

# CITY AND COUNTY OF SWANSEA

## NOTICE OF MEETING

You are invited to attend a Special Meeting of the

## COMMUNITIES CABINET ADVISORY COMMITTEE

**At:** Committee Room 5, Guildhall, Swansea

**On:** Thursday, 12 May 2016

**Time:** 2.00 pm

**Chair:** Councillor Bob Clay

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### Membership:

Councillors: J E Burtonshaw, U C Clay, D W Cole, A M Cook, N J Davies, T J Hennegan, H M Morris and G J Tanner

## AGENDA

Page No.

1 Apologies for Absence.

2 Disclosures of Personal and Prejudicial Interests.

[www.swansea.gov.uk/disclosuresofinterests](http://www.swansea.gov.uk/disclosuresofinterests)

3 Energy Strategy.

*Presentation by Martin Nichols (Interim Director of Place) and Terri Shaw (Energy Manager).*

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**Patrick Arran**  
**Head of Legal and Democratic Services**  
**Tuesday, 3 May 2016**

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**Contact: Democratic Services - 01792 636923**

## **ENERGY STRATEGY EXECUTIVE SUMMARY EXECUTIVE SUMMARY**

In order to achieve Swansea's vision '*to create a safer, greener, smarter, fairer, healthier and richer Swansea*', we must act to

- invest in renewable energy (solar, hydro, wind, tidal, biomass etc.);
- reduce our own rising electricity and gas costs and those of our communities;
- invest in energy saving and storage initiatives (LED; insulation; smart controls; batteries etc.)
- deliver targets on CO2 emissions (£% per annum savings) and reduce our Carbon Reduction Commitment Energy Efficiency Scheme (CRC) charges;'
- meet energy efficiency standards e.g. BREEAM; and
- look at innovative energy generation and saving initiatives, which can create economic benefit, including employment and inward investment in Swansea, building on world class projects like the Tidal Lagoon.
- look to increase local energy security, becoming less reliant on imported fossil fuels and less exposed to higher energy prices in the future.

### **Energy Strategy Aim:**

City & County of Swansea will contribute towards a sustainable low carbon economy by delivering an Energy Strategy that delivers real benefits to society, the economy and the environment and sets out our wider and long term aims for energy across Swansea the place, as well as the council within the context of national and international developments.

### **Energy Strategy Objectives:**

**Objective 1:** To reduce energy consumption and improve the energy efficiency of City & County of Swansea's public building and housing stock portfolio

**Objective 2:** To invest in renewable technologies that will benefit the council and the wider community

**Objective 3:** To secure or facilitate community access to affordable low carbon/renewable energy

**Objective 4:** Explore and maximise commercial opportunities to benefit community wellbeing and/or financial gain

**Objective 5:** Ensure Energy Strategy and action plan are delivered in line with current legislation

Through implementation of the Energy Strategy action plan the City & County of Swansea will mitigate the:

- Effects of Climate change by reducing their carbon emissions
- Risks associated with Energy security by sourcing low carbon/renewable energy sources and eradicating fuel poverty
- Risks associated with increased energy costs

and define what an 'Energy Self-sufficient city means Swansea'

The Council's current activities include:

- on-going HRA investment in our housing stock (new boilers, insulation, cladding, replacement windows etc.) making our tenants homes warm and energy efficient
- the refit of street lamps with lower energy use LED
- a small sample of PV (solar) on schools
- a small number of biomass and CHP projects (schools and Leisure centre)
- mechanical and electrical works across buildings delivering greater energy efficiency
- the establishment of a community group (Swansea Community Energy & Enterprise Scheme, SCEES) to own and run renewable installations in the City & County of Swansea.
- Development of a district heat network for the city centre

All of these projects contribute to reducing the council's carbon footprint and energy costs as well as contributing towards the Corporate Priorities of;

1. Safeguarding vulnerable people
2. Improving pupil attainment
3. Creating a vibrant and viable city and economy
4. Tackling poverty
5. Building sustainable communities

What we propose and what more can we do:

- Support the roll out of Smart Meters in all domestic properties by 2020
- Set up the corporate governance and management structures to deliver our centralised energy strategy across departments. An internal team should take ownership of the energy strategy and meet regularly to drive forward the strategy
- Assess our entire schools' estate for biomass and solar feasibility to generate and provide cheaper energy
- Map our land based assets and assess feasibility for wind, solar and hydro potential
- Assess our buildings for energy saving initiatives and possible PV, biomass boilers, ground source heating etc.
- Explore options to develop heat networks across existing building stock and new developments in the City Centre and across the county
- Identify budgets for investment and access appropriate grants and subsidies
- Set out and timetable a list of potential projects that can be assessed through a small business cases for Council approval
- Look at energy technology capital investments as a driver to:
  - reduce fuel poverty
  - reduce our own energy costs and CO2 emissions across our estate
  - provide economic stimulus and significant jobs
  - build new industries, research and innovation in partnership with the public, private and third sector

# Energy Strategy Action Plan (Draft 1)

## Aims & Objectives

This Energy Strategy sets out the Aims & Objectives of the City & County of Swansea. Leading on from this, an action plan will be developed, detailing the actions that the Authority will need to take to deliver their Energy Strategy.

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The actions that follow are listed under each of the four objectives listed above. Each is given a priority status of High, Medium or Low based on the contribution the project makes towards the delivery of the Energy Strategy Aspirations.

High	High Ability to meet City & County of Swansea aspirations; low financial risk or sound invest to save proposal
Medium	Medium Ability to meet City & County of Swansea aspirations; medium financial risk or sound invest to save proposal
Low	Low Ability to meet City & County of Swansea aspirations; high financial risk or sound invest to save proposal

Objective	No	Project	Action required	Funding available?	By whom	By When	Priority H/M/L
<b>Objective 1:</b> To reduce energy consumption and improve the energy efficiency of City & County of Swansea's asset portfolio	<b>ES1.1</b>	Meet Breeam Excellent in all Government funded schemes	Delivery of already identified QED projects	50/50 match funding WG 21 <sup>st</sup> Century School Program	Andrew Shaw	Annually	High
	<b>ES1.2a</b>	Smart metering in public building assets	Complete implementation of smart metering in prioritised public building assets including communal and sheltered accommodation excluding domestic stock. Approximately 91% complete	Funded from Invest to Save	Terri Shaw	December 2016	High
	<b>ES1.2b</b>	Smart metering in domestic building stock	Explore AMR metering in council domestic stock	Separate Business case to be completed	Terri Shaw	September 2016	High
	<b>ES1.3</b>	Energy Awareness campaign for tenants	Determine the extent of Energy Awareness campaign to tenants for Energy saving and link to fuel poverty	Housing Revenue Budget	Mark Wade	December 2016	High
	<b>ES1.4</b>	Procure energy to ensure security of supply and value for money.	Ensure regular dialogue with framework lead i.e. NPS	N/A	Terri Shaw	Ongoing	Medium
	<b>ES1.5</b>	Delivery of identified priority M&E investment projects in	Via Annual Capital Maintenance Report	Capital Maintenance Budget	Andrew Shaw	Annually 2016	High

		non- domestic properties					
	<b>ES1.6</b>	Delivery of Welsh Housing Quality Standard Capital investment program for domestic properties	Delivery of Welsh Housing Quality Standard	Housing Revenue Account (HRA)	Andrew Shaw	Annually Programme overall completion 2020	<b>High</b>
	<b>ES1.7</b>	Allocation of Capital Maintenance Energy budget	Consider appropriate projects to be funded under the Capital Maintenance Energy budget e.g. CHP	Capital Maintenance Energy Budget	Terri Shaw	Annually April 2016	<b>High</b>
	<b>ES1.8</b>	Maintain an ongoing Energy Awareness Programme for Council employees	To develop on an ongoing basis	Within existing resources	Terri Shaw	Annually	<b>High</b>
	<b>ES1.9</b>	Maintain drive to 3% CRC reduction until 2020 in line with policy commitments and outcome agreement	To maintain all actions originally identified in CRC action plan	Within existing resources and allocated budgets	Terri Shaw	Annually	<b>High</b>
	<b>ES1.10a</b>	Street Lighting Programme	Complete LED programme installation for Street lighting	Existing Capital Budget	Jonathan Hurley	Ongoing	<b>High</b>
	<b>ES1.10b</b>	Other street lighting energy efficiency measures	Explore other opportunities for energy saving measures in relation to street signs/bollards and illuminated street furniture	To be determined by Invest to save	Jonathan Hurley	Ongoing to be determined on a case by case basis	<b>Medium</b>
	<b>ES1.11</b>	Maximise energy efficiency of fleet vehicles	Explore options available for replacement of fleet vehicles with energy efficient alternatives such as electric and hybrid vehicles	Within existing resources	Mark Barrow	March 2017	<b>Medium</b>
	<b>ES1.12</b>	Publishing Display Energy Certificates for the Councils public buildings over 250 square meters	All current DEC's published and displayed for public viewing in line with requirements of legislation.	Existing Capital/Revenue Budget	Terri Shaw	As required by legislation	<b>High</b>
C/F from CRC Action Plan	<b>C.P3.10</b>	Develop TEAM Sigma "Web module" for all Council premises and budget managers to remotely access	Complete web module development and set up independent password access for premises and budget managers	Capital Maintenance Energy Budget	Terri Shaw	December 2016	<b>High</b>

		energy cost and consumption reports					
<b>Objective 2:</b> To invest in renewable technologies that will benefit the council and the wider community	<b>ES2.1</b>	Explore suitability of council owned land for renewable energy generation such as solar and wind farms	Link in with local partnership with regard to carrying out feasibility study	Green Growth Wales	Terri Shaw	March 2017	Low
	<b>ES2.1a</b>		Explore and trial the use of battery storage on buildings already fitted with PV	Invest to save on a case by case basis	Terri Shaw	March 2017	Low
	<b>ES2.2</b>	Opportunities for Biomass installation in Council owned Building assets	Feasibility Study to be carried out by CB&PS Technical Services on a case by case basis as and when heating plant is being renewed	Capital Maintenance Energy Budget	Barry Morgan	Annually	Low
	<b>ES2.3a</b>	Explore interaction between energy and waste work streams to develop opportunities and project delivery	Methane from Tir John landfill site utilised to generate electricity until either gas yields are no longer viable or a more advantageous treatment process is developed.	Waste Budget	Chris Howell/Mathew Perkins	2020	Low
	<b>ES2.3b</b>		Swansea council currently has a regional Anaerobic Digestion contract in place on an interim basis for treatment of food waste. A new long-term regional contract will be in place by 2017.	Waste Budget	Chris Howell/Mathew Perkins	2017	Low
	<b>ES2.3c</b>		Swansea will continue to pursue a regional EfW treatment contract but should this not prove viable will look to procure a stand-alone contract. An EfW contract is expected to start in 2020 when the Tir John Landfill site closes	Waste Budget	Chris Howell/Mathew Perkins	2020	Low
	<b>ES2.4a</b>	Explore suitability of all school buildings for	Complete current programme of PV systems within School	CCoS Capital Budget	Andrew Shaw	Annually	



		installation of solar photovoltaic infrastructure	assets (14 identified as suitable)				High
	<b>ES2.4b</b>		Explore future opportunities on a case by case basis depending upon infrastructure and government subsidies	Invest to save on a case by case basis	Andrew Shaw	Case by Case basis	Low
<b>Objective 3:</b> To secure or facilitate community access to affordable low carbon/renewable energy	<b>ES3.1</b>	SCEES	Support, develop and deliver SCEES project in Swansea	Approximately £88k is required to take the project forward, but this will be the responsibility of the CBS to raise. Grants, loans and support have been identified via a WG scheme called Local Energy.	Tanya Nash Terri Shaw Chris Small	September 2016	High
	<b>ES3.2</b>	District Heating Schemes	Support feasibility study to develop and deliver District Heating Schemes	£75k has been raised from HNDU to complete feasibility work. However additional resource will need to be identified for professional fees for legal and commercial advice in setting up the business if the feasibility study is positive. Funding may be available from HNDU or WG.	Tanya Nash Terri Shaw Chris Small Huw Mowbray	March 2017	Low
	<b>ES3.3</b>	Zero Carbon Zones (ZCZ)	The City will support and participate in the development of Zero Carbon Zones (ZCZ) to support WG'S demonstrator projects for SMART living under their Green Growth	Funding for Phase one has been provided and coordinated by WG. As yet WG have not identified resource	Tanya Nash Terri Shaw	May 2016	Low

			Programme	for Phase 2			
	<b>ES3.4a</b>	More Homes	Develop Pilot scheme which will explore cost benefit analysis of alternative build technology i.e. pasivhaus and solcer technology (Initially 32 units being delivered)	Housing Revenue Account	Andrew Shaw	First properties pilot projects to be delivered by 2017	High
	<b>ES3.4b</b>		Determine long term extent of energy efficiency of Housing properties	Housing Revenue Account	Dave Evans	March 2017	Medium
<b>Objective 4:</b> Explore and maximise commercial opportunities to benefit community wellbeing and/or financial gain	<b>ES4.1</b>	Feasibility of setting up our own energy company (either independently or in collaboration with another provider)	Develop options appraisals	Existing Resources	Chris Williams	1st July	Low
	<b>ES4.2</b>	Feasibility of buying options	Ensuring council is an integral partners in all major developments that could impact on this strategy e.g. involvement in Tidal Lagoon, Community initiatives etc.	No budget	Director of Place	Case by case basis	Medium
	<b>ES4.3</b>	Explore option for installation of Electric Car charging infrastructure for vehicles	Develop options paper	Existing Resources	Chris Williams / Terri Shaw	1 <sup>st</sup> July	Low
<b>Objective 5:</b> Ensure Energy Strategy & Action plan are delivered in line with current legislation	<b>ES5.1</b>	Review of Energy Action plan	Monitor/Review of Energy Action Plan at directorate level via P&FM process and feedback progress to Energy Manager to ensure the evolving Energy strategy is driven forward and any risks/issues are mitigated as	N/A	HoS	Quarterly	High

			they occur.				
	<b>ES5.2</b>	Update Action plan	Action plan update following progress reports from relevant HoS	N/A	Terri Shaw	Quarterly	<b>High</b>
	<b>ES5.3</b>	Energy Strategy	The Strategy will be reviewed annually to account for operational changes, new legislation and technology, amongst other things that may influence the roll out of this action plan	N/A	MN/TS/Cllr Lewis	Annually	<b>High</b>
	<b>ES5.4</b>	Explore the links between the energy strategy and the council responsibility to comply with the requirements of the Future Generations Act 2015 in their decision making process	Relevant tasks to be allocated by Cabinet Advisory Committee	N/A	Cabinet Advisory Committee Members	June/August 2016	<b>High</b>
	<b>ES5.5</b>	Define what 'An Energy Self-sufficient City' means for Swansea.	To be determined by Executive Board and Members prior to the Strategy being agreed by cabinet	N/A	Cabinet Advisory Committee Members	June/August 2016	<b>High</b>
	<b>ES5.6</b>	Energy Standards	Explore what accreditation standards are available to enable the council to obtain independent verification of the good work being carried out by the council and the high quality of service being delivered	N/A	Terri Shaw	September 2016	<b>High</b>