

Argyfwng Hinsawdd ac Ecolegol

Cyfarfod Cyhoeddus

*Cyngor Di-Garbon Net
ac Ecolegol
Gadarnhaol 2030*

Climate and Ecological Emergency

Public Meeting

***Net Carbon Zero &
Ecologically Positive
Council 2030***

Croeso!

Welcome!

Gweithio gyda'n gilydd er lles dyfodol Sir Ddinbych

Cynllun Corfforaethol 2017-2022

sir ddinbych
denbighshire
County Council

Working together for the future of Denbighshire

Corporate Plan 2017-2022

sir ddinbych
denbighshire
County Council

Amgylchedd

Deniadol ac wedi ei warchod, gan gefnogi lles a ffyiant economaidd

Nod Sir Ddinbych yw sicrhau fod yr amgylchedd yn ddeniadol ac yn cael ei ddiogelu, ond hefyd yn cefnogi lles cymunedol a ffyiant economaidd. I gyflawni hyn, byddwn yn lleihau ein hól troed carbon a chnyddu defnydd o anodau adnewydadwy ledled y sir. Rydym hefyd yn bwrddu cnyddu gwirth biomrywlaeth y sir drwy ddogelog rhywogaethau a chynefinoedd agored i newid er lles bywyd gwylt a'r bobl sy'n byw ac yn ymwdol â Sir Ddinbych. Ynglyd â hyn, nod Sir Ddinbych yw codi proffil y sir fel lle i gynnal digwyddiadau awyr agored sy'n manteisio ar ein hamgylchedd unigryw.



Er mwyn cyflawni hyn byddwn yn:

- Lleihau alryriadau carbon oasedu'r Cyngor gan o leiaf 15% erbyn 2022.
- Gwella effeithlonwyd ynni tai'r Cyngor.
- Cynyddu darpariaeth ynni adnewyddadwy ar draws y sir.
- Lleihau nifer yr eiddo mewn pergl y llofogydd yn Sir Ddinbych.
- Cynyddu safon biomrywlaeth cynfeinoedd phwysig a rhywogaethau ar draws y sir.
- Codi proffil y sir fel lleoliad i ymwdol ag o, er mwyn manteisio ar botensial economaidd Sir Ddinbych.

Os byddwn yn llwyddo, disgwyliwn weld:

- Gweliannau mewnw sgoriau ynni tai'r Cyngor, gan gyflawni sgôr ynni 'Rhagorol' ym mhob cartref newydd.
- Dyblu'r ynni rydym yn ei ddefnyddio yn adeiladau'r cyngor sy'n dôf i fynonellau adnewydadwy.
- Lleihau nifer yr eiddo mewn pergl y llofogydd yn Sir Ddinbych.
- Cynyddu niferoedd y rugiar ddu, môr-wenoliaid bach, gwiberod, madfallod a tywod a gwennol.
- 18,000 yn rhagor o goed ar draws y Rhyl a Dinbych.
- Cynydd yng ngwerth gwariant twristiaeth yn y sir.

Environment

Attractive and protected, supporting well-being and economic prosperity

Denbighshire aims to ensure that the environment is both attractive and protected, but also supports community well-being and economic prosperity. To achieve this we will reduce our carbon impact and increase the use of renewables throughout the county. We also plan to increase the biodiversity value of the county by protecting vulnerable species and habitats for the benefit of both wildlife and people who live and visit Denbighshire. Alongside this, Denbighshire aims to raise the profile of the county as a place to hold outdoor events that capitalise on our unique environment.



To achieve this we will:

- Reduce carbon emissions from Council assets by at least 15% by 2022.
- Improve the energy efficiency of Council houses.
- Increase renewable energy provision across the county.
- Reduce the number of properties at risk of flooding in Denbighshire.
- Increase the biodiversity quality of important habitats and species across the county.
- Raise the profile of the county as a location to visit, in order to capitalise on Denbighshire's economic potential.

If we are successful we expect to see:

- Improvements in Council housing energy ratings, achieving an 'Excellent' energy rating for all new builds.
- Double the amount of energy we use in our council buildings that comes from renewable sources.
- A reduction in the number of properties at risk of flooding in Denbighshire.
- Growing numbers of black grouse, little terns, adders, sand lizards & bees.
- 18,000 more trees across Rhyl and Denbigh.
- An increase in the value of tourism spend in the county.

Cyngor Di-garbon Net ac Ecolegol Gadarnhaol 2030

Crynodeb o'r cyflwyniadau

Thema 1 – Lleihau Carbon

Cyflwyniad : Cyflwyno'r testun o 'leihau carbon'	Drosodd i chi: 45 munud o Gwestiynau, Cyfraniadau, Syniadau
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Thema 2 – Amsugno Carbon a Gwella Bioamrywiaeth

Cyflwyniad: Cyflwyno testun 'Amsugno Carbon a Gwella Bioamrywiaeth'	Drosodd i chi: 25 munud o Gwestiynau, Cyfraniadau, Syniadau
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Diwedd

Net Carbon Zero and Ecologically Positive Council 2030

Summary presentation

Theme 1- Carbon Reduction

Presentation: Introducing the topic 'Carbon Reduction'	Over to you: 45 mins of your Questions, Contributions, Ideas
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Theme 2- Carbon Absorption and Biodiversity improvement

Presentation: Introducing the topic 'Carbon Absorption and Biodiversity improvement'	Over to you: 25 mins of your Questions, Contributions, Ideas
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Close

CSDd yn datgan Argyfwng Hinsawdd ac Ecolegol (Gorffennaf 2019)

A Notice of Motion put forward by Councillors Graham Timms, Mabon ap Gwynfor and Joseph Welch for consideration by Council:

"We are facing a Climate and Ecological Emergency

The global consensus is that climate change is causing a significant risk to our health, economy, and environment and is threatening the well-being of future generations.

Scientific evidence clearly tells us that we have fewer than 11 years to prevent catastrophic climate change. Furthermore, this year we have the clearest evidence ever that biodiversity loss is increasing and that this threatens the planet's life-support systems upon which we all depend.

Nature is in serious decline, our biodiversity and soils are in decline or are being degraded. We are sustaining our own lives, whilst reducing the ability of future generations to sustain theirs. This is not an acceptable legacy to leave our children and grandchildren.

The future of humankind depends on today's brave and enterprising leaders to make the necessary changes to secure the environment, for our own future and the future of generations yet to come.

Denbighshire County Council will

- Immediately declare a Climate and Ecological Emergency.
- Commit to making the authority net carbon zero by 2030 at the latest.
- Set up a task and finish group to draw up a clear plan within 6 months to achieve the above, including ways to enhance biodiversity in Denbighshire.
- Call on the Welsh Government and UK Government to provide assistance and resources to enable us to reduce greenhouse gas emissions and enhance biodiversity.
- Work with partners across the public, private and third sector to help solve this climate and ecological emergency."

DCC declares a Climate and Ecological Emergency (July 2019)



Cyngor Di - Garbon Net erbyn 2030

Cyfanswm y
Carbon
wedi'i allyrru
fel Cyngor,
Allyriadau
Cwmpas 1, 2
a 3

Cyfartal neu llai na



Cyfanswm y
carbon sy'n
cael ei
amsugno gan
gynlluniau
rheoli coed,
cynefinoedd
a thir ar dir
sy'n eiddo i'r
Cyngor

Net Carbon Zero Council by 2030

Total Carbon
Emitted as a
Council
Scope 1, 2
and 3
emissions

Equal or less than



Total carbon
absorbed by
trees, habitat
& land
management
regimes on
Council
owned land

2020/21 – 2029/30

2020/21 – 2029/30

O ble y mae angen i ni leihau ein carbon?

Defnydd ynni yn ein hadeiladau (gwres a thrydan)	Defnydd o danwydd yn fflyd y cyngor	Defnydd o danwydd mewn teithiau busnes
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Defnydd o danwydd gan staff yn cymudo	Gwastraff sy'n cael ei gynhyrchu gan y Cyngor	Ein cadwyn gyflenwi (yr hyn yr ydym yn ei brynu)
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	Asedau sy'n cael eu prydlesu i ni neu eu prydlesu i eraill	
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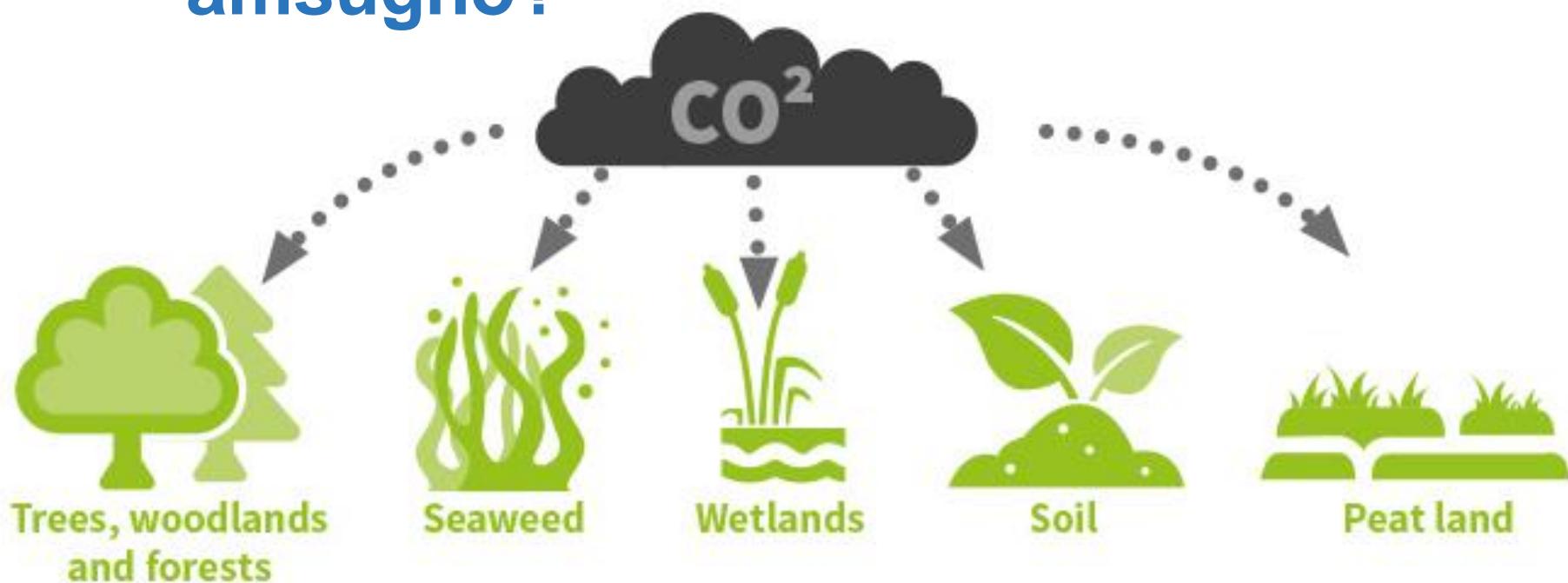
From where do we need to reduce our carbon?

Energy use in our buildings (heat and electricity)	Fuel use in our council fleet	Fuel use in business travel
Fuel use in staff commuting	Waste generated by the Council	Our supply chain (what we buy)

	Assets leased to us or leased to others	
--	--	--

**Beth sydd angen i ni
ei amddiffyn a'i
gynyddu i gynyddu'r
carbon sy'n cael ei
amsugno?**

**What do we need to
protect and increase
to increase our
carbon absorption?**



Cyngor ecolegol gadarnhaol erbyn 2030

Ecologically Positive Council by 2030

Gwneud
dim niwed

Lle na ellir
osgoi niwed
bod y
bioamrywia
eth yn cael
ei adael
mewn gwell
cyflwr na
chyn i ni

Gwella'n
rhagweithio
I gan greu
ecosistema
u amrywiol,
wedi'u
cysylltu, y
gellir eu
haddasu ac
sy'n wydn

Do no harm

Where
harm is
unavoidabl
e
biodiversity
is left in a
better state
than when
we started

Actively
enhance
creating
diverse,
connected,
adaptable
and
resilient
ecosystems

Yr holl brosiectau, gweithrediadau ac
ymyraethau sy'n cael eu cyflawni fel sefydliad
2020/21 – 2029/30

All projects, operations and interventions
undertaken as an organisation
2020/21 – 2029/30

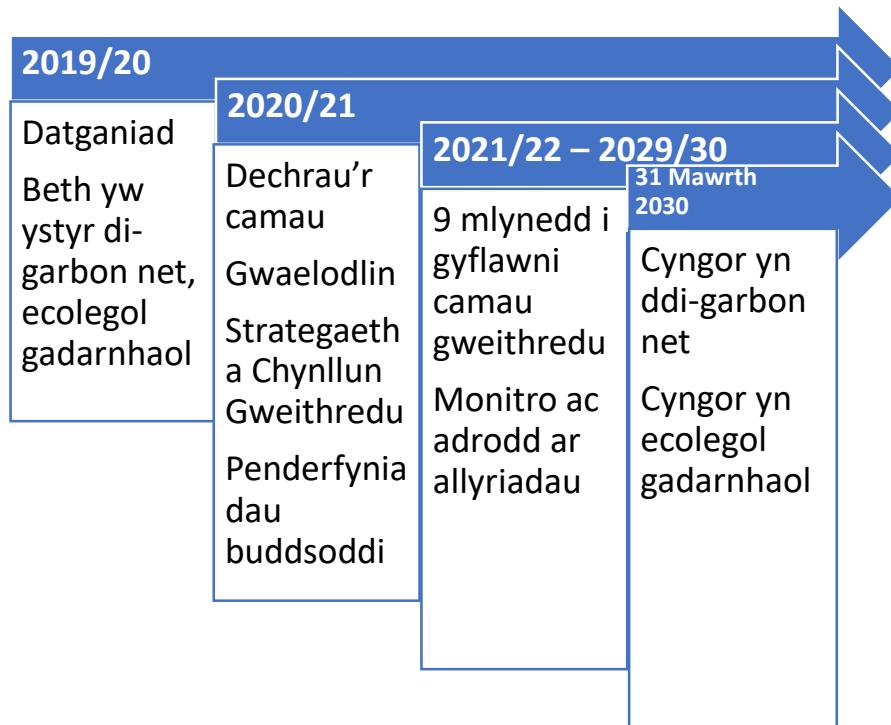
**Mae ecosystemau
 gwydn yn cynyddu
 bioamrywiaeth ac yn...**

AMRYWIOL	WEDI'U CYSYLLTU
YN FAWR O RAN MAINT	MEWN CYFLWR IACH
YN GALLU ADDASU	

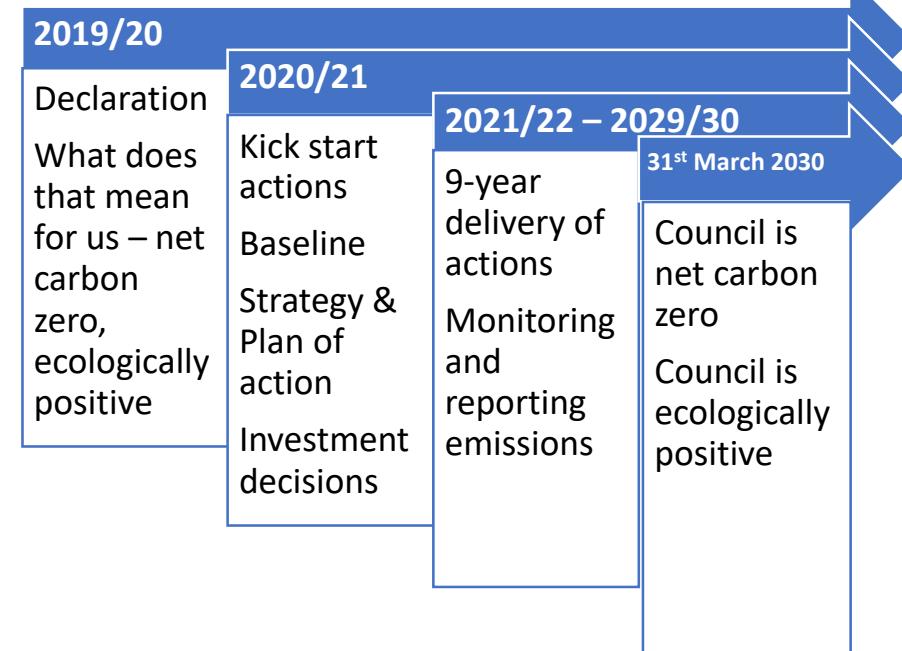
**Resilient ecosystems
 increase biodiversity
 and are...**

DIVERSE	CONNECTED
BIG IN SCALE & EXTENT	IN A HEALTHY CONDITION
ADAPTABLE	

Beth sy'n digwydd nesaf?



What happens next?



LLEIHAU CARBON CARBON REDUCTION

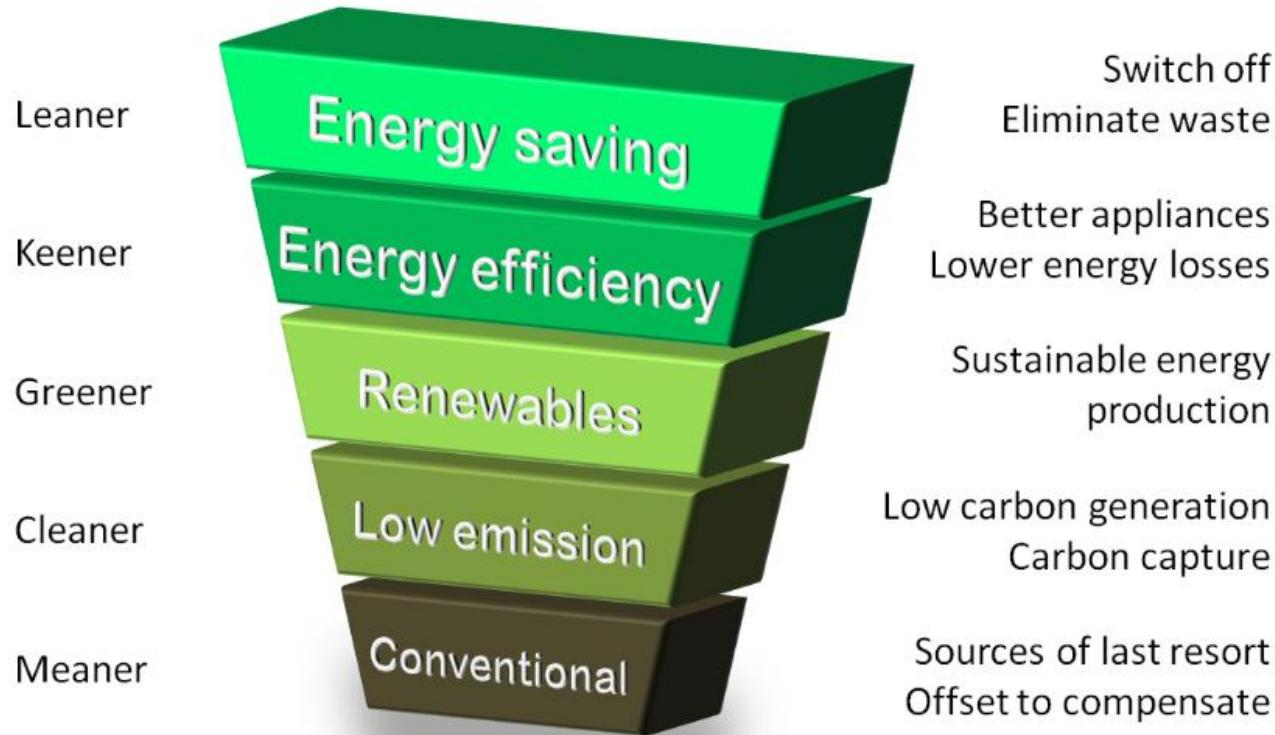


Martyn Smith

**Swyddog Prosiect Ynni
Energy Project Officer**

Beth sy'n arbed carbon

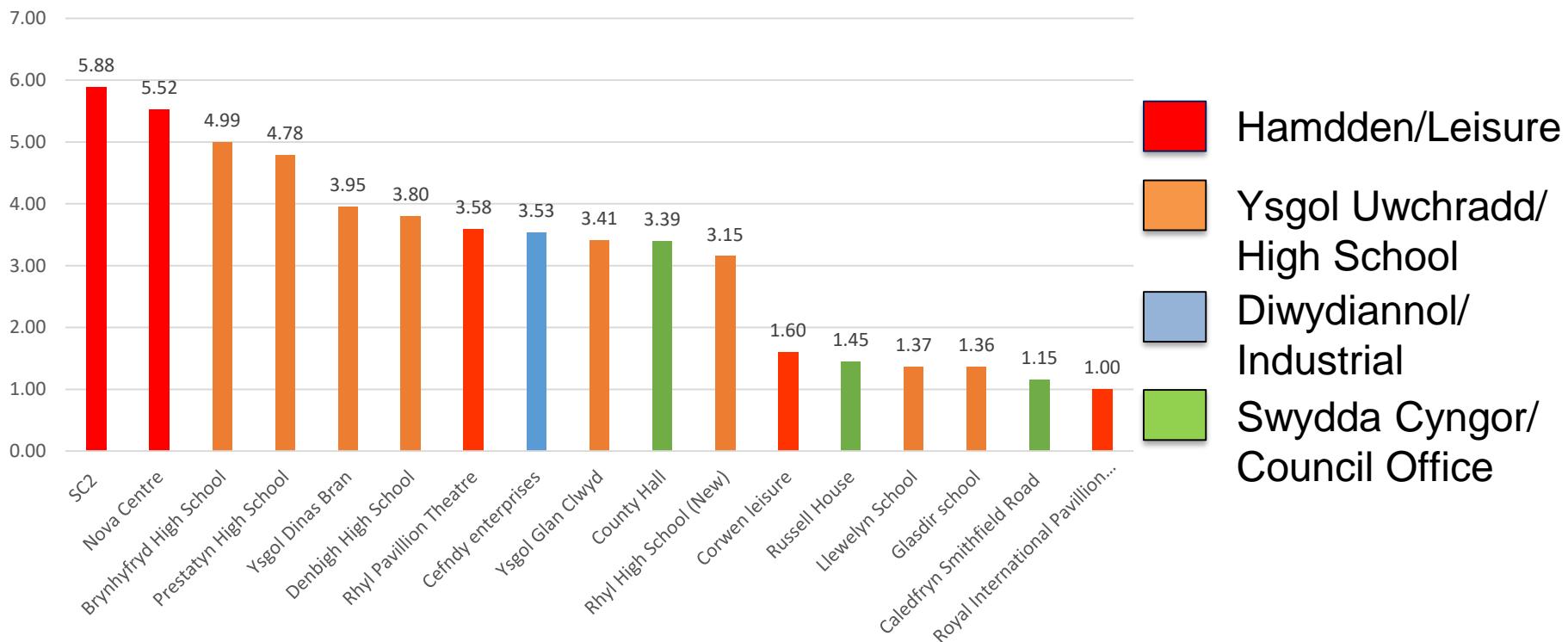
What saves carbon



Carbon o'n hadeiladau

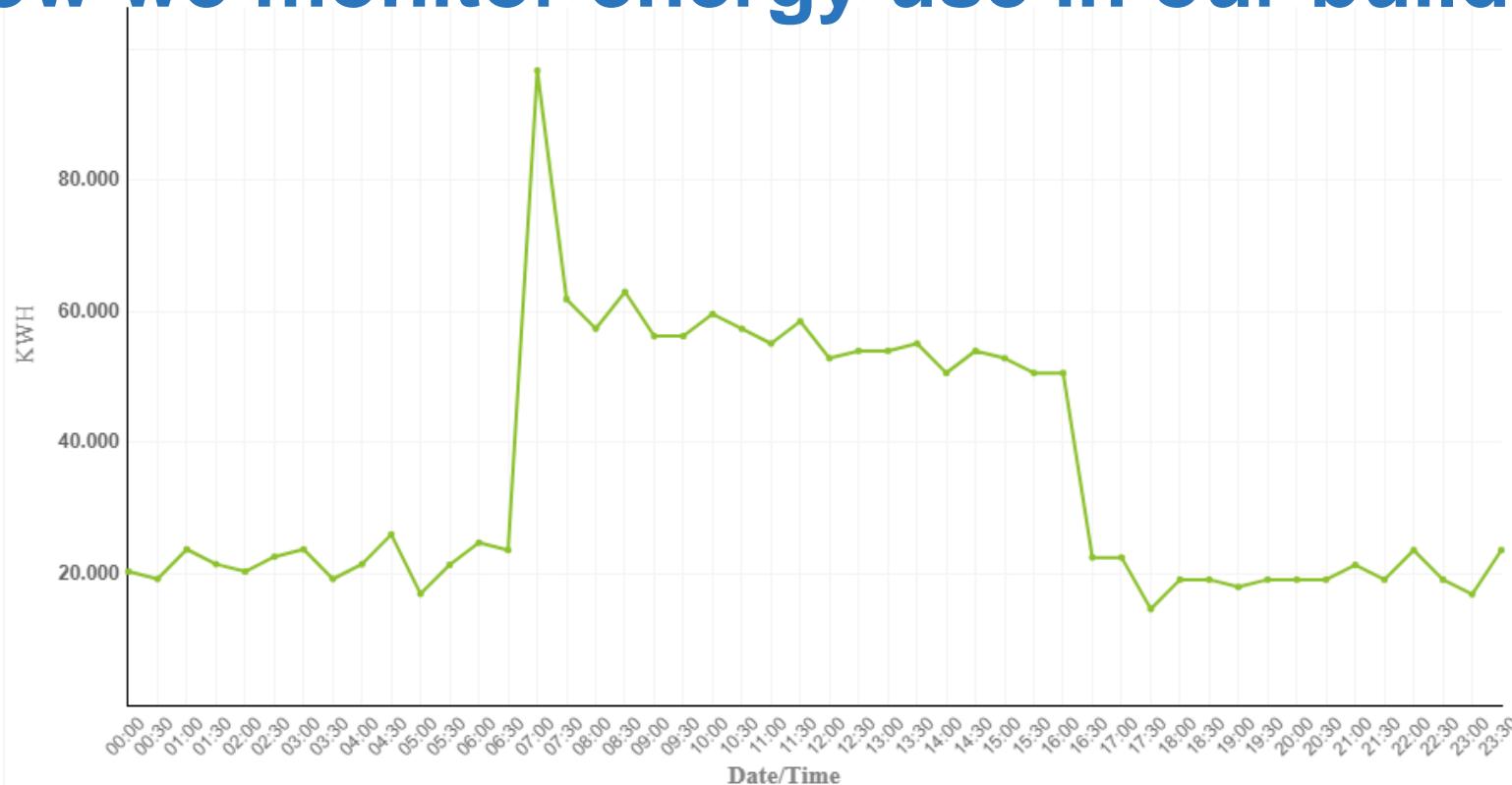
Carbon from our buildings

% of Total DCC carbon



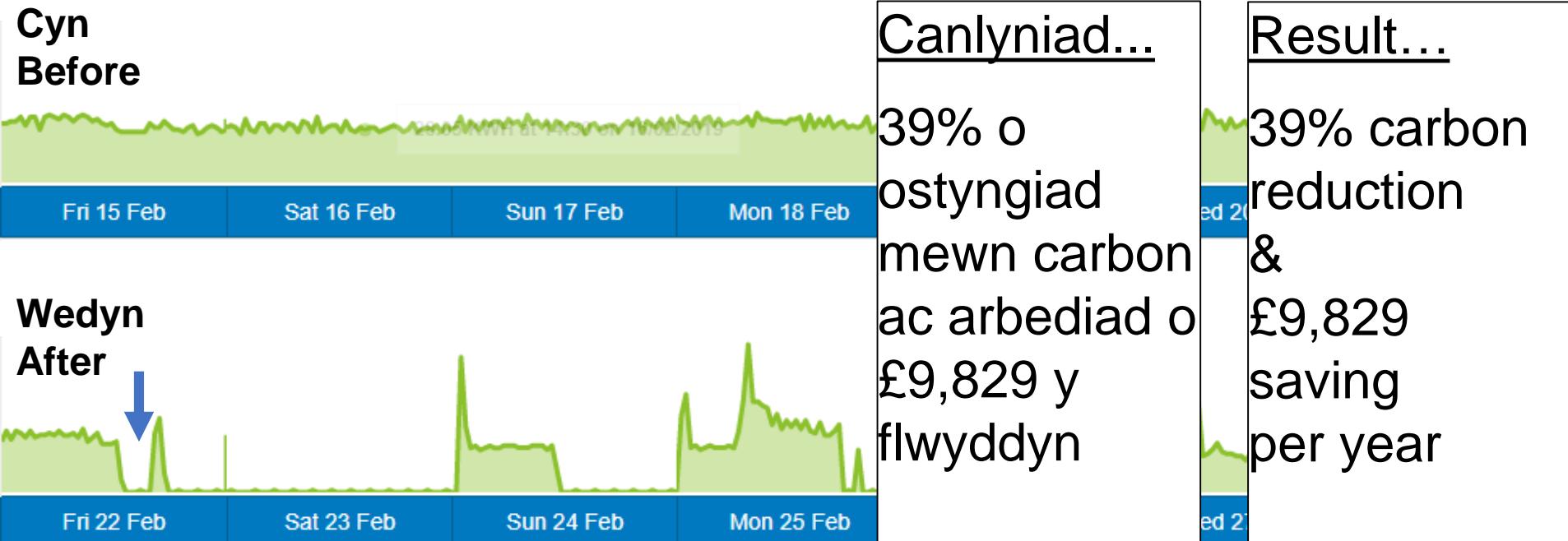
Sut yr ydym yn monitro'r defnydd o ynni yn ein hadeiladau

How we monitor energy use in our building



Enghraifft o arbed carbon drwy'r defnydd o nwy yn ein swyddfeydd

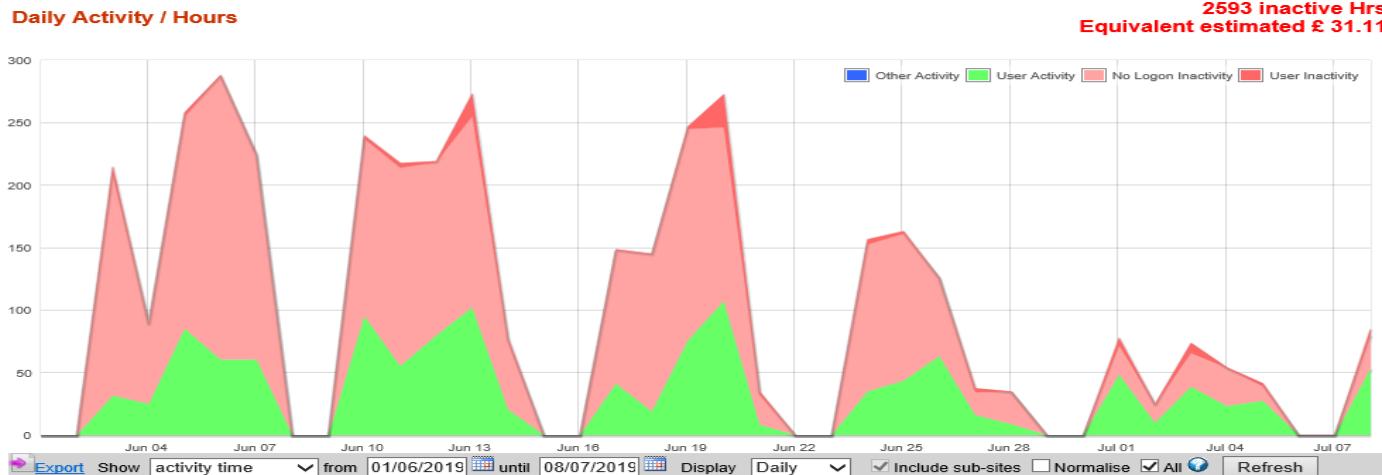
An example of saving carbon from gas use in our offices



Enghraifft o arbed carbon o'n hysgolion - trydan

Saving carbon from our schools - electric

Daily Activity / Hours



Computers

Computer	Version	Last Status	Inactive %	Inactive Hours	Active Hours	No Logon	Inactive User	User	Other
YB-WKS-C13-23	5.4.0.5932	09/07/2019	88.71	27.50	3.50			24.00	
YB-WKS-C13-17	5.4.0.5932	09/07/2019	49.30	8.75	9.00	2.00	6.00	1.00	
YB-WKS-C13-01	5.4.0.5932	08/07/2019	56.60	7.50	5.75	1.00	4.00	0.75	
YB-WKS-C13-02	5.4.0.5932	09/07/2019	52.00	6.50	6.00	1.00	5.00	0.50	
YB-WKS-C13-13	5.4.0.5932	09/07/2019	32.86	5.75	11.75	3.00	8.00	0.75	
YB-WKS-C13-32	5.4.0.5932	09/07/2019	46.67	5.25	6.00	1.00	5.00	0.25	
YB-WKS-C13-19	5.4.0.5932	09/07/2019	30.88	5.25	11.75	2.00	9.00	0.75	
YB-WKS-C13-35	5.4.0.5932	08/07/2019	35.71	5.00	9.00	1.00	8.00	0.71	
YB-WKS-C13-28	5.4.0.5932	09/07/2019	46.51	5.00	5.75	1.00	4.75	0.75	
YB-WKS-C13-24	5.4.0.5932	09/07/2019	45.24	4.75	5.75	1.00	4.75	0.24	

Export Show worst 10 computers from 02/07/2019 until 09/07/2019 Include computers in sub-sites Refresh

Rheolaeth ynni
cyfrifiaduron
ysgol uwchradd

High school
computer
energy
management

Lleihau carbon o dai presennol sy'n eiddo i'r cyngor

Holl dai CSDd yn
derbyn "gradd C" yr
EPC erbyn 2022.

Reducing carbon from existing Council owned housing

All DCC houses to be
“C rated” on the EPC
by 2022.



110 o dai gyda
insiwleiddiad ar
waliau allanol –
Dinbych Uchaf

110 Houses
external wall
insulation Upper
Denbigh



Pympiau
gwresogi
ffynhonnell aer yn
cael eu gosod i
dai cyngor heb
nwy

Air source heat
pumps being
installed to off gas
council houses

Lleihau carbon o dai newydd sy'n eiddo i'r Cyngor

Mae'r holl dai cyngor
newydd yr ydym yn eu
hadeiladu yn cael eu
hadeiladu i safon
“Passivhaus” a bydd
ganddynt radd A yr EPC.

Reducing carbon from new Council owned housing

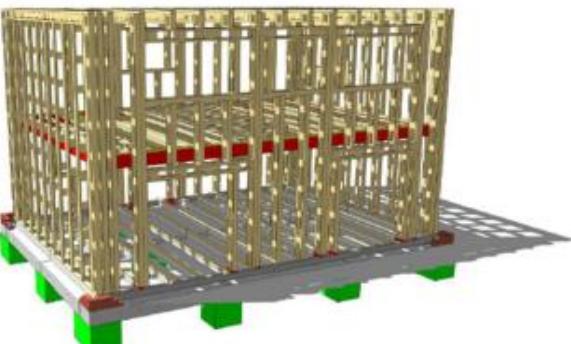
All council houses we are
building are being built to
“Passivhaus” standard and
will have EPC rating A.



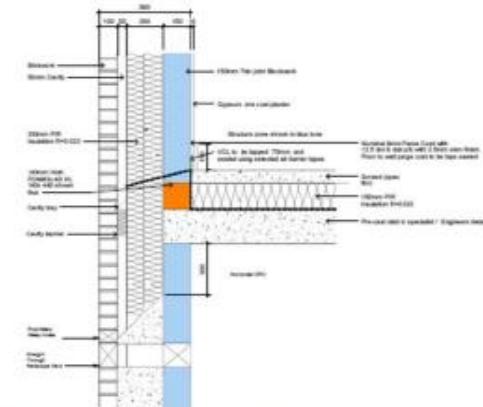
Rydym yn datblygu 3 math gwahanol o dai carbon isel (effeithlon o ran ynni)



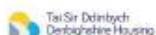
Denbigh Housing
2/4 Bed House Type 1
North East Entrance



Denbigh Passivhaus – 22 units – social housing. “Stick frame” modular timber construction.



Prestatyn Passivhaus – 4 units – sheltered accommodation. Masonry panel construction.



The Dell, Prestatyn - Ffurtau hygrych newydd arfaethedig.
The Dell, Prestatyn - Proposed new accessible apartments.



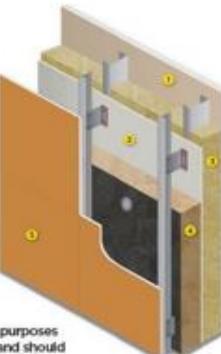
www.denbighshirehousing.co.uk/thedell [Facebook](https://www.facebook.com/denbighshirehousing) [Twitter](https://www.twitter.com/denbighshirehousing) [Instagram](https://www.instagram.com/denbighshirehousing/)

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denbighshire
Gogledd Cymru

Rainscreen cladding system

Detail

- 1 2 x 12.5mm plasterboard
- 2 12.5mm weathertight sheathing board
- 3 Steel Frame Infill Batt
- 4 Polterm Max Plus
- 5 Rainscreen façade



The building detail is for illustrative purposes only. It does not constitute advice and should not be relied upon.

We are developing 3 different types of low carbon (energy efficient) houses.

Prestatyn – Steel Frame, ‘rain-screen’ clad high energy performance (A Rated on EPC) apartments.



Lleihau carbon o gerbydau'r Cyngor

Cerbydau Trydan

- Gosod pwyntiau gwefru Cerbydau Trydan
- Prynú Cerbydau Trydan
- Polisi newydd y fflyd “cerbydau trydan yn gyntaf”

Reducing carbon from our Council vehicles

Electric Vehicles

- Installed EV charging points,
- purchasing EV's.
- New fleet policy “electric vehicles first”

Cynhyrchu ynni adnewyddadwy ar y safle

Generating renewable energy on site

Table 4: The following sites have had renewable energy (solar PV) installed in 2019.

Sites	Date	Estimated proposed capacity KW
New Llanfair school	May 2019	12.15
Ysgol Carreg Emlyn, Clocaenog	May 2019	13.5
Christ the word, Rhyl	Summer 2019	41.25
	Total	66.9

Prynu ynni adnewyddadwy

Buying renewable energy

Denbighshire County Council

Supply Period: 01 October 2019 - 30 September 2020

Electricity Source	CO ₂ /kWh emissions	Consumption
A	Renewable	0g
B	Low Carbon/CCS	<200g
C	Gas CHP	<300g
D	CCGT Gas	<400g
E	UK Average/Gas	<600g
F	Coal/Oil	<800g
G	Coal	>800g

Denbighshire County Council

has chosen to use the npower Business Renewable product for its supply of electricity. This meets the quality criteria of the GHG Protocol (2015) for reporting zero carbon emissions and has been independently assured by Carbon Clear.

Rydym wedi newid i drydan adnewyddadwy gydag ardystiad REGO.

We have switched to REGO certified renewable electricity.

Gwaith Presennol

Cam gweithredu ‘dechrau’ gwres adnewyddadwy

- Cynllun peilot ysgolion heb nwy - asesu 3 safle ar gyfer gwres adnewyddadwy.
- Pympiau gwres ffynhonnell o'r tir yw'r mwyaf dichonadwy – 4 safle yn cael eu hasesu ar gyfer model cyllid a hyfywedd technegol.

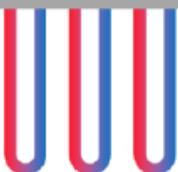
Current work

Renewable heat “kick start” action

- Off gas schools pilot – assessing 3 sites for renewable heat.
- Ground source heat pumps most viable- 4 sites being assess for technical viability and finance model.



GROUND SOURCE HEAT PUMPS (GSHP)



Description: Like air source heat pumps, this technology uses electricity to provide heating and/or cooling for buildings. Ground source heat pumps use the ground as the heat exchanger as opposed to the air

LLEIHAU CARBON

CWESTIYNAU

Codwch eich llaw i ofyn
cwestiwn

CARBON REDUCTION

QUESTION TIME

Please raise your hand to
ask a question

AMSUGNO CARBON A GWELLA BIOAMRYWIAETH

CARBON ABSORPTION AND BIODIVERSITY IMPROVEMENT



Joel Walley
Swyddog Ecoleg/ Ecology Officer



Biodiversity Duty Delivery Plan

Denbighshire County Council

As a local authority we now have a statutory duty to function sustainably and lead by example when it comes to protecting and enhancing our natural environment. To meet the challenge of reversing the decline in biodiversity it is essential that we act now. As a local authority we must ensure that we meet the needs of the present, without compromising the ability of future generations to meet their own needs.

This document is Denbighshire County Council's biodiversity duty delivery plan which outlines how, as an organisation, we plan to address the biodiversity duty under Section 6 of the Environment (Wales) Act 2016 and consequently help achieve the Well-being and Nature Recovery Plan objectives over the period 2016-19.



Arferion da presennol yn Sir Ddinbych

- Mae'r Amgylchedd yn flaenoriaeth gorfforaethol ar gyfer Cyngor Sir Ddinbych.
- Mae gennym Swyddog Bioamrywiaeth newydd i fynd i'r afael â materion o ran capaciti.
- Rydym wedi arwyddo cytundeb lefel gwasanaeth gyda Chofnod i dderbyn mynediad at ddata amgylcheddol
- Mae gennym dargedau penodol ar gyfer **madfallod y tywod, grugieir du, gwiberod, gwenoliaid y môr a gwenyn**.

Current Good Practice in Denbighshire

- The Environment is a corporate priority for Denbighshire County Council
- We have a new Biodiversity Officer to address capacity issues.
- We signed a service level agreement with Cofnod to gain access to environmental data.
- Specific targets set out for **sand lizards, black grouse, adders, little terns and bees**.

The Daily Telegraph

Roadside nature reserves to save the misunderstood British adder

By Elliott Kime

ADDERS are to be given protected roadside habitats in an attempt to boost numbers as conservationists insist they pose "little risk" to the public.

Denbighshire County Council is believed to be the first local authority in the UK to unveil plans to use roadside nature reserves to help preserve the country's only venomous snake.

The measures are being taken amid fears that adders are vanishing with the species believed to be extinct in Nottinghamshire and Warwickshire, and endangered in Oxfordshire, Buckinghamshire, Hertfordshire and London.

A loss of natural habitat and human "persecution" has damaged the adder population, experts have said.

In North Wales, one of the reptile's last remaining strongholds, work has started to create a 150-metre-long stretch of roadside verge in Hiraethog, where snakes will be protected under a "specific habitat management plan".

The council, which already operates roadside reserves for wild plants and flowers, said it hoped its approach would be rolled out across the country.

However, organisers admitted they faced a battle to change public perceptions about the snakes, which they said

12

The number of deaths from adder bites in the UK, according to the Wildwood Trust. The last fatality was in Scotland, in 1975

often came under attack from people scared of their venom.

Joel Walley, the project's architect, said people killed adders, which are protected by law, "out of fear".

He said: "They are fascinating animals, with complex ecology and behaviours, and they are not dangerous unless they feel threatened. People are

still scared of them and harm them, traditional lands are lost and they have quite a slow reproductive cycle."

Mr Walley, an ecology officer at the council, blamed the adder's image problem on representations of snakes in films and TV programmes, citing Indiana Jones as an example.

"[Snakes] are big scary things in the media. People think they are sort of slimy but they are really beautiful things," he said.

Last month, the Amphibian and Reptile Groups of the UK declared a "whole generation's attitude" needed to change to prevent adders from extinction, as it hosted a series of workshops with children in Pembrokeshire.

Angela Julian, national co-ordinator, said adders were "generally not in a good state in Britain", because of the "historic persecution" of habitats.

According to the Wildwood Trust, 12 people have died after adder bites in Britain, with the last fatality understood to have been in Scotland in 1975.

Adders to be given new protected habitat as conservationists admit battle to overturn image problem



Conservationists have admitted that adders have an image problem CREDIT: MARK HUMPHREY

Adders are to be given protected habitats by roadides in an attempt to boost numbers as conservationists insist they pose 'little risk' to the public.

Denbighshire County Council is believed to be the first local authority in the UK to unveil plans to use roadside nature reserves to help preserve Britain's only venomous snake.

Polisi Ymylon

Verge Policy

- Torri'r holl ymylon ffyrdd nad ydynt yn briffyrdd unwaith y flwyddyn, ar ôl 1 Awst, fel rhan o "Dorri Bioamrywiaeth".
- 78% o'r rhwydwaith ymylon yn rhan o'r gwaith torri hwn
- 1,821km o ymylon ffyrdd yn awr yn cael eu torri er budd bioamrywiaeth

- Cut all non-principal roads once per year, after the 1st August, as part of a "Biodiversity Cut"
- 78% of the verge network included in this cut
- 1,821km of road verge now cut to benefit biodiversity



Cynllun Rheoli Cynefin Dolydd Blodau Gwyllt Rhuddlan



Rhuddlan Wildflower Meadow Habitat Management Plan



figure 1 – Rhuddlan Wildflower verge habitats, divided into management areas.



Plannu Coed

- Ceisio plannu 18,000 o goed 2017-2022.
- Gweithio gyda'r gymuned leol a sefydliadau partner i blannu oddeutu 2,000 o goed mewn 3 diwrnod, Chwefror 2020.



Tree Planting

- Aim to plant 18,000 trees 2017-2022.
- Worked with local community and partner organisations to plant nearly 2,000 trees in 3 days, Feb 2020.



	1990	2000	2005	2010	2015
<i>million tonnes of carbon dioxide equivalent</i>					
Carbon in above-ground biomass	360	471	527	583	639
Carbon in below-ground biomass	129	170	190	210	230
Carbon in dead wood	9	10	10	10	10
Carbon in litter	165	175	179	182	187
Soil carbon ¹	2366	2533	2594	2629	2715
Total forest carbon	3029	3359	3500	3614	3781

Casgliad

- Rydym yn cymryd camau cadarnhaol i sicrhau bod ein holl waith yn gwella bioamrywiaeth
- Mae gennym gofnod da o gyflawni prosiectau bioamrywiaeth llwyddiannus, gyda mwy ar y gorwel yn y dyfodol.
- Rydym yn deall fod hyn yn destun cymhleth, a bydd yn cymryd amser i gyflawni ein nodau.

Conclusion

- We are making positive steps to ensure that all of our work delivers an enhancement to biodiversity
- We have a strong record of delivering successful biodiversity projects, with many more planned in the future
- We understand that this is a complex subject, and it will take time to achieve our goals.

AMSUGNO CARBON A GWELLA BIOAMRYWIAETH

CARBON ABSORPTION AND BIODIVERSITY IMPROVEMENT

CWESTIYNAU

Codwch eich llaw i ofyn
cwestiwn

QUESTION TIME

Please raise your hand
to ask a question

Diolch yn fawr!

Thank you very much!