAY	JUN	JUL	AUG		ОСТ	NOV	DEC	JAN	FEB	MAR
	11101 21111 111111	-	-			7				7100	<u> </u>	00.			• • • • • • • • • • • • • • • • • • • •		
1 E22 114	BETWYS GG SCHOOL					С	С	С		С	С	С	С		С		
	YSGOL-Y-FAENOL					C	C	C	С		Č	Ċ	C	С	C		
3 E22 117	YSGOL BODFARI						C	C			Č	Ċ	,	C	C		
4 E22 136	CARROG C P SCHOOL					С	С	С		С	С		С		С		
5 E22 140	CEFNMEIRIADOG C P SCHOOL						С				С		С		С		
6 E22 146	YSGOL CLOCAENOG					С	С	С			С	С	С		С		
7 E22 162	YSGOL CAER DREWYN					С	С	С	С	С	С	С	С	С	С		
8 E22 163	YSGOL CYFFYLLIOG						С	С			С	С	С		С		
9 E22 164	YSGOL MAESHYFRYD						С	С			С		С	С	С		
10 E22 168	YSGOL Y PARC					С	С	С		С	С	С			С		
11 E22 169	FRONGOCH					С	С	С	С		С	С	С	С	С		
12 E22 170	YSGOL GWAENYNOG					С	С	С	С	С	С		С	С	С		
13 E22 171	YSGOL HEULFRE					С	С	С		С	С	С		С	С		
	YSGOL TWM O'R NANT						С	С			С	С	С		С		
	YSGOL HIRADDUG					С	С	С	C	С	С	С	С	С	С		
	GELLIFOR CP						O	O	O	С	С	С	C		С		
	GLYNDYFRDWY C P SCHOOL										С						
	GWYDDELWERN C P SCHOOL					С	С	С	С		С	С	С	С	С		
	HENLLAN CP SCHOOL						С	С		С	С	С	С		С		
	YSGOL BRO FAMAU C P SCHOOL (LLANARMON)					С	С	С		С	С				С		
	LLANBEDR CP SCHOOL					С	C	C		С	С	С	С		С		
	BRYNEGLWYS SCHOOL						С	С							С		
	LLANDEGLA CONT SCHOOL					С	С	С							С		
	LLANDYRNOG VILLAGE HALL						С	С			С	С	С		С		
	YSGOL BRYN CLWYD (LLANDYRNOG School)						С	С			С	С	С		С		
	YSGOL LLANFAIR DC					С	С	С			С		С	С	С		
27 E22 261	LLANFERRES & COMM HALL (BRO FAMAU)						С				С				С		
	YSGOL BRYN COLLEN					С	С	С			С	С	С	С	С		
	YSGOL BRO CINMEIRCH LLANRHAEDR						С	С			С	С	С		С		
30 E22 284	YSGOL MELYD					С	С	С			С	С	С	С	С		
31 E22 325	PENTRECELYN SCHOOL					С	С	С			С	С			С		
32 E22 333	YSGOL CLAWDD OFFA					С	С				С	С			С		<u> </u>
	BODNANT JUNIORS						С	С			С	С	С		С		<u> </u>
	BODNANT INFANTS														С		<u> </u>
	YSGOL PENMORFA					С	С	С	С		С	С	С		С		
	YSGOL Y LLYS					С	С	С	С		С	С	С	С	С		<u> </u>
37 E22 338	PRION CP SCHOOL										С						
38 E22 351	RHEWL SCHOOL					С	С	С			С			С	С		
39 E22 361	YSGOL Y CASTELL					С	С	С	С	С	С	С			С		į

40 E22 364	YSGOL BRYN HEDYDD			С	С			С	С	С		С	
41 E22 365	CHRISTCHURCH C P SCHOOL		С	C	C		С	C	Č			C	
42 E22 366	YSGOL DEWI SANT		C	C				C	- Ŭ	С		C	
43 E22 367	YSGOL EMMANUEL C P		C	C	С	С		C	С	Ū		C	
44 E22 368	YSGOL LLEWELYN			C	C			C	Č	С	С	C	
45 E22 369	YSGOL MAIR		С	C	C			C	С	C	C	C	
46 E22 373	BORTHYN				С		С	С	С	С	С	С	
47 E22 374	YSGOL PENBARRAS			С	С	С	С		С	С		С	
48 E22 374	ANNEX RHOS STREET			С	С	С	С		С	С		С	
	RHOS ST SCHOOL			С	С	С	С		С	С		С	
50 E22 390	ST ASAPH INFANTS		С	С	С			С	С	С		С	
	YSGOL ESGOB MORGAN		С	С	С	С		С		С		С	
	TREFNANT CP SCHOOL		С	С	С			С	С	С		С	
	TREMEIRCHION SCHOOL							С		С			
	ST BRIGIDS SCHOOL		С	C	C	C	O	C	С	С	С	С	
55 E23 513	DENBIGH HIGH SCHOOL		С	C	C	C		С	С	С	С	С	
	DINAS BRAN HIGH SCHOOL		С	С				С	С	С		С	
	PRESTATYN HIGH SCHOOL		С	С	С	С	C	С	С	С	С	С	
	RHYL HIGH SCHOOL		С	С	С	С	C	С	С	С		С	
59 E23 543	EDWARD JONES HIGH SCH		С	С	С	С	C	С	С	С	С	С	
60 E23 543	SPORTS CTR E JONES SCH			С	С	С	С	С		С	С		
	YSGOL BRYNHYFRYD		С	С	С	С	С	С	С	С	С	С	
62 E23 549	BRYNHYFRYD SCHOOL HOUSE/ 6th FORM			С	С	С	С	С	С	С	С	С	
	YSGOL GLAN CLWYD		С	С	С	С	С	С	С	С	С	С	
64 E26 620	PLAS BRONDYFFRYN PRIMARY(Tyn Fron site)		С	С	С			С	С	С	С	С	
	YSGOL PLAS BRONDYFFRYN(Park St)		С	С	С	С		С	С	С	С	С	
	TIR YSGOL HYFRYDLE		С	С	С	С		С	С	С			
	GERDDI GLASFRYN		С	С	С	С		С	С	С			
	TIR MORFA (NEW)(Plot 1)		Т	T	T		Т	T	Т	Т	T	Т	
69 E26 655	TIR MORFA (OLD)		Т	T	T		Т	T	Т	Т	T	Т	
70 E22 252	YSGOL LLANDRILLO			С					С	С		С	
	YSGOL PLAS CEFNDY		С	С	С	С		С	С	С	С	С	
72 E28 003	PROJECT 11 / 6 GORDON AVENUE		С	Т	Т	Т	Т	Т	Т			С	

72

#### **Environment**

278

Steve Parker

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CODE	PROPERTY NAME	V	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
H24 002	NOVA PUBLIC TOILETS							С	С	С	С	С	С	С	С		
H24 003	BARKBY BEACH PUBLIC TOILETS							С	С	С	С	С	С	С	С		
H24 004	CORONATION GARDENS PUBLIC TOILETS							C	C	C	C	C	C	C	С		

H24 005	BUS STATION PUBLIC TOILETS		1			С	С	С	С	С	С	С	С	Demolish	hed Is
	REAR NANT HALL PUBLIC TOILETS					C	C	C	C	C	C	С	C	Demoisi	100 00
	WATERFALL RD PUBLIC TOILETS					C	С	C	C	C	C	C	C		
	RHUDDLAN PUBLIC TOILETS					C	C	C	C	C	C	C	C		
	ST ASAPH PUBLIC TOILETS					C	C	C	C	C	C	C	C		
	CRISPIN YARD PUBLIC TOILETS					C	C	C	C	С	C	С	C		
	LLANGOLLEN PUBLIC TOILETS					C	C	С	С	С	C	С	C		
	CORWEN PUBLIC TOILETS					C	С	C	С	С	C	С	C		
	ROSEMARY LANE PUBLIC TOILETS							C	C			С	C		
						С	С			С	С				
	EVENTS ARENA PUBLIC TOILETS					C	C	С	С	С	С	С	С		
	OLD GOLF ROAD PUBLIC TOILETS Rhyl					C	С	С	С	С	С	С	C		
	BOWLING PUBLIC TOILETS, Rhyl					С	C	С	С	С	С	С	C		
	BOTANICAL GDNS NEW PAVILION/CAFÉ						C	С	С	С	С	С	C		
	EAST PARADE PUBLIC TOILETS. Rhyl					C	С	С	С	С	С	С	С		
H24 050	DRIFT PARK TOILETS Rhyl					С	С	С	С	С	С	С	C		
-	RHYL TOWN HALL TOILETS					С	С	С	С	С	С	С	C		
P32 011	BERWYN TOILETS				С								С		
	TOILET BLOCK Loggerheads											С			
H31 001	WEIGHBRIDGE														
	D7 PINFOLD COUNTRYSIDE				С	С	С	С	С	С	С	С	С		
	LOGGERHEADS OLD MILL			С		С									
	GARAGES & TOILETS LOGGERHEADS			С	С	С									
	CAFÉ LOGGERHEADS			С	С	С									
P46 005	EVENTS ARENA			С		С	О	С	С	С	С	С	С		
P46 005	DISTRIBUTION PILLAR EVENTS			С		С	С	С	С	С	С	С	С		
P46 007	PADDLING POOL											С	С		
P46 008	BOWLING COMPLEX			С	С	С	С	С		С		С	С		
	BARBICAN BOWLING					С		С		С		С	С		
P46 009	BEACH PATROL OFFICE						С	С				С	С		
P46 009	BEACH PATROL STATION						С	С					С		
P46 013	PENSTOCK CHAMBER			С		С	С	С		С			С		
P46 013	BOAT HOUSE			С		С	С	С		С	С	С	С		
	LON PARCWR DEPOT			С	С	С	С	С	С	С	С	С	С		
T16 006	KINMEL PARK DEPOT				С						С	С	С		
T16 011	TY NEWYDD DEPOT			С	C	С	С	С	С	С	C	C	C		$\neg \neg$
	TAI TREFOR GAS WORKS LANE DEPOT			Č	Ċ	Č	Č	C	C	_	C	C	C		-
	WASTE & RECYCLING LON PARCWR RUTHIN				_			-					C		$\neg \neg$
	PLAS NEWYDD HOUSE				С						С		C		$\neg \neg$
	STABLE BLOCK				C	<u> </u>					C		C		$\dashv$
	Y CABAN				C	1					C		C		
	SHOP				C	1					C		C		
E52 002	KITCHEN				C	<u> </u>					C		C		-
	NANT CLWYD HOUSE RUTHIN	<del>                                     </del>				<del>                                     </del>							C		
	Meliden MUGA Multi Utility Games Area	<del>                                     </del>		С	С	С	С	С	С				C		$\dashv$
	PROM SECURITY OFFICE	<del>                                     </del>				<del>                                     </del>				С	С	С	C		-
1 20 002	I NOW SLOUKIT OFFICE	1 1		İ							U			1	

P28 002	LAND TRAIN STATION						С	С	С	С	
P28 002	LAND TRAIN KIOSK						O	С	O	C	
P28 002	COACH BOOKING OFFICE				•		С	С	С	С	

50 46

#### Finance & Assets

Paul McGrady

										l	MONTH	1					
CODE	PROPERTY NAME	٧	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
																	1
E94 001	MIDDLE LANE						С	С	С	С	С	С	С	С	С		1
H31 001	WEIGHBRIDGE St Asaph																1
T08 003	RUSSELL HOUSE					С	С	С	С	С	С	С	С	С	С		1
T08 004	6/8 NANT HALL ROAD					С	С	С	С	С	С	С	С	С	С		1
T08 010	COUNTY ARCHIVES (46 CLWYD ST)					С	С	С	С	С	С	С	С	С	С		1
T08 025	CALEDFRYN					С	С	С	С	С	С	С	С	С	С		1
T08 028	TREM CLWYD					С	С	С	С	С	С	С	С	С	С		1
T08 029	TY NANT					С	С	С	С	С	С	С	С	С	С		1
T08 031	FRONFRAITH					С	С	С	С	С	С	С	С	С	С		1
T08 035	REGISTRAR OFFICE Morfa Clwyd									С	С	С	С		С		1
T08 038	64 BRIGHTON ROAD					С	С	С	С	С	С	С	С	С	С		1
	ST PETER'S SQARE CLOCK TOWER RUTHIN				•	•	•							•			

12

# Leisure, Library & Communities

Jamie Groves

										ľ	MONTH	ł					
CODE	PROPERTY NAME	٧	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
E41 003	DENBIGH LIBRARY					С	С		С	С			С		С		
E41 005	PRESTATYN LIBRARY					C	C	C	С	С	С	C	С	С	С		
E41 006	RHYL LIBRARY					С	С	С	C	С	С	С	С	С	С		
E41 007	RHUDDLAN LIBRARY						С	С	C	С	С	С	С		С		
E41 008	RUTHIN LIBRARY						С	O	O	С	С		С	С	С		
E41 009	ST ASAPH LIBRARY					С	С	C	C	С	С	С	С	С	С		
E48 001	Y CAPEL LIBRARY/ONE STOP					С	С	C	C	С	С	С	С	С	С		
E66 089	HEALTHY LIVING												С				
E66 229	LLANGOLLEN YOUTH CLUB						С	C					С		С		
E66 323	PRESTATYN YOUTH CLUB						С		С						С		
E66 359	RUTHIN YOUTH CLUB						С	С	С	С	С	С	С		С		
P47 016	CRAFT CENTRE RUTHIN					С	С	С	C	С	С	С	С	С	С		

	DENBIGH YOUTH CLUB (ALWEN)		С	С	С	С	С	С	С	С	С	С	
P48 001	ROYAL INT PAVILION LLANGOLLEN		С	С	С	С	С	С	С	С	С	С	
P51 001	SWIMMING POOL CORWEN			С	С	С	С	С	С	C	С	С	
P58 001	DENBIGH LEISURE CENTRE			C	C			C	С	C	С	C	
P58 001	ASTROTURF LEISURE CTR			С	C			С			С	C	
P59 001	RUTHIN LEISURE CENTRE		С	С	C	C	С	С	С	C	С	C	
P55 001	RHYL LEISURE CENTRE			C						C	С	C	
P60 001	DINAS BRAN LEISURE CENTRE			C	C	C	С	О	С	O	С	O	
P62 001	RHYL TOWN HALL		С	C	C	C	С	О	С	O	С	O	
P62 002	NEUADD EDEYRNION/ONE STOP SHOP CORWEN			C	C	C	С	C	С	C	С	C	
P62 003	DENBIGH MARKET HALL			С	C	C	С	С	С	C	С	C	
P62 003	DENBIGH TOWN HALL		С	С	C	C	С	С	С	C	С	C	
P62 005	LLANGOLLEN TOWN HALL		С	C	C	C	С	C	С	C	С	C	
P62 005	INFORMATION OFFICE LLANGOLLEN												
	MARGARET MORRIS CENTRE		С	C	С	C	С	C	С		С	C	
E62 001	OAK TREE CENTRE RHYL, ERNEST St		С	С	С	С		С	С		С	С	

31

# Housing

## MONTH

CODE	PROPERTY NAME	V	F	R1	R2	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1 HR1 021	11 MAES BRYN MELYD					С	С			С			С				
2 HR1 021	7 MAES BRYN MELYD					C	С			С			С				
3 HR1 022	33 RHYDWEN DRIVE					С		С				С	С	С	С		
4 HR1 025	RESOURCE CENTRE																
5 HR1 027	RESOURCE CENTRE																
6 HR2 051	BRYN IBOD SEWAGE WORKS						С			С			С				
7 HR2 052	HEN AFON SEWAGE WORKS						С			С			С				
8 HR2 053	MAES RATHBONE STW						С			С			С				
9 HR2 054	MAES RATHBONE STW						С			С			С				
10 HR2 055	DYFFRYN TEG STW						С			С			С				
11 HR3 001	1 - 6 BRON Y CREST														С		
12 HR3 001	7 - 12 BRON Y CREST														С		
13 HR3 001	1 - 6 BOD NANT FLATS														С		
14 HR3 001	7 -12 BOD NANT FLATS														С		
15 HR3 001	PENNANT FLATS														С		
16 HR3 001	10-17 PENNANT FLATS														С		
17 HR3 001	18 -25 PENNANT FLATS														С		
18 HR3 001	FLAT 3 PENNANT														С		
19 HR3 001	FLAT 9 PENNANT						С								С		
20 HR3 001	LLYGADOG														С		
21 HR3 001	TREM Y FOEL														С		

23   HR8 001 COMMUNITY COM			<u>,                                      </u>		1 1	1	1	1	1	1		 
24   HR8 001   COMMUNITY CENTRE LLYS Y FELIN											С	
25 FIRS 001 COMM LIGHTING GER Y DDOL 27 FIRS 001 GA71 FFORD TALARGOCH 28 FIRS 001 GA71 FFORD TALARGOCH 29 FIRS 001 GA71 FFORD TALARGOCH 29 FIRS 001 GA71 FFORD TY NEWYDD 29 FIRS 001 SA04 FFORD TY NEWYDD 30 FIRS 001 BLOCK 2 CARADOC ROAD 31 FIRS 001 BLOCK 2 CARADOC ROAD 31 FIRS 001 BLOCK 2 CARADOC ROAD 4 C C 32 FIRS 001 BLOCK 2 CARADOC ROAD 5 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 5 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 6 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 7 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 7 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 8 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 9 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 9 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 9 C C 34 FIRS 001 BLOCK 2 CARADOC ROAD 9 C C 35 FIRS 001 BLOCK 2 CARADOC ROAD 9 C C C 36 FIRS 001 CLOVELLY COURT 9 C C C C C C C C C C C C C C C C C C C												
16   18   10   1   10   10   10   10   10												
27   HR8 001   83-71 FFORDD TALARGOCH												
28   HR8 001   30-40 FFORDD TY NEWYDD											С	
29 HR8 001 TV RELAY  30 HR8 001 BLOCK 1 CARADOC ROAD  31 HR8 001 BLOCK 2 CARADOC ROAD  31 HR8 001 BLOCK 3 CARADOC ROAD  31 HR8 001 BLOCK 3 CARADOC ROAD  41 HR8 001 BLOCK 4 CARADOC ROAD  51 HR8 001 BLOCK 4 CARADOC ROAD  52 HR8 001 BLOCK 4 CARADOC ROAD  53 HR8 001 BLOCK 4 CARADOC ROAD  64 HR8 001 CLOVELLY COURT  65 HR8 001 CLOVELLY COURT  66 HR8 001 CLOVELLY COURT  67 HR8 001 LLYS BODNANT  67 HR8 001 LLYS BODNANT  68 HR8 001 PEN Y CAE  68 HR8 001 TYWYN GANOL  60 HR8 001 TYWYN GANOL  61 HR8 001 TYWYN GANOL  61 HR8 001 BLOCK 2 MAES Y GAER  61 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  62 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  63 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  64 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  65 HR8 001 LANDLORDS SUPPLY PLAS EMLYN  66 HR8 001 LANDLORDS SUPPLY PLAS EMLYN  67 HR8 001 LANDLORDS SUPPLY PLAS EMLYN  68 HR8 001 COMMUNUAL AREA MAES EMLYN  69 HR8 001 LANDLORDS SUPPLY LAS EMLYN  60 C C C  61 HR8 001 LANDLORDS SUPPLY LAS EMLYN  60 C C C  61 HR8 001 LANDLORDS SUPPLY LAS EMLYN  61 HR8 001 LANDLORDS SUPPLY LAS EMLYN  62 C C C  63 HR8 001 LANDLORDS SUPPLY LAS EMLYN  64 HR8 001 LANDLORDS SUPPLY LAS EMLYN  65 HR8 001 LANDLORDS SUPPLY LAS EMLYN  66 HR8 001 LANDLORDS SUPPLY LAS EMLYN  66 HR8 001 LANDLORDS SUPPLY LAS EMLYN  66 HR8 001 LANDLORDS SUPPLY LAS EMLYN  67 C C C  68 HR8 001 LANDLORDS SUPPLY LAS EMLYN  68 HR8 001 LANDLORDS SUPPLY LAS EMLYN  69 HR8 001 LANDLORDS SUPPLY LAS EMLYN  60 C C C  61 HR8 001 LANDLORDS SUPPLY WESTON COURT  60 HR8 001 LANDLORDS SUPPLY LAS EMLS FAP  60 HR8 001 LANDLORDS SUPPLY WESTON COURT  60 HR8 001 LANDLORDS SUPPLY WESTON COURT  60 HR8 001 LANDLORDS SUPPLY LAS EMLS FAP  60 HR8 001 LANDLORDS SUPPLY LY SETION COURT  61 HR8 001 LAN												
10   H80 001   BLOCK 1 CARADOC ROAD												
11 HR8 001   BLOCK 2 CARADOC ROAD   C   C												
SECTION   SECT											С	
33 HR8 001 BLOCK 4 CARADOC ROAD  4 HR8 001 BANASTRE AVENUE  56 HR8 001 BRYN TEG  57 HR8 001 LVS BODNANT  58 HR8 001 LVS BODNANT  59 HR8 001 LLYS BODNANT  50 HR8 001 LLYS BODNANT  50 HR8 001 LYS BODNANT  50 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  50 HR8 001 HALLWAY AREA 9-14 LLYS MORGAN  50 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  51 HR8 001 LANDLORDS SUPPLY PLAS CYRIL  52 HR8 001 HALL & STORAGE HEATING MAES EMLYN  53 HR8 001 HALL BODNANT BOD											С	
34 HR8 001 BANASTRE AVENUE 35 HR8 001 CLOVELLY COURT 36 HR8 001 CLOVELLY COURT 37 HR8 001 LLYS BODNANT 38 HR8 001 PEN Y CAE 39 HR8 001 LLYS OFNA 40 HR8 001 LLYS OFNA 40 HR8 001 LLYS OFNA 40 HR8 001 LLYS OFNA 41 HR8 001 BLOCK 2 MAES Y GAER 42 HR8 001 24 MAES MAENEFA 42 HR8 001 24 MAES MAENEFA 43 HR8 001 BLOCK 2 MAES Y GAER 44 HR8 001 HALLWAY AREA 9 :14 LLYS MORGAN 46 HR8 001 LANDLORDS SUPPLY HLAS CYRIL 46 HR8 001 LANDLORDS SUPPLY MAES EMLYN 46 HR8 001 LANDLORDS SUPPLY MAES EMLYN 47 HR8 001 LANDLORDS SUPPLY MAES EMLYN 48 HR8 001 NO1 STARCASE LIGHTING MAES EMLYN 49 HR8 001 OOMMUNUAL AREA MEES EMLYN 50 HR8 001 HALL LIGHTING MAES EMLYN 50 HR8 001 HALL LIGHTING MAES EMLYN 50 HR8 001 HALL LIGHTING MAES EMLYN 50 HR8 001 LANDLORDS SUPPLY HAS CYRIL 50 HR8 001 LANDLORDS SUPPLY LYS BRUNSWICK 51 HR8 001 LANDLORDS SUPPLY MAES SAF 56 HR8 001 LANDLORDS SUPPLY MAES SAF 56 HR8 001 LANDLORDS SUPPLY WESTON COURT 57 HR8 001 LANDLORDS SUPPLY WESTON COURT 58 HR8 001 LANDLORDS SUPPLY SETON COURT 59 HR8 001 LANDLORDS SUPPLY SETON COURT 50 HR8 001 LANDLORDS SUPPLY SETON COURT											С	
35 HR8 001 BRYN TEG 6 HR8 001 CLOVELLY COURT 37 HR8 001 LLYS BONANT 38 HR8 001 PEN Y CAE 39 HR8 001 LLYS BONANT 30 HR8 001 BLOCK 2 MAES Y GAER 41 HR8 001 BLOCK 2 MAES Y GAER 42 HR8 001 24 MAES MAENEFA 43 HR8 001 BLOCK 2 MAES AMENEFA 44 HR8 001 HALLWAY RAEA 9 +14 LLYS MORGAN 45 HR8 001 LANDLORDS SUPPLY PLAS CYRIL 46 HR8 001 LANDLORDS SUPPLY PLAS CYRIL 46 HR8 001 LANDLORDS SUPPLY MAES EMLYN 46 HR8 001 HALL & STORAGE HEATING MAES EMLYN 47 HR8 001 HALL & STORAGE HEATING MAES EMLYN 48 HR8 001 NO1 STAIRCASE LIGHTING MAES EMLYN 50 HR8 001 HALL LIGHTING MAES EMLYN 51 HR8 001 HALL LIGHTING MAES EMLYN 52 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 53 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 54 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 55 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 56 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 57 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 58 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 59 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 50 HR8 001 LANDLORDS SUPPLY LIYS BRUNSWICK 50 HR8 001 LANDLORDS SUPPLY WESTON COURT 51 HR8 001 LANDLORDS SUPPLY WESTON COURT 52 HR8 001 LANDLORDS SUPPLY WESTON COURT 53 HR8 001 LANDLORDS SUPPLY WESTON COURT 54 HR8 001 LANDLORDS SUPPLY WESTON COURT 55 HR8 001 LANDLORDS SUPPLY WESTON COURT 56 HR8 001 LANDLORDS SUPPLY WESTON COURT 57 HR8 001 LANDLORDS SUPPLY WESTON COURT 58 HR8 001 LANDLORDS											С	
16   HR8 001   CLOVELLY COURT	34 HR8 001	BANASTRE AVENUE										
37   HR8 001   LLYS BODNANT												
18   18   18   10   1   12   15   15   15   15   15   15												
HR8 001												
HR 8 001		PEN Y CAE									С	
HR8 001   BLOCK 2 MAES Y GAER											С	
12   HR8 001   24 MAES MAENEFA							(	;				
1												
HR8 001												
STATE   STATE   STORE SUPPLY PLAS CYRIL							(	;				
HR8 001							(	;			С	
HR8 001	45 HR8 001	LANDLORDS SUPPLY PLAS CYRIL										
HR8 001   NO1 STAIRCASE LIGHTING MAES EMLYN   C	46 HR8 001	LANDLORDS SUPPLY MAES EMLYN					(	;			С	
HR8 001   COMMUNUAL AREA MAES EMLYN   C	4 HR8 001	HALL & STORAGE HEATING MAES EMLYN					(	;			С	
HR8 001	48 HR8 001	NO1 STAIRCASE LIGHTING MAES EMLYN					(	;			С	
HR8 001   STORES CUPBOARD MAES EMLYN   C	49 HR8 001	COMMUNUAL AREA MAES EMLYN					(	;			С	
52 HR8 001 LANDLORDS SUPPLY LLYS BRUNSWICK       C       C         53 HR8 001 LANDLORDS SUPPLY LLYS BRUNSWICK       C       C         54 HR8 001 LANDLORDS SUPPLY MAES CWM       C       C         55 HR8 001 BLOCK 1 LL SUPPLY MAES ISAF       C       C         56 HR8 001 BLOCK 2 LL SUPPLY MAES ISAF       C       C         57 HR8 001 LANDLORDS SUPPLY WESTON COURT       C       C         58 HR8 001 LANDLORDS SUPPLY 2 WESTON COURT       C       C         59 HR8 001 LANDLORDS SUPPLY LLYS PEN Y CEFNDY       C       C         60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN       C       C         61 HR8 001 STAIRCASE LIGHTING HEOL AFON       C       C         62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN       C       C							(	;				
53       HR8 001       LANDLORDS SUPPLY LLYS BRUNSWICK       C       C         54       HR8 001       LANDLORDS SUPPLY MAES CWM       SIRVER CONTROL OF CON							(	;			С	
54 HR8 001 LANDLORDS SUPPLY MAES CWM       55 HR8 001 BLOCK 1 LL SUPPLY MAES ISAF       56 HR8 001 BLOCK 2 LL SUPPLY MAES ISAF       56 HR8 001 BLOCK 2 LL SUPPLY MAES ISAF       57 HR8 001 LANDLORDS SUPPLY WESTON COURT       C	52 HR8 001	LANDLORDS SUPPLY LLYS BRUNSWICK					(	;			С	
55       HR8 001       BLOCK 1 LL SUPPLY MAES ISAF         56       HR8 001       BLOCK 2 LL SUPPLY MAES ISAF         57       HR8 001       LANDLORDS SUPPLY WESTON COURT         58       HR8 001       LANDLORDS SUPPLY 2 WESTON COURT         59       HR8 001       LANDLORDS SUPPLY LLYS PEN Y CEFNDY         60       HR8 001       COMMUNITY CENTRE LLYS Y FELIN         61       HR8 001       STAIRCASE LIGHTING HEOL AFON         62       HR8 001       STAIRCASE LIGHTING LLYS Y FELIN							(	;			С	
56 HR8 001 BLOCK 2 LL SUPPLY MAES ISAF       C       C         57 HR8 001 LANDLORDS SUPPLY WESTON COURT       C       C         58 HR8 001 LANDLORDS SUPPLY 2 WESTON COURT       C       C         59 HR8 001 LANDLORDS SUPPLY LLYS PEN Y CEFNDY       C       C         60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN       C       C         61 HR8 001 STAIRCASE LIGHTING HEOL AFON       C       C         62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN       C       C	54 HR8 001	LANDLORDS SUPPLY MAES CWM										
57 HR8 001 LANDLORDS SUPPLY WESTON COURT         C         C           58 HR8 001 LANDLORDS SUPPLY 2 WESTON COURT         SUPPLY 2 WESTON COURT         C           59 HR8 001 LANDLORDS SUPPLY LLYS PEN Y CEFNDY         C         C           60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN         C         C           61 HR8 001 STAIRCASE LIGHTING HEOL AFON         C         C           62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN         C         C												
58 HR8 001 LANDLORDS SUPPLY 2 WESTON COURT       59 HR8 001 LANDLORDS SUPPLY LLYS PEN Y CEFNDY       C         60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN       C         61 HR8 001 STAIRCASE LIGHTING HEOL AFON       C         62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN       C	56 HR8 001	BLOCK 2 LL SUPPLY MAES ISAF										
59 HR8 001 LANDLORDS SUPPLY LLYS PEN Y CEFNDY         C           60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN         C           61 HR8 001 STAIRCASE LIGHTING HEOL AFON         STAIRCASE LIGHTING LLYS Y FELIN	57 HR8 001	LANDLORDS SUPPLY WESTON COURT					(	;			С	
60 HR8 001 COMMUNITY CENTRE LLYS Y FELIN 61 HR8 001 STAIRCASE LIGHTING HEOL AFON 62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN												
61 HR8 001 STAIRCASE LIGHTING HEOL AFON 62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN	59 HR8 001	LANDLORDS SUPPLY LLYS PEN Y CEFNDY									С	
62 HR8 001 STAIRCASE LIGHTING LLYS Y FELIN											С	
	61 HR8 001	STAIRCASE LIGHTING HEOL AFON										
63 HR8 001 1 PEN Y MAES AVENUE												
64 HR8 001 2 THORNLEY AVENUE												
65 HR8 001   5 MORFA VIEW												
66 HR1 027 PENGWERN C C C	66 HR1 027	PENGWERN		C					С			

60						13	1	9	1	32	

C - Reding received by card/e-mail T - reading received by telephone

176000 - consumption from unread meters (based on

 Kw/h
 estimated bills)
 1.85%

 Kw/h
 9510156 - consumption from read meters
 98.15%

 Kw/h
 9686156.00
 100%

The actaul reads cover 98% of our consumption (Figures represent annual consumption)

# Appendix 3 Energy Savings, comparing 2010 /2011/ to 2011 / 2012

Gas Reduction kwh

2010 -2011

Total gas April to Dec 18204160 kwh

2011 - 2012 April to Dec 13826662 kwh 4377498

percentage saving 24.05 %

**Electric** 

2010 -2011

Total electric April to Dec 5518939.67 kwh

2011. 2012 April to Dec 4803899 kwh 715040.6667

percentage saving 12.96 %

Appendix 4

<i>/</i> (ppollal)	•				
Customer Site	Cita Address 4	Inquistion Cla	Llocking controls upgrade Cl	Con conversion	Lighting upgrade LED / controls Ck
Reference	Site Address1	Insulation £k	Heating controls upgrade £k	Gas conversion	Lighting upgrade, LED / controls £k
	None schools				
E66 359	YOUTH CENTRE RUTHIN	5	-	-	-
S21 211	CYSGOD Y GAER	-	15	-	
T08 025	CALEDFRYN	-	-	-	5
T9B 049	County Hall	-	-	-	25
S01	Cefndy enterprises	-		-	-
	Total	5	15	0	30

	Schools				
	Potential Energy Eff Projects 2012 .2013				
Customer					
Site					
Reference	Site Address1	Insulation £k	Heating controls upgrade £k	Gas conversion	Lighting upgrade, LED / controls £k
E22 176	YSGOL HIRADDUG	10	0	-	-
E22 247	YSGOL Bro Famau C P SCHOOL	5	-	•	-
E22 365	CHRISTCHURCH C P SCHOOL	5	5	15	-
E22 373	BORTHYN	5	-	-	-
E22 390	ST ASAPH INFANTS	-	-	10	-
E22	Penmorfa Prestatyn	-		15	
E23 513	DENBIGH HIGH SCHOOL	10	-	-	20
E23 549	Brynhyfryd	-	8	-	5
	Total	35	13	40	25

Anticipated

Highways & Infrastructure Street lighting scheme (replacement bulbs energy efficient & long life)

No's Anticipated cost (£K)

650

saving p/a (£K) Anticipated payback (yrs)

30

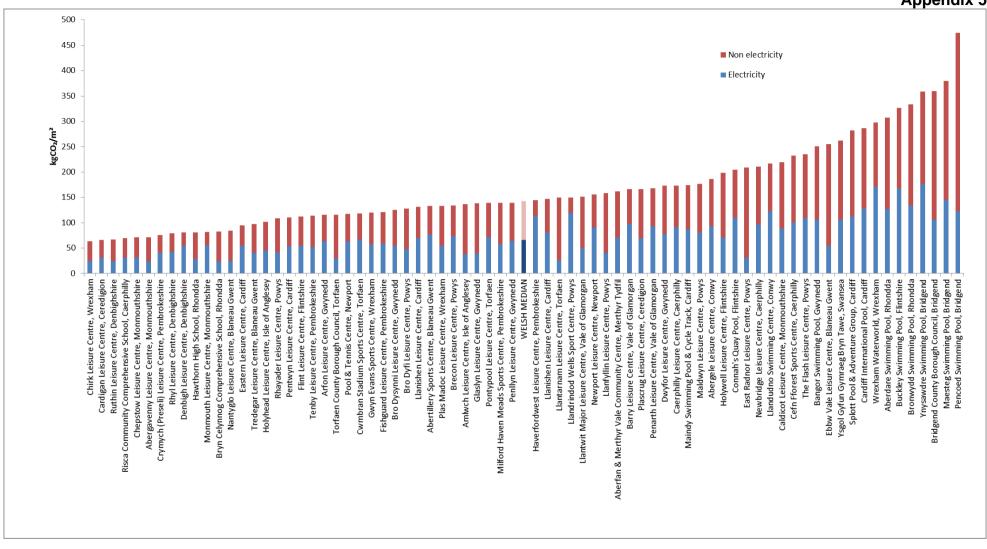
250

8.3

Pool cover £k	Power Perfector £k	Water saving devices	Total cost £k	Cost saving £k	Simple payback	Potencial C02 saving /pa. tonnes
-	-	-	5	2	2.50	3
-	-	-	15	11	1.36	15
-	-	-	5	2.5	2.00	5
-	-	-	25	5	5.00	2
-	20	-	20	6	3.33	30
0	20	0	70	26.5	-	55

Pool cover £k	Power Perfector £k	Water saving devices	Total cost £k	Cost saving £k	Simple payback	Potencial C02 saving /pa. tonnes
-	-	-	10	4	2.5	34
-	•	-	5	2	2.5	5
-	-	-	25	10	2.5	5
-	•	-	5	2	2.5	1
-	-	-	10	2.5	4	3
-		-	15	3.5	4.29	1
-	-	-	30	8	3.75	25
-	-	-	13	3	4.33	20
0	0	0	113	35	-	94

## Appendix 5



Appendix 5