



Local Development Plan engagement – Planning Power with Cairngorms 2030

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The views, grading systems and opinions expressed within this paper are that of the individual participants and are not reflective of the views of the Cairngorms National Park Authority as a body. For the purpose of this paper, participants have been anonymised to facilitate their personal views being conveyed without attribution, allowing for open, honest, and uninfluenced discussion of the themes explored during the Planning Power sessions.



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1. Executive summary

The Planning power game is a gamified data collection tool used to gather the insights, suggestions as well as the understanding of policies within National Planning Framework 4. Originally built utilising the Otter Power game created by the University of Edinburgh, the platform allows for participant to engage in an equitable discussion and trial planning decisions by implementing different National Planning Framework 4 policy to achieve a series of goals that their teams feel would aid the Cairngorms National Park. The game was trialled with members of the public in an event in Aviemore in February 2025¹.

The Planning Power game was run with the Cairngorms 2030 team consisting of 30 members split over six tables of five participants with one facilitator. Participants possessed various degrees of knowledge surrounding the planning system with the views of participants having no reflection of the views of the Cairngorms National Park Authority.

Across the six groups, participants consistently prioritised mental and physical health, housing, wellbeing economy, and sustainable transport, alongside climate and ecology goals such as net zero and biodiversity. These selections reflect pressing concerns around affordable housing, the impacts of short-term lets, accessibility and transport limitations, and the need for integrated environmental action. Goals such as landscape, community ownership, and cultural heritage were less frequently chosen, suggesting participants perceived these as already safeguarded or less urgent relative to immediate community challenges.

Discussions revealed a nuanced understanding of policy concerns. Participants valued National Planning framework 4's high-level vision but stressed the need for context-specific, locally adaptable policies. Housing emerged as a critical issue, with participants highlighting shortages, affordability challenges, and the tension between new development and environmental protection. Participants called for policies with measurable outcomes, enforceable delivery mechanisms, and stronger alignment between national, regional, and local planning.

The game format proved effective in fostering inclusive and democratic dialogue. The rotating 'Otter' role ensured equal participation, while wild card policies allowed for creative input beyond predefined options. Facilitators played a vital role in guiding

¹ Click here to view the University of Edinburgh report on the engagement event in Aviemore



discussion, though participants requested clearer upfront information about planning processes and implementation. Key insights generated:

- Top priorities: health, housing, wellbeing, transport, and net zero.
- Policy gaps: need for locally relevant housing and infrastructure solutions.
- Systemic challenges: lack of municipal-level capacity and limits to the Park Authority's powers.
- Value of gamification: accessible, engaging, allows for lived experiences and local priorities to be discussed.



2. Project Overview

2.1 Background

Context of the Cairngorms 2030 team

The Cairngorms 2030 team, as part of their away day, agreed to participate in the Planning Power game, run in conjunction with the Forward Planning team. The session lasted around 90 minutes, during which the thoughts and opinions of the team were both categorised and recorded.

The Cairngorms 2030 programme aims to make the Cairngorms National Park the United Kingdom's first net zero national park. Comprising more than 20 long-term, high-impact projects, Cairngorms 2030 is the largest initiative of its kind. With over 80 partners involved in delivery and more than £42 million invested, the programme is intended to drive the transformative changes needed to meet the National Park's shared climate and nature responsibilities. By combining large-scale investment, partnership working, and a focus on long-term outcomes, Cairngorms 2030 seeks not only to achieve net zero, but also to establish a model of sustainable practice that can inspire other national parks and regions across the UK.

The outcomes of the Planning Power game provided valuable insights into how the Cairngorms 2030 team view key priorities such as climate action, housing, health and wellbeing, and sustainable transport. These reflections will help inform the programme's ongoing work, ensuring that its projects are shaped not only by strategic objectives, but also by the lived experiences and perspectives of those involved in delivering change across the National Park.

Table 1 Participant information.

Games	Workshop code	Number of participants	Group
Game session 1	C2030	30	Cairngorms 2030

Rationale for using gamification to explore planning issues

The planning system, while highly visible to the public, is often misunderstood or misrepresented. This is partly due to the specialised language and technical jargon used within the profession, as well as the complexity of legal documents that demand



significant expertise to interpret. Even accompanying guidance often requires further explanation.

To address these challenges, the Otter power game later adapted into the Planning Power game was created by the University of Edinburgh. Supported in its development and delivery by the Cairngorms National Park Authority, the game was designed to ground discussions in real planning challenges while remaining accessible to a wide range of participants.

Introduction to National Planning Framework 4 and its relevance

National Planning Framework 4 is Scotland's national spatial strategy that sets out the overarching tone for how development and local policy should be set out over the next decade. It combines long-term spatial planning with national planning policies, placing climate and nature at the centre of decision-making. National Planning Framework 4 is particularly relevant to the Cairngorms National Park, as it provides the policy context for addressing critical challenges such as affordable housing, sustainable transport, biodiversity loss, and the transition to net zero.

The Cairngorms 2030 were chosen due to the alignment with National Planning Framework 4 and the work that they continue to produce with outcomes present through the National Park, this coupled with the potential familiarity but not a specialised knowledge that the group could possess with the planning system allowed for the parameters set for the game to be achieved.

2.2 Objectives

The objectives that this report seeks to achieve by analysing the gamification session are as follows:

- Understand participants' knowledge and opinions of planning and National Planning Framework 4.
- Identify priorities and trade-offs in planning decisions.
- Capture real-world concerns that planning policy may or may not address.



3. Methodology

3.1 Participant Overview

The game called Planning Power for facilitating face-to-face public consultations is designed to be played in a group of five participants (although it is flexible enough to be played by four or six players). It aims to foster an effective and open discussion among all the participants by requiring them, through game play, to agree on a shortlist of goals from a larger selection and debate and select a set of policies by taking it in turns to chair the discussion (be 'the otter') and choose a policy to meet the group's chosen goals. The game can be used to generate discussions across a wide range of policy areas. Table 2 describes the main features of the game structure.

Table 2 Participant overview.

Feature type	Otter Power game
Design goal	Goals and Policies prioritisation
Game approach	Role-play card game
Who can play?	Game experience: Low to none Knowledge: Experts and non-experts
Number of participants	4 – 6
Number of sessions	1
Number of facilitators	One facilitator per game
Gameplay	Four phases of the game: <ul style="list-style-type: none">• Agree on a set of goals collectively as a group.• Select a set of five policies through five rounds where players take it in turns to be the decision-maker ('the otter') and choose a policy from those proposed by the other players.• Score the policies to see the impact on all the goals, including the set selected by the group.• Discuss the impact of the chosen policies on the selected goals and consider swapping the policies.
Game setting	In person workshop participation
Expected duration	80 – 100 min



Feature type	Otter Power game
Output	Opinions of participants on the value and relevance of all goals and policies presented by the game, including consistent themes and differences.

3.2 Creation of Planning Power

The objectives most relevant to planning were selected and combined to create 11 distinct 'goals'. The language was simplified down to a goal title and one sentence description, and this was provided on each goal card, together with an icon representing the goal. While this did not allow the full meaning of the objectives to be understood by the players, the premise of each goal was clear, it enabled the game to function and it improved accessibility.

The image shows three goal cards, each with a title, an icon, and a description. The cards are arranged horizontally and have a light blue background with a white top section.

- Ecology**: Icon of a bird. Description: "Connect and restore habitats across the National Park and ensure species thrive."
- Mental and physical health**: Icon of a heart with a cross. Description: "Improve mental and physical health through greater connection to the outdoors and ensure everyone has opportunities to enjoy it."
- Housing**: Icon of a house. Description: "Ensure that 75% of new housing is for social rental, mid-market rental or other affordable categories providing affordability in perpetuity to enable people to live and work within the National Park."

This game aims to collect the opinions of players on which of the policies are important to them as citizens, thereby directly contributing to the process. A total of 33 policies was formulated. For the purpose of the game, the lengthy description of each policy was reduced to a short policy title and one sentence description.

Potential impacts on the goals' are shown on each policy card. The goals icons are listed together with 'plus's and 'minus' symbols indicating whether the impact is positive (+), strongly positive (++), negative (-), strongly negative (--), or insignificant (blank). These potential impacts were based on judgements made by a group of planning officers. They are open to interpretation and do not reflect the aim of the authorities, which is that there should not be compromise or trade-offs between policy objectives and all policies



can be applied positively to achieve sustainable development. Nevertheless, potential impact scores were applied to allow game play and enable the scoring round.

Blank policy 'wild cards' were created to enable players to write their own policies with potential impacts if they did not feel the policy cards covered the policy issues they believed were necessary or if they strongly disagreed with the impacts listed on a current policy card and players were encouraged to use these

The Otter Power game architecture envisages the identification of synergetic impacts when policy cards are implemented together. This was indicated in the bottom of the cards.

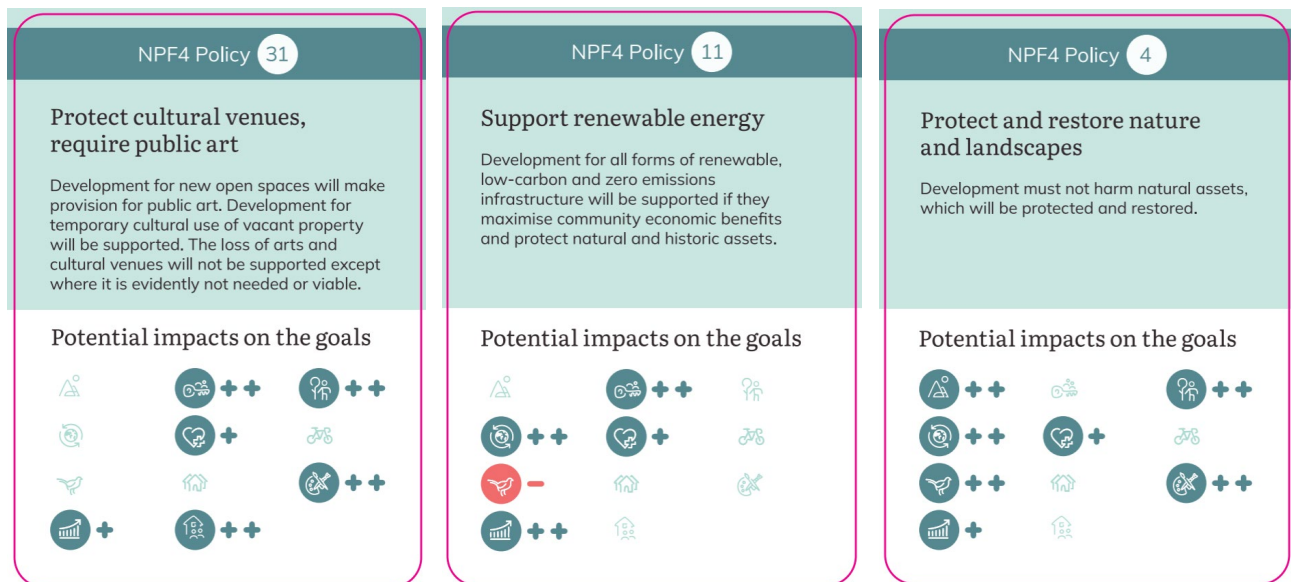


Figure 1 A series of images detailing the grading system conceptualised by the Cairngorms forward planning team.



Table 3 and Table 4, present a description of the goals and policies, respectively and Table 5 provides the potential impacts of the policies on the goals, identified on each policy card.

Table 3 Description of goals and their derivation.

Goal title	Goal description	Cairngorms National Park Partnership Plan 2022-27 objective
Landscape	Protect the National Park's special Landscape qualities.	Special landscape qualities
Net zero	Ensure the National Park reaches net zero as soon as possible.	A1. Net zero
Ecology	Connect and restore habitats across the park and ensure species thrive.	A10. Ecological network A11. Ecological restoration A13. Species recovery
Wellbeing economy	Increase the proportion of young and working-aged people in the National Park and develop an economy with a more equitable distribution of wealth, health and well-being.	B1. Working-age population B2. Well-being economy
Community ownership	Increase the amount of property and land in community ownership or management, including most of the land allocated for development.	B5. Community assets and land C3. Housing and Community benefit
Mental and physical health	Improve mental and physical health through greater connection to the outdoors and ensure everyone has the opportunities to enjoy it.	B9. Mental and physical health B10. A park for all
Housing	Ensure that 75% of new housing is for social rented, mid-market rental or other affordable categories providing affordability in perpetuity to enable people to live and work within the National Park.	C1. Access to Housing C2. New Housing



Goal title	Goal description	Cairngorms National Park Partnership Plan 2022-27 objective
Village and town centres	Ensure villages and town centres in the National Park are thriving places to live, shop and socialise.	C4. Village and town centres
Visitors	Stabilise visitor numbers in peak season and focus on high quality experiences in areas with sufficient infrastructure, capacity and ranger services in line with our sustainable tourism reputation.	C5. Visitors C6. A sustainable destination C9. High-quality visitor experience
Transport and access	Promote a shift towards sustainable and active travel and improve our path, cycle and outdoor access networks.	C7. Transport to and around the National Park C8. Accessible path and cycle network
Cultural heritage	Safeguard and promote the National Park's historic environment, history and culture and provide everyone with opportunities to experience and learn more.	C10. Cultural Heritage



Table 4 Description of policies and their derivation.

Policy title used on game cards	Policy description used on game cards	Policy title in National Planning Framework 4	National Planning Framework 4 policy number
Minimise carbon emissions	Development must be located and designed to minimise emissions and adapt to climate change.	Climate mitigation and adaptation	2
Protect and strengthen biodiversity	Development must protect, conserve, restore and enhance biodiversity.	Biodiversity	3
Protect and restore nature and landscapes	Development must not harm natural assets which will be protected and restored.	Natural places	4
Protect carbon-rich soils and peatlands	Development on carbon-rich soils will be limited to renewable energy or be small-scale farm or rural community-related.	Soils	5
Protect and expand forests, woodland and trees	Development must not remove or fragment woodland which will be protected and expanded.	Forestry, woodland and trees	6
Protect and enhance historic assets	Development must not harm historic buildings and other assets which will be protected and enhanced.	Historic assets and places	7
Reuse brownfield land and limit greenfield development	Development that sustainably reuses brownfield (previously developed) land will be permitted. Building on greenfield land (not previously developed) will only be permitted where allocated.	Brownfield, vacant and derelict land and empty buildings	9
Support renewable energy	Development for all forms of renewable, low-carbon and zero emissions infrastructure will be supported if they	Energy	11



Policy title used on game cards	Policy description used on game cards	Policy title in National Planning Framework 4	National Planning Framework 4 policy number
	maximise community economic benefits and protect natural and historic assets.		
Minimise construction waste	Development must minimise waste including by reusing buildings, materials and infrastructure and using low-carbon, reusable, new materials.	Zero waste	12
Prioritise walking, cycling and public transport	Development must provide walking and cycling routes, be accessible by public transport and not located where it would increase reliance on the private car.	Sustainable transport	13
Require well designed places	Development must be designed to improve the quality of the area by being healthy, pleasant, distinctive, connected, sustainable and adaptable.	Design, quality and place	14
Create connected and compact places (local living)	Development must successfully integrate with existing places and communities to improve access to sustainable transport, employment, shopping, health and social care, childcare and education, playgrounds, open space and recreation facilities, toilets and housing.	Local living and 20 minute neighbourhoods	15
Require high quality, affordable, diverse and sustainable homes	Development for new homes must be high quality, affordable and sustainable, providing choice across tenures and meeting the diverse housing needs of people and communities.	Quality homes	16
Support new rural homes	Development will be supported in rural areas where it is small-scale and in keeping with the character of the area.	Rural homes	17



Policy title used on game cards	Policy description used on game cards	Policy title in National Planning Framework 4	National Planning Framework 4 policy number
Require infrastructure with development	Development must provide or contribute to identified infrastructure need and impacts on infrastructure must be mitigated.	Infrastructure first	18
Prioritise natural and passive heating and cooling solutions	Development must prioritise natural and passive solutions such as siting, orientation and materials to adapt to more extreme temperatures.	Heat and cooling	19
Protect and enhance blue and green infrastructure	Development must not lead to a deficit in blue or green infrastructure (water and land-based open space) and it should be an integral part of new proposals.	Blue and green infrastructure	20
Protect outdoor play, recreation and sport facilities	Development must not result in the loss of outdoor sports or children's play facilities unless it is replaced with a better facility. New development should incorporate play provision.	Play, recreation and sport	21
Avoid flood risk areas	Development must be avoided in areas at flood risk and must not increase the risk of flooding. Development must connect to the public water mains or to a sustainable water source.	Flood risk and water management	22
Support health and wellbeing uses	Development that will have positive effects on health will be supported - for example places for exercise, community food growing or allotments, and health and social care facilities.	Health and safety	23a



Policy title used on game cards	Policy description used on game cards	Policy title in National Planning Framework 4	National Planning Framework 4 policy number
Protect people and places from harm	Development that would cause air quality or noise pollution or create safety hazards or risks will not be supported.	Health and safety	23b
Support digital infrastructure	Development that delivers new digital services, particularly in areas with no or low connectivity will be supported. The visual and amenity impacts must be minimised and the use of existing buildings or masts explored.	Digital infrastructure	24
Support community wealth building (wellbeing economy)	Development that contributes to community wealth building strategies such as enabling local jobs and community-led ownership of buildings as well as improving community resilience, reducing inequalities and increasing spending within communities will be supported.	Community wealth building	25
Support business uses in the right locations	Development for business and industry uses on allocated sites, home working, live-work units and microbusinesses will be supported.	Business and industry	26
Prioritise town and local centres	Development that creates vibrant town and local centres and attracts high levels of people, such as leisure, cultural, sports, education and health facilities will be supported in town and local centres, but not out with them.	City, town, local and commercial centres	27
Support shops in rural areas	Development for shops that serve local rural needs ancillary to farms, craft and petrol/charge/service stations will be supported.	Retail	28



Policy title used on game cards	Policy description used on game cards	Policy title in National Planning Framework 4	National Planning Framework 4 policy number
Support sustainable rural development and communities	Development proposals that contribute to the viability, sustainability and diversity of rural communities and local rural economy will be supported.	Rural development	29
Support sustainable tourist facilities and accommodation	Development proposals for new or extended tourist facilities or accommodation will be supported in identified locations. Loss of tourist facilities will only be supported where it is no longer viable and there is no need for alternative tourist facilities in the area.	Tourism	30
Protect cultural venues, require public art	Development for new open spaces will make provision for public art. Development for temporary cultural use of vacant property will be supported. The loss of arts and cultural venues will not be supported except where it is evidently not needed or viable.	Culture and creativity	31



Table 5 Potential impacts on the goals identified on each policy card.

	Policy title used on game cards	Goal titles used on game cards										
		Landscape	Net zero	Ecology	Wellbeing economy	Community ownership	Mental and physical	Housing	Village and town centres	Visitors	Transport and access	Cultural heritage
2	Minimise carbon emissions		**				*		**	*	**	*
3	Protect and strengthen biodiversity	**	*	**	*		*			**		
4	Protect and restore nature and landscapes	**	**	**	*		*			**		**
5	Protect carbon-rich soils and peatlands	**	**	**								
6	Protect and expand forests, woodland and trees	**	**	**			*			**		
7	Protect and enhance historic assets	**	*		*	*	*			**		**
9	Reuse brownfield land and limit greenfield development	*	**	*		*			**	*	**	
11	Support renewable energy		**	*	**	**	*					
12	Minimise construction waste		**	*								
13	Prioritise walking, cycling and public transport		**		**		**		**	**	**	*
14	Require well designed places	*	*	**	**		**	*	**	**	**	**
15	Create connected and compact places (local living)	*	**	*	*		**	**	**	*	**	*
16	Require high quality, affordable, diverse and sustainable homes		*		**	*	*	**	*		*	
17	Support new rural homes				**	*	*	**			*	
18	Require infrastructure with development		*	*	**		*			*	**	
19	Prioritise natural and passive heating and cooling solutions		**				*			*		*



		Goal titles used on game cards										
20	Protect and enhance blue and green infrastructure	**	**	**	*	*	**		*	**	*	*
21	Protect outdoor play, recreation and sport facilities				**	*	**		*	*	*	*
22	Avoid flood risk areas						*			*		
23a	Support health and wellbeing use				**	**	**		*	*	**	
23b	Protect people and places from harm				*		**		*			
24	Support digital infrastructure	*	*	*	**	*	*	*	**	**	*	
25	Support community wealth building (wellbeing economy)				**	**	*	**	*	*		
26	Support business uses in the right locations	*	*	*	**		*		**	**	*	
27	Prioritise town and local centres	*	**	*	**	*	*	*	**	*	*	*
28	Support shops in rural areas		*		**		*		*	*	*	*
29	Support sustainable rural development and communities		*		**	*	*	*	*	*	**	*
30	Support sustainable tourist facilities and accommodation		*		**		*		*	**	**	*
31	Protect cultural venues, require public art				*	**	*		**	**		**

In addition to goal and policy cards, 'players instructions' and 'otter's powers' cards were created to explain the game for players. These updated the Otter Power game infrastructure to enable the specifics of the game to be understood and learned by the players as part of the game.

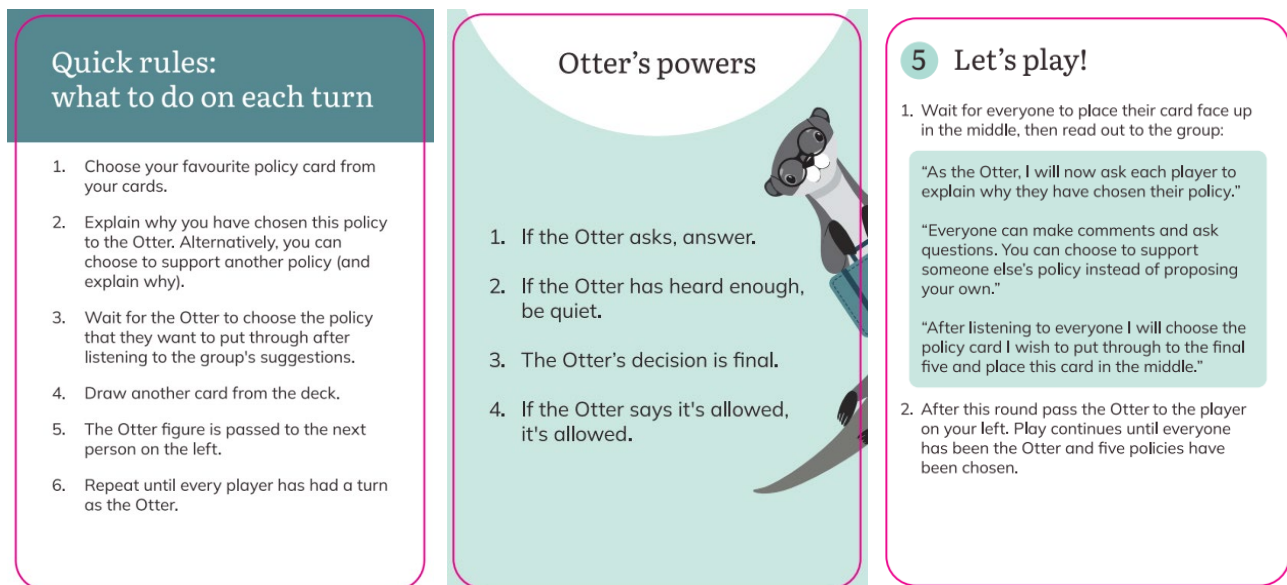


Figure 2 Series of images of the Planning power instruction cards.

3.3 Data Collection Tools

To determine how often each goal was explicitly selected across all the game transcripts, a structured semantic search was applied similar to earlier policy analysis. This involved the following steps:

Goal reference set creation

Each goal was defined using its official title and descriptive text. We also created a list of common synonyms and thematic keywords associated with each goal.

Transcript parsing

All game transcripts were parsed paragraph by paragraph using the python-docx library, capturing each participant utterance individually.

Selection cue identification

Paragraphs were flagged for analysis if they contained explicit selection signals, such as:

"We chose...", "we selected...", "our pick was...", "we went with...", "we agreed on...", "this was our goal..."

Semantic matching

Flagged paragraphs were then compared against each goal using:



Keyword-based matching (goal aliases, related terms)

Contextual checks for alignment between the selection statement and the intended meaning of the goal.

A match was counted only when a selection phrase clearly referred to a goal or its synonyms, ensuring the analysis prioritized explicit selections rather than vague mentions.

Validation and filtering

For ambiguous cases, we manually verified quotes to ensure that selection intent was genuinely present. We excluded paragraphs that mentioned goals but did not indicate they were chosen by the players.

Aggregation

The resulting matches were tallied into a matrix: goals (rows) × games (columns), with a final column summing the total selections per goal. We also extracted and displayed example quotes from each game that supported these selections.

Fathom Notetaker

Each Planning Power game discussion was recorded using the Fathom Notetaker application, a bolt on third party application which allowed for teams calls to be recorded transcribed and interrogated within one package. In order to achieve high-quality audio, capture the usage of aftermarket radial microphones was also implemented, ensuring that all participant contributions including dialogue, decision-making, and reflection were accurately documented in real time with a corresponding time stamp. This approach enabled the capture of the group dynamics while maintaining an unobtrusive presence during gameplay.

Following the sessions, the Fathom transcripts were exported, cleaned, and anonymised to remove identifying details as well as non sensical language, such as filler speech. Each transcript was then reviewed to ensure consistency in formatting and to correct transcriptional inaccuracies introduced by overlapping speech or environmental noise.

The cleaned transcripts were subsequently analysed using a prompted query-based approach, combining the Fathom platform's built-in summarisation features with custom analytical prompts to extract qualitative insights. Specifically, a structured series of prompts was developed to guide Fathom's semantic search and summarisation functions, focusing on key themes such as:



- Explicit goal selection statements. (e.g., “we chose...”, “our goal was...”)
- Participant reasoning behind goal and policy choices.
- Reflections on planning challenges, policy interpretation, and local experience.
- Expressions of consensus, disagreement, or negotiation between participants.

These query results were then validated through manual review to ensure contextual accuracy and reliability.

The integration of Fathom’s AI-assisted transcription with a structured prompting and validation workflow provided a robust and transparent analytical framework. This couple with the efforts of the University of Edinburgh’s efforts as well as the in-house Data extraction tool allowed for a high degree of accuracy to be achieved and for the participants intents to be clearly conveyed.



4. Findings

4.1 Common Priorities

From the onset of the game participants were instructed to choose four goals out of a possible eleven, these goals would be the ideals that the team were looking towards and what theoretically their chosen policies throughout the game would support through the scoring system. The frequency of such choices is noted in Table 6.

Table 6 Goal selection matrix.

Goals	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Total number of times chosen
Landscape							0
Net zero			✓	✓			2
Ecology	✓	✓					2
Wellbeing economy			✓	✓	✓	✓	4
Community ownership							0
Mental and physical health	✓	✓	✓	✓		✓	5
Housing		✓		✓	✓	✓	4
Village and town centres	✓				✓		2
Visitors		✓	✓				2
Transport and access	✓				✓	✓	3
Cultural heritage							0

Health and housing are the apparent top priorities of the group, with mental and physical health leading the table with five out of the six tables choosing this goal as a priority, this is reinforced by the wellbeing economy being chosen by four out of six tables, followed by housing and the need for affordable housing.



Goals associated with environmental sustainability followed close second. With net zero, ecology and transportation and access all being chosen multiple times. The frequency of the goals being chosen could be down to multiple factors, such as the complexity of implementation as well as the Cairngorms 2030 team having had direct experience with initiatives throughout the national park which could have influenced participants on the feasibility or impact of the said goals in a National Park centred viewpoint.

Areas which were not / chosen with relatively low frequency include landscape, community ownership as well as cultural heritage which were not chosen at all, this could suggest a misalignment in priorities or that other goals were simply more relevant to the group of participants. Alternatively, the lower frequency might reflect the perception that themes like landscape and cultural heritage are already well-protected or embedded in existing policy frameworks, leading participants to focus instead on areas where they felt their choices could drive more tangible or urgent change.

Visitor management and local centres were both topics that had been chosen with less frequency but still employed by multiple groups. This choice suggests holistic approach to choosing the goals for some groups as tourism is a key generator of income as well as employment within the National Park. By selecting these goals participants demonstrated an understanding that sustainable transportation includes more than attracting visitors, rather careful planning to accommodate as well as the protection of natural and cultural assets.

4.2 Interpretations and Strategy

Participant reflections on the relevance of the goals

Goal 1: Landscape

The goal of preserving natural landscapes in national parks centres on ensuring they remain unimpaired for future generations while carefully balancing conservation with public access. Participants' discussions reflected this balance, emphasising the need for sustainable tourism and low-impact infrastructure to minimise harm. Climate change and invasive species were identified as significant threats, leading to calls for habitat restoration, ecological research, and adaptive management. Community involvement and education were also highlighted as vital tools for strengthening stewardship and fostering long term protection.

Despite being fundamental to the identity of National Park, this goal was chosen less frequently by groups. This may suggest that participants considered it already well



protected, or that more immediate challenges such as housing, net zero, and visitor pressures felt more urgent. When it did feature, however, the discussions reflected a holistic understanding of conservation, linking ecological health with cultural values and local community engagement.

Goal 2: Net zero

The goal of achieving net-zero emissions within the National Parks was widely recognised as both urgent and necessary. Participants focused on the importance of renewable energy infrastructure, including solar and wind, and the expansion of electric vehicle charging networks to reduce dependency on fossil fuels. Reforestation and afforestation were also emphasised as key strategies for carbon sequestration, alongside improved forestry management.

The discussions reflected a strong consensus that national parks should act as exemplars of environmental leadership, modelling how protected landscapes can balance conservation with decarbonisation. This goal was chosen frequently, suggesting participants saw climate action as central to the future of the Cairngorms National Park and a priority that underpinned progress on many other areas, including visitor management, housing, and sustainable development.

Goal 3: Ecology

Protecting and enhancing ecological integrity was a theme that resonated strongly, with participants highlighting the need to safeguard biodiversity, restore habitats, and address the pressures of invasive species and climate change. The use of scientifically based conservation practices and ongoing ecological research was considered vital for informing adaptive management strategies.

Participants also linked ecological protection to wider goals, stressing the need for landscape connectivity to allow species migration and resilience to future climate pressures. Public engagement and education were seen as crucial, with many suggesting that stronger awareness campaigns could help visitors and communities understand their role in supporting biodiversity. While chosen less often than net zero or housing, the discussions revealed deep recognition that ecological health forms the foundation for all other aspects of park management.

GOAL 4: Wellbeing Economy

The wellbeing economy goal sought to reframe how national parks contribute to society, moving beyond traditional economic growth to focus on community wellbeing and sustainable livelihoods. Participants strongly supported aligning National Park



economies with local communities through sourcing goods and services locally, supporting small businesses, and developing eco-tourism initiatives that generate shared value. Collaboration between park authorities, communities, and businesses was considered essential to co-create opportunities and ensure fair distribution of benefits.

Discussions also explored how success should be measured through social and environmental wellbeing indicators rather than solely financial metrics. This goal was not always prioritised in the gameplay but, when chosen, participants engaged in forward-thinking discussions on how the National Park could model a wellbeing economy that integrates conservation with inclusive local prosperity.

GOAL 5: Community Ownership

Community ownership was seen to ensure residents have a genuine voice in, and derive benefits from, the management of national parks. Participants proposed advisory boards and formal structures for involvement in decision-making, alongside creating economic opportunities through community-based tourism, craft industries, and employment within the parks.

Environmental education and awareness were highlighted as central, with the view that engaged and informed communities are more likely to support conservation initiatives. However, this goal was chosen infrequently, which may suggest that participants prioritised more immediate or tangible issues, such as visitor numbers or housing. Nevertheless, the discussions revealed a strong belief that community ownership can strengthen long term stewardship and embed the Cairngorms National Park within the social and cultural fabric of surrounding areas.

GOAL 6: Mental and Physical Health

The role of the National parks in promoting physical activity and mental wellbeing was strongly recognised, with participants linking access to nature to reduced stress, improved fitness, and enhanced overall health. Hiking, cycling, and water-based activities were proposed as ways to encourage active lifestyles, supported by well maintained and accessible infrastructure. Mental health benefits were also highlighted, with calls for quiet zones, mindfulness programs, and guided nature experiences to support wellbeing. Accessibility for disabled people, older visitors, and underrepresented groups was a recurring theme, underscoring the importance of inclusion. This goal was viewed positively and chosen regularly, with participants recognising the unique capacity of national parks to act as health promoting environments that benefit diverse populations.



GOAL 7: Housing

The housing goal generated extensive debate, reflecting the acute challenges of affordability and access for both park employees and local residents. Participants noted that high living costs and limited housing availability undermine sustainable housing goals and community resilience. Proposed solutions included developing on site housing for seasonal staff, providing subsidies, and forming partnerships with local authorities to expand affordable housing.

Sustainability was a central concern, with strong support for green building practices, energy efficiency, and renewable technologies in new developments. The risk of gentrification and displacement was also acknowledged, with participants stressing the importance of inclusive planning that benefits local people. Housing was chosen frequently across groups, reflecting its importance and its role in supporting the long-term viability of both park operations and surrounding communities.

GOAL 8: Village and Town Centres

Village and town centres were recognised as vital hubs for community life, culture, and commerce, with the potential to reduce travel, support local economies, and enhance visitor experiences. Participants supported policies that encouraged investment in public spaces, sustainable transport links, and the promotion of local businesses.

Preserving the architectural and cultural character of these centres was seen as essential, with debates around balancing modern infrastructure with heritage values. Sustainability featured strongly, with calls for pedestrian-friendly designs, green building practices, and low-carbon transport systems. Although this goal was less frequently chosen, participants who engaged with it highlighted its importance for creating vibrant, resilient communities that align conservation and development in a visible, practical way.

GOAL 9: Visitors

Enhancing visitor experiences while managing their impact was a central theme in many discussions. Participants supported strategies such as timed entry, visitor capacity limits, and sustainable infrastructure to mitigate overcrowding and environmental pressures. Technology was seen as a tool to broaden access, with proposals for virtual tours and digital interpretation material.

Education and engagement were highlighted as critical, with calls for interpretive trails, exhibitions, and interactive workshops to deepen visitor connection to the parks' natural and cultural values. This goal was chosen regularly, reflecting the recognition that visitor



management is both a challenge and an opportunity: well managed visitors can become advocates for conservation, while poorly managed growth risks undermining the National Parks integrity.

GOAL 10: Transport and Access

Transport and access were viewed as pivotal to balancing conservation with inclusion. Participants proposed multi-modal transport systems that reduce reliance on cars, including electric shuttle buses, bike share schemes, and expanded pedestrian routes. Infrastructure improvements, such as better wayfinding and accessible trails, were highlighted as key to enhancing visitor experiences while making the Cairngorms National Park more inclusive for people with disabilities and mobility challenges.

Funding was widely debated, with suggestions including government grants, partnerships, and park entrance fees. This goal was chosen frequently, reflecting recognition that transport and access sit at the intersection of sustainability, equity, and visitor management, and that addressing it is crucial for achieving wider National Park objectives.

GOAL 11: Cultural Heritage

Cultural heritage was seen as essential to the identity of national parks, encompassing sites, traditions, and histories that enrich visitor understanding and create a deeper sense of place. Participants supported strategies such as guided tours, interpretive programs, and even virtual reality to balance access with protection of fragile sites.

Concerns were raised about over-visitation, and the importance of visitor caps and culturally sensitive approaches was stressed. Indigenous communities were highlighted as vital stewards, with participants underscoring the need for their involvement in management and interpretation. Although not chosen often, discussions revealed strong appreciation of the role cultural heritage plays in deepening the meaning of the National Park and by extension national parks in general, connecting ecological protection with human history and values.

Participant reflections on the relevance of the policies within National Planning Framework 4

Participant viewed National Planning Framework 4 as a useful high-level framework that works well on a national level but highlighted that sometimes its broad nature and how sometime this can cause some doubt in how effectively the policies could be applied to the Cairngorms National Park. The need for context based and more specific



policies that work to achieve local priorities such as park specific affordable housing goals, sustainable transportation as well as policies that aid in empowering the community whilst still protecting tangible and intangible cultural assets.

The participants' reflections suggested a pragmatic understanding that while the National Planning Framework 4 provides a valuable high-level direction, the real-world application and impacts will depend on how those principles are translated into specific, context-appropriate Local Development Plan policies and its implementation. Overall, participants saw National Planning Framework 4 as setting direction, with the Local Development Plan and other local mechanisms needing to adapt and expand on it to deliver tangible, locally relevant outcomes. The summaries are as follows.

Policy 1 Significant weight to be given to climate and nature crisis

Participants did not discuss this policy with specificity.

Policy 2: Minimise Carbon Emissions

Participants discussed at length the urgent need to reduce carbon emissions within the national park as part of the climate action strategy. Suggested stratagems that could be employed to achieve this are as follows:

- Energy efficient infrastructure: solar panels on park buildings, electric vehicles for maintenance / transport, and improved waste management.
- Low-carbon recreation: encouraging hiking, cycling, and other non-motorized activities over car use.
- Education and outreach: raising visitor awareness of their carbon footprint through materials and programs.

Participants stressed that success depends on collaboration between park staff, visitors, and communities, with the Policy acting as both a management tool and a driver of cultural change toward sustainability.

Policy 3: Protect and Strengthen Biodiversity

Discussions stressed the Policy's role in maintaining ecological balance, combating climate change impacts, and supporting resilient ecosystems. Key strategies included:

- Habitat protection & restoration: establishing protected areas, restoring degraded sites, and enforcing regulations against harmful activities (such as illegal logging, wildlife trafficking).
- Community engagement: involving local people in conservation, education, and stewardship to ensure long term effectiveness.



- Balancing conservation and livelihoods: promoting sustainable resource use and integrating traditional knowledge to harmonize human needs with biodiversity goals.

Participants emphasized that protecting biodiversity requires a comprehensive, inclusive approach combining science, policy, and community collaboration to secure ecosystem services and long-term sustainability.

Policy 4: Protect and Restore Nature and Landscapes

Discussions between participants highlighted the Policy's importance in conserving habitats, sustaining ecosystem services, and thus supporting sustainable tourism. Key strategies suggested included:

- Protection and restoration: restoring degraded landscapes, reintroducing native species, and managing invasive species to prevent further loss.

Science and monitoring: using research and data to guide priorities, measure progress, and ensure evidence-based decision making.

- Community and indigenous involvement: valuing traditional knowledge and fostering local stewardship of landscapes.
- Collaboration and resources: collective action across government, NGOs, and private sector, supported by funding and sustainable management.

Participants emphasized that Policy 4 requires proactive, collaborative efforts to repair past damage, prevent future degradation, and safeguard natural heritage for generations to come.

Policy 5: Protect Carbon-Rich Soils and Peatlands

Discussions between participants stressed the Policy's role in climate change mitigation, biodiversity protection, and ecosystem services. Key strategies included:

- Protection and monitoring: mapping, assessing vulnerabilities, and designating protected areas to prevent degradation from farming, peat extraction, and development.
- Restoration: scientifically backed projects such as re-wetting drained peatlands, with strong community involvement to ensure long-term success.
- Integration and cooperation: embedding the Policy within wider climate and land management strategies, with collaboration across agriculture, forestry, and planning sectors.
- Education and awareness: public campaigns to build understanding of peatlands' carbon storage and ecological value.



Participants concluded that safeguarding peatlands requires urgent, coordinated action across protection, restoration, and public engagement, recognizing these ecosystems as vital to climate and environmental health.

Policy 6: Protect and Expand Forests, Woodland and Trees

Discussions between participants highlighted the ecological, social, and climate benefits of forests, stressing their role in biodiversity, carbon storage, and visitor experience. Key strategies discussed included:

- Expansion and restoration: reforestation with native species, guided by specialised management and long-term monitoring.
- Resilience and adaptation: addressing threats from invasive species, disease, and climate change through adaptive, flexible approaches.
- Community and stakeholder involvement: engaging local people in governance and stewardship to build ownership and support sustainable forest management.

Participants agreed that protecting and expanding forests is essential for ecosystem health, climate resilience, and community well-being, requiring inclusive and adaptive strategies.

Policy 7: Protect and Enhance Historic Assets

Discussions between participants emphasized the cultural, educational, and tourism value of historic sites in national parks, alongside challenges of preservation. Key strategies mentioned included:

- Restoration and maintenance: securing funding and prioritizing conservation of at-risk or significant assets.
- Education and engagement: developing visitor programs and using digital tools for documentation and virtual access.
- Balance and sustainability: aligning heritage protection with ecological goals and sustainable tourism practices.
- Collaboration: working with local communities, historians, and conservation experts to ensure integrated management.

Participants recognized that protecting historic assets requires a careful balance of cultural heritage, environmental conservation, and tourism, with both targeted and broad approaches debated.



Policy 8 development within green belts

Participants did not discuss this policy with specificity

Policy 9: Reuse Brownfield Land and Limit Greenfield Development

Discussions between participants focused on balancing development with conservation by prioritizing brownfield reuse over greenfield expansion. Key strategies mentioned included:

- Site identification and reuse: creating an inventory of brownfield sites for redevelopment into recreation, education, or low-impact housing.
- Incentives and regulation: offering tax breaks and technical support for brownfield projects, while tightening restrictions on greenfield development.
- Challenges and solutions: addressing contamination, higher costs, and public perception through partnerships, grants, and awareness campaigns.
- Community involvement: ensuring local input and support to align redevelopment with sustainable park management.

Participants agreed that the Policy is central to sustainable development, requiring careful planning, local policies to bridge gaps between national and local policy, funding, and engagement to succeed.

Policy 10 coastal development and defence

This policy is outside of the scope of discussion concerning the Cairngorms National Park.

Policy 11: Support Renewable Energy

Discussions between participants highlighted the need to balance renewable energy expansion with the conservation of natural landscapes and biodiversity. Key strategies mentioned included:

- Technology and siting: favouring solar, wind, and hydro projects designed to minimize landscape change and wildlife disruption, supported by thorough impact assessments.
- Collaboration: building partnerships with local communities and energy companies to ensure projects deliver shared benefits.
- Education: using renewable projects as opportunities to engage visitors and raise awareness about sustainable energy.
- Funding and safeguards: exploring grants, public investment, and private funding while avoiding commercial exploitation of parks.



Participants agreed Policy 11 is central to climate action, requiring careful design and collaboration to ensure renewable energy supports sustainability without compromising park conservation.

Policy 12: Minimise Construction Waste

Discussions between participants emphasized the Policy's role in reducing the environmental footprint of the National Parks infrastructure projects while supporting sustainability goals. Key strategies included:

- Sustainable practices: using green building materials, integrating waste management plans from project inception, and leveraging technology for efficiency.
- Holistic integration: aligning with other environmental policies to ensure construction supports broader conservation objectives.
- Stakeholder engagement: involving local communities, contractors, and experts to design feasible and culturally sensitive approaches.
- Capacity & resources: addressing funding needs, staff / contractor training, and regulatory challenges to ensure effective implementation.

Participants were optimistic that Policy 12 could drive more sustainable construction practices, helping protect natural landscapes while meeting park infrastructure needs.

Policy 13: Prioritise Walking, Cycling and Public Transport

Discussions between participants focused on reducing carbon emissions, traffic, and ecological impacts while enhancing visitor experience. Key strategies included:

- Active travel and access: developing safe, accessible cycling routes and pedestrian pathways to encourage non-motorized transport.
- Public transport: improving affordable, efficient links to and within the park, including shuttle services to reduce private vehicle use.
- Education & engagement: campaigns to promote sustainable transport choices among visitors.
- Collaboration and funding: working with local communities and businesses to improve services and secure investment for infrastructure.

Participants agreed Policy 13 is essential for sustainability, requiring strategic planning, investment, and partnerships to balance access with environmental protection.



Policy 14: Require Well-Designed Places

Discussions between participants emphasized the need for high quality, environmentally sensitive design in park facilities to enhance aesthetics, functionality, and visitor experience. Key strategies included:

- Sustainable design: using natural materials, green building practices, and designs that blend with landscapes.
- Guidelines and standards: establishing clear criteria for architectural and landscape excellence, with ongoing maintenance and evaluation.
- Community involvement: engaging local stakeholders in the design process to ensure relevance and support.
- Resource planning: acknowledging higher upfront costs while emphasizing long-term benefits for visitor satisfaction and environmental protection.

Participants agreed that well-designed places support sustainability, environmental stewardship, and enriched visitor experiences, making thoughtful planning and investment essential.

Policy 15: Create Connected and Compact Places (Local Living)

Discussions focused on fostering sustainable, accessible communities within and around national parks to enhance local living and reduce environmental impacts. Key strategies included:

- Sustainable mobility: promoting walking, cycling, and reduced car use to lower emissions and traffic.
- Local economy and services: supporting mixed-use developments and local businesses to minimize long-distance travel.
- Community planning: leveraging existing settlements as development hubs while respecting natural and cultural values.
- Integration and infrastructure: aligning with other environmental policies and investing in transport and community infrastructure.

Participants agreed that connected, compact communities can improve sustainability and local quality of life, but careful planning and engagement are essential to balance development with conservation.

Policy 16: Require High Quality, Affordable, Diverse and Sustainable Homes

Discussions emphasized the need for housing that is environmentally sustainable, affordable, and diverse, supporting communities around national parks. Key strategies included:



- Sustainable construction: using green materials and practices to minimize ecological impact while setting new standards for development near sensitive areas.
- Affordability: ensuring housing access for low- and middle-income families, including park employees, to foster stable, resilient communities.
- Diversity: providing a range of housing types for families, singles, and the elderly to support inclusive, vibrant communities.
- Integration with conservation: balancing development needs with ecological preservation and park aesthetics.

Participants agreed Policy 16 is crucial for reconciling human housing needs with environmental stewardship, promoting sustainable, inclusive, and affordable living near national parks.

Policy 17: Support New Rural Homes

Discussions focused on enabling rural housing while protecting natural landscapes and promoting sustainability. Key strategies included:

- Community support: providing affordable homes to strengthen local economies and foster connections between residents and park management.
- Environmental safeguards: using eco-friendly building practices, strict environmental impact assessments, and limits on housing size and density.
- Balancing development & conservation: ensuring new homes do not compromise ecosystems, scenic values, or park resources.
- Integration with broader goals: aligning rural housing development with conservation, tourism, and sustainability objectives.

Participants agreed that Policy 17 requires careful planning to reconcile local housing needs with the preservation of natural and cultural resources.

Policy 18: Require Infrastructure with Development

Discussions emphasized integrating necessary infrastructure into new developments to ensure sustainability and minimize environmental impacts. Key strategies included:

- Environmental sustainability: enforcing strict standards to protect habitats, biodiversity, and park landscapes.
- Economic considerations: balancing costs and regulatory requirements with investment viability, exploring funding and public-private partnerships.



- Stakeholder engagement: involving local communities, indigenous groups, environmental organizations, and private sector partners to align development with social and environmental goals.
- Proactive planning: embedding infrastructure requirements early in development processes to prevent ecological degradation.

Participants agreed that Policy 18 is essential for sustainable development, requiring careful coordination between conservation, economic needs, and community interests.

Policy 19: Prioritise Natural and Passive Heating and Cooling Solutions

Discussions emphasized reducing energy use and carbon emissions by adopting natural and passive temperature regulation methods. Key strategies included:

- Environmental benefits: using landscape and architectural design to minimize reliance on conventional HVAC (heating, ventilation and air conditioning) systems and support climate mitigation.
- Cost-effectiveness: initial investment offset by long-term energy savings.
- Visitor experience: creating comfortable, aesthetically pleasing park environments that enhance connection with nature.
- Implementation challenges: addressing site-specific climatic and geographical limitations with innovative design solutions.
- Education: using facilities as demonstrations of sustainable living to inspire visitors.

Participants agreed that Policy 19 promotes practical, sustainable park management while supporting climate goals and visitor engagement.

Policy 20: Protect and Enhance Blue and Green Infrastructure

Discussions highlighted the importance of safeguarding rivers, lakes, wetlands, forests, and grasslands to support biodiversity, recreation, and climate resilience. Key strategies included:

- Ecosystem resilience: using blue and green infrastructure as natural buffers against floods, heatwaves, and other climate impacts.
- Community engagement and education: involving schools, volunteers, and local organizations in conservation, restoration, and monitoring initiatives.
- Economic benefits: enhancing tourism appeal and supporting sustainable local economies through well-maintained natural assets.
- Holistic management: integrating ecological, social, and economic considerations to ensure long-term sustainability and park resilience.



Participants agreed that Policy 20 is vital for climate adaptation, ecosystem health, and community involvement, emphasizing proactive protection and enhancement of natural infrastructure.

Policy 21: Protect Outdoor Play, Recreation and Sport Facilities

Discussions emphasized the importance of safeguarding outdoor recreational spaces to promote physical activity, wellbeing, and visitor engagement while respecting the natural environment. Key strategies included:

- Environmental integration: designing facilities that blend with natural landscapes and minimize ecological impact.
- Accessibility and inclusivity: ensuring spaces are usable by all ages, abilities, and backgrounds.
- Community collaboration: involving local stakeholders in planning, development, and management.
- Visitor wellbeing: fostering active lifestyles and deeper connections with nature.

Participants agreed that protecting and enhancing outdoor recreation facilities is essential for health, engagement, and environmental stewardship.

Policy 22: Avoid Flood Risk Areas

Discussions focused on preventing development in areas prone to flooding to protect visitors, infrastructure, and ecosystems. Key strategies included:

- Proactive planning: incorporating flood risk assessments in early development stages.
- Data-informed decision-making: using GIS, historical flood data, and expert input to map risk zones.
- Mitigation measures: elevating buildings, constructing flood defences, and protecting existing facilities.
- Public engagement and education: raising awareness of flood risks and resilience measures.

Participants agreed that Policy 22 requires integrating scientific data, planning, and community engagement to ensure safe, resilient park development.



Policy 23A: Support Health and Wellbeing Uses

Discussions highlighted promoting physical and mental health through accessible, inclusive park spaces. Key strategies included:

- Health-focused infrastructure: walking / cycling trails, outdoor gyms, and spaces for mindfulness and relaxation.
- Inclusivity: designing facilities for diverse ages, abilities, and interests.
- Education & engagement: programs, workshops, and events to promote awareness of nature's health benefits.
- Partnerships & evidence-based monitoring: collaborating with health organizations and collecting data to assess impact.

Participants agreed that Policy 23a strengthens the role of parks in public health and wellbeing, ensuring accessibility, inclusivity, and measurable outcomes.

Policy 23B: Protect People and Places from Harm

Discussions emphasized safeguarding visitors and natural / cultural resources through proactive risk management. Key strategies included:

- Risk mitigation: implementing emergency response plans, public education campaigns, and infrastructure improvements.
- Balancing access and protection: restricting or modifying access to high-risk areas without unduly limiting enjoyment.
- Evidence-based decision-making: using scientific research and historical data to guide policies.
- Collaboration: involving park management, local communities, emergency services, and environmental experts.

Participants agreed that Policy 23b is essential for maintaining safety while preserving the intrinsic value of national parks.

Policy 24: Support Digital Infrastructure

Discussions focused on leveraging digital technologies to enhance visitor experiences and park operations while minimizing environmental impact. Key strategies included:

- Visitor engagement: mobile apps, real-time information, and virtual / augmented reality experiences.
- Operational efficiency: improved ecosystem monitoring, resource allocation, and emergency response.



- Sustainability: low-impact installations and renewable energy for powering technologies.
- Strategic planning and collaboration: ensuring digital infrastructure aligns with conservation goals.

Participants agreed that digital infrastructure can enrich parks educational and operational capabilities if implemented sustainably.

Policy 25: Support Community Wealth Building (Wellbeing Economy)

Discussions highlighted fostering local economies that prioritize social, environmental, and economic wellbeing. Key strategies included:

- Holistic economic development: supporting local businesses, social enterprises, and eco-tourism initiatives.
- Wellbeing economy principles: integrating education, sustainable practices, and community-focused infrastructure.
- Partnerships: collaboration between park management, local governments, NGOs, and community groups.
- Community inclusion: ensuring local voices guide economic strategies.

Participants agreed that Policy 25 promotes equitable, sustainable prosperity that benefits both communities and park ecosystems.

Policy 26: Support Business Uses in the Right Locations

Discussions emphasized permitting business activities that are compatible with conservation and educational objectives. Key strategies included:

- Environmental safeguards: rigorous impact assessments to avoid ecological harm.
- Appropriate business types: eco-tourism, educational facilities, and sustainable concessions.
- Stakeholder engagement: involving local communities, indigenous groups, and environmental organizations in decisions.
- Criteria-driven planning: identifying suitable locations that balance economic activity with conservation.

Participants agreed that Policy 26 ensures businesses support parks' missions while minimizing environmental impact.



Policy 27: Prioritise Town and Local Centres

Discussions focused on revitalizing town and local centres to strengthen economic, social, and environmental outcomes. Key strategies included:

- Economic revitalization: supporting local businesses and services to create sustainable community economies.
- Sustainability: concentrating development to reduce sprawl, preserve landscapes, and lower carbon footprints.
- Community cohesion: fostering social interaction, cultural expression, and local engagement.
- Visitor experience: improving access to services, amenities, and authentic cultural experiences.

Participants agreed that Policy 27 promotes vibrant, sustainable town centres that enhance both community life and the visitor experience.

Policy 28: Support Shops in Rural Areas

Discussions highlighted the importance of supporting rural shops for local economies and visitor experiences while maintaining environmental integrity. Key strategies included:

- Economic and community benefits: rural shops provide essential services, create jobs, and promote local products.
- Sustainability considerations: minimizing environmental impacts from increased commercial activity, traffic, and waste.
- Integration with broader strategies: leveraging technology and e-commerce to expand market reach without physical expansion.
- Collaborative approach: involving local communities, park authorities, and environmental experts.

Participants agreed that Policy 28 requires careful coordination to support livelihoods while preserving park values.

Policy 29: Support Sustainable Rural Development and Communities

Discussions emphasized balancing conservation with economic and social needs of rural populations. Key strategies included:

- Harmonizing conservation and livelihoods: supporting eco-tourism, sustainable agriculture, and renewable energy projects.



- Community engagement: involving residents in conservation activities as key stakeholders.
- Partnerships: collaboration among park authorities, local communities, Non-Government Organisations, and private sector.
- Adaptive management: monitoring, evaluation, and long-term funding to ensure effectiveness.

Participants saw Policy 29 as enabling win-win outcomes for conservation and rural development.

Policy 30: Support Sustainable Tourist Facilities and Accommodation

Discussions focused on promoting eco-friendly tourism while preserving natural resources. Key strategies included:

- Sustainable design and operations: reducing energy consumption, waste, and water use in tourist facilities.
- Incentives and regulations: financial incentives, recognition programs, and mandatory sustainability standards.
- Education and awareness: informing tourists and facility operators about sustainability practices.
- Implementation challenges: managing costs, maintenance, and stakeholder resistance.

Participants agreed that Policy 30 is essential for aligning tourism development with environmental preservation and long-term park sustainability.

Policy 31: Protect Cultural Venues, Require Public Art

Discussions highlighted the role of cultural venues and public art in enhancing visitor experience and conserving heritage. Key strategies included:

- Cultural preservation: safeguarding venues for educational and heritage purposes.
- Public art integration: using art to communicate cultural and environmental themes.
- Practical considerations: addressing budget constraints and minimizing landscape disruption.
- Community collaboration: working with local artists and cultural organizations to ensure relevance and sustainability.

Participants agreed that careful planning and community engagement are crucial to successfully implementing Policy 31.



4.3 Thematic observations

Housing affordability and sustainability

- Housing affordability and availability:
 - Lack of affordable, good-quality homes for locals.
 - Second homes and short-term lets driving shortages and rising prices.
- Concerns about new development:
 - Seen as profit-driven, not community-focused.
 - Tension between growth and protecting landscapes, character, and biodiversity.
- Proposed solutions:
 - Prioritise local occupancy (e.g., control zones for short-term lets).
 - Incentives for affordable / community-led housing.
 - Reuse / renovation of vacant and derelict properties (sawmill site on A95).
- Policy focus:
 - Policies 16 (quality homes), 17 (rural development), and 29 (town centres) seen as most relevant.
 - Implementation constrained by external policy requirements.

A key theme that emerged was concerns surrounding housing affordability and sustainability, this concern presented itself amongst all groups with a high degree of frequency. Participants repeatedly highlighted the lack of affordable housing stock as well as high quality housing options tailored towards local residents. Multiple groups highlighted the prevalence of second homes and short term holiday lets within the National Park as the perceived root cause of the reduction in housing stock as well as the prices of property rising throughout the National Park.

Whilst new residential development is underway within the Cairngorms National Park a number of participants held the opinion that the developments prioritise profit over what the community 'actually' require. With access to amenities being one of the main needs that participants highlighted for a sustainable community. The challenge of balancing new development with protecting both the rural landscapes as well as the biodiversity, whilst keeping in line with the sustainable development goals was an issue that was also mentioned by multiple participants over a number of tables. For example, some participants expressed concern that policies encouraging new rural homes might



inadvertently open the door to inappropriate 'rampant' development, while others countered that without such policies, housing shortages would continue to worsen.

Participants suggested a range of mitigation measures to address housing challenges. These included prioritising local occupancy and ownership through mechanisms such as control zones for short-term lets, incentives for delivering affordable housing, and policies that support community-led or community-owned models. Participants also highlighted the value of renovating and reusing existing buildings as a way to meet housing needs while avoiding further sprawl "I strongly feel we're not using the stock that is already there, we're building new houses instead of renovating old houses" it is worth noting that there is a raised percentage of vacant and derelict properties within the boundary of the Cairngorms National Park when comparing vacant housing figures with the 5 constituent local authorities that make up the Cairngorms National Park. For further information please navigate to page 70 of the following document. Specific attention was drawn to the abandoned sawmill site along the A95, which was seen as a potential opportunity for redevelopment into a housing complex / extension to Boat of Garten.

Overall, participants highlighted a number of policies that both supported sustainable development of housing opportunities as well as policies which supported the continued sustainment of rural and remote housing. Of the policies chosen:

- Policy 16 which calls for the construction of quality homes.
- Policy 17 which supports rural development.
- Policy 29 which calls for development which can support and aid in growth of a city or in this context town centre.

Where discussed in depth by multiple tables. The majority of the tables did note however that in their opinion Planning within the Cairngorms National Park was also slightly constrained, be it due to external guidance / policy. This suggests a point of contention between the desired policies to support housing and rural development, and the actual constraints faced in implementing those policies effectively within the national park framework. Navigating this balance between local priorities and external requirements appears to have been a key challenge discussed in the meeting.



Development planning and policy

- Importance of clear coordinated planning policies:
 - Need for policies that guide development effectively within the Cairngorms National Park.
 - Concern over disconnect between broad frameworks and place based context specific needs.
- Broad versus targeted approaches:
 - High level policies valued for flexibility but criticised for lack of clarity as well as a limited impact on local priorities.
 - Housing often highlighted as an area where general policies fail to deliver
- Gaps between policy intentions and real world implications:
 - Housing and infrastructure demand not being met (due to perceived pressure from short term lets as well as second homes).
 - Planning system struggles to keep pace with emerging challenges.
- Integration across government levels:
 - Call of stronger alignment between national, regional, and local planning.
 - Lack of municipal governance layer in Scotland creates uneven capacity and resources across communities.
- Need for measurable actionable outcomes:
 - Preference for policies with enforceable, tangible results rather than broad aspirations.
 - Ongoing debate over prescriptive rules vs. flexible guidance.
- Housing specific concerns:
 - Broad policies seen as ineffective at addressing housing shortages.
 - Clear demand for more direct, targeted housing policies.

Participants again stressed the importance of clear, coordinated, and effective planning policies to guide development within the Cairngorms National Park. A recurring concern was the perceived disconnect between broad, overarching policy frameworks and the need for place based, context-specific approaches. While many valued the flexibility of high-level policies that could accommodate multiple priorities, others felt that such



broad approaches often lacked clarity and failed to address pressing local needs. 'I think the difficulty here is why housing didn't score very well is the need to specifically to address housing. You need specific housing policies, they were getting a spin-off effect from other policies which moved them up the board, but a spin-off effect from a lot of the other policies had no impact on housing.'

A key issue identified was the gap between policy intentions and their real-world impacts, particularly in relation to housing and infrastructure. The planning system was described as struggling to keep pace with challenges such as the rising demand for affordable homes, the pressures created by short-term lets, and the need for improved transport connections. Several participants argued that stronger integration was required between national, regional, and local planning to avoid fragmentation and ensure alignment across different levels of governance. "We don't have the municipal level that other parts of Europe have, which enables resources and decision making to be managed locally. Instead, we're left with a fragmented system: some areas benefit from strong development companies, trusts, or income from renewables, while others don't even have a functioning community council. This results in a very uneven distribution of capacity and resources across communities."

Another prominent theme was the desire for policies that deliver measurable, tangible outcomes rather than aspirational goals. While there was recognition of the value of multi-goal policies that integrate economic, environmental, and social objectives, participants emphasised that these must be actionable, enforceable, and capable of being monitored. The balance between prescriptive rules and flexible guidance was widely debated: some advocated for strict controls to prevent inappropriate development, while others highlighted the need for adaptable frameworks that reflect the diversity of local contexts.

Housing was often cited as an area where broad policies were seen to fall short. As one participant explained, "I think the difficulty here in why housing didn't score very well is to address the housing specifically. You need specific housing policies, whereas a lot of the other things, they were getting a spin-off effect from other policies... though I don't think that the spin-off effect from any of the other things had no impact on housing". This highlighted the limitations of generalised policies and the need for more direct, targeted measures.

Overall, participants called for development planning and policy to act as a unifying framework that balances long-term strategic vision with the nuanced realities of rural and village life. This included resisting patterns of sprawl, prioritising compact and



connected places, and ensuring that economic development does not come at the expense of landscape character, ecology, or community wellbeing.

Environment and landscape

Participants highlighted the central importance of protecting the natural environment and distinctive landscapes of the National Park, noting that these qualities underpin both its ecological value and its cultural identity. There was broad agreement that development must be carefully managed to safeguard biodiversity, landscape character, and public access to nature, while also supporting the social and economic wellbeing of communities.

A recurring concern was the challenge of balancing development pressures with environmental protection. Participants acknowledged the need for housing and infrastructure but warned that poorly planned or profit-driven development risked eroding the very landscapes that make the National Park unique. Several groups called for stronger planning controls in the form of policy changes as well as enforcement to ensure that ecological and scenic considerations are embedded in every stage of decision-making, from site selection to design standards.

The interconnectedness of environment, economy, and community wellbeing was also emphasised. Many participants stressed that access to nature and green spaces is essential for mental and physical health, while high-quality landscapes play a vital role in sustaining the visitor economy. At the same time, there were concerns that the needs of visitors could sometimes be prioritised over those of residents, creating tensions between conservation, tourism, and community priorities all of which the National Park must balance in order to sustain development.

Landscape challenges, such as biodiversity loss, climate change adaptation, and habitat connectivity, were seen as requiring strategies that extend beyond individual developments. Some participants suggested that these wider environmental issues are best addressed through targeted funding streams and complementary strategies, alongside the National Park's statutory planning framework. This included support for renewable energy and low-carbon initiatives, provided they are designed to complement, rather than compromise, landscape character.

Overall, participants called for an integrated approach that ensures environmental, and landscape protection is not treated as separate from, but as integral to, housing, transport, and community policies. The guiding principle should be that development



enhances rather than diminishes the natural assets of the park, preserving its ecological integrity and landscape heritage for future generations.

Transport and connectivity

- Key challenge: lack of reliable, affordable, low-carbon transport in a dispersed rural area.
- Car dependency: limited public transport and long distances force reliance on private vehicles, raising costs and emissions.
- Digital connectivity: broadband and mobile coverage seen as essential infrastructure for education, work, and inclusion.
- Place-based solutions: investment in village / town centres vs. ensuring access for remote communities and the need to balance compact growth with inclusivity.
- Policy: integrated, equitable, and sustainable transport and digital infrastructure to support resilient, connected communities.

Transport and connectivity were consistently highlighted as both enablers and barriers to sustainable development in the National Park. Participants emphasised the challenges of ensuring reliable, affordable, and low-carbon transport options across a geographically dispersed and often rural population. For many, the lack of effective transport links between villages and key service centres was seen as a major obstacle to community resilience, access to employment, and social equity.

Car dependency was a recurring concern. Participants noted that the limited availability of public transport, coupled with long travel distances, forces many residents to rely on private vehicles. This not only increases household costs but also runs counter to broader environmental goals such as reducing carbon emissions. Calls were made for policies that actively support public transport provision, active travel infrastructure, and more compact settlement patterns to reduce the need for long commutes.

Digital connectivity was frequently mentioned alongside physical transport as a vital form of infrastructure. Reliable broadband and mobile networks were described as critical for education, employment, and social inclusion, particularly in remote areas. Several groups stressed that digital access should be considered a core utility, equivalent in importance to roads or energy supply.

Place-based solutions were considered essential. Throughout multiple tables a discussion surrounding community investment formed. Some participants supported prioritising investment in village and town centres to create vibrant, connected hubs,



while others stressed the importance of maintaining access and services for those in more remote rural communities. Finding a balance between avoiding urbanised sprawl and ensuring inclusivity of rural communities was seen as a key challenge that local level policy would aid in addressing.

Overall, participants called for transport and connectivity policies that are integrated, equitable, and environmentally sustainable. By addressing both physical and digital infrastructure, the National Park can support thriving communities that are less dependent on cars, better connected to services, and more resilient in the face of demographic and economic pressures.

Governance and delivery

- Complex high level policies.
- Addressing the gap between policy and real world outcomes.
- Limits to the National parks ability to deliver on housing goals.
- The need for clear implementation strategies.
- Finding the balance between flexible guidance and prescriptive rules.

The effectiveness of governance structures and the ability to deliver on policy goals emerged as a central theme throughout discussions. Participants often expressed frustration with the gaps between policy intent and real-world outcomes, particularly in areas such as housing, infrastructure, and environmental protection. The planning system was described as overly complex, fragmented, and slow to respond to pressing challenges.

A recurring issue was the limited powers of the National Park Authority, particularly in relation to housing delivery and control over second homes and short-term lets. Many participants argued that responsibility for key decisions is dispersed across local authorities, regional bodies, and national government, creating misalignment and reducing accountability. Stronger integration across levels of governance was widely called for, with an emphasis on clarity over who has responsibility for specific outcomes.

The delivery mechanisms of the policies within National Planning Framework 4 were also scrutinised by participants, throughout discussions the value in broad overarching frameworks was appreciated, yet the need for clear implementation strategies was also called for, alongside measurable outcomes and adequate funding. Without these participants felt that certain policies could be viewed as symbolic as opposed to practical. Several groups suggested the need for custom or more community focused



approaches, where local stakeholders are empowered to co design and deliver solutions suitable for their local communities.

The balance between prescriptive rules and flexible guidance was a topic of debate. Some participants favoured strict controls to ensure that inappropriate development is prevented, while others argued for frameworks that can adapt to the diversity of local contexts. Ultimately, most agreed that governance should provide both a unifying vision and the flexibility to respond to specific community needs.

In summary, participants highlighted governance and delivery as the mechanisms that either enable or constrain success across all other themes. Effective governance requires alignment across scales, robust enforcement of policies, and empowerment of local communities to play an active role in shaping their future.



5. Reflections on engagement

5.1 Learning outcomes

How participants' understanding of planning evolved

Early reflections at the start of the game showed that participants engaged with planning in broad and fairly general terms, often reading the goal cards at a surface level. Common themes such as housing, the environment, and wellbeing were quickly identified as priorities, but these were discussed in aspirational rather than practical terms. As the game progressed and the individual policy cards were introduced, participants began to engage more critically with how policies could be used to achieve their goals. On some tables, this led to more deliberate planning, with participants actively selecting policies to align with their chosen objectives and omitting policy cards that whilst still addressed important issues to them did not fit within the remit of their goals.

On other tables, it became clear that the available policies only partially addressed the goals initially set, in turn this forced certain participants to pick and choose between a policy card which could meet the aspirations of the goals previously set out or pick the policy that they felt could provide relief to a pain point that they had highlighted within the Cairngorms National park.

This progression suggests that the game helped participants move beyond a superficial understanding of policy aims towards a deeper appreciation of how the planning system works in practice revealing both the opportunities for alignment and the limitations that can arise when translating high-level objectives into actionable outcomes as well as highlighting the need for local policies 'to bridge the gap' as it were in fulfil all of the outcomes set before oneself.

Consensus and dissensus

Throughout the game sessions, there was a strong consensus among participants on the importance of prioritizing mental and physical health, well-being economy, and ecology. Players consistently aligned on these goals, highlighting the universal recognition of their importance to the community. The decision to prioritize the protection and strengthening of biodiversity underlines the participants' shared commitment to nature-based solutions. Additionally, support for digital infrastructure reflects a consensus on the role of technology in enhancing community well-being and long-term sustainability.



Community ownership and well-being economies emerged as themes that received strong, but variable, support across the game sessions. In some instances, participants strongly backed these themes, reflecting an activist perspective that emphasized local control and sustainable development. However, this enthusiasm was less prevalent in sessions dominated by institutional perspectives, where participants seemed to favour more traditional policy approaches.

The areas of least consensus revolved around land use planning, visitor limits, and enforcement mechanisms. Players held divergent views on these policy approaches, reflecting a tension between growth-oriented and conservationist mindsets. For instance, while some participants advocated for stricter visitor limits to protect natural resources, others argued for more lenient policies to stimulate economic growth. Similarly, debates around land use planning revealed gaps between participants who prioritized conservation and those who favoured development.

Intense exchanges occurred around the topics of housing affordability, youth outmigration, and tourism limits. For instance, participants passionately debated the need for high-quality, affordable, and sustainable homes, reflecting concerns about housing accessibility and its impact on community well-being. The issue of youth outmigration also sparked emotional discussions, as participants recognized its implications for the community's future. These debates highlighted the influence of lived experiences on policy discussions and underscored the need for inclusive dialogue in decision-making processes.



5.2 Effectiveness of the game format

What worked well in terms of engagement and discussion

Throughout the course of the game, participants noted that the open-ended, gamified format of the session allowed diverse groups to put their views forward, with everyone having a chance to speak in an equitable manner. With the Otter being passed around the group, members who might not otherwise have spoken during the conversation were given the opportunity to contribute and be heard, whilst also allowing for critical analysis of the cards, knowing that the Otter ultimately had the final say. This reduced defensiveness within the discussion.

The informal nature of the game encouraged the sharing and discussion of real-life and lived examples from participants. With many participants living within the Cairngorms National Park, much of this lived experience could be related to by others at the table. This provided valuable context for those living outside the National Park, thus allowing genuine planning and community challenges to be discussed.

Participants also noted that the presence of facilitators at each table supported the progression of the game, as well as breaking down its steps. The facilitators were instructed to simply guide the discussion rather than insert their own opinions, with participants commenting that “The facilitator seemed adept at summarising key points and reflections, helping to synthesise the discussion.”

The addition of the Wild Card policies enabled participants to reconsider their choices and allowed policies that might not otherwise have progressed through the rotation to be included, provided that a participant or facilitator had specific knowledge of their existence.

Finally, the opportunity for participants to take breaks and then return to provide feedback, alongside time for reflection on earlier decisions, was also viewed positively.

Suggestions for adapting the game in future contexts

Feedback presented to the facilitators throughout and towards the end of the session allows both facilitators and those interested in using the Planning Power game to continue development, as well as improving the participants' experience. The feedback is summarised as follows.

Participants requested clearer and more upfront information on the scope of the goals and the planning system, including its limitations, as well as more detail on the policy



context. Questions were raised about how local policy fills the gaps between high-level frameworks and local needs. It is worth noting that these insights were particularly evident at tables where a planner was not present, leading to the suggestion that facilitators be provided with a knowledge pack to support them in providing context to their tables.

This naturally leads into calls for a stronger link to implementation, with some tables noting that a number of the policies could be perceived as abstract. For future adoption of the game in other contexts, it is recommended that:

- Facilitators receive a briefing pack covering both the policy framework and local implementation examples.
- Clearer guidance is provided upfront to participants regarding the scope, objectives, and limitations of the game.
- Opportunities are included for participants to discuss practical implementation challenges, bridging the gap between policy and real-world application.
- The game is structured to ensure that participants without professional planning experience can engage meaningfully, for example by pairing them with facilitators or more experienced participants.
- As future iterations of the fathom software continue to be developed, further insights of future documents would become possible.

Implementing these measures could help ensure that the game remains accessible, informative, and engaging, while maintaining its value as a tool for exploring planning policy in a practical and interactive way.



6. Key insights and summery

6.1 Summary of cross-group insights

The goals prioritised across groups revealed a strong focus on practical, immediate challenges facing the Cairngorms National Park. The most frequently chosen goal was mental and physical health, selected by five out of six tables, highlighting the recognition that access to nature and outdoor activity directly supports community wellbeing. Closely linked to this was the wellbeing economy, chosen by four groups, which underscored participants' belief that planning should foster sustainable livelihoods and more equitable distribution of wealth and opportunities. Housing was also selected four times, reflecting widespread concern over affordability, the rise of second homes and short term lets, and the need for policies that genuinely meet local needs rather than developer led priorities

Environmental sustainability goals followed closely behind. Net zero and ecology were each chosen twice, with participants stressing the urgency of decarbonisation and biodiversity recovery. Transport and access were prioritised by three groups, showing recognition that low-carbon, reliable, and inclusive transport is essential to balance conservation with accessibility. Visitor management and the vitality of village and town centres were each chosen by two groups, reflecting awareness of tourism pressures as well as the importance of local hubs for sustaining community life.

By contrast, landscape, community ownership, and cultural heritage were not selected at any table. Discussions suggested this was not due to a lack of importance but rather a perception that these values are already protected through existing policies and practice. Participants instead chose to prioritise goals they felt represented the most pressing or actionable challenges within the National Park.

Across all sessions, participants linked their choices to lived experiences and practical constraints. Concerns about housing shortages and affordability were frequently tied to personal examples of local people being priced out of communities. Transport and connectivity discussions highlighted both the difficulties of car dependency and the opportunities that improved digital access could bring for work and education. Health was consistently framed as more than medical provision participants emphasised the restorative benefits of green space, the need for inclusive access to trails and facilities, and the importance of nature for reducing stress and improving wellbeing.

Taken together, the cross group insights point to a collective prioritisation of goals that bridge social wellbeing, environmental responsibility, and sustainable economic



development. They reflect a clear demand for planning policies that move beyond abstract aspirations to deliver measurable, locally relevant outcomes on housing, health, transport, and climate action issues viewed by participants as central to the long term resilience of the National Park and its communities.