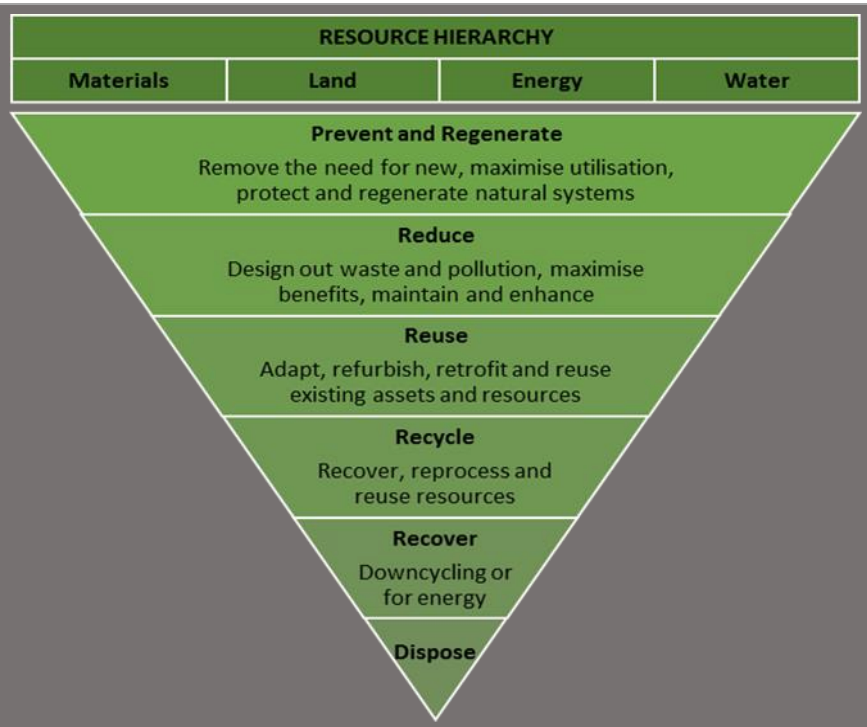
Appendix One: SEPA response to NPF4 Call for Ideas - Policy

POLICY IDEA ONE: A FRAMEWORK FOR A CIRCULAR ECONOMY APPROACH TO PLACE

A circular economy is critical to achieving a low-carbon society. To achieve this, the conditions should be put in place now. The integration of circular economy principles in NPF4 provides an opportunity to ensure that the design of places reduces our call on natural resources and keeps assets flowing through the economy at as high a value as possible for as long as possible. This can support the creation of thriving, liveable, resilient places.

To achieve this NPF4 should ensure:

- **A whole system circular economy approach to place**
- **Waste to resources infrastructure is delivered at all scales across Scotland**
- **A whole life approach to resource use in planning decisions**
- **The use of the resource hierarchy as a framework for development to make the most efficient use of all resources – materials (and buildings), land, water and energy – as an integral part of placemaking. This can be achieved by designing development to utilise resources as far up the hierarchy as possible including:**
  1. **Removing the need for new and regenerating natural systems (prevent and regenerate)**
  2. **Designing out waste and pollution (reduce)**
  3. **Keeping assets and resources in productive use (reuse, recycle, recover)**
- **Development proposals demonstrate how the resource hierarchy has been applied and provide the evidence that circular economy principles are hardwired into location, siting, design and resource use**



NPF4 OUTCOMES	Meeting emission reduction targets	Increasing rural population	Meeting housing needs	Improving health and wellbeing	Securing positive effects for biodiversity	Improving equality/ eliminating discrimination
	Reducing the harder to reach emissions (which globally account for 45%) that arise from the management of land, water and the production of buildings, travel, and other assets we use every day.	Supporting jobs and rural communities by encouraging mixed use and multipurpose buildings to meet community needs.	Meeting demand through the utilisation of existing land and buildings. Ensuring homes are flexible, long lasting and can adapt over time to meet changing needs particularly of older and disabled people.	Creating healthy buildings and places. Encouraging people to walk and cycle more, boosting interactions with people and nature and creating strong sense of community.	Creating and regenerating natural systems and habitats. Reducing pollution of air, soils and water.	Regenerating areas through the prioritisation of existing land and building assets. Addressing climate injustice. Ensuring flexible housing products and designs to meet individual needs now and as they change in the future.

Links to SPP Policy Topic Areas: placemaking, climate change, sustainability, waste, natural environment, green infrastructure, peatland, energy-electricity, energy-heat, infrastructure, vacant and derelict land, housing, business and employment, town centres, community facilities, green belts, rural development, historic environment, mineral extraction, transport.

Policy Area: A Framework for a Circular Economy Approach to Place

National Developments (See Appendix Two)

- **Materials and Resource Management Facilities Network**

Policies to remain

With some amendments, the existing waste policies in SPP should be retained:

- Planning authorities must plan for new waste/resource management facilities to enable the move to a circular economy (SPP paras 176 – 187).
- Clarify buffer zone policy to ensure this is applied both to new waste/resource management facilities and new development proposed adjacent to existing waste/resource management facilities (SPP para 191).
- Strengthened policy framework around heat networks to support heat recovery, protection of carbon rich soils and enhanced energy policies (SPP paras 158-160) see Idea Two: a Framework for Zero Carbon Places.

Policy changes

- Language change from “waste” to “materials” or “resources”.
- Refocus planning for zero waste to planning for the circular use of materials, with emphasis placed on delivering a range of circular economy infrastructure to meet local and regional needs rather than delivering a range of waste management facilities to meet the additional capacity required to meet the Zero Waste Plan on a national basis.
- Strengthened policy to drive the circular economy as an integral part of placemaking and development and design of new places.
- Promotion of vacant and derelict land and buildings for reuse, this focus will fulfil the role of promoting town centres, valuing the natural environment and promoting active and sustainable travel.
- Reframe policy to promote the use of secondary material in all new developments.

Delivering the step change: new policy areas

A. Overarching principle

NPF4 should:

1. **Include a circular economy, place based, whole systems approach to resource use as an overarching principle to be embedded throughout all policy areas.** The resource hierarchy can be used as a framework to guide development to make the most efficient use of all resources – materials, land, water and energy – by considering them in parallel as an integral part of placemaking. Circular economy statements should be required to demonstrate how the resource hierarchy has been applied (in the context of place) and provide the evidence that circular principles have been hardwired into location, siting, design and resource use (the draft London Plan is an example of how this could be achieved). These statements would support a broader Carbon Statement (see Idea Two: A framework for Zero Carbon Places).

The themes below (under B-D), provide policy suggestions that could be included to support this principle.

B. Removing the need for new by regenerating natural systems

1. **Work with the natural water cycle to increase climate resilience and create benefits for people**. NPF should require LDPs and major developments to identify, safeguarding and restore areas that can be used for water management (see Idea Three: A Framework for Green Resilient Places), storage of flood water (see Idea Four: A Framework for Flood Adapted Places) and the use of natural systems to manage resilience, reducing the need for new built infrastructure to do the same.
2. **Achieve environmental net gain and building with nature**. Avoidance and minimisation of environmental impacts should be prioritised through the resource hierarchy with a presumption in favour of nature based solutions. Where unavoidable negative impacts arise, policies should require net environmental gain to be secured as part of the proposal through habitat creation or enhancement within the site boundary, with residual losses compensated offsite. Requiring new developments to meet the Building with Nature benchmark will support this approach (See Idea Three: A Framework for Green Resilient Places).
3. **Protect and restore natural carbon stores** including high carbon soils (see Idea Two: A Framework for Zero Carbon Places – carbon stores).

C. Designing out waste and pollution

Materials

1. **Change terminology from "waste" to "materials" and/or "resource"** to support the move from waste to resources throughout the document. This should include a move away from referring to waste management facilities or sites.
2. **Promote appropriate site selection and material choices that prevent waste.** Opportunities to reduce or reuse resources as part of the design, construction and operation of new buildings and infrastructure should be considered and identified as part of spatial strategies, including any specific allocations.

Land

3. **Facilitate a more joined-up approach to soil management throughout the development process**. Include policies that treat soil as a valuable resource to be considered in line with the resource hierarchy to help prevent soil degradation and the creation of waste by avoiding areas of high value soil and minimising soil disturbance. Thoughts on the approach to carbon rich soil are included in Idea Two: A framework for zero carbon places.

Energy

4. **Minimise energy demand and maximise energy efficiency** in line with the energy hierarchy (See Idea Two: A framework for zero carbon places**).**

Water

5. **Minimise water use and promote re-use to deliver place outcomes.** Through appropriate location, siting and design, developments should minimise the use, treatment, transfer and disposal of water. Development proposals should outline how this is being addressed as part of the circular economy statement and where appropriate, accompanying surface water or drainage strategy and blue-green infrastructure proposals (See Idea Three: A framework for Resilient Green Places).

D. Keeping assets and resources in productive use

Promote underused land and buildings:

6. **Underused land and buildings and land should be brought back into positive use.** This could be undertaken through an audit of underused land and buildings to inform spatial strategies with allocations and policies designed to promote the productive use of these assets. This includes identifying land for built development, along with sites that would best utilised in other ways as part of strategies e.g. Open Space and Green Space Strategies.
7. **Promote a sequential approach that prioritises the reuse of vacant and derelict land and existing buildings before consideration of greenfield or new build options.** For proposals involving existing buildings, the resource hierarchy should be applied, with justification provided in the circular economy statement for not utilising the building further up the hierarchy. Where demolition is justified, a pre-demolition audit should be undertaken to maximise material recovery (links to 'Maximising material reuse and recovery' below).

Locate and design development and infrastructure for adaptability and longevity:

8. **Promote co-location and require adaptive flexible design of all new buildings and places**. Co-location of new development within town centres, utilising underused sites makes good use of land that is generally close to existing infrastructure and facilities and can reduce the number of buildings required to meet the needs of communities. Adaptive and flexible design of new developments allows for buildings to be reused once the original intended use is completed, without requiring additional material use, and allows for building owners to adapt in response to changing needs and climate.

Using space more efficiently:

9. **Promote the best and most efficient use of space**. This can be achieved through a place based approach, by recovering space which is currently lost to other uses, particularly mobility that can take up over 40% of town centres. Along with policies designed to utilise our existing buildings more effectively, thus helping to reinvigorate town centres and provide much needed space for community and other interest groups. Shared use of buildings should be encouraged through planning policy. The Use Class Order should also be reviewed and revised through secondary legislation if needed to remove potential barriers.
10. **Rethink the use mix of our town centres to support circular places**. The repurposing of town centres to support their long term viability and vitality should be informed by Circular Economy Statements to enable efficient resource flows, avoid the unnecessary uptake of land, reduce car dependency and create the conditions to support mobility systems.
11. **Enhance connectivity within and between places.** Through planned multimodal and multifunctional networks that enable people and resources to flow and needs to be meet across all scales within the wider place context. Policies and spatial strategies should be designed to deliver multi-modal mobility options that work together to offer all-in-one solutions for users and work together to enable people and resources to move within and between places.

Maximise material reuse and recovery:

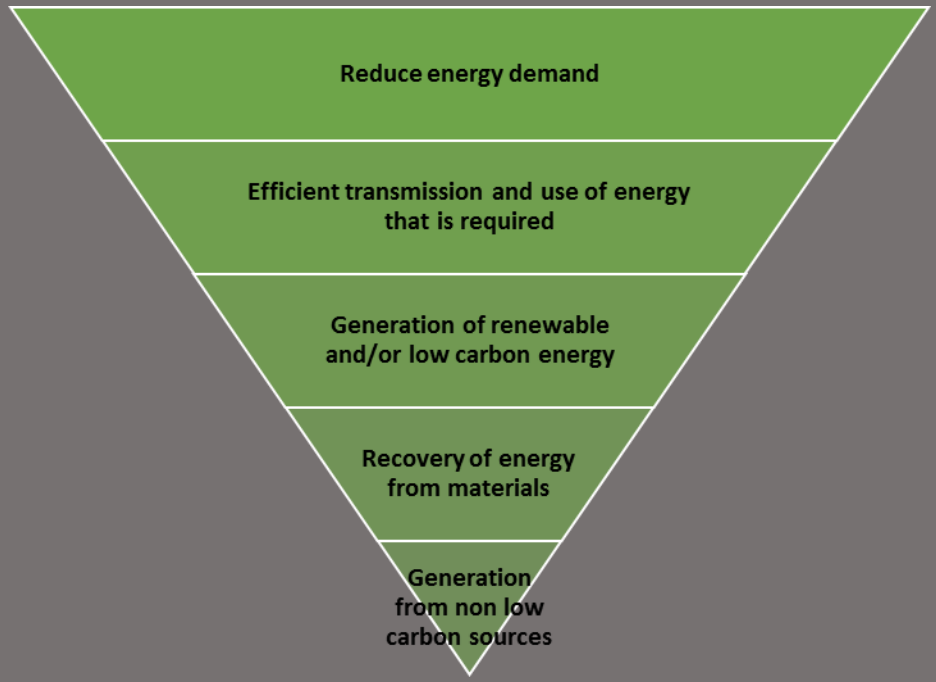
12. **Promote the re-use and recovery of materials.** As part of a circular economy statement, development proposals should demonstrate how secondary materials are incorporated into the design, how new materials are being specified to enable their reuse, and how any material surplus and construction waste will be minimised and managed in accordance with the resource hierarchy. To support this LDPs could include minimum targets for the use of secondary materials, and ensure that consideration is given to secondary materials as part of aesthetic design appraisal.
13. **Promote design for disassembly and include a requirement for pre-demolition audits.** Pre-demolition audits are standard practice across Europe, and should be included as a requirement in NPF. For new builds, this should be a single document that complies with BIM standard and outlines how the building will be designed for disassembly to make material available for re-use and recovery. For applications proposing the demolition of existing buildings, where the case for demolition has been justified as part of the circular economy statement, a pre-demolition audit should be undertaken to outline how materials will be managed and reclaimed as far as practicable.
14. **Ensure sufficient space is included within development design and layouts to support material recovery.** As part of the circular economy statement, proposals should be required to demonstrate that ample space for storage and collection of material recycling streams and residual waste has been incorporated into the design. Both during the construction phase, and operational phases of the building. Space required during the operational phases of the buildings is likely to increase as the economy becomes more circular, and should be designed to make it as easy as possible for the user.
15. **Promote the creation of regional and local resource reuse and recovery facilities.** Resource and material reuse and recovery hubs, facilities and networks need to be planned at all scales. As part of the spatial strategy LDPs should be encouraged to identify potential sites with supportive policies included in NPF. Decentralisation of these facilities will support more localised retention of resources, reduce transportation of material (and associated emissions) and encourage the creation of new business opportunities to make use of the materials for resale.

IDEA TWO: A FRAMEWORK FOR ZERO CARBON PLACES

If we are to address the climate emergency NPF4 will need to ensure that future infrastructure and developments are providing a pathway for a net zero Scotland by 2045. This requires a radical step change in current policy but in doing so provides opportunities to improve the health and well-being of our communities and to stimulate growth in the green economy through a just transition. Achieving this target can also deliver significant benefits for air quality. One of the key objectives of Cleaner Air for Scotland: a road to a healthier future is "A Scotland that reduces greenhouse gas emissions and achieves its renewable energy targets whilst delivering co-benefits for air quality".

To achieve this NPF4 should ensure:

- **Development is underpinned by the energy hierarchy with greatest priority given to reducing energy demand through location, siting, form, design and connectivity**
- **The transition to low carbon heat is facilitated and promoted**
- **Future energy infrastructure needs are understood and supported including what we will need, what we won't need anymore and opportunities to re-use and re-purpose**
- **Place is at heart of a coherent energy infrastructure first policy**
- **Natural carbon stores are protected and opportunities for enhancement are maximised through development**
- **Air quality benefits are maximised through spatial strategies and placemaking**



NPF4 OUTCOMES	Meeting emission reduction targets	Increasing rural population	Meeting housing needs	Improving health and wellbeing	Securing positive effects for biodiversity	Improving equality/ eliminating discrimination
	Delivering zero carbon development and infrastructure	Decentralising energy supply and increasing the resilience of rural areas	Ensuring an energy infrastructure first approach and reducing housing running costs	Reducing fuel poverty, improving connectivity and good design and ensuring low carbon/low emission energy leads to positive impacts on air quality and health	Protecting and enhancing high carbon soils and increasing woodland cover	Reducing fuel poverty, increasing access to green jobs and improving connectivity to services and work

Links to SPP Policy Topic Areas: placemaking, climate change, air quality, sustainability, housing, rural development, energy-electricity, energy-heat, peatlands, forestry, strategic infrastructure, waste

Policy Area: Zero Carbon Places

National Developments (see Appendix Two)

- **Zero Carbon Innovation Areas**
- **National Energy Infrastructure**
- **National Green Network**
- **Carbon Capture and Storage**

Policies to remain

1. Positive planning framework for renewables but need to expand to a wider range of technologies and to facilitate future innovation (SPP paras 161-168).

Policy Changes

1. A stronger focus on reducing energy demand through new development.
2. Enhanced policy framework for wind farm decommissioning and repowering with circular economy and resource efficiency at its core.
3. Strengthened policy framework around heat networks (see Section A, 1-4 below).
4. Enhanced protection for carbon rich soils (see Section B below)
5. Ban on commercial peat extraction including a revocation of ROMPS.

Delivering the step change: New Policy areas

A. Carbon, Energy and Place

NPF should:

Reducing energy demand

1. **Ensure the spatial strategy of developments plans is underpinned by need to minimise energy demand and associated carbon emissions**. This should form part of the Evidence Report and could be achieved through an updated version of or alternative to the SPACE tool.
2. **Ensure new developments are net carbon positive**. Developments should be supported by a 'Carbon Statement' (an evolution of 'Energy Statements') covering a range of issues to demonstrate that it achieves a minimum baseline of net zero emissions. The Statement should outline how the energy hierarchy is being implemented and include:
    a. location, form and density and how these will support net carbon ambition;
    b. low/zero carbon mobility and connectivity within and to areas outwith the development;
    c. minimising the embedded carbon by reuse of existing buildings and infrastructure on site*;
    d. minimising embedded carbon by reuse of surplus, excess, and secondary materials in new buildings and infrastructure on site*;
    e. meeting residual demand for heat and electricity through low/zero carbon sources on and/or off site; and,
    f. protecting and enhancing natural carbon stores (through green infrastructure provision, restoration and minimising/avoiding impact on existing carbon stores).
    (*See Idea One: A framework for A Circular Economy Approach to Place and links to the recommended requirement for Circular Economy Statements)

Energy Efficiency

3. **Support the delivery of Local Heat and Energy Efficiency Strategies (LHEES)**. Regional Spatial Strategies and Local Development Plans support the delivery of LHEES. The LHEES will identify key areas for improving energy efficiency, and opportunities for local heat solutions. The spatial element of the LHEES should influence, and be informed by, the development of RSS and LDPs to ensure new developments are more energy efficient, the efficient generation, storage and transportation of energy is planned for and low carbon energy is utilised where an energy demand remains. This should be required through the LDP Gatecheck process and links to delivery of points 1 and 3 above. New developments should be expected to address their heat demand in line with the LHEES and investigate the feasibility of low carbon alternative heat sources and implementation of bespoke on site solutions (e.g. water source heat pumps).
4. **Maximise opportunities to use low/zero carbon heat**. NPF should establish that low/zero carbon heat will be the standard heat source for all new development. Where possible this should link to the delivery of LHEES and should require the inclusion of clear, supportive and map based policy frameworks in LDPs that draw on existing data sources (e.g. the Scotland Heat Map) and emerging projects to ensure opportunities to use low/zero carbon heat sources are taken e.g. Glasgow's City Development Plan Policy CPD5 Resource Management.

Electricity transmission

5. **Promote local generation and storage and shorter transmission** including community level grids to share and store electricity generated by domestic solar or community wind/hydro. This would reduce transmission losses and maximise renewable resource use e.g. Dutch example here on World Economic Forum website. This would be particularly of value to the resilience of rural and remoter communities.
6. **Support the delivery of Future transmission infrastructure needs** such as energy storage facilities, interconnectors and grid upgrades to accommodate increases in renewables energy transmission (from building to national level). Map based network supported by policy that encourages RSS to work together in identifying key locations for infrastructure needs.
7. **Provide a network of charging and refuelling facilities** for low/zero carbon transport technologies. Map based network and policy that requires LDPs to identify key locations for charging and refuelling facilities. To ensure equity of service, charging and refuelling facilities must accommodate full range of transport types including cars, mobility scooters, bikes and large vehicles.

Other energy infrastructure

8. **Maximise opportunities arising from the reuse and repurposing of redundant energy infrastructure**. Including oil and gas decommissioning, power stations, oil and gas pipelines (opportunities to support CCS), wind farm decommissioning. This feeds in to the circular economy where keeping existing infrastructure in Scotland will maximise the economic benefits, reduce pressures on land and reduce carbon emissions (See Idea One: A framework for A Circular Economy Approach to Place).

B. Carbon Stores

1. **The correct terminology is being used for the intended policy outcome.** When considering carbon stored in soils, this should be carbon rich soils rather than peat, deep peat or peatland. To remove the confusion around terminology in planning, NPF should clarify that peat is a soil type and should be treated as soil and peatland is a habitat type and should be treated as a habitat. Carbon rich soils (which include organo-mineral and peat soils) have an important role in controlling emissions of greenhouse gases and in emission assessment. But also note that there will be circumstances where carbon rich soil such as peat and peatland habitat interactions will need to be considered in combination.
2. **Enhanced protection of carbon rich soils** by ensuring that:
    - When developing spatial strategies Regional Spatial Strategies and Local Development Plans are directed to use the best available information to identify areas of carbon rich soil and avoid the areas with the highest carbon content. Developments on soils that have a high carbon content (e.g. peat soil) should only be acceptable where there are imperative reasons of over-riding public interest, with clear list in NPF policy of what constitutes these exceptions. Development of low carbon/renewable energy on its own will not be sufficient to justify development on carbon rich soil. For most local

authority areas, the best available information is currently the Carbon and Peatland Map 2016 (classes 1, 2, and 5 should be avoided). However, it should be noted that this map was developed to identify peatland habitat and while it can be used to identify areas of carbon rich soils other maps currently in development may be more appropriate.

- Policies require new developments to identify when carbon rich soils may be present (using the best available information) and apply the resource hierarchy to ensure that areas with the highest carbon content are avoided and minimised as far as possible. Development proposals should outline how this has been addressed as part of the circular economy statement and where appropriate, accompanying soil survey (See Idea One: A framework for a Circular Economy Approach to Place).
- Where developments on carbon rich soil are permitted require net zero implications of any works through minimal disturbance and maximising restoration.

3. **Maximise opportunities to restore areas of degraded peat soils** by requiring the restoration of any degraded peat soil within the planning boundary through rewetting and revegetation. Recent advances in peatland restoration techniques have made restoration possible in practically all cases. Implementation can be supported through the Peatland Action initiative. The UK Climate Change Committee projections for achieving net zero by 2045 require at least 50% of upland peat to be restored, and at least 25% of lowland peat to be restored in order to stop emissions from degraded peat.
4. **Prevent the commercial extraction of peat (including through Renewals of Old Mineral Permissions (ROMPS)).** This is a fundamental area for policy change as such permissions totally undermine other efforts to deliver against targets for peatland restoration critical to achieving net zero by 2045.

C. Air Quality

1. **Deliver the spatial aspects of Cleaner Air for Scotland (CAFS).** NPF4 should provide a policy framework that supports the delivery of any national strategy for the improvement of air quality prepared by Scottish Ministers. It must also support the delivery of the, Climate Change Action Plan, Low Emissions Zones, Air Quality Action Plans and the National Transport Strategy through a strong planning policy framework. To achieve this air quality must be embedded into spatial strategies and placemaking outcomes to ensure that development proposals: minimise operational emissions leading to a worsening of air quality, support the transition to low emission transport, optimise the use of existing active, public and low emission transport infrastructure, reduce the need to travel, provide safe and convenient opportunities for walking and cycling for both active travel and recreation, and facilitate travel by public transport and maximise opportunities for blue-green infrastructure.

   EPS and RTPI Scotland's guidance document: Delivering Cleaner Air for Scotland – Development Planning and Development Management is a Scottish specific guide which sets out good air quality design principles for new planning developments. This guidance was developed as an action under the 2015 Clean Air For Scotland (CAFS) strategy. The basic concept is that good practice to reduce emissions and exposure is incorporated into all developments at the outset. By embedding the principals of this guidance under an air quality policy in to NPF4 the planning system will be helping to deliver CAFS objectives. It will also help ensure that all developments include good air quality design, endorsed at the national level

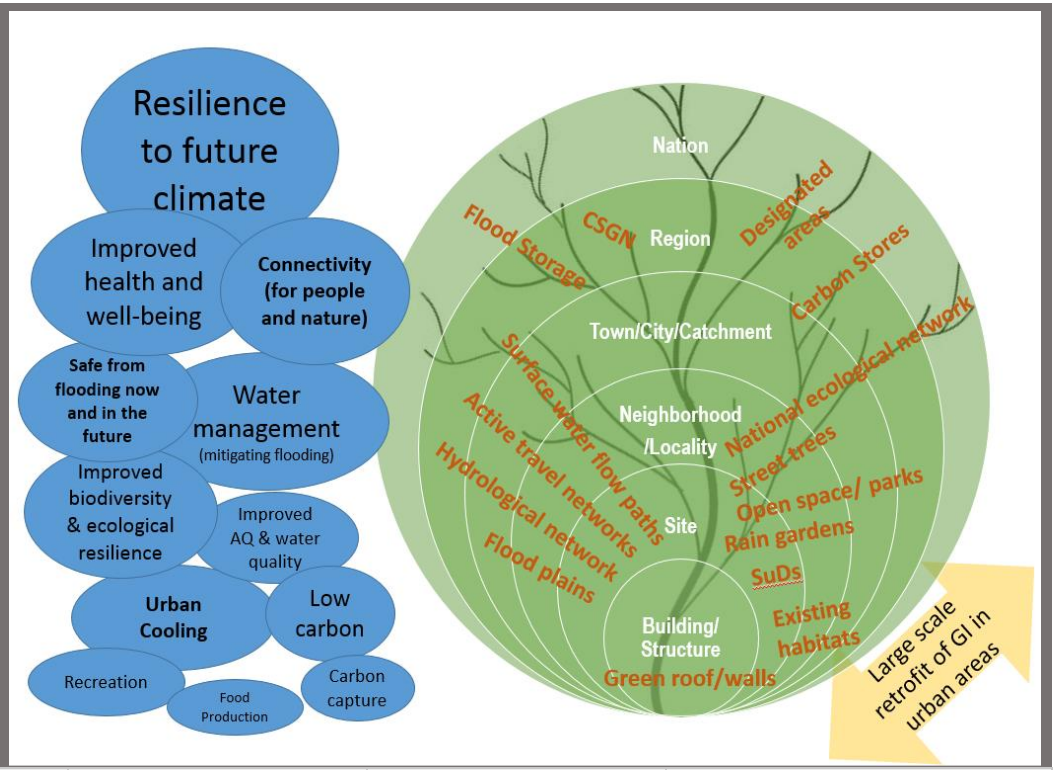
2. **Reduce the impact of emissions to air from regulated facilities on communities.** This could be achieved through a policy framework that ensures that facilities which are regulated through other environmental legislation minimise their impact on other land uses and sensitive receptors. Buffer zones or distances to be set out in policy to establish appropriate distances between new regulated facilities and existing land uses and/or sensitive receptors, and between new land uses and existing regulated facilities.

IDEA THREE: A FRAMEWORK FOR GREEN RESILIENT PLACES

The ongoing and future changes to our climate are placing increasing pressures on the natural and built fabric of our places and infrastructure presenting a significant challenge for NPF4. Blue-green infrastructure provides a solution that can deliver transformational benefits against a wide range of social, economic and environmental outcomes. To achieve this NPF4 can grasp the opportunity to ensure blue-green infrastructure is a key deliverable at all levels of the planning in a way that maximises social, economic and environmental benefits. Resetting a "new norm" in terms of blue-green infrastructure requirements requires education, changes in mindset and close collaboration on delivery but Scotland's communities and economy will reap the benefits for future generations to come.

To achieve this NPF4 should ensure:

- **Blue-green infrastructure is planned strategically across Scotland to maximise opportunities to deliver multiple benefits**
- **Opportunity mapping, including links to other relevant plans and strategies, is used to ensure opportunities are maximised**
- **An 'infrastructure first' approach to blue-green infrastructure is established**
- **Land take for blue-green infrastructure is factored into development capacity, density and layout**
- **The resilience of our communities, businesses and environment to future climate change is optimised through blue-green infrastructure provision**
- **Minimum standards are established for blue-green infrastructure in development**



NPF4 OUTCOMES	Meeting emission reduction targets	Increasing rural population	Meeting housing needs	Improving health and wellbeing	Securing positive effects for biodiversity	Improving equality/ eliminating discrimination
	Facilitating active travel and protecting and enhancing carbon stores	Enhancing connectivity with urban areas	Improving quality of life and enhancing the resilience of housing to future climate change	Improving physical and mental health through social cohesion and connecting people to nature, jobs, services and opportunities for active travel and local food production	Supporting habitat enhancement and connectivity.	Connecting socially isolated communities to jobs, services and opportunities to both source and grow affordable food. Enhancing the quality of place in deprived communities e.g. bring vacant and derelict land back into positive use.

Links to SPP Policy Topic Areas: placemaking, climate change, sustainability, infrastructure, housing, flooding, coastal planning, vacant and derelict land, natural environment, green infrastructure, green belts, health, rural development

Policy Area: Green Resilient Places

National Developments (see Appendix Two)

- **National Green Network**

Policies to remain

- See below

Policy Changes

- Expand the Central Scotland Green Network national development to all urban areas and their hinterlands.
- Update and strengthen existing green infrastructure policy in line with suggestions below.

Delivering the step change: New Policy areas

NPF4 should:

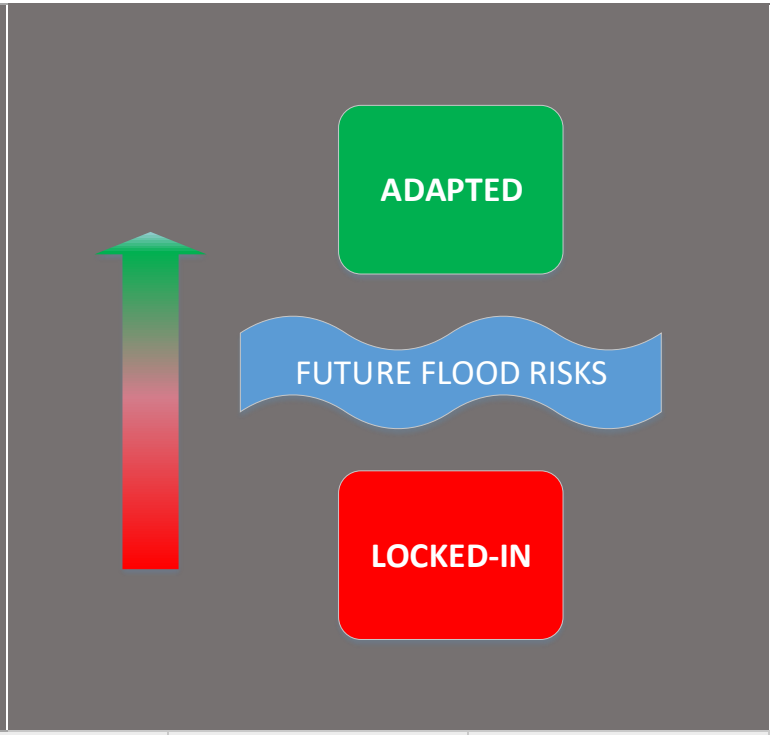
1. **Ensure green infrastructure provision is built in to all planning decisions from regional to building level.** NPF4 should provide a policy framework from national developments, through Regional Spatial Strategies, Local Development Plans to development management decision making to ensure that multi-purpose Blue-green infrastructure is integrated into and connects development with the surrounding areas/regions. Opportunity/need mapping at all scales (nationally down to site-specific level) should be used to plan for green infrastructure so that opportunities to deliver maximum place benefits are realised including surface water management, natural flood management, biodiversity enhancement, active travel connections, re-use of vacant and derelict land, air quality improvements, local food production and the protection and enhancement of carbon stores. Crucially, this should be informed by community planning (in particular Local Place Plans) with residents groups made fully aware of potential opportunities and multi-benefits that can be realised and given the opportunity to influence early design. Maximising linkages in delivering against these different agendas would not only deliver positive outcomes for place but importantly would help ensure the future resilience of our communities and businesses to future climate change. Such an approach would also facilitate the alignment of a range of funding sources to support delivery and create efficiencies. Land take for green-blue infrastructure must be factored into development capacity, density and layout.
2. **Ensure new developments meet the** **Building for Nature qualitative benchmark** . The Building with Nature standard provides a recognised and respected benchmark for green infrastructure. The benchmark requires consideration of standards relating to water, wellbeing and wildlife in a spatial context in terms of what they contribute to that place and wider connectivity. To support the delivery of 1 above this should become the baseline requirement for blue-green infrastructure in mixed use, residential and commercial development. This will support the development industry in meeting requirements whilst providing planning authorities with reassurance and a measure of added value.
3. **Apply an "infrastructure first" approach to blue-green infrastructure provision.** Blue-green infrastructure must be recognised as essential infrastructure for development and as such be factored into an "infrastructure first" approach advocated in NPF4. There are a multitude of reasons as to why blue-green infrastructure should be considered 'essential', as outlined previously. Linkages between blue-green infrastructure and the delivery of other essential infrastructure such as transport (active travel connections), drainage (surface water management) and flood risk management (natural flood management) also requires alignment. This could require the ring fencing of Infrastructure Levy funding for blue-green infrastructure.
4. **Protect existing and proposed blue-green infrastructure.** NPF4 should introduce a policy to ensure the protection of existing designated and proposed areas of blue-green infrastructure from inappropriate development. This should ensure that developments are avoided that detract from the objectives/functions of existing and proposed blue-green infrastructure.

IDEA FOUR: A FRAMEWORK FOR FLOOD-ADAPTED PLACES

Currently around 284,000 properties (homes, businesses, services), are at medium risk of flooding in Scotland; by the 2080s this could increase by 110,000 properties due solely to the impact of climate change on flooding (SEPA's National Flood Risk Assessment 2018). This figure does not take account of new development yet to take place, including undeveloped sites in Local Development Plans, some of which inevitably will be at risk of climate change-related flooding in future. Successful adaptation to the future impacts of climate change, including flood risk, will be vital to the future health and wellbeing of our communities and to ensure confident long-term investment in Scotland's economy.

To achieve this NPF4 should ensure:

- **Continued avoidance of areas at flood risk as a policy principle**
- **A clear direction on the climate scenarios we need to plan for and their likely impact on flood risk**
- **An understanding of the likely extent of our future floodplains and how planning decisions should take account of them**
- **The long term viability of communities and infrastructure at significant flood risk (both current and future).**
- **Our urban centres can adapt to increased risks from flooding in a way that supports climate change mitigation as well as regeneration and the positive use of vacant and derelict land and buildings**
- **Blue/green infrastructure is fully integrated into our built up areas to increase resilience to flood risk and deliver a wide range of other benefits for people and the environment**



NPF4 OUTCOMES	Meeting emission reduction targets	Increasing rural population	Meeting housing needs	Improving health and wellbeing	Securing positive effects for biodiversity	Improving equality/ eliminating discrimination
	Ensuring adaptation and mitigation policies are complementary, especially in our urban areas	Ensuring our future rural population is resilient to the impacts of climate change, including flood risk	By facilitating growth in urban areas and the viability of communities that are impacted by flooding	Through the protection of communities from flood risk and the creation of opportunities through blue/green infrastructure	Through the protection of our floodplains, and protecting and enhancing areas for natural flood management	Ensuring that the most vulnerable are not disproportionately impacted by flood risk

Links to SPP Policy Topic Areas: placemaking, climate change, sustainability, infrastructure, housing, flooding, coastal planning, vacant and derelict land, natural environment, green infrastructure, green belts, health, rural development

Policy Area: Flood-Adapted Places

National Developments (see Appendix Two)

- **National Green Network**

Policies from SPP to be carried over into NPF4

- The avoidance principle (SPP Para 255)
- The flood risk framework (with minor amendments) (SPP Para 263)

Policy Changes

- Stronger, clearer position on landraising as well as other forms of flood risk mitigation to provide certainty for all stakeholders (SPP para 265).
- Create stronger linkages to Flood Risk Management Plans and Strategies, supporting the safeguarding of land required to deliver on their actions, and promoting links to completed flood studies and other relevant information arising from the plans and strategies (SPP Paras 260-262).
- Greatly strengthen the role of Strategic Flood Risk Assessment in development planning, which we see as vital to ensuring SEPA's engagement in the planning process is truly front-loaded, and that development plans are deliverable (SPP Para 260).

Delivering the step-change: New Policy areas

NPF4 should:

1. **Take a lead role in identifying the future climate scenarios that development should be designed to withstand, and the thresholds at which we decide to evaluate and alter our course, and ensure that planning decisions take account of the likely impacts of climate change on our floodplains and coastal areas, to ensure the future resilience of our communities and businesses** Even if global mitigation targets are achieved, in Scotland we will still have to adapt to significantly different conditions from the present day, particularly with regard to sea level rise. In particular there is an unquantifiable risk (associated with potential for collapse of parts of the Antarctic ice sheet), that global sea level rise of 2m could occur this century. This is double the level currently considered in SEPA's planning guidance and would have significant impacts on coastal flooding and erosion, and potentially the long term viability of some coastal communities. We are currently working to update this guidance based on the most recent UK climate projections.
2. **Take account of the spatial implications of future climate impacts**. For a number of communities in Scotland, future climate impacts are likely to present significant challenges. This includes low lying coastal communities and their supporting critical infrastructure that would be severely impacted by predicted sea level rise. In such instances, a more radical policy response may be needed, and where this is a recognised as a priority action in Local Flood Risk Management Plans, NPF4 should provide a policy (and/or spatial) framework for how managed relocation can be addressed via LDPs. The framework could include identifying (or providing guidance on how to identify) areas where further additional development may be limited due to flooding and/or coastal erosion, and those where existing development can relocate to.
3. **Help ensure the future resilience of urban centres**. RSSs and LDPs should take a whole-system approach to the regeneration and revitalisation of urban centres including an integrated, strategic approach to current and future flood risk. This requires an early understanding of current and future flood risks and existing and proposed flood management proposals, and how these can balanced with other (sometimes competing) planning priorities, including low carbon spatial strategies and bringing previously used land and buildings back into productive use.
4. **Take an infrastructure-first approach to blue/green infrastructure (see Idea Three – Green Resilient Places).** There is great opportunity for NPF4 to take a radically more ambitious approach to delivering blue/green infrastructure, from the national to the local scale. Blue/green infrastructure

offers a great opportunity to address some of the most significant challenges facing Scotland including the climate emergency and biodiversity decline, in a way that delivers multiple benefits. Land for blue-green infrastructure (including the floodplain where relevant), should be considered to be a site pre-requisite in the same way that land for parking, pavements, bin storage etc. is, because of the significant benefits it will deliver not only for flood risk management, but also for water quality, biodiversity, surface water drainage, health, carbon storage and active travel. Our river and coastal flood plains and routes for rain and surface water are key components of blue/green infrastructure, and are essential for communities. In times of normal weather they provide a valuable service, providing greener and more attractive places for people to live and work, making our communities happier, healthier and more prosperous; in times of extreme weather (such as floods, droughts and heat) they make our communities more resilient.

5. **Provide an increased focus on the social impacts of flood risk.** The social vulnerability of those potentially impacted by flood risk should be a factor in planning decisions in future. This would enable consideration of the ability of people to prepare for, withstand, and recover from flood events. SEPA's National Flood Risk Assessment 2018 took account of information on flood disadvantage for the first time based on 2015 research. This would be one way in which NPF4 could help to deliver on the Scottish Government's move towards a just transition. A recent report from the Centre of Expertise for Waters looking at the impacts of flooding in north east Scotland provides some relevant findings on the impacts of flooding on individuals and communities.
6. **Consider whether there is a role for planning policy in helping to deliver property-level resistance and resilience measures for new development**. In November 2019 the Scottish Government published the action plan 'Living with Flooding', which states that evidence should be gathered in order to inform planning guidance, suggesting that there may be a role for land use planning to play in helping to deliver flood resistance and reliance measures at the property scale.