Toolkit: Engaging Diverse Communities in Climate Adaptation Conversations

Prepared by School of International Futures for National Infrastructure Commission For Wales

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Contents

Introduction and getting started	3
Introduction to the toolkit	3
Getting started	4
Section 1: Designing conversations	6
Designing community conversations	7
Overview of tools and their uses	8
The flow of a climate resilience conversation	9
Section 2: Tools and case studies	12
Futures Walk	13
Futures Poetry	17
Roleplay Deliberation	20
Climate Resilience Game	23
Future Visioning	26
Futures Mindfulness	30
Looking Back Looking forwards	33
Section 3: Additional guidance	36
Facilitator Guide: Running Effective Sessions	37
Additional methods inspiration	39



Introduction to the toolkit

This toolkit showcases a set of flexible tools to support and inspire better conversations in communities about the adaptation of local infrastructure to climate change.

Who is it for?

The toolkit is aimed at both commissioners and organisers of community dialogues about climate and infrastructure. You might be a government agency, an infrastructure planning body, a civil society organisation, or a local community organiser.

What challenge does it address?

Infrastructure sticks around. And so infrastructure decisions that are made today will have impacts on people generations into the future. Infrastructure planning is not just the responsibility of a small group of government officials—citizens can learn to use sandbags to protect their homes or community centres, and communities can collectively organise to adapt and improve their environments.

Conversations about climate infrastructure and climate risk are complex and multi-stranded. They can be full of jargon and hard to assess. Impacts of climate change can be uncertain or unknown, and may not be felt for a very long time. Some people refuse to accept the science. The risks may not directly affect us, but may affect our grandchildren, or other people whom we care about.

What is the goal of the toolkit?

The first step for Welsh citizens seems to be to find ways of engaging in nuanced conversation about climate change and its risks for local infrastructure. The goal of this toolkit is to share methods that demonstrate that it is possible to have nuanced, meaningful and future–focused conversations with diverse communities about climate infrastructure adaptation.

We want the toolkit to inspire more communities to have and host these conversations in the future.

How to use this toolkit:

This is not a one-size-fits-all approach. Instead, it's a diverse menu of methods, each varying in suitability depending on the context and community. The tools are written to be accessible but also not overly prescriptive—to help you identify what might work best in your specific context and guide you in adapting it to meet your needs.

It has been designed to take into account of the <u>Wellbeing of</u>
<u>Futures Generation Act</u>, its Seven Goals and Five Ways of Working.



Getting Started

This toolkit is designed to help you engage diverse communities in meaningful conversations about climate adaptation and local infrastructure. Whether you're an experienced facilitator or just starting out, this guide will help you navigate the toolkit and choose the right approach for your context

Navigating the toolkit

This is not a step-by-step manual but a flexible collection of tools that can be adapted to different groups, locations, and challenges. You can use it in full or select specific tools that suit your needs.

- If you're planning a community discussion:
 Start with the <u>quidance for designing community climate</u> conversations.
- If you're looking for specific activities: Browse the overview of tools to find ready-to-use methods.
- If you need facilitation guidance: The <u>additional</u> guidance section provides tips on running engaging, inclusive sessions.

Quick start tool selection

- **1. Need an easy way to begin?** Try the <u>Looking Back, Looking Forward</u> tool to spark discussions using local history and change.
- 2. Want a creative approach? Futures Poetry helps participants express their hopes and fears for climate adaptation through creative writing.
- **3. Running a multi-session process?** The <u>Conversation Flow</u> page suggests how different tools can fit together over multiple sessions.



Other resources that might meet your needs

There are a number of brilliant toolkits and organisations that support the design of community climate adaptation conversations. This toolkit fills a specific niche, but we encourage you to explore if other resources might better suit your needs.

What is unique about this toolkit?

This toolkit is made unique through the intersection of a number of different interacting lenses and design decisions:

- A focus on climate infrastructure adaptation
- A very long term focus out to the year 2100 to help communities make sense of long term climate uncertainty.
- A focus on tools to host conversations within individual community groups.
- A community first approach, focusing on adapting methods so suit each group rather than applying 'best practice'
- A goal to build literacy on these subjects, without a requirement to feed into specific planning decisions.

Before you dive into this toolkit we want to signpost towards a number of excellent toolkits that might better meet your needs. We have shared some here, but we suggest you start by asking who is already doing this work in your community and across Wales? Who can you connect with and learn from?

Understand how to connect into local development plans

Community Engagement in Local Development Plans - ORCA

A resource on best practices for involving communities in shaping local development plans. `

Explore ideas for how to scale your work

S Community Consultation for Quality of Life CCQOL

The largest study of its kind in the UK, exploring consultation and engagement practices in planning and infrastructure.

Hold participatory futures conversations in communities.

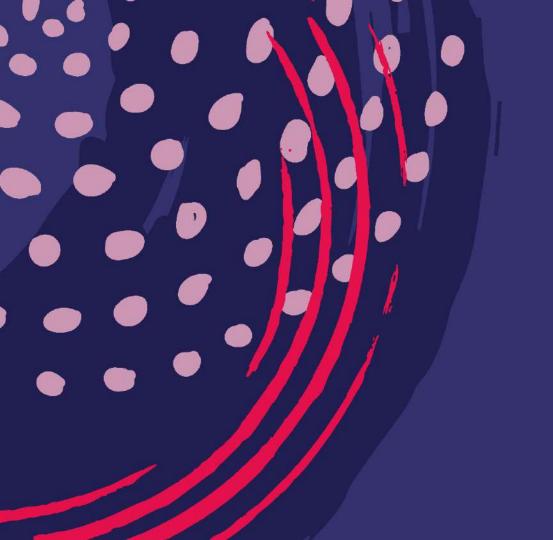
Building better futures toolkit WCVA A highly structured and directly applicable toolkit for communities to lead their own futures informed strategy making.

Explore approaches for public participation and deliberation

Involve A non-profit that hosts an extensive knowledge base, resources and tools for running participatory and deliberative exercises.

The National Principles for Public Engagement in Wales are a helpful checklist for planning engagement.





Section 1

Designing a community climate futures discussion

An introduction into the trade-offs and decisions needed to be made when putting together a conversation with a local community about climate adaptation.



This toolkit was developed through a co-design process with three stakeholder organisations in Grangetown, Cardiff. The accompanying report details the co-design process and offers a more detailed summary of recommendations for future work

Here are a set of the most important takeaways to apply when designing a community dialogue about climate infrastructure adaptation.

You can find out more about the communities and what we did here.

How to design conversations that involve diverse place-based communities?

- Bringing communities into a co-design process is essential for ensuring that all stakeholders feel equally valued and involved throughout the process. Rather than feeling the need to choose the tools yourself, why not ask your community what activities they would prefer to engage with.
- We recommend working with community anchor organisations for quicker access to diverse groups, but targeted outreach can be effective when aiming to involve underrepresented groups. Open calls through community networks can additionally be a way to bolster the range of groups you are in contact with.
- It is important to ensure flexibility in how conversations are designed and delivered. These conversations may not be their main priority, so you may need to work around other commitments.
- Designing in ample time for trust-building will lead to richer, more meaningful conversations.
- Providing multiple entry points for community members (drop-in sessions, facilitated workshops, and digital engagement) increases accessibility and people's ability to participate.

How do you design conversations that enable communities to engage on complex climate and infrastructure topics?

- Using participatory futures methods enables groups to have discussions about the future in ways that don't rely on complex knowledge, or processing detailed evidence about climate or infrastructure - instead they have a fictional conversation that draw off their own values yet still elicits useful trade-offs. This is seen in tools like <u>Futures Visioning</u>, and <u>Role Play Deliberation</u>, or a <u>Climate Resilience Game</u>.
- To also ground conversations in the local context, you might want to research locally relevant evidence (including lived experience, historical data, and expert insights) that you can bring into sessions. This can be seen in <u>Futures Walk</u>, And Looking Back, Looking Forward
- We recommend using a mix of structured and creative methods to make climate and infrastructure topics tangible to different groups, and in different ways.
- You may well already be working with people who are experienced at community facilitation. If funding allows, involve them as early as possible in planning.
- Source training/support for local facilitators in futures approaches to build necessary capacity.



Overview of tools and their uses



Role Play Deliberation

Helps participants explore complex climate adaptation decisions by embodying different perspectives.



Climate Resilience Game

A playful, competitive game that helps participants understand resilience, collaboration, and local adaptation challenges.



Looking Back, Looking Forward

Engages participants in storytelling and local history to build climate literacy and shared understanding of adaptation.



Futures Poetry

Uses poetry as a tool to express visions of the future, helping participants articulate emotions, challenges, and hopes..



Future Visioning

Guides participants through a structured visioning process to identify fears, hopes, and express future possibilities.



Futures Mindfulness

Uses guided mindfulness techniques to help participants deepen their understanding beyond cognitive analysis.



Futures Walking Tour

Immerses participants in their local environment to explore how places change over time and in the future.



The flow of a climate resilience conversation

These conversations can take many different directions, and most of the tools presented here can be used at various points in the process. If running a multi-session process with a group, you might consider the following flow:

- Session 1: Understanding climate & infrastructure Build awareness of key concepts, language, climate threats, and local infrastructure.
- Session 2: Creatively exploring climate futures
 Use a place-based futures tool to encourage
 creative exploration of alternative infrastructure
 solutions and local climate adaptation strategies.
- Session 3: Sensemaking & next steps
 Ground the learning through a creative project or a discussion on actionable next steps for the community.

The visual on the right shows which tools we think will work best for each of these stages.

Session 3: Session 2: Session 1: Sensemaking & Next **Understanding Climate** Creatively exploring Steps climate futures & Infrastructure **Looking Back, Looking Futures Mindfulness Role Play Deliberation Forward** Secommended **Futures Walking Tour Future Visioning Futures Poetry Climate Resilience Future Visioning Futures Walking Tour** Game **Futures Mindfulness** Applicable **Role Play Deliberation Futures Poetry Futures Walking Tour**

What did this look like in the communities we engaged?



SEF Cymru

Who: SEF Cymru works to narrow the attainment gap of school pupils. It provides tuition and study skills support to over 100 children and has deep connections with the historically under-served ethnically-diverse communities of south Cardiff

Interests: SEF Cymru ran these conversations as part of its weekly Sunday study club. As such, they favoured quick methods, that are simple, accessible, creative and don't 'feel like school'.

Tools used: We used <u>Futures Poetry</u>, then <u>Role Play Deliberation</u>, and finally <u>Futures Walking</u> Tour.



Grange Pavillion Youth Forum

Who: Grange Pavilion Youth Forum has a membership of over 40 young people aged 14-25. It is self-directed and engaged itself in community building, climate action and global citizenship matters.

Interests: The Youth Forum was really keen on game related activities, getting outdoors, and ensuring activities were fun and high energy.

Tools used: We used <u>Looking back looking</u> <u>forward</u>, <u>Futures Walking Tour</u>, followed by <u>Climate Resilience Game</u>, and finally <u>Futures</u> <u>Visioning</u>.



Green Soul

Who: Green Soul is a grassroots organisation dedicated to removing the barriers that women of colour face of engaging with climate and environmental issues, and accessing green space. It also supports women to engage in wellbeing, mindfulness and community activities.

Interests: Green Soul were keen to start with an informative approach to build their community members' understanding of climate resilience, before moving to more creative activities.

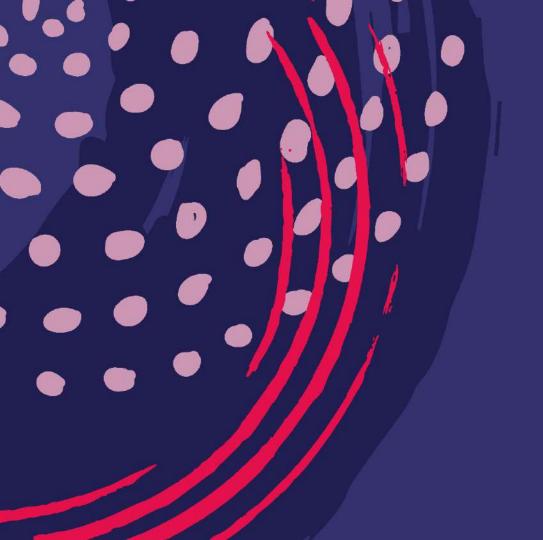
Tools used: We started with Role Play Deliberation and then Futures Mindfulness.



Watch this video for a bit more about the project.







Section 2

Tools and Case Studies

This section introduces you to the tools that we used in a light touch way. It aims to provide inspiration and guidance for how to adapt tools to other community contexts.

Tool 1: Futures Walk

Purpose:

The futures walk is a way to build community understanding of climate resilience through an engaging outdoor walk. It's a good first entry into this topic.

Introduction:

A walking tour is a standard, tried and tested community planning and engagement tool. We therefore used this approach, but made it 'futuresey'. Walking was a universally popular activity during the co-design sessions, and it is a great way to contextualise climate change locally, and capitalise on people's attachment to and knowledge of their community.

We used a set of cards to structure forward facing conversations at different locations.

Prep time: Low - Medium

Numbers: No max/min, Split into groups

Duration: 2-3 hours Difficulty: Easy



How to run the futures walk

Instructions

Before the walk:

- Decide on a route to include several places to stop for a discussion. Ideally you would visit existing sites of climate infrastructure, but it can also just be a circular walk around the neighbourhood.
- Risk assess the walk. Check the weather forecast!
- Print out the card deck ahead of time, ideally with a copy of the cards for groups of 4-6 people.
- Look for an expert in local climate infrastructure who might be able to join the walk - although this is not necessary.
- If you are involving a competitive element to the activity, or series of activities, identify your scoring system and the criteria for winning points.

Step 1: Introduction (20 mins)

- Start with a conversation to gauge what participants know about climate change
- Then you might kick off with a quiz featuring facts and figures about both climate change and the local community to get participants engaged and thinking critically about their environment.

Step 2: Future Facing Walk (60-80 mins)

- At each location start by asking each group to take out their cards. The cards have three categories:
 - o Climate impacts
 - o Types of Infrastructures
 - Design principles
- For each location, ask each person to do a 360° turn to take in as much as possible about what they see around them, and to consider 'hidden' infrastructure, e.g., underground or underwater.
- Each group then takes 5 minutes to choose one card from each category to illustrate a future infrastructure that might be built in that place.
 - e.g., they might pick, Extreme rainfall, Transport, and Nature Based Solutions, and imagine an elevated urban greenway for cyclists.
- Then they should present that idea back to the wider group explaining their rationale.
- Try to start a discussion on the trade-offs and benefits of the ideas each group presents.

Step 3: Closing reflections (20 minutes)

- End the walk at a location where you can sit and have a discussion such as a café.
- Facilitate a group discussion about what participants noticed and imagined during the walk.



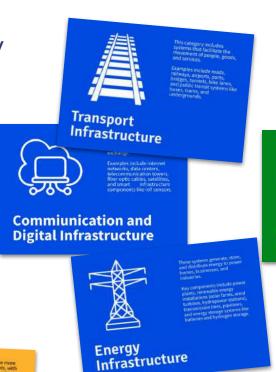


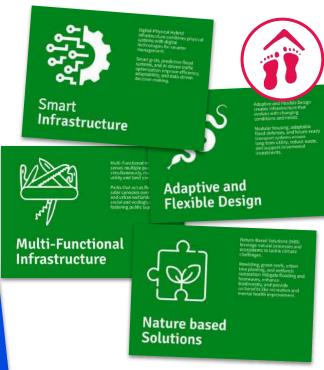
Examples of the card activity

The cards represent three simple categories: Climate impacts, Types of Infrastructures and future facing infrastructure Design Principles.

By combining cards together you can generate ideas for ways that infrastructure needs to adapt to climate challenges.







The cards for the walking tour was created based on the following assets:

- National Preparedness Commission Principles for Climate Resilient Infrastructure
- Future facing infrastructure principles derived from the <u>NICW scenarios</u>
- <u>Climate change committee infrastructure risks</u> fact sheet and chapter

Heavier

Rainfall

Tips on doing it well

- Avoid making the tour feel like a presentation.
 Some expert input can be good but it is primarily a creative activity about the future.
- Encourage creativity, and emphasise that any idea about the future is potentially true.
- Incentivise people by buying them lunch or a hot drink in a café at the end of the walk.
- Laminate your cards and other paper-based props you use in case of inclement weather

Adapting the tool to your community

We were lucky in Grangetown that the neighbourhood already has a wide range of different infrastructures that help it adapt to climate change. This made it relatively easy to visit and discuss each of them in turn. We also involved Grangetown resident lan Titherington, an expert in sustainable drainage, and who joined us on one of the walks.

In locations where there is little existing climate infrastructure, or where relevant experts cannot be found, then lean into the more imaginative use of the tools: get participants to imagine what climate infrastructures might one day be seen in a place.

Reflections from stakeholder organisations

YOUTH FORUM: "It was a really engaging activity where the group learned a lot and the young people loved it. Getting the teams to compete made the creative exercises much more energised."

SEF CYMRU: The futures cards were a little complex for the young people aged 11–14. Using digital versions of the cards on smartphones also reduced the tactile nature of the exercise.

Consider simplifying the cards for young people younger than 15; and using physical laminated versions of the cards.

Links to additional resources

- Link to printable card deck
- Other walking approaches include the <u>futurescape walk method</u>, or (more involved) is the <u>foresight walks</u> approach.
- <u>Public Map Platform</u> A two-year research initiative led by Cambridge University that aims to improve place-based decision-making by funding community researchers to create evidence-based maps.
- We also used this quiz to build participant knowledge of local climate threats





Tool 2: Futures Poetry

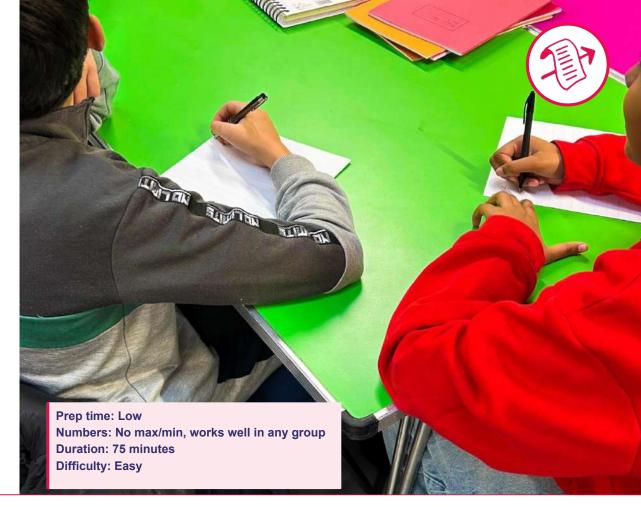
Purpose:

Futures Poetry is a way to build an emotional and imaginative connection to climate resilience through creative writing. It introduces key futures thinking concepts while helping participants explore personal and communal relationships to climate adaptation.

Introduction:

Poetry is a powerful tool for expression, reflection, and storytelling. In this session, we use it to connect people emotionally and imaginatively to climate resilience. This is particularly effective for engaging young people, allowing them to articulate their experiences, fears, and hopes in a personal way.

While poetry can sometimes feel intimidating, this session breaks it down into simple, accessible exercise to help people consider resilience in both personal and collective ways. You could also use other forms of creative writing.



How to run Futures Poetry

Before the Session:

- Choose a welcoming, comfortable space for discussion and writing.
- Print out examples of poems related to nature, climate, and resilience for inspiration (see resources)

Step 1: Welcome and Context (15 mins)

- Explain the role of poetry in capturing emotions and visions of the future and reassure people that poetry doesn't need to follow strict rules.
- Read a short poem on community climate resilience and explain that poetry can be simple, rhythmic, or event metaphorical.
- Introduce the first writing activity.

Step 2: Writing Activity - 'Where We've Been' (10 mins)

- Participants write a short poem (4-6 lines) about a memory of a loved place affected by environmental changes.
- Encourage sensory details—what did it smell or sound like? How do you feel here?
- If stuck, they can remix lines from existing poems.

Step 3: Writing Activity - 'Where We're Going' (10 mins)

- Now everyone will re-imagine their loved place as a climate-resilient future.
- Use open questions to guide the participants:
 What does daily life look like? How do people and nature interact? What innovations or traditions shape resilience?
- Write a short poem envisioning hope, adaptation, or renewal.

Step 4: Sharing and Reflection (25 mins)

- Invite participants to share their poems (optional but encouraged).
- Facilitate a discussion:
 - What common themes emerged?
 - What futures do we want to move towards?
 - How did writing these poems shift your perspective on resilience?

Step 5: Closing (2 mins)

- Reflect on key takeaway from the session.
- Introduce upcoming sessions (e.g., roleplay or futures walk).





Tips on doing it well

- Emphasise that poetry doesn't have to rhyme and anyone can write it. Give some examples of poems that do not rhyme.
- Encourage participants to experiment; there's no 'wrong' way to write poetry.
- Use examples and metaphors to help those struggling with writing.
- Offer small incentives (snacks, hot drinks) to encourage participation.

Adapting the tool to your community

Poetry can be scary for some, but there are many ways to run a poetry workshop with different levels of supportive structure: from making <u>acrostic poems</u>, to giving a template, cutting out and remixing existing poems, free-writing and choosing words from that the list is endless.

Hip hop might be popular with your young people and is very lyrical with an emphasis on rhyme so might be more appealing than the P-word. Take this as a simple guide but also do your own research into how to run a poetry workshop. Find something that feels right for your group. Why not arrange an exhibition or recital evening of the poems produced as part of the end-of-project reflections/celebrations?

Reflections from stakeholder organisations

SEF CYMRU: "Poems focused on people's favourite places, encouraging them to be optimistic about what they might be able to do [in the future]."

"At first I was a bit confused with the poems but I got into it."

"They [study club members] can usually struggle to stay quiet but noise levels dropped."

It took a while for the young people to grasp an understanding of the term 'infrastructure'. Explaining at as 'the things make things work' and referring to the lights in the room, the wifi, the electricity powering the laptop really helped.

Links to additional resources

- See here for a list of <u>poems about futures and climate resilience</u>
- View the <u>poems from when we ran this event</u> with a cohort of young people
- Here you can find a more <u>detailed session plan</u> if helpful





Tool 3: Role Play Deliberation

Purpose:

Role Play Deliberation is a participatory method that helps groups explore complex decisions by embodying different perspectives—including non-human ones. It allows participants to experience the tensions, trade-offs, and negotiations involved in planning for resilience...

Introduction:

This tool is especially useful for exploring decisions with many social dimensions in contexts where we don't actually have the evidence to know how the challenge will play out. It works best when framed around a specific dilemma, such as the construction of a new drainage system in response to flooding in Grangetown in 2100.

By role-playing different stakeholders—such as residents, policymakers, rivers, or future generations—participants develop empathy for diverse viewpoints and grapple with real-world complexities.



How to run Role Play Deliberation

Before the Session:

- For this tool you can use our role play activity comprising the character sheets in the resources box on the following page.
- If you would prefer to create your own role play game you will need to:
- Identify a specific infrastructure challenge/dilemma and create a scenario (e.g., It's 2050, and Grangetown needs a new drainage system to manage increased flooding).
- Create a set of characters (ChatGPT can really help here). These can be:
 - o people, ideally with different perspectives, e.g., local trader, a disabled person, a student, a climate activist.
 - o physical things, e.g., the River Taff, a local park, minerals for construction, a future generation
- Print facilitator scripts and discussion prompts.

Step 1: Welcome and Context (15 mins)

- Introduce the session's purpose: to explore infrastructure resilience through role play.
- Explain it is a fictional but grounded deliberation based on real climate challenges.
- Reassure participants that role-playing is about perspective-taking, not performance.

• Introduce the key dilemma they are discussing, including different options for moving forward.

Step 2: Character Immersion & Exploration (20 mins)

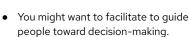
- Hand out character sheets and give each person a few minutes to read about their role.
- To start the role play make a mini-ritual to transition into their role. For example play a gong sound to mark the transition.
- Ask participants to introduce their character and their stance on the topic your are discussion. The character guide should give them initial prompts for this, and then they should be encouraged to make up the rest of their answers.
- Encourage characters to mingle and chat to build alliances. Who might support your stance?

Prompt for Character Exploration:

- Who do you agree with? Who do you oppose?
- What does a good outcome look like for you?

Step 3: Role Play Deliberation (30 mins)

- A more structured discussion where each character shares their stance with the full group.
- Open the floor for debate, encouraging participants to find common ground.





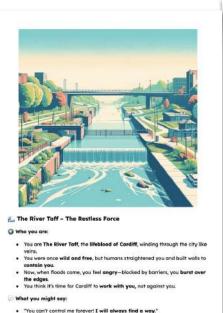
Step 4: Reflection & Takeaways (25 mins)

- Invite participants to step out of character and reflect on the experience. A gong sound or small ritual might help them to translation out of character.
- Facilitate a discussion:
 - What perspectives surprised you?
 - Did you find common ground with others?
 - How does this change the way you think about infrastructure decisions?
- Capture key insights on a board or make notes for follow-up discussions.





Examples of role play character sheets



. "Why fight the water? Let's work with and around the water!" . "I could help you... if you'd only give me space to flow naturally."



when the next storm corner? You'll wish you h



2 You can a small call over the rives

- Energy time the clear Stands, your core gets releast
 The water before fixed barriess—but you don't want the city to back aging.
 If proptic stop coming to your arms, yearst go ear of laurisess.
- What you might say:
- "I need pretention from floods, or my business wan't survive"
 "Big eight walls will naw the city—can we do screeting ensemble.
 "What about businesses like mine! we need support to misulat."





- Not are Grange Sardens, a beloved urban park that has watched Carolff
- You've provided shade, play space, and fresh sir for ever a century, but
- Tour to provided insular, you spool, druct mean our for over a celerary, but heavy main heap drawning your roots.
 Some any you should be named and a fixed retention gened—a welford designed to exect up escales water.
- The been here larger than any of your You cont just drawn on out?
 "Let the chees can wild we need more frees, well-only, and green spaces to
- "Concrete word's save you. Notice has been managing water for militarities."



14. Mei - The Rewilding Advocate



- . Every vear, people get trapped in their horses, and you light to gulf them to

- Tlooding is getting worse. We need better preparation, not just cleanap?
 Timergency services head more boots, more shelters, and faster worning.





Tips on doing it well

- A specific scenario with clear options makes discussions easier in the latter part.
- Simple props help participants embody their roles: name tags, masks, clothing.
- Non-human characters work really well in broadening the discussion, so keep these in the discussion when allocating characters.
- Host it somewhere with ample space it gets noisy and involves lots of movement!
- Consider how you deal with any participants who are not engaging with the activity. They can be a distraction to others in their group.

Adapting the tool to your community

The tool can be used with different roles, and the dilemma can be shaped to match a specific challenge that you are looking to address. For example if exploring transport infrastructure and sea level rise you could make a set of characters and a dilemma about that.

ChatGPT is your friend in this regard. Plug in the activity featured in the resources page, and ask it to create for you new characters and dilemmas based on your topic of interest.

Reflections from stakeholder organisations

SEF CYMRU: The character cards were largely fine, but for some of the young people either simplification and/or additional time would have helped their understanding.

"Just because Grangetown is safe, if the sea barrier affects other parts of Cardiff then that's not fair. What if we have friends or family living there?"

""It's ok to change your mind"

GREEN SOUL: "I enjoyed that. It really got me thinking"

Links to additional resources

- See here for the <u>role play character cards</u> that we used.
- Here you can find a <u>facilitator script and detailed session plan</u>.





Tool 4: Climate Resilience Game

Purpose:

The Climate Resilience Game is an interactive experience that helps participants engage with principles of resilience planning in a playful way. Through competition, collaboration, and creativity, participants explore the complexities of preparing for climate-related hazards in their community.

Introduction:

Adapted from a game called Act To Adapt - this game isn't just about physical infrastructure - it's about relationships, planning, and adaptive capacity. Players play as either a hazard team or a community team while the community team has to collaborate to agree on pieces of infrastructure to be saved from intensifying climate hazards. Through this mechanism players develop a deeper understanding of the trade-offs involved in community resilience.

Act To Adapt is a product of a collaboration between PLAN International, the Red Cross Red Crescent Climate Centre, the Engagement Lab at Emerson College, the Philippines Red Cross, and PLAN Philippines.



How to run Climate Resilience Game

Detailed instructions for this game can be found in the handbook for <u>Act To Adapt</u>, developed by the Red Cross and Red Crescent. This description shows how that game might fit within a workshop format.

Before the Session:

- Familiarise yourself with the rules it is a fairly complex game so you might have to read the rulebook a couple of times.
- Consider trying the game out with a small pilot group before running it with your full group.
- You may want to adapt it for your context by personalising the cards (see adapting the tool for your context)
- Print infrastructure sheets, and find a big space to run the activity in.

Game Introduction:

- Explain the game format, objectives, and rules.
- Emphasize that the goal is to explore collective resilience rather than individual survival.

Game Play:

- Participants engage in the game, making strategic decisions about resource allocation, collaboration, and response to climate hazards
- See <u>this document</u> for detailed game instructions.

Facilitated Reflection:

- Ask teams to present their decisions and outcomes.
- Discuss key themes, such as:
 - o What strategies were most effective?
 - o What challenges emerged?
 - o How did collaboration shape outcomes?
 - Which infrastructure did you not save but wish you could have?



<u>See here for detailed instructions on</u> <u>the Act To Adapt Game</u>

Tips on doing it well

- Manage the competition as you go along you might need to stretch the rules as you go along to make sure the game mechanics work.
- Make sure you do the practice rounds with your group before you start playing, they are very helpful to help participants understand the mechanics.
- The more drama and storytelling you bring with your facilitation, the more fun it will be.

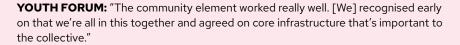
Adapting the tool to your community

The game does not need much adaption, and we would encourage you not to overly adapt the rules in order to make the game mechanism run smoothly.

What you can change is the infrastructures listed on the cards - you can see that we changed a few of them to make them relevant to the Grangetown context, since the game was originally developed for an Indonesian context.

You might also like to experiment with making the cards locally-specific, e.g., to a local park, or a specific bridge. This will help to locate negotiations around trade-offs.

Reflections from stakeholder organisations



"No matter how often you play it it's unpredictable."

Players engaged "really well" with long-term thinking.

"Our teamwork was really important because without it and the good communication we made the right decision every time when the hazard came"

Links to additional resources

- Link to <u>Act To Adapt online resources</u>
- Link to our <u>adapted act to adapt cards for the Cardiff context</u> with images replacing a number of illustrations.





Tool 5: Future Visioning

Purpose:

This activity is a guided visioning exercise that helps participants imagine hopeful long-term futures for their community. Through structured reflection, and freeform creative expression, this tool is a structured way to help groups articulate their aspirations, and bring together what what they have learned from the process (so far).

Introduction:

Visioning needs a structure to make it work. If you just ask people what they want from the future you tend to get generic, and airy answers (e.g., more greenery, equality, etc.).

A more structured way of doing it is to identify specific fears on a subject and then invert them imagining how the fear can become a source of hope. Write down a specific aspiration.

The final part of the activity involved freeform creative expression, which can be an empowering way to share these visions with the world.



How to run Future Visioning

Step 1: Review & Reflect (15 min)

Gather participants in a circle. Review insights from prior sessions, such as a walking tour or game. Ask:

- What has stood out most to you so far?
- Did anything shift in how you think about the future?
- How have you felt?

Step 2: Fears & Hopes (20 min)

Introduce the idea of looking toward the year 2100.

- Ask each participant to think of two fears for their community's future relating to climate infrastructure adaptation.
 - What could go wrong?
 - What worries them about the long term?
- Ask them to be as specific as possible here.
- After a few minutes, participants share their fears with the group.

Step 3: Reversing Fears into Hopes (20 min)

In small groups, participants take each fear and flip it into a positive vision.

 Example: If a fear is "We will lose all local green spaces," a reversed hope could be "Our town is full of thriving, community-run green spaces."

Step 4: Creative Future Expressions (30 min)

Groups transform their hopeful futures into a creative expression.

- They can draw, map, record a <u>podcast</u>, write a short story, create a newspaper from 2100, or even perform a short scene set in their envisioned future.
- Encourage different media: visual, spoken, movement-based.

Step 5: Sharing & Discussion (15 min)

Each group presents their future vision. Then, facilitate a short reflection:

- What patterns emerge across different groups' futures?
- How do these visions connect to present-day actions?
- What small steps could we take now toward these futures?





Tips on doing it well

- Give people enough time to think of their fears, and recap learning from previous sessions before diving into these. The nuance of the fears shape the vision
- Visual prompts can help people get creative with their fears, e.g., you could print out a selection of images and ask participants to choose images to represent their different fears. We made available again the infrastructure cards from the futures walk
- Encourage visions to be ambitious but still possible - they should feel achievable enough to give hope and motivation to work towards them

Adapting the tool to your community

This tool should not need much adapting from group to group. Some groups however, might prefer a more structured approach to the final creative exercise.

The Youth Forum were particularly creative and keen, energised by the freedom to create unique outputs,. Other groups might prefer the structure of knowing they have to make a specific outputs, e.g., a future news report.

Reflections from stakeholder organisations

YOUTH FORUM: "The enthusiasm was through the roof! And it showed through the quality of work produced"

"Al and technology were a key theme that kept coming up. Participants are aware of it can be utilised"

"In the podcast the maturity and understanding of the topics was beyond what I predicted"

"Nature often gets overlooked"

Links to additional resources

Short podcast on visioning by influential futurist Wendy Schultz





Tool 6: Futures Mindfulness

Purpose:

The activity combines mindfulness and meditation to help participants not just imagine, but feel what it would be like to live in future worlds encapsulated in a set of scenarios. A facilitator uses mindfulness techniques to guide then through this process.

Introduction:

It is easy enough to cognitively understand a future scenario, but very hard to really understand what that scenario might feel like. This approach gives participants time to step into the future and sense into their bodies to understand what it might feel like.

The session was designed and run by <u>Natasha</u>
<u>Dawkes</u>, a contemporary and improvisation dance artist and mindfulness practitioner, recruited by Green Soul.



How to run Futures Mindfulness



- If an external facilitator is being recruited to guide the mindfulness stage, make sure they are familiar with the scenarios and have, at least, a basic understanding of futures.
- The facilitator will need to prepare statements and open questions that will help participants to be introspective and...
- Identify the time and room for the mindfulness exercises. Ideally, you will not be interrupted or disrupted by the noise of other activities taking place in the building, and will have enough space to feel a collective experience without it being too cramped.
- Prepare your scenarios and name them.
- Ensure you will have the means to play your background music and noises (CD player, PA system, smart speaker, etc.).

Step 1: Introduce the scenarios (15 min)

- Present the scenarios on a screen and explain each one.
- Ask participants if there are any terms that need explaining.
- Refrain from exploring feelings or opinions on the scenarios
- Explain what the mindfulness exercise will entail and how long it will last

Step 2: Mindfulness (45 min)

- The facilitator will use a range of pre-prepared verbal, audio and musical prompts and stimuli to help participants enter a states of relaxation relax.
- Participants will be encouraged to focus on their breathing and invited to shut their eyes
- The facilitator will invite participants to imagine and explore the first scenario: how it makes them feel; to consider the elements they have reservations about and those to which they are more receptive; to conjure images in their minds in keeping with this scenario; place themselves in the scenario. The only voice that is heard is the facilitator's.



Step 2 cont.

- The facilitator will bring people back into 'the round' by opening their eyes, 'shaking out' their relaxed state and making eye contact with each other.
- The facilitator will invite participants to share their reflections and observations on the scenario and guide the conversation towards expressions of feelings about it.
- These steps are then repeated for each of the remaining scenarios.

Step 3: Reflection (15-30 min)

- The session can culminate with a range of options:
- Participants can be invited to form consensus behind a preferred scenario; or they can nominate their individually preferred scenario and explain why in discussion
- A further step can involve considering what might need to be done to bring about a preferred scenario(s) and to locate themselves within these potential actions



Tips on doing it well

- Keep scenarios to one side of A4 or to a single slide in PowerPoint. The longer and more detailed they are the harder they might be to engage with; or people may get hung up on particular details that inhibit their ability to explore the wider scenario.
- Four scenarios should be ample. Before going into the mindfulness and meditation stage, spend time discussing the scenarios and unpacking any terminologies in them.
- Participants may wish to express their feelings about scenarios at this introductory stage.
 Politely ask that they keep these back for the mindfulness stage.
- Use a location where interruptions and background noise will be kept to a minimum
- Give scenarios a name that helps participants.connect with them. For instance song lyrics, book/film titles ('Green Green Grass of Home', 'Blade Runner', 'The Hunger Games').

Adapting the tool to your community

Prepare scenarios that participants can relate to: refer to locations they will be familiar with; refer to concepts they will understand e.g., the economy, train travel, or smartphones.

Links to additional resources

• <u>Short podcast on visioning</u> by influential futurist Wendy Schultz



Tool 7: Looking back, looking forward

Purpose:

This tool is a simple discursive introduction to climate infrastructure adaptation. It draws on historic photos and people's own stories of their local area to develop a shared understanding of weather and how it affects our places.

Introduction:

Many groups will need a grounding session to start their engagement. Trust and climate literacy must be nurtured before attempting the more creative tools in this toolkit

This session is therefore structured as a way for participants to share their stories, to connect with one another, and to develop a shared understanding of both infrastructure and climate adaptation.

It's not about providing them with loads of new information at this point, nor positing change as a positive or negative, but holding discussions which surface what they already know about the topic - which is generally more than they think!



How to run Looking Back, Looking Forward

Before the Session:

- Search the internet and history books for old images of different types of infrastructure that exist in the community, e.g., social infrastructure, transport, communications, environmental.
- Try to replicate the old image as it exists today by standing in the same position or viewpoint as the earlier image was taken. This helps to provide a contrast.
- Bring all your images together into an online presentation. Prepare questions and prompts that help to illustrate the differences between the then and now, and the concept of change. For instance, how does it make people feel, notions of loss, or renewal or enhancements.
- Look for pictures of locations that you are planning on visiting or including when you use other methods, for instance the futures walk. This helps make connections between sessions.
- Consider inviting participants to bring their own photos of the community from days gone by.
 They can help build personal connections with the project and to create shared artefacts (see Step 3).Be sure to tell them well in advance what they may need to do/bring.

Step 1: Introduction (5 min)

- Depending on the numbers in the session, consider placing participants in groups
- Explain the purpose of the method and, given it is likely to be one of the first exercises, locate it within the wider project.

Step 2: Reveal the pictures (45-60 mins)

- Slide by slide reveal the then and now pictures and facilitate a conversation about people's recollections. An element of competition can be incorporated by seeing who can first recognize the old photos.
- Steer the discussions towards the concept of change and adaptations. Invariably, participants will note fewer cars or more trees in the older pictures; more street furniture and more functional/less ornate architecture in the recent pictures.
- Use these observations to encourage participants to think what differences pictures from the same vantage point might be 30-50 years from now

Step 3 (optional): Create digital outputs (1-2 hours)

- Scan pictures that you might have invited participants to bring to the session
- Capture people's memories and the stories they tell when you explore the then and now pictures.
- People's audio can be overlaid onto the pictures to create a digital story; or edited together to create an oral history podcast; or shared on social media that might serve to raise the profile of your futures project in the community. Be imaginative!





Tips on doing it well

- When you trawl for old pictures, aim for pictures that date as least as far back as your futures methods are stretching people to think ahead, i.e., want people to locate themselves in the 2050s? Then source pictures from 25-30 years ago in the 1990s
- Don't get too fixated on accurate re-creations. Approximate will do!
- Be careful to respect copyright. You may need to credit the source of the photos you use, especially if there is a public aspect to using this method, e.g., as part of a community fair, exhibition, digital storytelling, oral history project

Adapting the tool to your community

There should be little adaptation required as the method is intrinsically all about the community in question.

But consider including pictures that will very quickly generate discussion, e.g.,:

- a landmark that has controversially been lost
- a cherished feature of the community
- something with not just local significance but regionally/nationally important



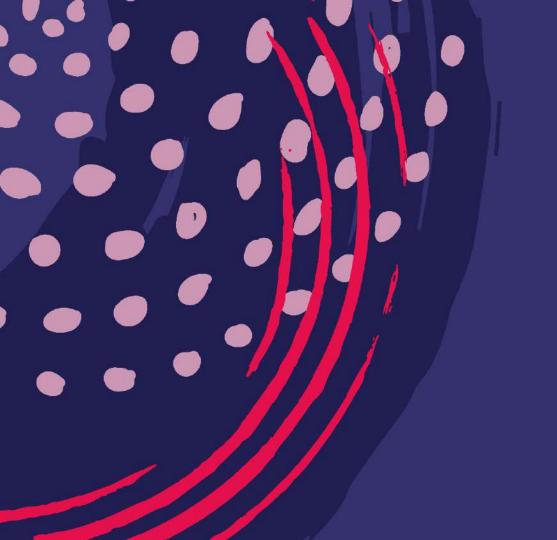
YOUTH FORUM: "it's amazing how much some things change but other things stay the same."

GREEN SOUL: "remember the mudflats out where the Bay is now? Young people must look at us funny when we talk about watching the tide go out in Grangetown."

Links to additional resources

- You can use <u>Google Earth</u> to get historical photos of a place. <u>Here are the instructions</u> of how to do it.
- <u>This thread on Bluesky</u> has some fascinating #ThenAndNow pictures from around Cardiff





Section 3

Additional Guidance



Facilitator Guide: Running Effective Sessions

The detail provided in this toolkit assumes that sessions are run by a facilitator with at least a small amount of experience in leading group activities.

For those with less experience, this guide provides practical steps for setting up, running, and concluding sessions effectively. It ensures participants are engaged, discussions are productive, and key insights are captured.

Preparing for a Session

- Share an agenda in advance so participants know what to expect.
- Send out all necessary briefing materials, e.g., background reading, discussion prompts.
- If hosting a virtual session, confirm everyone has the necessary links and devices.
- Print in advance any necessary materials
- Enquire if anyone has any special requirements that you can accommodate to maximise their contributions and enjoyment.

Session Flow & Timing

A well-structured session balances time for discussion, creativity, and reflection.

1. Check-in (20-30 min):

- Start with an icebreaker to set the tone and encourage participation.
- Provide space for informal conversation to build rapport.

2. Main Activities:

 Exercises should be exploratory and for this toolkit need not lead to concrete outputs.
 Embrace the unknown!

3. Feedback & Discussion (10-20 min):

 Allow time for small groups to share insights, ensuring space for deeper conversation.

4. Wrap-up (10 min):

 End with a checkout, summarising key takeaways and outlining next steps.

Starting a Session

The beginning of a session sets the energy for the rest of the discussion

- Icebreakers help participants feel comfortable and engaged. They should be simple and interactive.
- A quiz is a fun and competitive way of starting a session, as well as helping gauge existing understanding
- Examples of future-themed icebreakers:
 - What object from today would you take to 2100?
 - What food do you love that will be harder to find in the future?

Working in Small Groups

For effective collaboration, consider:

- Assigning roles (e.g., note-taker, timekeeper) and rotating them.
- Setting ground rules at the start of a workshop series to create a respectful, productive space. Try:
 - Providing a blank sheet for participants to write their own rules.
 - o Offering a starting list, such as:
 - "Be present in the room"
 - "Listen as much as you talk"
 - "Respect everyone's contributions"
 - "Build on what you hear"
 - "Speak as individuals, not as representatives"



Facilitating Feedback

When groups present their work:

- Encourage reflective feedback. You might want to ask an objective question first (What did you notice?) before going to a feeling level or interpretive question.
- Encourage visual summaries:
 - If your insights were a headline, what would it be?
 - o If this were a picture, what would it look like?
- Balance speaking time across groups and look for common themes.

Closing & Synthesizing Outputs

- Thank participants for their time and contributions.
- Ensure key points are captured if you are planning to use them in another session:
 - o Take photos of physical materials.
 - o Download digital templates if working online.
- It is essential in all engagement exercises that participants and other stakeholders are informed about what has happened with their contributions
- This should be done via a range of methods that take account of participants' preferences and broaden your reach.

 Be sure to share your findings with your funders or sponsors. Maybe your elected representatives such as local councillors, or Senedd members, would be interested in your insights.

Building on your success and planning forward

- Should you wish to repeat the exercise, rather than simply 'rinse and repeat' these steps, it is important you evaluate how you feel things have gone
- Ensure that you canvas a wide range of opinions as part of the evaluation and:
 - Build on what worked well
 - Seek to improve on what worked less well
- A key question to ask yourselves is: Who didn't we reach last time?
- It is likely that participants will have acquired skills and experiences through their involvement last time round, so consider whether they can take on an enhanced role in a successor project.





Additional resources to support planning and delivery of community conversations

The following list is a set of additional resources that may support your community conversations

Quick Tips - Academi Wales

A collection of practical insights and guidance from Academi Wales, likely aimed at supporting leadership and public sector professionals in Wales.

Quick tips website

Business Wales Events Finder

A searchable database of business-related training, workshops, networking, and seminars.

Business Wales Events Finder

Local Resilience Forums - GOV.UK

A resource providing contact details and information on the role of Local Resilience Forums, which coordinate emergency planning and disaster response across the UK. Decal Resilience Forums – GOV.UK

Co-Production Network for Wales Knowledge

Base A repository of best practices, case studies, and resources on co-production, supporting more inclusive and participatory decision-making processes.

Co-Production Network for Wales Knowledge Base

Well-being of Future Generations Act (Wales) 2015

All the explainers and resources needed to inform your preparation and help increase understanding of the Act in the community with whom you are working.

Public Map Platform

A two-year research initiative led by Cambridge University that aims to improve place-based decision-making by funding community researchers to create evidence-based maps.

Public Map Platform

Community Consultation for Quality of Life

The largest study of its kind in the UK, exploring consultation and engagement practices in planning and infrastructure.

Community Engagement in Local Development Plans – ORCA

A resource on best practices for involving communities in shaping local development plans. CELDP - ORCA

Wales Infrastructure Act (Section 30)

Wales Infrastructure Act - Consultation Regulations A legislative reference concerning future consultation regulations under the Wales Infrastructure Act.

Section 30 - Infrastructure (Wales) Act 2024

Understanding Welsh Places

An online database that documents all settlements in Wales with a population of 2,000 people or more, covering 193 settlements.

Understanding Welsh Places





Additional methods inspiration

This toolkit provides 7 simple methods for engaging communities in climate conversations, but we are aware that there are many more.

This page lists some of the inspiration we considered when designing these approaches, and we hope it inspires you as well to explore alternatives that might work with your group.

Global Assembly Approach

Adapting a deliberative approach from global assembly Resilientville Canada

Climate Fresk

A 3 hour activity of arranging tiles to better understand the complexity of the climate crises. A card deck could potentially be adapted to illustrate infrastructure systems & Climate Fresk

Climate Play

A range of approaches using lego serious play to hold diverse climate discussions & Climate Play

Town Anywhere

Approach developed by Rob Hopkins for activating collective imagination about the future of people's cities <u>Town Anywhere on Youtube</u>

Play Decide

A card game for simple, respectful and fact-based aroup discussion. PlayDecide

Participatory GIS

GIS is used as a research tool in academia to capture. store, analyse and present data that is linked to a location. Participatory GIS | Involve

Seeds of the Good Anthropocene

Workshops uncover inspirational grassroots climate projects and use them to imagine better futures.

Seeds of the Good Anthropocene

CityScope

Hamburg experiment of using augmented reality to talk about refugee housing planning; use of Generative AI to quickly visualize different sorts of built environment changes to a neighborhood

Street performance

Experiential approaches, where street performances are done, so citizens can 'walk into the future' based on difference scenarios

Our City Plans Toolbox

A process-heavy breakdown of activities to use for different stages of participatory urban design 🔗 Toolbox I Our City Plans

Forum Theatre

Forum theatre is an interactive drama technique where audiences explore solutions to social issues by actively intervening and changing the course of a performance

Walk Shop

A participatory walk exploring a neighbourhood's past via storytelling, observation and community mapping. It engages elders, policymakers and scientists to envision future transformations

The Wonders of Walkshops - STEPS Centre



Conversation cafe and world cafe

Conversation Cafe is a casual dialogue method that encourages people to engage in discussions about current issues in a relaxed and informal setting

Japanese Future Design

This involves intergenerational role play to improve planning and decision-making. Participants role play as either current or future generations, using costumes to symbolise their roles. This method has successfully influenced policy planning in Japan Springer

Time Capsule Retrieval Service

Different future scenarios are explored by opening a time capsule from the future. Participants explore the time capsules to make sense of changes and decisions we are facing Smithery

B-Prepared

A collaborative platform and VR experience where users can build and share knowledge on extreme weather events and means to survive them B-Prepared

Speculative design and storytelling workshops

We use emerging trends to tell future stories and come up with objects and artefacts from the future.

TikTok Futures Workshop

Using tiktok to scan for signals of change and then getting training from tiktokkers to make our own future films.

https://www.studiofuturall.com/projects/tiktok-futures

Resilientville Canada

A role playing games for groups of 8-10 people to advance participant awareness of the short and long term benefits of problem solving at the neighbourhood level. The game is focused on flood.

<u>https://crewresilience.ca/our-projects/resilientville-canada/</u>

The Adaptation Game

A game that uses maps to let players make infrastructure investment decisions and experience the consequences that unfold. They would then enhance their imagined worlds with design fiction games.

https://www.tagclimatedrill.org/

SURE!

A role play game about collaboration in protecting urban people and infrastructure from flood risk.

https://www.climatecentre.org/games/2470/sure/



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About the Authors

The School of International Futures (SOIF) is a purpose driven non-profit organisation that seeks to transform futures for current and next generations. It works globally with partners such as governments, foundations, civil society and business leaders to enhance innovation and resilience; to better understand and manage risk; and to improve strategic decisions.

For information on the project please contact info@soif.global or the NICW Secretariat.

About the Commissioners

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 makes 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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