



Dŵr Cymru Welsh Water Investment Plan for Price Review 2024 (PR24)

Cynllun Buddsoddi Dŵr Cymru ar gyfer Adolygiad Pris 2024 (PR24)

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Summary PR24 plan

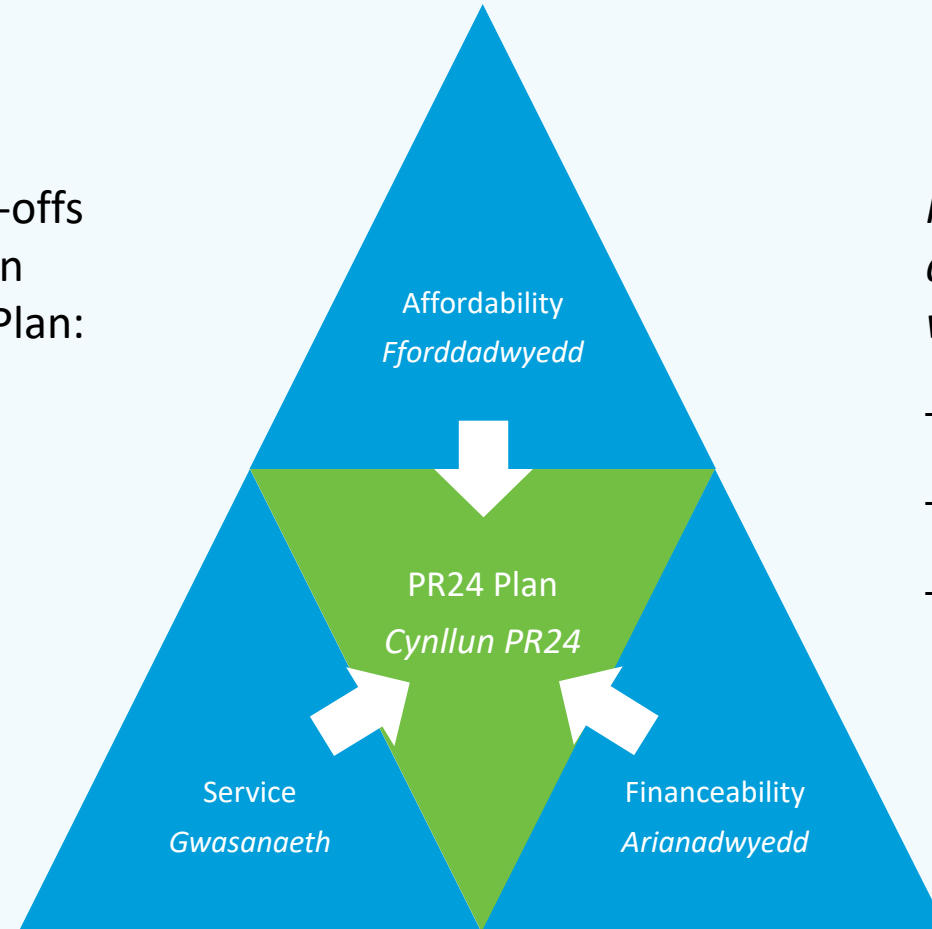
Crynodeb o gynllun PR24

- This presentation sets out our best view of our PR24 at this moment
 - OFWAT’s final methodology published in December 2022
 - Work ongoing to define the requirements of the National Environment Plan (NEP)
 - Need to work also with EA on outcomes for our English operating area.
- **Ambition**
 - To achieve sustainable 4 star EPA performance.
 - Committed to meet aspiration of FM’s objectives (post Phosphate Summit July 2022)
 - Seeking to improve more than 500km of rivers
 - Net Zero by 2040 and achieve 90% by 2030
- **Cost of living crisis, affordability and financeability are key factors**
- *Mae’r cyflwyniad hwn yn rhannu’r darlun gorau sydd gennym o’n PR24 ar hyn o bryd*
 - *Methodoleg derfynol OFWAT i’w chyhoeddi yn Rhagfyr 2022*
 - *Mae gwaith yn parhau i ddiffinio gofynion y Rhaglen Amgylcheddol Genedlaethol (RhAG)*
 - *Mae angen gweithio gydag Asiantaeth yr Amgylchedd ar ddeilliannau i’n hardaloedd gweithredu yn Lloegr hefyd.*
- **Uchelgais**
 - *Cyflawni perfformiad 4 seren cynaliadwy o ran EPA.*
 - *Ymrwymiad i fodloni amcanion dyhead FM (yn sgil Uwchgynhadledd Ffosffadau 2022)*
 - *Ymdrechu i wella dros 500km o afonydd*
 - *Sero Net erbyn 2040 a chyflawni 90% erbyn 2030*
- *Mae’r argyfwng costau byw, fforddadwyedd ac arianadwyedd yn ffactorau allweddol yn hyn o beth*



There are three principle trade-offs that companies need to make in developing the PR24 Business Plan:

- Bills v Investment
- Investment v Performance
- Financeability v Bills



Mae yna dri ffactor pwysig y mae angen i gwmnïau eu gwrthbwyso wrth lunio Cynllun Busnes PR24:

- *Biliau v Buddsoddiad*
- *Buddsoddiad v Perfformiad*
- *Arianadwyedd v Biliau*



The AMP8 Plan aims to deliver...

Nod Cynllun AMP8 yw cyflawni...

- Upper quartile performance in the Tap Water Quality Compliance Risk Index (CRI)
- Seeking to achieve 4 star performance in our Environmental Performance Assessment (EPA)
- The improvement of River Water Quality status for more than 500km of river
- Upper quartile performance in our Customer Measure of Experience (C-MeX)
- *Perfformiad chwartil uchaf yn y Mynegai Risg o ran Cydymffurfiaeth (CRI) ar gyfer Ansawdd Dŵr Tap*
- *Ceisio cyflawni perfformiad 4 seren yn ein Hasesiad o Berfformiad Amgylcheddol (APA)*
- *Gwella statws Ansawdd Dŵr Afonol mwy na 500km o afonydd*
- *Perfformiad chwartil uchaf yn ein Mesuriad o Brofiadau Cwsmeriaid (C-MeX)*

It is estimated that the AMP8 Wholesale CapEx plan will be approximately 50% bigger than the AMP7 plan of circa £2Bn excluding the impact of inflation.

Amcangyfrifir y bydd cynllun CapEx Cyfanwerthu AMP8 tua 50% yn fwy na chynllun AMP7 o tua £2Bn, heb gynnwys effeithiau chwyddiant.



Key investment areas in AMP8

Meysydd buddsoddi allweddol yn AMP8

Water

- Tap Water Quality Compliance Risk Index
- Acceptability of Water – quality, colour, taste & odour
- Impounding Reservoirs – safety and climate change resilience
- Drought Resilience (including customer supply meters and leakage)

Wastewater

- (WI)NEP – National Environment Programme (see later slide)
- New Development & Growth
- Pollution Reduction
- Sewer network (including SECS main, internal flooding reduction, worst served customers)
- Drainage and Wastewater Management Plan (DWMP) delivery of schemes and further modelling of networks, catchments and climate change assessments

Dŵr

- *Y Mynegai Risg o ran Cydymffurfiaeth ag Ansawdd Dŵr Tap*
- *Derbynioldeb Dŵr – ansawdd, lliw, blas ac arogl*
- *Cronfeydd Storio – diogelwch a gwytnwch rhag y newid yn yr hinsawdd*
- *Gwytnwch rhag Sychder (gan gynnwys mesuryddion ar gyflenwadau cwsmeriaid a gollyngiadau)*

Dŵr gwastraff

- *(WI)NEP – Y Rhaglen Amgylcheddol Genedlaethol (gweler y sleid yn nes ymlaen)*
- *Datblygiad Newydd a Thwf*
- *Lleihau Llygredd*
- *Y rhwydwaith carthffosiaeth (gan gynnwys prif bibellau SECS, lleihau llifogydd mewnol)*
- *Cynllun Draenio a Rheoli Dŵr Gwastraff (DWMP) cyflawni cynlluniau a modelu rhwydweithiau pellach, dalgylchoedd ac asesiadau newid hinsawdd*



More detail on key investment areas in Water in AMP8

Rhagor o fanylion am y meysydd allweddol o fuddsoddiad mewn Dŵr yn AMP8

Investment Planning Category	AMP8	Categori Cynllunio Buddsoddiad
Safety & Acceptability of Water	£179M	<i>Diogelwch a Derbynioldeb Dŵr</i>
Impounding Reservoirs	£161M	<i>Cronfeydd Storio</i>
Customer Supply Meters	£110M	<i>Mesuryddion ar Gyflenwadau Cwsmeriaid</i>
Leakage	£101M	<i>Gollyngiadau</i>
Water Quality Schemes	£87M	<i>Cynlluniau Ansawdd Dŵr</i>
New Development & Growth	£75M	<i>Datblygiadau Newydd a Thwf</i>
Network Ancillaries	£69M	<i>Ategolion i'r Rhwydwaith</i>
Treatment Work Maintenance	£64M	<i>Cynnal a Chadw Gweithfeydd Trin</i>
Water Resilience	£56M	<i>Gwytnwch Dŵr</i>
Treatment Work Ancillaries	£51M	<i>Ategolion Gweithfeydd Trin</i>
Trunk Mains	£50M	<i>Prif Bibellau</i>



More detail on key investment areas in Wastewater in AMP8

Rhagor o fanylion am y meysydd buddsoddi allweddol mewn Dŵr Gwastraff yn AMP8

Investment Planning Category	AMP8	Categori Cynllunio Buddsoddiad
Continuous & Intermittent Discharges	£599M	<i>Rhyddhau Parhaus ac Ysbeidiol</i>
Sewer Network	£238M	<i>Y Rhwydwaith Carthffosiaeth</i>
Treatment works (wwtw) Maintenance	£182M	<i>Cynnal a Chadw Gweithfeydd Trin (GTDG)</i>
New Development & Growth	£138M	<i>Datblygiadau Newydd a Thwf</i>
Event Duration Monitoring	£88M	<i>Monitro Hyd Digwyddiadau</i>
Sewage Pumping Stations	£79M	<i>Gorsafoedd Pwmpio Carthffosiaeth</i>
Sludge Schemes	£49M	<i>Cynlluniau Slwtsh</i>



AMP8 Wastewater National Environment Programme (NEP)

Rhaglen Amgylcheddol Genedlaethol (RhAG) Dŵr Gwastraff AMP8

WWTW in Sensitive Areas

Phosphorus

- Failing SACs - £60m additional investment added to AMP7 - AMP8 50% of failing SAC improvements (focus on largest sites with development embargoes)
- Failing Water Framework Directive- AMP8 50% of failing WFD water bodies

Sanitary determinants (ammonia and BOD)

- SAC – not included but P removal will help BOD and NBS will help ammonia
- Some WFD Sanitary Determinands
- No deterioration investigations,

GTDG mewn Ardaloedd Sensitif

Ffosfforws

- ACA sy'n methu – Ychwanegu buddsoddiad ychwanegol o £60m at AMP7 – AMP 8 50% o'r gwelliannau i ACA sy'n methu (ffocws ar y safleoedd mwyaf ag embargo ar ddatblygu)
- Fframwaith Dŵr Diffygiol – AMP8 50% o gyrff dŵr WFD diffygiol

Penderfynyddion hylendid (amonia a BOD)

- ACA - heb eu cynnwys, ond bydd dileu P yn helpu BOD a bydd NBS yn helpu amonia
- Rhai datblygiadau WFD SAN
- Dim ymchwiliadau i ddirywiad

Storm Overflows

- Focus on reducing “impact” – prioritise the highest priority sites
- Investigations to measure ecological impact at all CSOs
- Increase maximum flow treated at WWTWs and storm tank capacity

Gorlifoedd Storm

- Ffocws ar leihau “effaith” – blaenoriaethu'r safleoedd â'r flaenoriaeth uchaf
- Ymchwiliadau i fesur yr effaith ecolegol ym mhob CSO
- Cynyddu'r llif uchaf y gellir ei drin yn y GTDG a chapasiti'r tanciau storm



AMP8 Wastewater National Environment Programme (NEP)

Rhaglen Amgylcheddol Genedlaethol (RhAG) Dŵr Gwastraff AMP8

Bathing Waters

- Building on a good position
- Inland bathing waters – pilot at recreation centres
- Investigations – newly designated, prevent deterioration, riverine, sufficient and good to excellent
- Llanelli style multi AMP improvement programme for Barry

Biodiversity

- Investigations and improvements to maintain and enhance biodiversity/control INNS
 - Improve connectivity of habitats
 - Extend and enhance biodiversity baseline assessment
 - Protection for SSSIs on our land
- Protection of marine conservation areas
- Collaborative fund
- SMNR improvements through investment on other sites – measured through multi capitals.

Biosolids

- Meet new regulatory requirements (Control of Pollution from Agriculture Regs & Farming Rules for Water)
- Low temperature drying and identifying new uses and circular economy focus
 - Alternative sources of carbon and remediation material
- Improved agronomy services, governance and control
- Research in areas of concern

Dyfroedd Ymdrochi

- Adeiladu o sefyllfa dda
- Dyfroedd ymdrochi mewndirol – pilot mewn canolfannau adloniant
- Ymchwiliadau – newydd eu dynodi, atal dirywiad, afonol, digonol a da i ragorol
- Rhaglen gwella dros sawl AMP yn y Barri fel yr un yn Llanelli

Bioamrywiaeth

- Ymchwiliadau a gwelliannau i gynnal a gwella bioamrywiaeth/rheoli INNS
 - Gwella cysylltedd cynefinoedd
 - Ymestyn a gwella asesiadau gwaelodlin bioamrywiaeth
 - Amddiffyn SoDdGA ar ein tir
- Amddiffyn ardaloedd cadwraeth morol
- Cronfa gydweithredol
- Gwelliannau SMNR trwy fuddsoddi mewn safleoedd eraill - mesur trwy aml-gyfalaf

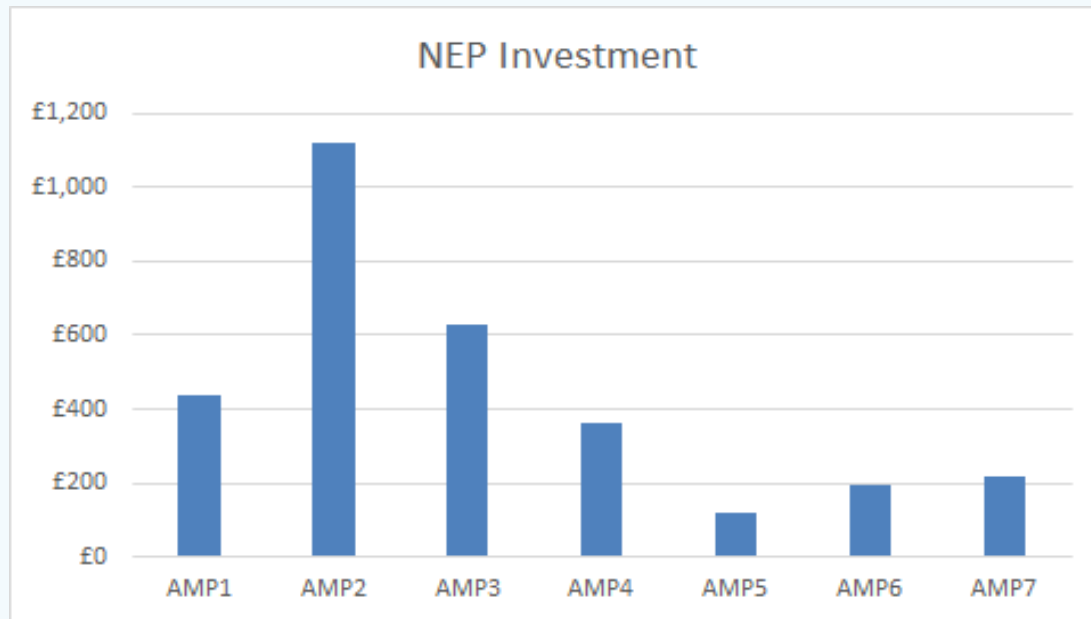
Biosolidau

- Bodloni'r gofynion rheoliadol newydd (Rheoliadau Rheoli Llygredd o Amaeth a'r Rheolau Ffermio ar gyfer Dŵr)
- Sychu ar dymheredd isel a chlustnodi defnyddiau newydd a ffocws ar economi cylchol
 - Ffynonellau amgen o garbon a deunyddiau adfer
- Gwell gwasanaethau, llywodraethu a rheolaeth o ran agronomeg
- Ymchwil mewn meysydd o bryder

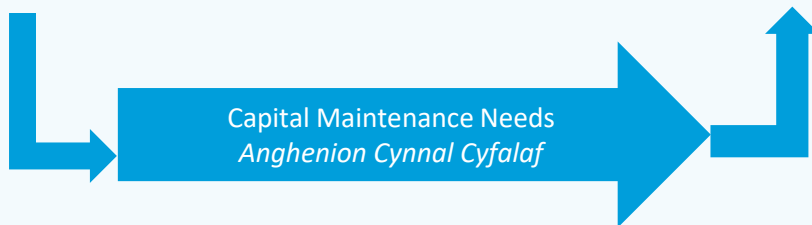


Size of the NEP - AMP8 vs Historic Investment

Maint y RhAG - AMP8 v Buddsoddiad Hanesyddol



- AMP 8 NEP likely to be around £600m
 - Looking to phase some of the phosphorous and CSO work over 3 AMP's
 - AMP2 was when we introduced first time coastal sewage treatment
 - Capital maintenance of all the assets built in previous amps also needs factoring into plan
- *Mae RhAG AMP8 yn debygol o fod tua £600m*
 - *Bwriedir cyflwyno rhywfaint o'r gwaith ffosfforws a CSO dros 3 AMP*
 - *Cyflwynwyd trin carthffosiaeth arfordirol am y tro cyntaf yn AMP2*
 - *Mae angen ffactora gwaith cynnal cyfalaf ar yr holl asedau a adeiladwyd yn ystod AMP blaenorol i'r cynllun hefyd*





Financeability

Is a very significant factor on the AMP8 Business Plan

- DCWW is required to submit a business plan that would allow an A grade credit rating on its senior debt at each price review.
- The size of the NEP has a material impact on the financeability of the plan
- A significant increase is not considered financeable
- Size of the maintenance capital spend will be subject to OFWAT comparisons with English Water Companies

Deliverability and capacity of the supply chain

The capacity of the supply chain to deliver a significantly bigger investment programme than in the current AMP is a key consideration.

- The size of plan, driven mainly by environmental improvements is likely to be over twice the size of the AMP7 plan
- If all Water Companies are expected to drive large programmes of P stripping at WWTW and CSO improvements, UK supply chain will be severely challenged.

Arianadwyedd

Mae hyn yn ffactor sylweddol iawn yng Nghynllun Busnes AMP8

- *Rhaid i DCWW gyflwyno cynllun busnes a fyddai'n caniatáu ar gyfer statws credyd gradd A ar ei uwch ddyled ym mhob adolygiad o brisiau.*
- *Mae maint y RhAC yn effeithio'n faterol ar arianadwyedd y cynllun*
- *Ni ystyrir bod modd ariannu cynnydd sylweddol.*
- *Bydd maint y gwariant cyfalaf ar gynnal a chadw'n amodol ar gymariaethau OFWAT â chwmnïau dŵr Lloegr*

Cyflawnadwyedd a chapasiti'r gadwyn gyflenwi

Mae capasiti'r gadwyn gyflenwi i gyflawni rhaglen fuddsoddi sylweddol fwy na'r AMP cyfredol yn ystyriaeth allweddol.

- *Mae maint y cynllun, sy'n cael ei lywio'n bennaf gan welliannau amgylcheddol, yn debygol o fod dros ddwywaith yn fwy na cynllun AMP7*
- *Os disgwylir i'r holl Gwmnïau Dŵr yrru rhaglenni helaeth o ddileu mewn GTDG a gwelliannau i CSOs, bydd hynny'n her ddifrifol i gadwyn gyflenwi'r DU*



PR24 Timetable

Amserlen PR24

2022

NOV
Draft
plan

TACH
Cynllun
drafft

DEC
Final
methodology

RAHG
Methodoleg
derfynol

2023

FEB
Updated
plan

CHWE
Diweddarau'r
cynllun

FEB/MAR
Open challenge
sessions

CHWE/MAW
Sesiynau herio agored

FEB/MAR
Affordability
& acceptability
testing

2nd OCT
Final submission

2 HYD
Cyflwyniad terfynol

CHWE/MAW
Profi
fforddadwyedd a
derbynadwedd

2024

SPRING/
SUMMER
Draft
determination

DEC
Final determination

RHAG
Penderfyniad Terfynol

GWANWYN/
HAF
Penderfyniad
drafft