



Comisiwn **Seilwaith**
Cenedlaethol **Cymru**
National **Infrastructure**
Commission **Wales**

Annual Report 2024



The National Infrastructure Commission for Wales (NICW) was established in 2018 as an independent, non-statutory, advisory body to Welsh Ministers.

Its key purpose is to analyse, advise and make recommendations on Wales' longer term strategic economic and environmental infrastructure needs over a 5–80-year period.

NICW conducts studies into Wales' most pressing infrastructure challenges and will make recommendations to the Welsh Government.

The advice provided by NICW will be impartial, strategic and forward looking in nature.

NICW is accountable to the Welsh Ministers for the quality of its advice and recommendations and its use of public funding.

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Our second year delivering:

An introduction from the Chair and Deputy Chair

Welcome to the National Infrastructure Commission for Wales' annual report for 2024.

Our delivery at pace has continued this year, building on significant momentum from previous years, and on the goodwill and support of organisations from across the infrastructure sector.

We have delivered on our remit for the year, including making recommendations to the Welsh Government on how to reduce the impact of flooding in Wales by 2050. The launch of our flooding report was well-attended by

organisations from across the UK, demonstrating our growing influence within and beyond the borders of Wales.

This year has seen climate-driven disasters increase in severity and frequency in all parts of the world, reminding us of the need to maintain a strong commitment to the nature and climate emergencies. Our main project activity for the coming year will focus on how people understand and communicate the climate risks of the distant future, an issue which has seen high polarisation in other countries, and which may come to influence political discourse here in the coming years.



Much of that political and social polarisation is exacerbated by social media platforms that prioritise shareholder return over social good. Our decision in September 2023 to stop using our Twitter account was prescient; numerous public, private and third sector bodies across Wales have since announced their intention to do the same. We will maintain our leadership in this sector by showcasing the power – and the values – of open source social media platforms, contributing to a Wales that communicates differences with tolerance and understanding.

We believe that transparency is a necessary precondition for accountability. As in recent years, our meetings with external parties are listed on our website, and this year we have also published all our formal external correspondence. In 2025 we will continue to seek out and implement good practice in governance and accountability.

This year has seen our Commissioners participate in some of the most challenging areas of infrastructure for Wales, including the changing face of industry in Port Talbot and the need for an accessible and affordable grid across all parts of Wales. We look forward to playing our role in the coming twelve months in helping ensure infrastructure in Wales fit for current and future generations.



Dr David Clubb
Chair



Dr Jenifer Baxter
Deputy Chair

Our aims, objectives, outcomes and values

Our organisational values and ways of working were established in our first year as our guiding principles and to reflect our remit set out by the Welsh Government.

Our aims

1. To provide radical, challenging and evidence-informed advice and guidance to a variety of audiences, but principally Welsh Government, that will inform and future-proof decisions on infrastructure deployment from 2030–2100.
2. To use the frameworks of the Well-being of Future Generations (Wales) Act 2015, the climate and nature emergencies, and the socio-economic duty, to guide our deliberations.
3. To support initiatives, organisations or policies that aim to create and maintain resilient and adaptable infrastructure that delivers well-being until 2100 and beyond.



Artwork: Extract from 'The River' (2024) by Prith B at the NICW Flood Report Launch

Our objectives

Our objectives align with the Welsh Government Programme for Government.

Build an economy based on the principles of fair work, sustainability and the industries and services of the future.

Build a stronger, greener economy as we make maximum progress towards decarbonisation.

Embed our response to the climate and nature emergency in everything we do.

Make our cities, towns and villages even better places in which to live and work.

Celebrate diversity and move to eliminate inequality in all of its forms.

Our outcomes

In the first Annual Report of this current Commission, we defined a range of outcomes that we anticipated being able to deliver from 2022 to 2025. We have assessed below how we have performed against these over the last 12 months.

Desired outcome	Summary performance to date
<p>Future policy that improves the capture of wealth from renewables; that better manages land for various infrastructure uses; and that builds on a better understanding of local community perspectives.</p>	<p>Following delivery of our renewable energy report in October 2023, we have followed up on our recommendations to the Welsh Government through continuous engagement with officials and Ministers. We have also written to the UK Government regarding the issue of the Crown Estate and are continuing our dialogue with stakeholders.</p>
<p>Future policy and practice is better informed about ways to minimise the impact of flooding on Wales' communities and infrastructure.</p>	<p>We delivered our report on our flooding project in collaboration with sector experts, that produced 17 recommendations for the Welsh Government. The report was launched on 17 October 2024. We await a formal response from the Welsh Government but wish to engage on the recommendations in a positive way with officials and Ministers.</p>
<p>NICW and other stakeholders are better informed about how to communicate long-term risks to communities most vulnerable to climate change impacts.</p>	<p>We completed scoping of our Climate Communication project and established 2 research projects, separately focussing on communities and infrastructure providers. Research contracts have been let and Project Reference Groups have been formed to provide feedback.</p>
<p>NICW's activities and recommendations are better informed by a wide and diverse range of stakeholders.</p>	<p>We have engaged with a wide variety of stakeholders, in meetings, events and in the media. These are listed on our website.</p>
<p>An enhanced profile and reputation for NICW.</p>	<p>Whilst it is difficult to objectively assess our reputation, our profile has increased considerably over the last twelve months. We also have good statistics on activity on our website. These statistics are fully transparent and accessible by visitors to the site. The NICW Review (see below) will provide further opportunities for feedback. This year we have also appointed Equinox to support us in our communications and engagement activity.</p>

Our values

During 2023 we agreed upon a set of values that describe how we aspire to deliberate and operate. We wrote a short piece describing them on the [NICW website](#). Our values are:

- **Inclusive:** creating a warm and friendly environment within which people feel supported, and confident to express their views.
- **Transparent:** pushing the boundaries of reporting in near-real-time on our engagement, and demonstrating publicly how we deal with internal disagreements.
- **Radical:** commissioners have committed to working out of their comfort zones; we aim to deliver advice, opinions and recommendations that diverge from 'business as usual' to alleviate the nature and climate emergencies and deliver on our remit.
- **Challenging:** the Commissioners challenge the status quo with the needs of future generations and an aspiration to do better for the future citizens of Wales.
- **Practical:** the Commission's work is focused on actionable recommendations that move us towards a more sustainable infrastructure for the needs of the people of Wales.



The National Infrastructure Commissioners for Wales with colleagues on our 2024 site visit to Newtown

Our strategy

Over the course of 2024 we have developed our broader strategic approach to define what NICW is seeking to do and how it should go about achieving this, always with our remit and operational framework in mind. In June we were fortunate to have a workshop facilitated by Dr Paul Davies of Swansea University to help us explore this in more depth.

We concluded that most organisations benefit from a strategic approach on how they deliver their activity. However, NICW is not a traditional organisation; comprised of 8 part-time Commissioners, supported by two members of the Secretariat. We therefore developed our strategic approach bearing in mind our own limited resource, as well as our remit that is set by Welsh Government.

Our strategic approach is outlined in more detail on [our website](#). In summary we examine our

functions as a Commission which allow us to analyse how we contribute to the debate on Welsh Infrastructure. We then can monitor this contribution using critical success factors. Although we have tried to produce metrics to measure our success, in some cases the evidence is not numeric. We are comfortable with a narrative-based approach to assessing our performance and have included examples of success where relevant.

Listing our success factors (all of which are reported on in this document) will help us focus on collecting data that will provide evidence on the impact of our work. Publishing this first strategic approach will help us understand how others view our success, so that we can continue to refine and adapt our approach to better serve our purpose. We intend to revisit this approach benefitting from feedback from stakeholders, the NICW Review or any significant change in the socio-economic context.



The Commission sitting

NICW year in review: 2024

Infrastructure policy context

Futures Thinking

As reported last year, for us to be able to take a long-term view of policy goals and development, we are also seeking to adopt **Futures thinking** in our work. We plan to hold an event in January 2025 to bring together infrastructure leaders to think spatially about their future plans. This event, which will be facilitated by the School of International Futures, will consider our transportation networks and their future adaptation in a changing world and society. We are really interested to see this in action and hope it will additionally feed into our newly identified 'Year 4 / Final Year' work project.

We have used Futures Thinking and methodologies in our Flooding Project to envisage a **Flooding Framework in Wales for 2050**. Using participatory workshops, colleagues at Arup were able to support us in generating a Vision for a flood resilient Wales. By using creative outputs, it also has helped us engage more widely in our processes, seeking a greater range of views of what a Future Wales could look like.

On this theme, we were delighted to be able to partner with the Institute of Welsh Affairs, to publish a series of essays on Wales in 2100 by a variety of contributors. They examined issues such as food supply, accessibility and the use of AI to help us imagine what life could be like for us in the future. These were published weekly over the summer of 2024 and we have published these together in an anthology, **Imagining Wales in 2100: Stories and Essays**, where they can be viewed in one place.



Our collection of 2100 Essays



Personas at our Flood Visioning Workshops

Steel production at Port Talbot

In February 2024 our Deputy Chair, Jenifer Baxter, wrote a blog post on the [situation in Port Talbot](#). Jenifer commented that the news that Tata Steel will close both blast furnaces at the steelworks and replace them with an electric arc furnace (around 2027) will significantly reduce the UK's ability to be self-sufficient in the supply of critical infrastructure, as we will be dependent on imported steel. Not only that, but as Jenifer continued, Tata Steel's employees and

their local communities will feel the most devastating impact with a narrative from Tata Steel focusing on the need for emissions reduction, and a corresponding move towards a more circular economy.

Jenifer presents different options for the future of steel production in South Wales, focusing on the use of alternative and low carbon fuels and considers the social impacts, including the just transition for communities, and societies, impacted by these changes.



Grid

In May 2024, Commissioner Nick Tune, who was a lead on our renewable energy report, wrote a blog on the [electricity grid system in Wales](#). Nick commented on the National Grid Energy Systems Operator (ESO) publication: [“Beyond 2030: A National Blueprint for a Decarbonized Electricity System in Great Britain”](#).

Nick expressed concerns regarding the absence of plans for grid upgrades spanning north to south Wales. Urgent capacity enhancements are needed in mid Wales to facilitate the development of planned onshore wind energy projects, while south Wales grapples with grid congestion. A potential solution lies in routing the Celtic Sea connector through south west Wales, enabling a comprehensive upgrade of the South Wales grid, thereby liberating capacity for expanded renewable energy generation throughout south Wales.

He pressed the need for the Welsh Government to urgently look at NICW's renewable energy recommendations and take action.

Infrastructure (Wales) Act 2024

Following on from our events and scrutiny last year, we were pleased to see that the [Infrastructure \(Wales\) Act 2024](#) received royal assent in June 2024. Our response to the original consultation on the draft Act spoke of the need for a greater emphasis on community engagement and consultation. In July, we responded to the Welsh Government consultation on the Requirements for Pre-Application Consultation and Methods of Engaging Stakeholders and Local Communities consultation.

[Our response](#) highlighted the need for effective and meaningful engagement which proactively

involves the communities impacted by infrastructure development. We were pleased to draw on our experiences in Borth and our renewable energy project, to highlight good practice. We also used case studies which have been brought to our attention through our flooding project to further exemplify where engagement has had a positive outcome for communities in the development process.

CCEI Committee Report

NICW were pleased to be invited for the annual [scrutiny session](#) by the Climate Change, Environment and Infrastructure Committee in the Senedd. We welcomed [their subsequent report](#) and responded to the [NICW facing recommendations](#) in a positive fashion.

We note also that the [Welsh Government response](#) was proactive in setting out arrangements for the NICW review, responding to the renewable energy report and its approach to water issues.

We welcomed the [subsequent debate](#) in the Senedd and noted the positive words from the Julie James, who had ministerial oversight of NICW at the time.

“The commission has... firmly established itself as an authoritative voice in the sector that is respected and whose opinions are actively sought out by stakeholders, and I do believe this is a sign of maturity for the organisation and we are seeing a real difference from its work.”

Julie James MS

Institute of Work and Learning event

In November 2024 we were pleased to sponsor and take part in the Learning and Work Institute annual conference in Cardiff. Time and time again, the issue of skills shortages in the many infrastructure sectors has been raised as a key issue which is hampering progress in Wales. It was a great opportunity to engage with the major stakeholders in the education and skills sector to discuss the changes that our needed, how we attract new people into the industry and how we make the prospect of working in infrastructure appealing to school leavers.



Deputy Chair, Jenifer Baxter, speaking at the Learning and Work Institute Conference

Study tours

The Commission is interested in deepening its existing understanding of infrastructure issues, to hear about the new and exciting responses being developed, right across Wales. We therefore organised several study tours around Wales this year.

Newtown

In February 2024 NICW Commissioners travelled to Newtown to speak with local stakeholders on the challenges facing rural communities such as: economic sustainability, what active travel looks like in a rural context and how strategic initiatives are managed across borders.

Talking to the Growing Mid Wales partnership including local politicians and officials, we received an excellent understanding of some of the issues facing the area. We had a fantastic tour of Newtown Town Centre to witness the regeneration projects currently underway there. We also were taken to the site of the new Newtown Active Bridge to view construction works.

We based ourselves at [Gregynog Hall](#), itself an important local landmark preserving both the natural and historical assets of the area with a community focus.



NICW went on a walking tour of Newtown

Ceredigion Coastal Communities

In June 2024, we journeyed to Ceredigion via the TrawsCymru strategic bus network. Whilst on board, we heard from Transport for Wales about how they are supporting the bus network in Wales and trying to support the move to public transport. Once in Aberystwyth we met with local transport stakeholders to get a first-hand view of the issues faced by people living in this part of Wales to get around without access to a car. The challenges here differ greatly from those experienced in urban parts of the country, and it was refreshing to be reminded of this when considering national transportation priorities.



NICW meeting TfW staff on board at TrawsCymru service Newtown



NICW meeting Mid Wales stakeholders in Newtown

On this trip, we were also fortunate to travel along the coast to Borth, to hear from communities directly affected by the impacts of climate change. We were keen to engage with members of Borth Community Council and others on their experiences of living with a changing coastline and increased flooding events. We witnessed an engaging conversation with colleagues from Natural Resources Wales on future proposals for the area which has also helped shape our Year 3 work on engaging with communities on this sensitive issue.



NICW exploring coastal flooding issues with Borth Town Council

Bannau Brycheiniog

Towards the end of the year, in November, NICW held a [site visit to Bannau Brycheiniog](#). On this visit, which was hosted by the Bannau Brycheiniog National Park authority, we were able to engage with local stakeholders on how life in sensitive areas can grow and thrive in the right conditions.

We also had the opportunity to a visit to a farm to witness natural flood management techniques in practice. This has helped us to contextualise our flooding recommendations in the context of land management and farming. We were also excited to witness and engage with young people in futures thinking about how they wanted their local area to develop in the Authority's Local Development Plan.

NICW organisational development

We are committed to developing ourselves as Commissioners to equip us to undertake our roles effectively, communicate successfully both internally and externally, and ensure we are meeting our remit as set out by the Welsh Government. To this end we have allocated time this year to considering our strategic approach (see above) and thinking about the next steps for NICW in terms of a continued work programme.

Politically, we have had 4 changes of Ministerial oversight in 2024 which has made for an uncertain operating environment. However, with a new First Minister and Cabinet in place from Autumn 2024 we hope this will provide the stability that NICW needs to carry on its work for the rest of this Senedd.

In association with this annual report, we have also undertaken some reflection on our year of work and how we can improve the way we operate to be an even better organisation delivering on our remit.

In 2024 Our Commissioners undertook training in the following areas:

- futures thinking, with training provided by the UK Government Office of Science
- transport and health, provided by Aberystwyth University
- LinkedIn expert training, provided by Equinox.

Digital systems

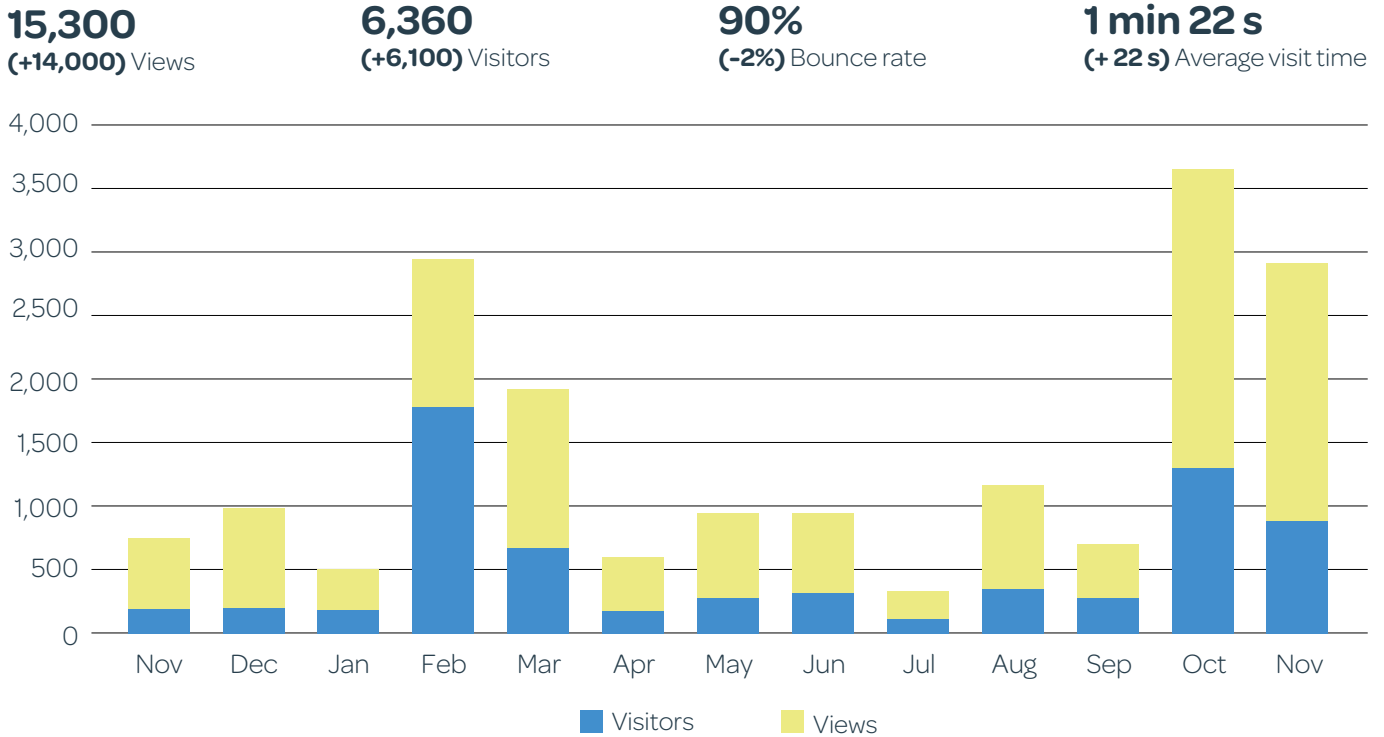
We have continued to develop our digital communication offering, building on a basic website to offer a platform that helps us share our updates and narrative about infrastructure in Wales. We continued to develop our digital offer this year by specifically hosting the **2050 Flooding Vision**, as a subsite of the main website, and by launching our **quarterly newsletter**.

Website

Our website hosts NICW **meeting notes and other publications**, records of **external engagements and meetings**, project information and videos of our appearances in the **media, Senedd or on fact-finding visits**. It also embeds images from our Pixelfed social media account, and acts as the hub for most of our public activity. Over the course of the year we have made a considerable effort to publish our outputs in web format as well as, sometimes, via pdf. Screen readers often struggle with proprietary formats such as pdfs. This initiative will improve the accessibility of our content. Our 'web-based by default' approach also supports better search engine visibility, as web crawlers can report on all the content we produce.

Our **web statistics** are open for all to explore. In the twelve months since our last report, the website has been accessed more than 13,700 times, with more than 4,700 individual visitors. The UK was the country of origin of the vast majority (85%) of our visitors.

Figure 1: Web statistics from the NICW website. Peaks in the summer months are likely related to our series of Futures essays; the peak in October probably results from publication of the flooding report



Social media

We are active on three social media sites and have grown our presence on these throughout the year:

- 1. LinkedIn.** with currently more than 1,380 followers. This is more than a 10% increase on the previous year.
- 2. Mastodon.** Our most popular post highlighted three Commissioners with an account on toot.wales, the Welsh server for Mastodon. We have over 110 followers on this platform.
- 3. Pixelfed.** An open-source social media platform optimised for image sharing. We have over 140 followers on this platform.

Engagement and working with others

We record our engagement and external meetings on our website in an **open and transparent way**. Commissioner highlights of this year have been our continuous engagement on renewable energy and grid issues, as well as increasing our understanding of the impacts of flooding and the need to adapt to the changing climate. These additional engagements help us to investigate our major project issues in more depth, outside of the main research contracts. We look forward to meeting with more organisations and individuals over the coming year that can enrich our knowledge of issues relating to the built environment and infrastructure more generally.

In keeping with the Future Generations 'Ways of Working', and where resources allow, we work with other bodies in a collaborative way to spread common key messages and explore ideas. As highlighted in our **reporting of meetings**, this year we have worked with numerous organisations.

Working together helps to maximise skill sets, reach and resource availability. We look forward to working with other bodies and organisations in the next 12 months, to fulfil our remit.



NICW with transport stakeholders in Aberystwyth

Our profile

NICW recognised that its communications and engagement activities needed external expertise and support in 3 major areas:

- developing a communications and engagement strategy
- specific support on engaging the media on the publication of our flooding report
- ongoing monthly support in communicating NICW activity effectively

To this end, we were pleased to engage with Equinox, a communications firm based in Wales, to support NICW with its media and social media activity. This will significantly boost our resource base and our engagement activity over the course of this financial year. Equinox have already enabled us to effectively promote the launch of flooding report which included significant regional activity across Wales as well as a presence on TV and radio interviews. We hope our growing profile will mean NICW will increasingly be asked for its opinion on the infrastructure issues of the day and be able to promote our wider work to the world.



Commissioner Eurgain Powell being interviewed for *Newyddion* on S4C on the launch of our flooding report

NICW Review

In line with its terms of reference, the **Welsh Government announced** in May 2024 that a review of NICW was underway and will be completed by the end of the year. Terms of Reference for the review have been created and work is now ongoing.

The objective of the review is to provide assurance to Welsh Government, NICW Commissioners and the Senedd on the Commission's performance status, remit and objectives.

The review will focus on the effectiveness of the Commission including how it functions and operates. Consideration will also determine whether the current three-year term of

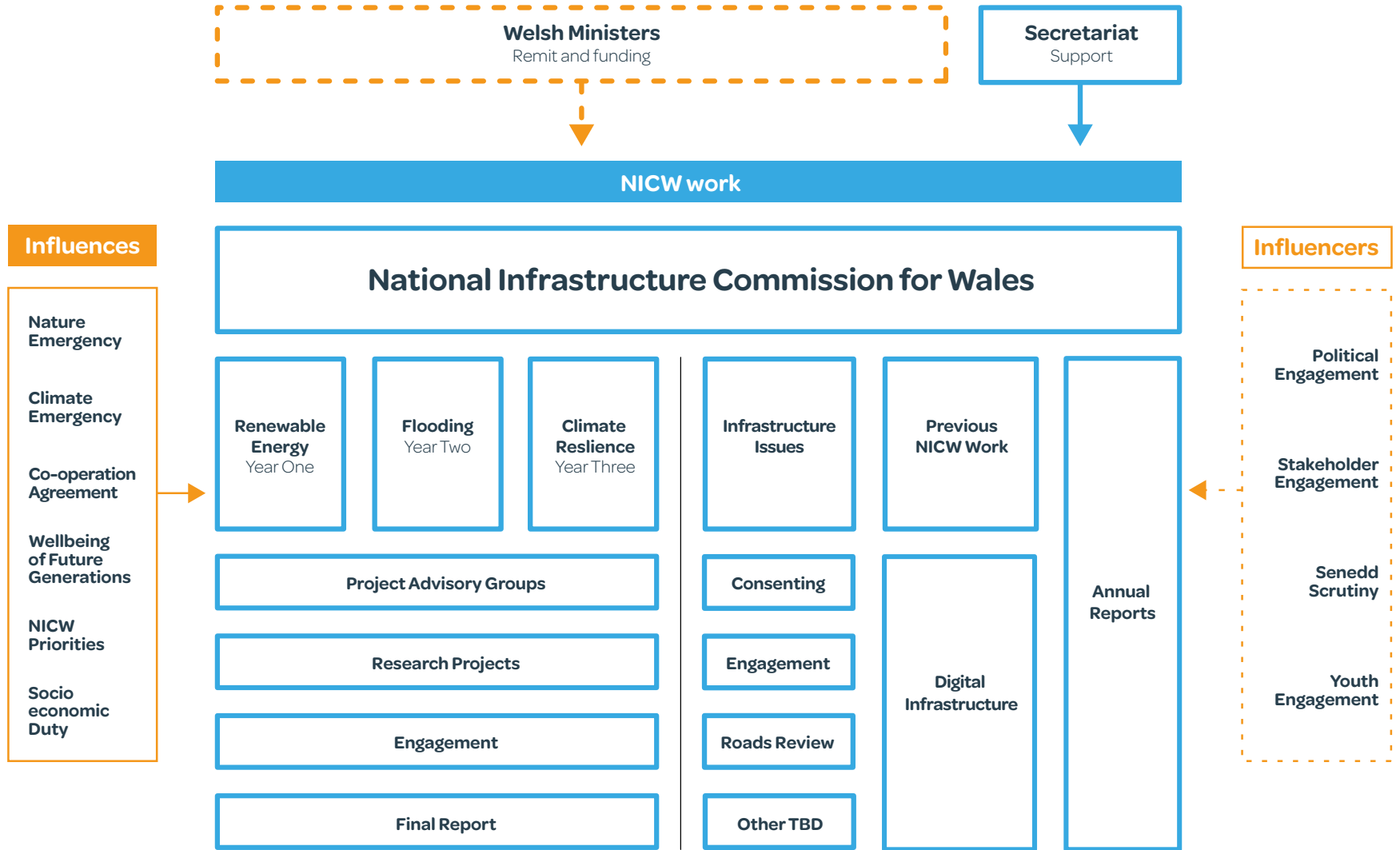
appointment for Commissioners is appropriate; and take a view on the requirement for NICW to undertake a national infrastructure assessment. The review is being undertaken by the Welsh Government's Internal Audit Service who have consulted with external stakeholders as part of this work.

NICW is fully committed to playing its part in the review. All Commissioners have responded to questions from the reviewers on various aspects of the Commission's work.

We look forward to receiving the results of the review and working positively with the Welsh Government to implement any recommendations for change which are put forward.



Our Framework



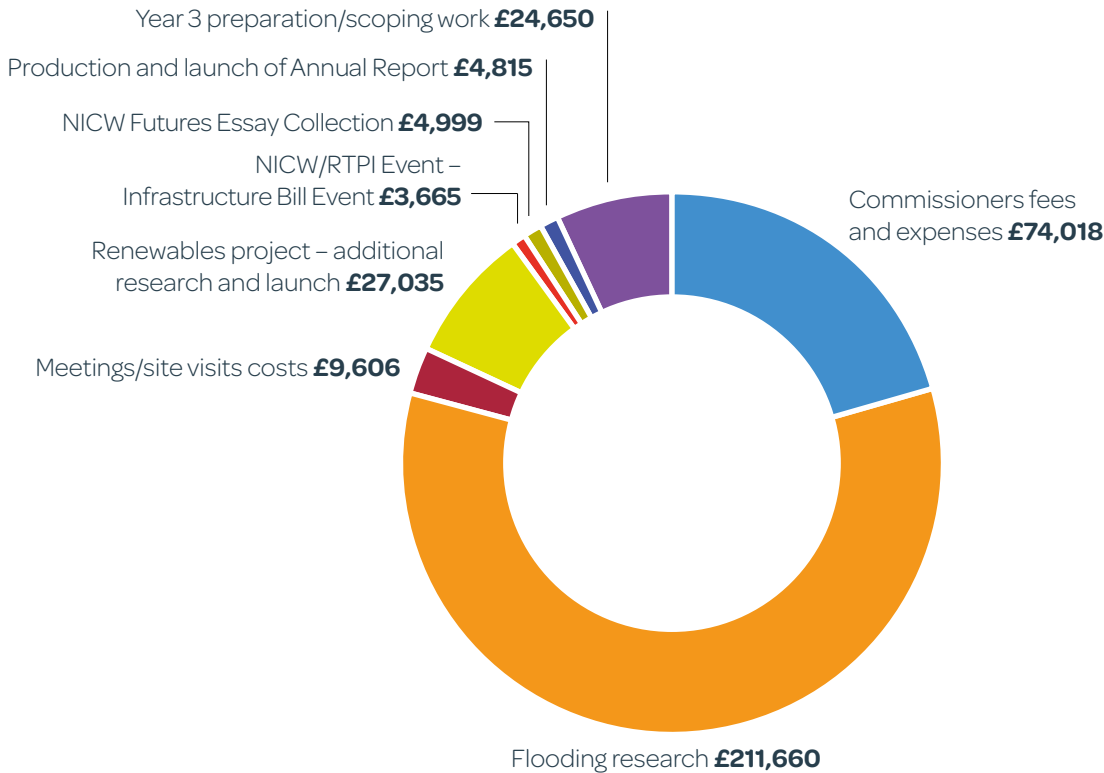
Our 2023/24 expenditure and 2024/25 budget

NICW is allocated a specific budget from the Welsh Government for it to deliver the work programme and to undertake research. We publish our intended areas of spend for transparency.

In 2023/24 of our £400,000 budget allocation, we spent approximately £360,500. The majority

of this was spent undertaking the flooding project research which is outlined in more detail below. This was spent primarily on the four research contracts and the incidentals associated with producing and publishing the report. We also undertook a scoping study to inform our Year 3 work on climate communication.

Figure 2: NICW Expenditure 2023/24

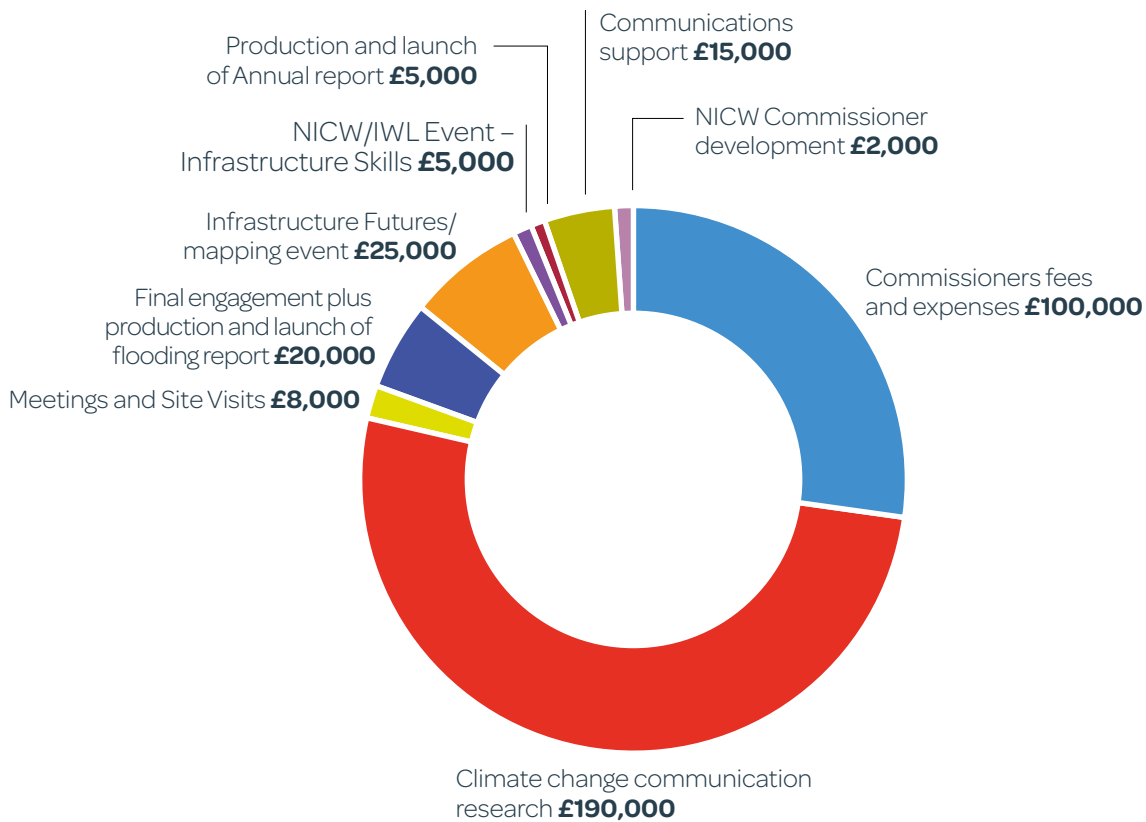


For 2024/25, and in recognition of the challenging state of public finances, we have been allocated a reduced budget of £370,000 by the Welsh Government. We have allocated over half of our budget to the climate communication research projects which are currently underway.

As with last year, we have been given a one-year budget settlement by the Welsh Government, with no guarantee that this will continue. However, we are confident that the delivery

of the renewable energy and flooding reports together with the other activity demonstrated in this report has shown that NICW can be effective with its work and will give us a strong platform for making a case for continued funding in the future. We are already thinking about our Year 4 work (see below) and hope to use this to assess the current key issues within the infrastructures sector to recommend a future work programme for NICW in the next Senedd term.

Figure 3: NICW budget 2024/25



Our 2022–2025 work programme

Renewable Energy: 2022/23

Lead Commissioners:

Aleena Khan and Nick Tune

Project update

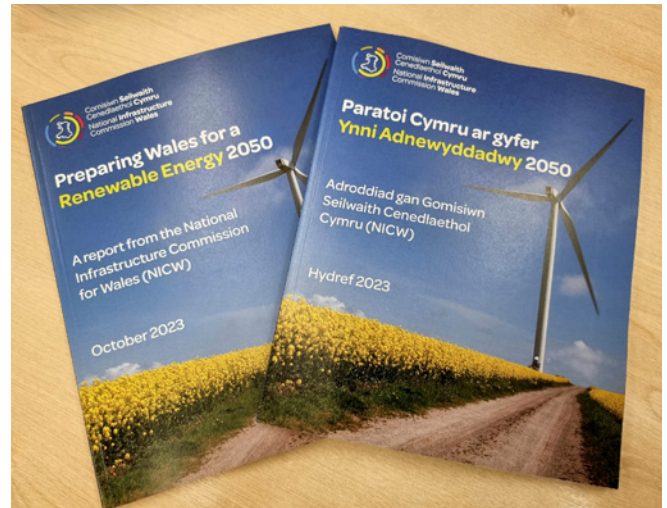
In October 2023 we published our first major report of this Commission, *Preparing Wales for a Renewable Energy 2050* which was the product of a large amount of work undertaken by us, our contractors, our Project Advisory Group and other stakeholders.

NICW made 11 recommendations for the Welsh Government, including:

- rapidly accelerate renewables in Wales by setting a clearer vision and action plan that business and communities can understand
- help communities own and share the benefits of local schemes
- update planning rules and building regulations
- use its influence with UK bodies to help solve problems with insufficient grid infrastructure
- ensure more of the economic benefits stay in Wales and benefit the people of Wales, including pooling of profits in a new sovereign wealth fund.

We continue to urge Welsh Government to seize the opportunity for renewable energy in Wales by:

- having higher expectations on community ownership in particular for all energy developments
- moving much more rapidly to reduce barriers to installing small-scale renewable energy through permitted development



Renewable energy report

- exploring the idea of ‘presumption of consent’ for community renewables
- rolling out pooled expertise to support more timely decision-making and consenting for projects.

Notwithstanding resource constraints within Welsh Government, we still believe that there is much more for Welsh Government to do to ensure that Wales becomes an attractive place to develop projects that deliver far more significant benefits to the people and communities of Wales. As with all our formal correspondence, our engagement with Welsh Government is available to view on our website.

We have written twice to Jo Stevens MP, Secretary of State for Wales, requesting a meeting on the issue of devolving the Crown Estate to Wales. We await the response of the UK Government with interest.

Flooding: 2023/24

Lead Commissioners:

Eurgain Powell and Eluned Parrott

Project update

On 17th October 2024, we published our second major report, this time on the topic of flooding. This was established in our remit by the 2021 Co-operation Agreement to assess how the impacts of flooding to homes, businesses and communities could be minimised by 2050.

Building Resilience to Flooding in Wales by 2050 presents 17 bold but practical recommendations for Welsh Ministers to future-proof Wales against the growing risks of flooding over the next 25 years. The report emphasises natural solutions, placing nature and community at the forefront of increasing Wales' resilience to flooding.



Our flooding report

We recommend a catchment-based approach that engages local communities directly in flood-related decisions using initiatives such as Citizen Juries and a new Water Resilience Forum.

On the governance side, the report calls for the appointment of a Water Commissioner and the creation of a 30-year resilience strategy to drive Wales-wide, innovative flood solutions.

To boost awareness and skills, the report suggests integrating climate adaptation into Wales' school curriculums and providing flood resilience training at a regional level.



Flood report launch event

To enhance funding and capacity, we recommend diversifying funding sources and introducing Welsh Government subsidies to help the homeowners in most need to invest in flood resilience measures.

We have already engaged with the relevant Welsh Minister on the recommendations in this report and have held proactive discussions with officials to help ensure that our report is received in a positive light. We look forward to being able to assist the Welsh Government and other organisations in implementing of our recommendations.

Climate Communications: 2024/25

Lead Commissioners: Helen Armstrong and Steve Brooks

Project overview

Our Year 3 work investigates how we communicate with communities who will be impacted by Climate Change. Last year we commissioned work to help us in scoping out the issues in this area. To aid in this work, we held a call for evidence to collect information and held several sessions as a Commission to identify where specific additional work could be undertaken to provide meaningful recommendations to the Welsh Government.

Project research

Our research programme this year is concentrated on two areas, each with a unique perspective on this issue:

Engaging Communities – School of International Futures

We identified that current Welsh Government policy on climate change issues will require people across all parts of society to be engaged in long-term thinking about climate change adaptation and its implications for infrastructure. We see community participation as a key component of enabling positive climate adaptation and infrastructure development for the long term.

The School of International Futures has been commissioned to co-design and test practical approaches that support diverse place-based communities in Wales to have conversations about climate adaptation and the long-term impacts on infrastructure.

Specific objectives include working within specific groups in the Grangetown area of Cardiff and:

- drawing on what works for participatory and futures methods for engaging diverse place-based communities in long term decision making
- using creative, participatory techniques to engage diverse citizens
- testing and capturing the learning for others
- making recommendations to NICW in line with its remit.

Amongst the outputs of this report, we hope to produce a toolkit for others in engaging with local communities.



Flood Risk Map for Cardiff shows the extent to which Grangetown will be affected in the future

Resilient Infrastructure – Arup

Our scoping led us to the conclusion that infrastructure providers and planners are not fully thinking about the next 60-70 years in terms of climate change impacts on infrastructure networks in Wales and that there is a need for improved future focused planning and delivery of infrastructure going forward.

In this project, we will review how climate change considerations within infrastructure planning and provision are considered from the perspective of both maintaining existing infrastructure (e.g. asset management approaches) and the development of new infrastructure.

Specifically, we will be looking at the following areas of infrastructure:

- health
- housing
- energy
- water and wastewater
- education
- transportation
- construction
- community facilities
- local and regional authorities.



Conwy Valley railway line washed away by Storm Ciara, 2020

After extensive engagement with infrastructure providers on how they take climate projections into account and how, if at all, they currently work together to address climate issues, this project will culminate in an educational workshop for infrastructure bodies, to bring them together to discuss what changes can be made.

In 2025 we plan to produce a report that makes recommendations to Welsh Ministers on how to help public bodies better engage and involve communities and the public in the response to the climate change emergency.

Year 4 work: A Futures Infrastructure Assessment

The Commission is aware that its current work programme and remit is coming to a close. We are working on the assumption that its work will continue in the future and a new remit will be set for it by an incoming Welsh Government in 2026.

In light of this, the Commission is looking to undertake a 'Year 4 / Final Year' piece of work with different infrastructure sectors on what is likely to be the major issues for the industry over the next 80 years. We will present the Welsh Government with these findings and recommend a work programme for NICW for the next Senedd term.

We believe that the use of 'Futures' techniques could play a much larger role in policy in Wales. We aim to use these techniques frequently in our work, including potentially a Futures Infrastructure Assessment to spark the conversation about Wales' needs for infrastructure for existing and future generations.

Commissioner reflections

Our Commissioners reflect on their second year in office and take a forward look at things to come.

Helen Armstrong



At the beginning of 2024 we received a scoping report from Cynnal Cymru which helped us understand the landscape of community engagement in infrastructure and resilience projects across the UK. Throughout the year the Commission's project examining flood resilience has been progressing, and the vision for a Flood Resilient Wales in 2050 was an

inspiration that helped us shape our work in our third year. During our trip to Borth in June we spoke to residents about the sea defences protecting their community; it gave us a real sense of how people are affected by rising sea levels and flooding from rivers, and how keen they are to have a say and take action to protect their communities.

This informed our project specification and following a tender process over the summer we appointed School of International Futures to carry out place-based research into ways of engaging people from underrepresented groups in

meaningful decision making about infrastructure in the light of climate change. Adaptation and resilience are key themes and is apt given the excessive rainfall we have experienced recently. With the oversight of a small project reference group, SOIF will explore creative and innovative ways of engaging communities, and we hope the results will inspire infrastructure providers and decision makers to better engage the public. I'm really excited about this piece of work and believe we will be able to apply the learning more widely, making an important contribution to how we do things in Wales.

Jen Baxter



This year has felt particularly important as the Commission begins to settle into a working

rhythm. We have developed a small but powerful strategy that allows us to deliver for the people of Wales.

This year we have used our values and newly formed strategy to produce a radical new approach to managing flooding in Wales and from this co-created a programme of

work to understand existential risk and how local communities live with existential threat.

These are all exciting projects that continue to educate us on the best ways to manage, maintain and renew infrastructure across Wales in a way that centred around people and the planet.

Steve Brooks



This year, we have marked 25 years of devolution in Wales. As I reflect on the progress we've made over the past two and a half decades, I am struck by some of the change we have seen. At the same time, I find myself pondering the future change we need, and how we will navigate the next chapter of Wales' evolution. Not so long ago, the impacts of living beyond our environmental limits were understood but felt some way off for many people. Working in international development, I knew that climate change was altering environments and impacting

livelihoods, particularly in the Global South. I was familiar with the long-term projections, but even for me the risk often felt distant, abstract even.

NICW is undertaking work that I am co-leading, which is dedicated to understanding the limitations and opportunities in our consideration of climate projections in infrastructure and spatial planning. This work is focused on engaging with infrastructure planners and providers to explore current practices, information sharing, and collaborative efforts. We are also looking at case studies of best practice from around the world, understanding how different countries are integrating climate projections into their planning processes. Our findings will be crucial in shaping recommendations for the Welsh Government, particularly in advising them on

how they should request climate advice in the future and how to plan strategically for Wales' infrastructure.

The report we are working on will explore the differences between predicted climate impacts and real-world data, and how these differences can influence infrastructure planning and provision. The aim is to better equip decision-makers to respond effectively to future challenges.

Creating that country where we do things differently requires all of us to step up and play our part. It demands that we acknowledge the barriers we face today, yet remain relentless in our efforts to overcome them. We all need to ask ourselves what we can do, both personally and professionally, to shape a more sustainable and resilient future for Wales.

David Clubb



Our efforts in the early years are yielding strong results in Commission activities. NICW is effectively meeting its objectives, adhering to both its official mandate and internal framework, which anchors our

discussions and decisions in the realms of nature, climate, and the commitment to improving conditions for Wales' most disadvantaged communities.

We are continually enhancing our internal capabilities, including through training in futures thinking, ensuring that we can anticipate and address the needs of future Welsh citizens, including those yet to be born, alongside the more immediate concerns of the 2030 horizon.

Our collaboration with representatives across various infrastructure sectors highlights NICW's broader relevance within the industry. I am grateful for the support from these sectors, which has been invaluable in helping us achieve our primary objective: providing recommendations that challenge and guide the Welsh Government in its long-term infrastructure planning for Wales.

Aleena Khan



Today's radical policies are tomorrow's new standards. Year 2 provided an opportunity to reflect on our 'Preparing Wales for a Renewable Energy 2050' report published in 2023.

The report was forward thinking in its approach, highlighting the urgency of embracing radical actions now so that we can create a world where addressing climate change isn't extraordinary.

An experience which was particularly impactful this year was our Site Visit to Borth, where we were given the opportunity to hear from community members directly impacted by climate change.

It reinforced the importance of engaging with the local community to foster stronger & more resilient outcomes that truly reflect their, and future generations priorities & well-being. In the coming year, I look forward to contributing towards the Climate Communication – Engaging Communities project, which focuses on the interconnection between community engagement and futureproofing infrastructure.

Eluned Parrott



As one of the lead commissioners on this year's major project on Flood Resilience, this has been a year of discovery and reflection, but also gratitude to the many stakeholders and communities who have supported us on our journey.

The data is stark. 1 in 7 homes in Wales are already at risk of flooding, and this will increase rapidly as the effects of climate change become increasingly apparent. When you visit communities who are already living with this risk, the sense of anxiety is palpable. Flooding devastates lives. It removes that sense of security we all need to feel safe in our homes, and leaves people watching over their shoulders every time it rains. It takes a toll on mental and physical health for years to come, not just when the immediate danger of a flooding event is present.

On a personal level, I feel a deep sense of responsibility to these communities, to make sure their voices are heard and help to drive forward meaningful change. It has been deeply humbling to hear stories of personal anguish, but also to hear how people want to be active participants in building the resilience of their communities for the future. They are not content to wait passively for the next crisis, and neither must we be. As a society, we must be impatient to build a better future. The time to start is now.

Eurgain Powell



During our second year, Eluned and I have been busy working on our Flooding project. Working with a range of sector experts and stakeholders to deliver four research workstreams, exploring the challenges and opportunities identified in terms of a future vision, catchment

working, funding, resources and the role of land use planning. We are hugely grateful to all of those who have contributed to our work and were very pleased with our final report that we published in October, with 17 bold but practical solutions. We've had such a positive response to the report from the Deputy First Minister, NRW Flood Committee and the Flood and Coastal Erosion Committee, it does feel that our work sets out the path that we need to take to develop long-term resilience to our

changing climate with people and nature at the heart of our approach.

I've really enjoyed working with my fellow Commissioner to explore a variety of infrastructure issues, also visiting other areas of Wales and talking to a range of stakeholders about local challenges and opportunities. I've benefited from training on the UK Government's Futures Toolkit this year, and was pleased that we were able to apply futures methodologies in our Flooding work to develop a positive Vision of a resilient Wales in 2050.

Nick Tune



Having delivered our report 'Preparing Wales for a Renewable Energy 2050' in 2023, it's heartening to see some of recommendations

coming to fruition, such as the development of a national energy plan based on the work of the Local Energy Action Plans, and with the creation of the National Energy Systems Operator it is pleasing to see the drive for electricity grid that Wales needs, delivered at pace. With the implementation of the Infrastructure Bill, I very much hope that the consenting of renewable energy schemes in Wales will become streamlined,

however there is still an issue with the lack of skilled professionals to consent renewable energy schemes within the public sector.

Finally, I am very proud of my fellow commissioners' work on the flooding report, as it is so very timely and needed. We need to stop building in high-risk flooding zones and we need to prioritise green infrastructure solutions to manage flood risk into 2100.

Engagement/resources



You can email us at NationalInfrastructureCommissionforWales@gov.wales



You can telephone the Secretariat on **0300 025 5200/5040**.



You can check out our [LinkedIn](#) Page.

We maintain a register of our engagements online:

<https://nationalinfrastructurecommission.wales/about/>

Our new Remit Letter can be viewed here:

<https://nationalinfrastructurecommission.wales/wp-content/uploads/2022/04/NICW-remit-letter-2022.pdf>

Our updated Terms of Reference can be viewed here:

<https://nationalinfrastructurecommission.wales/wp-content/uploads/2022/04/NICW-Terms-of-Reference-2022-English.pdf>

Our register of interests can be viewed here:

<https://nationalinfrastructurecommission.wales/wp-content/uploads/2023/11/NICW-Register-of-Interests-v5.0-2nd-NICW.pdf>

Our meeting notes can be found here at:

<https://nationalinfrastructurecommission.wales/publications/>