

**Appendix B to PDC Energy Strategy Update dated 25 Feb 20**

**City & County of Swansea: Energy Strategy 2016  
(Appendix 3 – Original Carbon Reduction Action Plan)**

No.	Project	RO	What is currently in place	Action required	By whom	By When	Progress to date	Cost / Anticipated savings	Status Feb 2020
	Short Term – 1 to 2 years (2013/14 & 2014/15)								
CP3.1	Record and document energy & carbon baseline data	JRL	100% data recording process now established since 2009/10 (baseline year)	Continuous data recording process via the TEAM Sigma Energy Management system	Energy Management Unit.	Continuous process	Data recorded monthly	Not applicable	New baseline in alignment with Welsh Government guidelines Climate Emergency declaration
CP3.2	Energy / Carbon Management recording and reporting in relation to Performance Measurement and Legislative requirements	JRL	Energy and Carbon data collation for PI EEF/002a and Carbon Reduction <b>Commitment Energy Efficiency (CRC) Scheme</b>	Energy data management and reporting via TEAM Sigma Energy Management system	Energy Management Unit	PI EEF/002a & CRC reports issued each July for previous financial year	PI & CRC Reports issued within predetermined timescales	2012/13 CRC charge of £392,424 to be paid in Sept 2013. Allowances to be surrendered in Sept 2013.	Completed 19-20
CP3.3	Include Carbon reporting within the Councils Statement of Accounts for 2012/13	MH / JRL / TN	Carbon data currently being recorded for Energy use, Fleet / Waste transport, Business Mileage	Report carbon emissions within the 2012/13 Statement of Accounts	Sustainable Development Unit / Energy Management Unit / Finance	Carbon data issued to SD Unit in August 2013	Carbon performance to be published within the Councils Annual Statement of Accounts for 2012/13	Not applicable	Further resource required for collation of fleet data
CP3.4	Implementation of Ebilling for	JR/NP	Testing of energy suppliers ebills now complete. Electronic	Continue the recording of BGB	Energy Management	Corona testing to be	All EDF accounts being centrally	Efficiency savings in the automatic	EDI Billing in place in EDF

	electronically processing "centrally paid" energy bills		payment of EDF accounts now implemented with payment reports also developed for finance managers. Testing of Corona ebill 95% complete	ebills within TEAM Sigma Test system.	Unit / Finance Accounts Payable / IT	completed by September 2013	paid via ebilling process.	checking & payment of circa 900 centrally paid energy bills	Energy and Corona Energy
CP3.5	Invest to Save Heating Control Systems	JRL / DM	Phase 1 completed by CB&PS. Phase 2 Framework contract set up with 3 specialist controls contractors.	Installation of 40 new TREND IQ3 heating control systems commenced in August 2011.	Energy Management Unit	The installation & commissioning of all new control systems was completed in March 2012	Full handover / system sign off completed in December 2012.	Project cost £90K Average of 8% saving in fossil fuel costs predicted for each premises.	Complete
CP3.6	Energy related IT proposals: Automatic PC Shutdown & Virtual Server implementation within the Civic Centre. Potential introduction of thin client technology in 2013/14	PL / TW	Council policy to automatically shut down desktop PC's completed in May 2010. 80% of server virtualisation completed in December 2012. Further system development due in 2013/14.	Phased implementation of virtual servers during 2012/13 with associated reduction in IT server room cooling capacity.	IT client team / CapGemini / CB&PS Mechanical services team / Energy Management Unit	2013/14	80% of server virtualisation completed in December 2012	Project cost £531K. Estimated energy cost savings £87K per annum	Complete
CP3.7	Implementation of Automatic energy metering (AMR) to Corporate Premises	JRL / DM / AD	AMR framework contracts established by the Government Procurement Service. Legal approval of energy supplier model contracts completed in May 2012.	Final Inventory of NHH electricity meter points issued to BGB in July 2012.	Energy Management Unit	250 Electricity SMART meters by March 2013. Further target of 400 SMART meters installed by March 2014	320 Electricity SMART meters installed up to week ending 16/8/13.	Gas AMR leasing cost to be charged within monthly energy bill. Scheme linked to ebilling & energy awareness / staff engagement programme	Ongoing
CP3.8	Creating an Energy Awareness Programme for Council staff.	JRL	Good energy housekeeping guide available via staff Intranet service	Develop communications strategy for Council staff engagement. Further develop the Councils Green Champions network Produce	Carbon Reduction Strategy team	Detailed programme to be advised Scheme to be further supported with additional	Draft Communication s Plan developed. Pilot staff awareness programme commence within C&T	5-10% energy cost saving could be anticipated from this & related programmes.	Completed, but propose new campaign in light of Climate Emergency declaration

				an intranet linked staff awareness / training service		resource by SD Unit	Service in December 2012.		
CP3.9	Heads of Service to include energy costs / use & carbon reduction reporting with their P&FM meetings	JRL / Performance Management Team / C&T HoS	Collation of energy data now available from TEAM Sigma system for all individual buildings or services.	Develop report with TEAM Sigma software support staff. Agree service groups for pilot via AMG. Agree with HoS the method of reporting to be implemented.	JRL / MN / C&T HoS	Design & development of report completed in August 2013. Pilot launch planned via Place P&FM in October 2013	Initial draft report presented at Regeneration P&FM meeting.	Linked to energy awareness / staff engagement programme	P&FM reports delivered in line with reporting cycle
CP3.10	Develop TEAM Sigma "Web module" for all Council premises and budget managers to remotely access energy cost and consumption reports	DM / IT Client teams	Web module purchased and technical development work completed with TEAM Sigma support staff.	Complete web module development and set up independent password access for premises and budget managers	Energy Management Unit / IT client teams / TEAM EAA Ltd	July 2013 but dependant on system development work	Development ongoing with IT client teams & pilot sites now being tested for access to TEAM Sigma web module.	Linked to energy awareness / staff engagement programme	Sigma Training arranged 27 Feb 20
CP3.11	Implementation of Capital Maintenance energy efficiency schemes	JRL / DM	£80K Capital Maintenance budget approved to fund schemes during April 2013 to March 2014	Identification of cost effective schemes via the programme of building energy surveys.	Energy Mgt Unit / Design & Maintenance teams.	March 2014	All new schemes on target to be installed by March 2014	Assessed for each individual scheme	Ongoing Budget allocation check with GB
CP3.12	Publishing Display Energy Certificates for the Councils public buildings over 1,000 square meters	JRL / DM	Annual programme for lodging 27 DEC's with CIBSE	Maintain Low Carbon Energy Assessor Accreditation with CIBSE	Energy Management Unit	Annually in line with each DEC renewal date	All current DEC's published and displayed for public viewing	Linked to energy awareness / staff engagement programme	Ongoing
CP3.13	Implementation of Capital Maintenance programme for projects that affect the Councils energy performance	GB / CH / JL / NG / DM	Annual Capital Maintenance programme	Design and installation of Capital maintenance schemes	Corporate Building & Property Services	Continuous programme	Progress recorded within CB&PS project management status reports	As per Capital Maintenance programme	Ongoing

CP3.14	Street Lighting - Implementation of new initiatives and funding being led by WG	CV / JH	3 Year investment programme	Replacement of existing lighting stock to energy efficient lighting using LED technology.	Street scene – Street Lighting team	To be completed by April 2015.	£2 Million spent to date.	Project cost 6million funded via prudential borrowing by WG.	Continuing programme
CP3.15	Acquisition of 35 hybrid fleet vehicles	MB	Fleet replacement programme	Business case approved for the procurement of hybrid vehicles	Fleet Management team	June 2013	35 vehicles now delivered	CO2 saving of 220 tonnes over the 7 year life.	Electric fleet continues to expand – 40 vans & 1 car
CP3.16	Acquisition of electric pool car vehicles & installation of charging points	CH / KR / PB / JL	Purchase of up to 11 electric pool cars with charging points at 3 Council premises	Electric pool car to be operated from CB&PS Heol y Gors Depot, Guildhall & Street scene Depot Clydach	CB&PS technical staff / Facilities Management team	June 2013	8 electric vehicles purchased & operating from the CB&PS Heol y Gors Depot	£35K funding allocation	Complete – as above
CP3.17	Installation of 35KW Photovoltaic System at the Civic Centre	CB&PS	Initial feasibility undertaken Planning application approved.	Awaiting funding approval to develop Project specification.	CB&PS technical staff	2014 following the establishment of WPC PV contract	Initial feasibility study undertaken Planning application approved December 2012.	£70K budget cost with 9 years simple payback	Complete but funding reallocated to Guildhall
CP3.18	Further develop the "Scope" of future carbon emissions reporting within the Annual Statement of Accounts	JRL / TN / SR / MH	Corporate building emissions reported with fleet use, business mileage data. Waste emissions recorded from Civic Centre only. Water use recorded for Civic Centre & Guildhall.	Phased inclusion of Renewables, Refrigerant, Waste / Recycling & Water data in future carbon emissions measurement and reporting	Energy Management Unit / SD Unit / CTU / Transportation & Waste Management teams.	Phased inclusion within Annual Statement of Accounts from 2012/13	Investigating Refrigerant measurement with specialist contractor	Not applicable	Aligned in the Climate Charter
CP3.19	Imbedding Sustainability within the Councils Procurement Process	TN / PG / Procurement / JL	Sustainable Procurement Assessment Framework (SPAF) - annual assessment / plan of continuous improvement now include a clause on Energy Management / Carbon	Include clause(s) on carbon reduction in the SPAF.	Sustainable Development Unit / Procurement / Energy	Clause initially included for Jan 2012 SPAF review	Self-Assessment SPAF score of 4.3 recorded for 2012/13. (Second highest		'Procurement Fitness Check Reports' now used

			Reduction.		Management Unit		recorded by Value Wales)		effectively by council
	Medium Term 2 3 years								
CP3.20	Develop carbon communications plan	JRL / TN	Sustainable Development Communications forum established within the Council	Pilot service specific energy efficiency behaviour change programme	Energy Management Unit / Sustainable Development Unit	2013/14	New proposal	Linked to energy awareness / staff engagement programme	Complete
CP3.21	Publish Success stories of best practice energy conservation measures as part of the staff Energy Awareness Campaign communications plan.	JRL	New proposal	Monitor energy consumption and report energy / carbon savings achieved. Publish success stories via staff intranet	Energy Management Unit / Carbon reduction team / Communications officer		Success story on Display Energy Certificate Results at the Grand Theatre has previously been published on the intranet	Linked to energy awareness / staff engagement programme	Ongoing
CP3.22	Sustainable changes & development		Medium/long term strategies in accordance with Sustainable Development team	Develop regular liaison to ensure cross fertilisation of ideas.	Carbon Reduction team				Ongoing
CP3.23	Budget savings reporting		Limited information at CMT level that doesn't provide enough service level detail	Begin collating service specific information, improving HoS accountability				Linked to Head of Service Reporting (CP 3.9)	Complete
CP3.24	Develop Renewable Energy / Micro Generation strategy	JL / TN	Renewable & Micro generation Investment within major capital construction projects.	Approval of Strategy to present the Councils future proposals for renewable energy & micro-generation systems	Carbon Reduction team	To be advised	Framework contract for the installation of PV systems being developed by the Welsh Purchasing Consortium		Ongoing. Energy Strategy needs to be updated to reflect climate change declaration
	Long term 3 - 5 years								

CP3.25	Carbon Trust / Green Dragon Standard (full or part accreditation)		Not necessarily aiming for full accreditation but aiming to put standard values and principles in place.						Complete
CP3.26	Publish a Carbon Emissions reduction plan for the CCoS.		New proposal						Will form part of work going forward
CP3.27	Strategic links to Accommodation Strategy		Accommodation Strategy already up and running as part of Asset Management programme						Ongoing
Other Projects as of February 2020									
No.	Project	RO	What is currently in place	Action required	By whom	By When	Progress to date	Cost / Anticipated savings	Status Feb 2020
	Develop appropriate carbon reduction target and reporting for non-domestic buildings	AM	Updating Energy Management Strategy aligning with Welsh Government Net Zero Carbon Reporting framework	Utilise the SIGMA M&T system for data analysis	Energy Management	Annual	Waiting for WG guidance to be published		Waiting for WG guidance to be published
	Update the Energy Management Strategy paper	AM	Currently with PDC for approval	Update Energy Strategy	Energy Management	May 2020	With PDC approval		Waiting for approval
	Water Management In collaboration with Welsh Water - undertake data cleanse covering all non-domestic sites	AM	Water information is out of date and inaccurate, data not being captured by SIGMA for bill validation and water management (leakage) / reporting against Scope 3	Review welsh water cleanse data spread / move towards EDI billing	Energy Management	Jun 2020	To be reviewed		To be reviewed
	Phase 1 Refit Project – Commence Delivery of project towards achieving Energy Conservation Measure (ECMs)	AM	IGP in place identifying all sites for ECMs / cost and reduction savings	Final contract sign off arranged for 21 Feb 20. Works Programme with Service Provider to commence Mar/Apr 20	Energy Management	Nov 2020	Contract sign stage	£1,397,396 capital investment / £187,393 guaranteed performance savings / 379tco2	Contract sign stage arranged for 21 Feb 20

	financial and carbon savings								
	Solar PV Farm – Working with Welsh Government Energy Services.	AM	Currently collaborating with Welsh Government Energy Services on model size scenarios and financial appraisal assumptions towards the development of a Ground Mounted Solar PV farm	Continue working with WG Energy Services	Energy Management	Dependent on outcome of model development	Legal issues currently being resolved	Potential savings of 3,189,720 kWh /yr	Continuing
	Review Display Energy Certificates and Advisory Reports to categorise buildings energy performance ratings to identify poor performing buildings	AM	All DECS and Advisory Reports in place to be reviewed.	Procurement Contract (4years) currently being processed for DECs and ARs	Energy Management	Apr 2020	Data spreadsheet of DECs ratings completed		Continuing
	Complete Sigma M&T training to enable consumption data analysis and reporting – energy; carbon; financial; budget management	AM	SIGMA monitoring and targeting system in place; downloading EDI energy bills for validation and energy analysis.	Licence renewal and training required	Energy Management	Feb 2020	Licence paid and training arranged		Training on 27 <sup>th</sup> Feb 20
	Extend 'smart' and sub-metering technology to ensure accurate and timely capture of energy consumption data	AM	Partial AMR metering place	Working in collaboration with energy suppliers	Energy Management	TBC	Continuing		Continuing
	Develop and Implement Behaviour Change programmes	AM	New behaviour programme / publicity required to be developed	To be developed and implemented	Energy Management	TBC	Continuing		Continuing

	Develop Phase 2 Refit: Cymru ECMs to achieve carbon reduction savings	AM	Continuation of Phase 1	Work with WG Energy Services	Energy Management	TBC	Continuing		Continuing
--	---	----	-------------------------	------------------------------	-------------------	-----	------------	--	------------