Our shared Mission for Sustainable Wellbeing

2024-2029 priorities for the UK Government, from the Institution of Environmental Sciences

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The Institution of Environmental Sciences

**The Institution
of Environmental
Sciences**

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About the Institution of Environmental Sciences

The Institution of Environmental Sciences (the IES) is at the forefront of uniting the environmental sciences around a shared goal: to work with speed, vision and expertise to solve the world's most pressing environmental challenges, together.

As the global professional membership body for environmental scientists, we support a diverse network of professionals all over the world – and at every stage of their education and careers – to connect, develop, progress and inspire.

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Executive summary

Recent decades have seen environmental challenges escalate to the point of crisis across the planet.

In the UK, the situation is no different: climate change, biodiversity loss, and pollution all have stark consequences for people across the country.

This era of crisis must end, beginning a transition towards a sustainable society with thriving people, a healthy economy, and a flourishing environment.

Both the Government's strong mandate for environmental action and the widespread aspirations of the public to restore and enhance the environment provide the opportunity to make that vision real.

That ambition is attainable through a clear and urgent course of action: to transform the UK with a new Mission for Sustainable Wellbeing.

Transforming the UK for the good of people, the economy, and the environment is a matter of public service: the natural world is the foundation of all human needs, and we cannot meet our collective obligation to people now or in the future if we do not sustain it.

Acting now will also save on the exponential costs of delay and unlock the "economic opportunity of the 21st century".

Each aspect of the environment warrants direct intervention and protection:

- Ambitious and robust governance for clean air
- Holistic land use and re-use for development
- A long-term approach to clean and sustainable water
- Strong leadership on the marine and coastal environment
- Transformative action to tackle climate change

At the same time, we cannot succeed until we address the big systems that underpin policy, and the ways they influence the environment:

- Implementation and delivery of policy, particularly at the local level
- A robust, modern, and sustainable planning system
- Sustainable education and skills

This report outlines the priority actions needed to make transformative, systemic

changes for the benefit of communities and the natural world, without compromising on the actions needed to solve specific challenges.

Those priorities come from the expertise and evidence of hundreds of scientists, working together across disciplines to solve environmental challenges.

We can accelerate together towards a better future for the UK. One without environmental crisis or communities left behind in the transition, creating a country with thriving people, a healthy economy, and a flourishing environment.

"This era of crisis must end, beginning a transition towards a sustainable society with thriving people, a healthy economy, and a flourishing environment."

Recommendations

These nine recommendations represent the most pressing priorities identified by IES members and our specialist communities.

There are further recommendations in each specialism's chapter, including details of how each recommendation can be delivered in practice.

1. **Transform the UK through a new Mission for Sustainable Wellbeing. Begin the transition from years of crisis towards a sustainable society where people and nature thrive.**

   See chapter one for details on how to deliver this recommendation.

2. **Secure a world-leading governance framework for air quality, raising the ambition of existing strategies and targets, and addressing governance gaps.**

   See chapter two for details on how to deliver this recommendation.

3. **Take a holistic approach to the use of land across the UK to secure multiple benefits for communities and our natural world.**

   See chapter three for details on how to deliver this recommendation.

4. **Adopt a long-term approach to water that acknowledges humans as part of the water system, prioritising strategic network solutions that work with nature.**

   See chapter four for details on how to deliver this recommendation.

5. **Strengthen leadership and governance on the marine and coastal environment, informed by systems thinking for a sustainable ocean.**

   See chapter five for details on how to deliver this recommendation.

6. **Commit to a 'transformative change' approach to reshaping unsustainable systems, addressing climate change, biodiversity loss, and environmental pollution together.**

   See chapter six for details on how to deliver this recommendation.

7. **Champion local authorities to deliver for the environment by clarifying their responsibilities and increasing their powers and resources.**

   See chapter seven for details on how to deliver this recommendation.

8. **Create a less adversarial approach to planning and environmental consenting by developing processes which are coherent, flexible, and accessible.**

   See chapter eight for details on how to deliver this recommendation.

9. **Embed Education for Sustainable Development (ESD) across all types of education and at all levels, from primary school through to the workforce, with a focus on solutions.**

   See chapter nine for details on how to deliver this recommendation.

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"The priorities in this report are contemporary and evidence-based ... at the IES we know that our members are the experts."

Our offer to government

While this report contains several crucial priorities for environmental action by the Government, we also recognise that the challenges of climate change, biodiversity loss, and pollution require the collective efforts of all parts of our society.

The IES and its members want to make clear our offer to play our part to support government in delivering ambitious action.

Background to the project

During the five weeks of the 2024 general election period, the IES held seven discussion events with environmental scientists and other experts, aiming to identify the most pressing priorities for the next UK Government.

More than 150 professionals attended the events, representing voices from industry, research, government, NGOs, and the wider sector.

The priorities outlined in this report represent the outcomes of those discussions.

They are contemporary, evidence-based, and reflect a wide range of expert and community perspectives.

What are IES communities?

Communities within the IES are groups of members brought together around a shared professional interest, goal, or challenge. They are an integral part of the IES ecosystem, providing thought leadership for their area of focus and a forum for members to network, collaborate, and shape their sector.

At the IES we know that our members are the experts. Communities are a key tool for directly engaging with our members, channeling their expertise into a unified voice, and informing the development of tailored resources.

How can we help?

The IES is always willing to support the development of environmental policy through briefings, access to experts and evidence, training, or other avenues.

The IES and its members are able to support with the design, delivery, and evaluation of policy, as well as the identification of issues and support for the wider evidence base underpinning policy decisions.

If any of the priorities recommended in this report are unclear or require further exploration, the IES is happy to follow up in whatever form is most useful.

We also have a community of experts dedicated to considering the successful implementation of policies, the Environmental Policy Implementation Community (EPIC), which can support government in untangling challenging issues related to delivering on policies in practice.

What is our area of expertise?

The IES is a professional body with more than 6000 members. We represent the voices of environmental professionals, sharing insights from the front lines of working with the environment.

The IES is particularly well-placed to represent a multidisciplinary approach to those insights, drawing members working in air quality, land condition, climate, nature, sustainability, water, education, and anywhere else where environmental work is underpinned by science.

As a member of the Science Council, the IES brings a strong scientific and evidence-based perspective to addressing environmental challenges.

We are not solely focused on the technical aspects of policy, we also raise public awareness of environmental science: we give expert perspectives in the media, we are a UNFCCC admitted observer NGO, and we maintain good relationships with parliamentarians, civil servants, and arms-length bodies.

The IES is uniquely positioned to examine interactions between complex natural and social systems from a scientific perspective. We are a leading voice in 'systems thinking' perspectives and transformative approaches to change.

Chapter one: A new Mission for Sustainable Wellbeing

Priority actions for the UK Government: Sustainability

1 A new Mission...

Transform the UK through a new Mission for Sustainable Wellbeing. Begin the transition from years of crisis towards a sustainable society where people and nature thrive.

2 led by the evidence...

Across government, recognise the role of evidence-informed policy design and delivery, embracing the full range of scientific insights, whether or not they are politically convenient.

3 assured by governance...

Develop a robust, independent, and coherent system of environmental governance across all levels of the UK, with the power to act where needed to secure outcomes for people and the planet.

4 ...to empower future generations.

Put people at the heart of the sustainability transition by empowering communities and giving future generations the skills and tools they need to engage in decision making.

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"We need an approach that cuts across government and everything it does."

Years of crisis linked to climate change, biodiversity loss, and pollution have prevented us realising the fundamental promise that the future should always be brighter than it is today.

Our environment is a core resource that shapes each aspect of human society and influences every government department, so we should avoid approaches that isolate the solutions to these challenges. We need an approach that cuts across government and everything it does.

Our ambition should be for a country with thriving people, a healthy economy, and a flourishing environment. Each is crucial to creating a better country and all three could be realised together through a new Mission for Sustainable Wellbeing across the UK.

Those ambitions come from strong and enduring public expectations: people want their country to be better than it was in the past, rather than seeing rivers, forests, and green spaces decline around them.

The UK has a clear leadership role to play on the environment, and we can see our actions amplified if we lead by example on

the global stage. Sustainable wellbeing is essential for achieving social and environmental outcomes. It also sets the base conditions for economic security and productivity in the future.

Addressing environmental challenges in a meaningful and coherent way requires a transformative and systems approach: we need to do things differently and we need to use all the tools at our disposal to transform the world around us.

Evidence-informed decision making ensures policies achieve their intended consequences. Good governance ensures that targets and aspirations are realised in practice. Community participation ensures that a just transition to sustainability exists to serve people, as it cannot happen without them.

Together, we can accelerate towards sustainability, putting behind us the years of crisis that have prevented the UK realising a better future.

Together, we can solve environmental challenges and create a sustainable society where people and nature thrive.

1. **Transform the UK through a new Mission for Sustainable Wellbeing. Begin the transition from years of crisis towards a sustainable society where people and nature thrive.**

   i. Develop a cross-government Sustainable Wellbeing Framework for England and connect it to the Welsh Wellbeing of Future Generations Act and Scotland's National Performance Framework through a new Mission for Sustainable Wellbeing, creating a vision for Britain transformed for the good of people, the economy, and the environment.

   ii. Take a transformative approach to environmental challenges, without compromising on the specific actions needed to create positive change across the environment.

   > Find out more about key actions for clean air

   > Find out more about key actions for land use

   > Find out more about key actions for water

   > Find out more about key actions for climate

   iii. Commit to leaving UK nature and the wider environment in a better state than it was at the start of the 2020s, recognising that the current trend of environmental decline means that 'do no harm' is an insufficient approach to preventing long-term damage.

This is the easiest and most coherent way to meet the Government's manifesto commitment to **"ensure the institutional framework for policy making reflects our commitments to reach net zero and meet our carbon budgets."**

A cross-government approach will help meet the Government's manifesto commitments that **"economic growth, energy security, lower bills, and addressing climate change can be complementary"** and to **"work with the Scottish and Welsh Governments, and the Northern Ireland Executive, to drive growth across the country."**

This will deliver on the Environment Secretary's comment that **"Nature will be central to each of the missions that will define Keir Starmer's Labour government ... Nature underpins everything, but we stand at a moment in history when nature needs us to defend it."**

2. **Across government, recognise the role of evidence-informed policy design and delivery, embracing the full range of scientific insights, whether or not they are politically convenient.**

    i. Develop a systematic understanding of which policies work through 'integrated assessment approaches' to measuring progress on environmental objectives, using a combination of data sources to take account of dynamic natural systems.

    ii. Work with scientists and business to establish partnerships which increase public access to evidence, increasing understanding of different approaches to addressing environmental challenges and how they can be achieved.

    iii. Ensure there is sufficient expert advice to assess emerging evidence of the effects of environmental issues, filling gaps such as the need for an expert advisory group on noise pollution, as recommended by the House of Lords Science & Technology Committee.

This is essential to meeting all Government objectives, but particularly those on **economic security and long-term success,** which rely on policies producing expected results.

3. **Develop a robust, independent, and coherent system of environmental governance across all levels of the UK, with the power to act where needed to secure outcomes for people and the planet.**

i. Empower good governance in practice by ensuring regulatory bodies, such as the OEP and the Environment Agency, have adequate resources and powers, clear and coherent responsibilities, and shared approaches across the devolved administrations and local government.

ii. Address the gaps in the Environment Act's legally-binding target framework by raising ambitions beyond what can already be achieved by existing policies, filling gaps around soil health and resource efficiency. Refresh the Outcome Indicator Framework so that indicators actually measure progress towards the goals of environmental improvement and sustainable wellbeing.

iii. Enable local authorities to deliver for the environment by clarifying their responsibilities, increasing their powers and resources and reforming the planning system.

Find out more about key actions for implementation, including at a local level

Find out more about keys actions for environmental impact and planning

By delivering on each element of governance that underpins the environmental improvement plan, this will realise the commentary by the Environment Secretary that the Government will **"ensure the existing environmental improvement plan is fit for purpose."**

In the context of the environment, this will realise the Government's manifesto commitment to **"provide capacity and support to councils … so taxpayers get better value for money."**

4. Put people at the heart of the sustainability transition by empowering communities and giving future generations the skills and tools they need to engage in decision making.

i. Work with the education sector to deliver skills for the sustainability transition.

   Find out more about key actions for sustainable education

ii. Work with industry to produce sector-specific skills audits and transition plans aligned with a sustainable future.

iii. Work with professional bodies to develop and review competency frameworks to reflect the skills mix needed in each sector.

iv. Work with local communities to give people control over the country's pathway towards sustainability. Facilitate engagement by supporting widespread access to resources on critical scientific topics, including systems thinking, sustainable futures, Carbon Literacy and process literacy.

v. Build a science-policy interface which is credible, legitimate, relevant and actionable, helping decision makers and the public become comfortable with discussing uncertainty.

> This will be essential to delivering the Government's Mission to **'Make Britain a Clean Energy Superpower'** in a way that leaves no community behind.

> This supports the Government's manifesto commitment to **"transfer power out of Westminster, and into our communities",** in the context of sustainability.

"Our environment is a core resource that shapes each aspect of human society."

Chapter two: World leading governance for air quality

Priority actions for the UK Government: Clean air

1 Raise ambition...

Secure a world-leading governance framework for air quality, raising the ambition of existing strategies and targets, and addressing governance gaps.

2 deliver locally...

Back local authorities to deliver on clean air, through increased powers, funding and clear guidance.

3 address indoor air...

Raise the profile of indoor air quality in the UK's approach to public health and take immediate action to tackle the sources of poor indoor air quality.

4 take a strategic approach...

Produce ambitious strategies for highly polluting industries and novel contaminants.

5 ...and monitor to ensure success.

Expand air quality monitoring and alert networks, facilitating the use of high-quality equipment and best practice to provide robust data that informs decision making.

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"Healthy air should be a core public health aspiration of the next five years."

Air pollution is the single largest environmental threat to public health. It is estimated to cause at least 29,000 deaths each year in the UK.

Breathing poor quality air increases the risk of developing conditions such as cancer, heart disease, dementia, and chronic respiratory conditions. Air pollution also damages and degrades the natural environment.

Trends in outdoor air quality are generally improving, but recent progress has been slow, and the UK is not on track to meet the majority of its emissions reduction targets.

Some emission sources are also lagging significantly behind and require urgent action. Emissions from agriculture and domestic burning have seen a significant increase over the last decade.

Indoor air quality has been historically neglected, despite many of us spending around 90% of our time indoors. The IAQM has been working to raise the profile of indoor air quality and produced leading guidance for air quality, construction and planning professionals in 2021.

Healthy air should be a core public health aspiration of the next five years. Improving air quality will have particular benefits for deprived communities, who are more likely to live close to pollution sources and often have existing health vulnerabilities.

Government must work with local authorities and local communities, as well as the environmental science and air quality professions, to deliver an evidence-informed, just transition towards healthy air.

This will have wider benefits: many actions taken to improve air quality can also tackle climate emissions, improve biodiversity, and reduce noise pollution.

About the Institute of Air Quality Management (IAQM)

The Institute of Air Quality Management (IAQM) is the professional body for air quality professionals in the UK, acting as the voice for air quality by producing useful and timely guidance on matters affecting air quality professionals and by responding to Government consultations.

The IAQM is committed to maintaining, enhancing and promoting the highest standards of working practices in the field and supports the development of professionals working in the sector.

1. **Secure a world-leading governance framework for air quality, raising the ambition of existing strategies and targets, and addressing governance gaps.**

    i. Raise the ambition of the UK's air quality targets, setting out a credible plan for achieving World Health Organization (WHO) 2021 Air Quality Guidelines as soon as possible, including meeting an interim 2030 target of an annual mean concentration of 10 micrograms per cubic metre for PM2.5.

    ii. Introduce a right to clean air into UK law.

    iii. Commit to a regular review of the Air Quality Strategy, to take place at least every three years with a consultation period of at least two months.

    iv. Introduce a statutory requirement for local authorities to produce local air quality strategies for all key pollutants, and to consider PM2.5 in annual status reports.

    v. Put in place oversight mechanisms to ensure air quality delivery plans are reviewed and consulted upon when national limits are exceeded, as called for by the OEP.

This will support the Government's **"bold new ambition to raise the healthiest generation of children"**, addressing one the largest threats to public health in the UK.

This requirement will allow the Government to deliver its manifesto commitment to **"tackle the social determinants of health, halving the gap in healthy life expectancy between the richest and poorest regions."**

2. **Back local authorities to deliver on clean air, through increased powers, funding and clear guidance.**

   i. Clarify and strengthen the powers and enforcement abilities of all types of local authorities to tackle air pollution, including from vehicle idling and wood burning, and by enabling public transport and active travel.

   ii. Prioritise clear guidance and unambiguous political support for an evidence-informed community-led dialogue on air quality interventions, such as clean air zones and low traffic neighbourhoods.

   iii. Deliver long-term non-competitive funding to local authorities for air quality management, including and going beyond filling the gap left by the scrapping of the air quality grant scheme.

In the context of air quality, this realises the Government's manifesto commitment to **"widen devolution to more areas, encouraging local authorities to come together and take on new powers... ensure those places have the strong governance arrangements, capacity, and capability to deliver."**

This aligns with the Government's manifesto commitment that **"to provide greater stability, a Labour government will give councils multi-year funding settlements and end wasteful competitive bidding."**

3. **Raise the profile of indoor air quality in the UK's approach to public health and take immediate action to tackle the sources of poor indoor air quality.**

   i. Close the gaps for evidence and monitoring identified by the Air Quality Expert Group's 2022 Indoor Air Quality report.

   ii. Set out a road map for tackling indoor air quality, including an action plan for phasing out non-essential solid fuel burning in homes.

   iii. Deliver a clear and unified national public health campaign to raise awareness of the health impacts of solid fuel burning in the home, building on the work of the London Wood Burning Project.

This supports the Government's manifesto commitment to **"take preventative public health measures to tackle the biggest killers and support people to live longer, healthier lives."** The WHO describes air pollution as "the largest environmental threat to human health worldwide."

4. **Produce ambitious strategies for highly polluting industries and novel contaminants.**

   i. Tackle agricultural emissions by publishing a strategy to reduce ammonia, identifying the organisations responsible for delivering improvements, and setting strict targets for 2030, 2040 and 2050.

   ii. Publish the updated Clean Maritime Plan, which was due to be published in 2022, with explicit policies to tackle air pollution in ports, as set out by Transport & Environment's 2024 report.

   iii. Publish the long-awaited Chemicals Strategy, explicitly including plans to regulate on indoor chemical products, novel contaminants, and 'forever chemicals' such as PFAS.

This will be crucial to meeting the UK's climate and air quality targets while supporting the delivery of the Government's manifesto commitment to **"a serious industrial strategy and a genuine partnership between the public and private sectors … we can make Britain a clean energy superpower."**

This would be a key step towards meeting the Government's goal in its manifesto to **"tackle the … nature emergency, including the unforgivable pollution of our rivers and seas."**

5. **Expand air quality monitoring and alert networks, facilitating the use of high-quality equipment and best practice to provide robust data that informs decision making.**

   i. Expand and join up the air quality monitoring and alerts network, including increased monitoring of black carbon and ultra fine particulate matter.

   ii. Work with the scientific community to set standards, ensuring that monitoring equipment, especially new low-cost sensors, are robust and appropriately used, including by citizen scientists.

This would bring clean air in line with the Government's proposed approach to water in its manifesto, which includes the **role of independent monitoring.**

Chapter three: Holistic land use and re-use for sustainable development

Priority actions for the UK Government: Land use and re-use

1 **A holistic approach...**

Take a holistic approach to the use of land across the UK to secure multiple benefits for communities and our natural world.

2 **promoting healthy soils...**

Promote a sustainable, healthy, and resilient approach to soils across Government policy by coordinating governance, monitoring, and practice.

3 **starting with brownfield...**

Realise the safe use, re-use, and redevelopment of brownfield land in line with sustainable development.

4 **...delivered through partnership.**

Work with the environment sector and local government to deliver competency and best practice in the transition towards a more holistic approach to land.

"Sustainable development can simultaneously tackle the biggest social crises, such as housing, and the biggest environmental crises, such as climate change."

Land condition is critically important as we transform society towards sustainability. The land we live on interacts directly with our homes, our food, our energy security, and the protection of the natural world that people love.

The health of our land can be compromised by how it was used in the past and how it is used now. We need to address land condition directly to deliver a better future for our communities and the natural world.

Despite the overwhelming consensus of the environment sector to take a holistic approach to land, delivering healthy soils, and realising the safe use and redevelopment of brownfield land, regulation often works against a 'common sense' approach.

Current regulations and consenting processes for developing land and disposing of waste are often disconnected or adversarial by nature, preventing solutions which would be better for everyone.

Economic development and environmental outcomes need not be adversaries: sustainable development can deliver mutual benefits for people, the economy, and the environment.

Likewise, sustainable development can simultaneously tackle some of the biggest social crises, such as housing, and the biggest environmental crises, such as climate change.

Working with environmental scientists, landowners and local communities, the Government can transform the way we treat and use our land, unlocking economic growth and maintaining a landscape that is healthy for people and ecosystems.

About the Land Condition Community

The Land Condition Community is a member-led special interest group of land condition professionals spanning sectors and job types, dedicated to promoting best practice in the specialism.

The Community steers the IES's activities related to land condition and supports the development of tailored membership services, exploring synergistic collaborations with key stakeholders in the sector where relevant.

1. **Take a holistic approach to the use of land across the UK to secure multiple benefits for communities and our natural world.**

   i. Reach a cross-governmental consensus on the use of land, supported by a Land Use Framework that coordinates – and manages trade-offs for – social, economic, and environmental objectives, such as the Environmental Improvement Plan (and equivalent policies in the devolved administrations), food security, public health, and addressing the linked crises of climate change, biodiversity loss, and environmental pollution.

   > This aligns with the Government's manifesto commitment to **"introduce a land-use framework and make environment land management schemes work for farmers and nature."**

   ii. Prioritise brownfield land for new developments whenever suitable for use, taking a 'common sense' approach to building homes, developing infrastructure and protecting our green spaces.

   > This reflects the Government's manifesto commitment to **"take a brownfield first approach, prioritising the development of previously used land wherever possible."**

2. **Promote a sustainable, healthy, and resilient approach to soils across Government policy by coordinating governance, monitoring, and practice.**

   > This will be an essential element of the Government's manifesto ambition to **"champion British farming whilst protecting the environment."**

   i. Place soil health on the same legislative framework as other key environmental outcomes, introducing a statutory target for soil health and improving soil monitoring data.

   ii. Improve waste rules for soils by introducing a regulatory framework for the re-use, recovery, and recycling of soil. Include soil in the Circular Economy Regulations as a resource where safe re-use is encouraged. Expedite the development and rollout of the Soil Re-Use and Storage Depot scheme.

3. **Realise the safe use, re-use, and redevelopment of brownfield land in line with sustainable development.**

    i. Consolidate consenting processes to minimise duplication, delivering NPPF guidance that planning issues should not be unnecessarily revisited through permitting regimes. Avoid double regulation with formal agreements between departments and regulators, clarifying which process will encompass which actions and activities.

    ii. Use regulatory incentives to actively encourage brownfield development. Explore higher scrutiny processes for greenfield development which should be 'by exception only'. Showcase the positives of brownfield development and the multiple benefits which can be achieved for communities and developers.

    iii. Align governance and consenting processes across local and national policy, through frameworks such as the NPPF and NPF4. National environmental objectives and outcomes should be linked to local delivery as explicit considerations in Local Plans.

    iv. Improve designations for land to better reflect its complexity. Recognise that brownfield land can have more ecological diversity than some greenfield land. Ensure definitions do not lead to absurdities such as the intentional degradation of land to facilitate technical compliance with BNG.

This is the most sustainable way to deliver the Government's manifesto commitment to **"Get Britain building again … with 1.5 million new homes over the next parliament."**

This aligns with the Government's manifesto commitment to **"take a more strategic approach to greenbelt land designation"** and to **"introduce 'golden rules' to ensure development benefits communities and nature."**

4. **Work with the environment sector and local government to deliver competency and best practice in the transition towards a more holistic approach to land.**

   i. Support industry, professional bodies, and communities of practice to promote key competency standards (such as NQMS, SiLC, and CEnv). Hold regular reviews to ensure standards are fit for purpose, working with local government on a needs-based approach to competency, and delivering training on new technologies, data, and digital development.

   ii. Facilitate universal best practice through guidance for local authorities and delivery organisations, supported by sufficient resources and by evaluating the success of the Planning Skills Delivery Fund.

   iii. Deliver on the recommendations of the NAO's Implementing Statutory BNG Report, including monitoring local authority enforcement of BNG and overall impact to ensure environmental gain in practice.

This will be vital to delivering the Government's manifesto ambition to **"make the changes we need to forge ahead with new roads, railways, reservoirs, and other nationally significant infrastructure."** Planning reforms will only succeed if the right people have the skills they need to deliver in practice.

This will support the Environment Secretary's core priority of **"Ensuring nature's recovery".**

Chapter four: A long term approach to clean and sustainable water

Priority actions for the UK Government: Water

1 A long-term strategy...

Adopt a long-term approach to water that acknowledges humans as part of the water system, prioritising strategic network solutions that work with nature.

2 for clean water...

End the crisis for water quality by tackling all sources of pollution, providing healthy rivers and bodies of water for communities and the natural environment.

3 and water resilience...

Integrate the UK's approaches to water and climate change, providing water security and flood resilience, while maximising benefits for communities and our natural world.

4 backed by robust data...

Modernise the Government's approach to evidence through purpose-built standards and indicators for water, supported by clear guidance for Ministers and delivery organisations.

5 ...implemented locally.

Deliver sustainable water resource management at the catchment scale, developing necessary infrastructure with transparent, reasonable and actionable plans for implementation.

"In the long-term, the only sustainable future for water is to work with the water cycle."

Water is essential to people, the economy, and the environment.

More than ever, people across the UK are aware of the challenges facing water quality, water resilience, and the systems which rely on effective water management.

The water sector must be honest about what can be achieved in the short term, and in the long term cannot compromise on high ambitions for water.

We cannot avoid taking action to address the most pressing and readily-solvable challenges for water, which require immediate triage to lay the foundations of a sustainable approach.

Water stress, compounding challenges for freshwater quality, and water security in the wake of climate change are all immediate priorities to safeguard the health of our water system.

Water companies must be held to account for the sewage crisis, whilst also addressing the other causes of poor water quality, including highway runoff and agriculture.

In the long-term, the only sustainable future for water is to work with the water cycle, minimising human impacts on ecosystems without compromising on clean and plentiful water across the country.

By the middle of the century, we can achieve a water system which is healthy, sustainable, and resilient, delivered over the coming decades by efficient, robustly-informed regulators and a water industry focused on providing the most benefits to communities and the natural world.

About the Foundation for Water Research (the FWR)

The FWR Community was launched following the IES inheriting the mission of the Foundation for Water Research (FWR) in 2022.

The Community is a cohesive, innovative, and independent-thinking community of water professionals offering guidance and strategic thought leadership for the IES's water activities.

The FWR Community uses an integrated, systems-thinking approach to water issues and their interactions with land and air.

1. **Adopt a long-term approach to water that acknowledges humans as part of the water system, prioritising strategic network solutions that work with nature.**

   i. Deliver the commitments in DEFRA's Integrated Water Plan (IWP) to review the implementation of the WER 2017 and transform management of the whole water system, embedding a strategic approach to the multiple causes of poor water quality and water stress.

   ii. Work with the water industry to create a road map to sustainable water resource management, in line with the IWP. Tackle the sector's skills gaps to support sustainable water management across industry.

   iii. Address highway runoff, sewage overflows, and runoff from agriculture and food production as distinct parts of a combined challenge, aligning with ELMS. Unblock barriers to resource recovery and re-use to prevent treated sludge being applied to agriculture.

   iv. Overhaul the Environment Agency and Ofwat to make water system transformation a core principle of their long-term strategies. Ensure that both organisations have sufficient access to expertise in science and engineering, as well as the resources to take a robust approach to enforcement and regulatory oversight.

   v. Deliver comprehensive risk assessment and management, identifying high risk areas and developing joint emergency response plans with delivery organisations and the water industry. In parallel, increase public understanding of the risks associated with water use, including for drinking water, PFAS and PFOS contamination, and water stress.

This will be crucial to ensuring that the Government's commitment to **"put failing water companies under special measures"** delivers change in the long-term.

This will support the delivery of the Government's manifesto commitment to **"improve resilience and preparation across central government, local authorities, local communities, and emergency services."**

2. **End the crisis for water quality by tackling all sources of pollution, providing healthy rivers and bodies of water for communities and the natural environment.**

   i. Ensure that all UK rivers have a plan in place by the end of the current Parliament for how they will reach good ecological and chemical status.

   ii. Work to make healthy rivers accessible to everyone, implementing a target that everyone should live within 50 miles of an inland or coastal bathing water in good or excellent quality.

   iii. Fully deliver existing targets and policies on freshwater conservation, ecological status, and water quality, committing to no further delays or reversals of commitments. Carry out periodic reviews of the IWP, identifying opportunities to scale up ambitions for water quality.

   iv. Give Ofwat and other delivery organisations clear guidance and resources to consistently and robustly enforce the regulations we already have.

   v. Make a long-term commitment to the sustainability of wastewater and its effects on the environment, supporting the UK's strategic approach with a new Chief Scientist for Wastewater.

A broad approach to water quality will support the Environment Secretary to deliver his core priority of **"Cleaning up Britain's rivers, lakes and seas."**

This will help to achieve in practice the aspiration underpinning the Government's proposed **Water (Special Measures) Bill** and its **review of the water sector.**

3. **Integrate the UK's approaches to water and climate change, providing water security and flood resilience, while maximising benefits for communities and our natural world.**

    i.   Support strategic planning for water stress and insecurity at a catchment level, including joined-up planning for responsible authorities that embeds climate resilience as well as mitigation.

    ii. Commit to a strategic programme of reservoir building which identifies opportunities to work with the water cycle. Unlock water storage through ELMS, SuDS and nature-based solutions.

    iii. Work with environmental scientists to produce a coherent long-term plan on surface water flooding, implementing the recommendations of DEFRA's review and rolling out SuDS with support for planning and delivery organisations.

    iv. Adopt opportunities for co-benefits between water management and climate action, such as the potential role of wastewater in enabling a transition to shared networks for heating buildings.

    v.   Explore market and behavioural mechanisms to urgently accelerate action on water security, while delivering existing commitments on leakage and per capita consumption.

This will be a key step to meet the Government's manifesto commitment to increasingly **"[adapt] to the changes [the climate and nature emergencies] will bring to our environment"** in line with the manifesto's commentary that **"without action, flooding and coastal erosion will pose greater risks to lives, livelihoods and people's wellbeing."**

Pilot schemes could support the delivery of **the Warm Homes Plan** and the Government's manifesto commitment to **support investment in "low carbon heating to cut bills."**

4. **Modernise the Government's approach to evidence through purpose-built standards and indicators for water, supported by clear guidance for Ministers and delivery organisations.**

i. Assess water quality standards, indicators, and targets to ensure they are robust, relevant to the context of often-degraded natural environments, appropriate for the purposes for which they are used, and deliverable in practice.

ii. Work with the OEP and regulators to deliver a joined-up approach to the use of evidence from governance through to implementation, supporting standards on 'what works'. Ensure the OEP and regulators have appropriate support, funding and powers to carry out their functions.

iii. Adopt a cross-government approach to the use of evidence in decision making, supported by guidance for Ministers and civil servants on how evidence should be used, as well as primers on water quality data and its environmental implications for those working with water systems.

iv. Support the delivery of a systems approach to water with models of the integrated water system, aligned with the UK's implementation of the Water Framework Directive.

v. Work with the environment sector to develop a national standardised framework for citizen science projects to support standards for how projects are delivered and managed, providing quality assurance for data collection.

> This will support the delivery of the Government's ambitions for water quality and will be a crucial step towards its manifesto commitment to **"ensure independent monitoring of every outlet."**

> This will support continued alignment with Europe and will align English water systems with the Government's desire to make the UK **"a leading nation in Europe once again, with an improved and ambitious relationship."**

5. **Deliver sustainable water resource management at the catchment scale, developing necessary infrastructure with transparent, reasonable and actionable plans for implementation.**

   i.   Provide sufficient resources and skills to deliver sustainable water management at the catchment scale across regions. Facilitate local decision making about sustainable water management and provide investment to guarantee everyone has access to a local catchment partnership.

   ii. Work with the water industry and delivery organisations to implement sustainable water management at a catchment scale, supporting local delivery of nature-based solutions, engineering works, and pipeline solutions as appropriate for the context of the local catchment.

   iii. Work with academia to support key priorities for research and innovation, such as wastewater-based epidemiology and novel contaminants of concern.

This aligns with the Government's manifesto commitment to **"transfer power out of Westminster, and into our communities",** ensuring communities have the power to make choices about water.

Chapter five: Strong leadership for a sustainable ocean
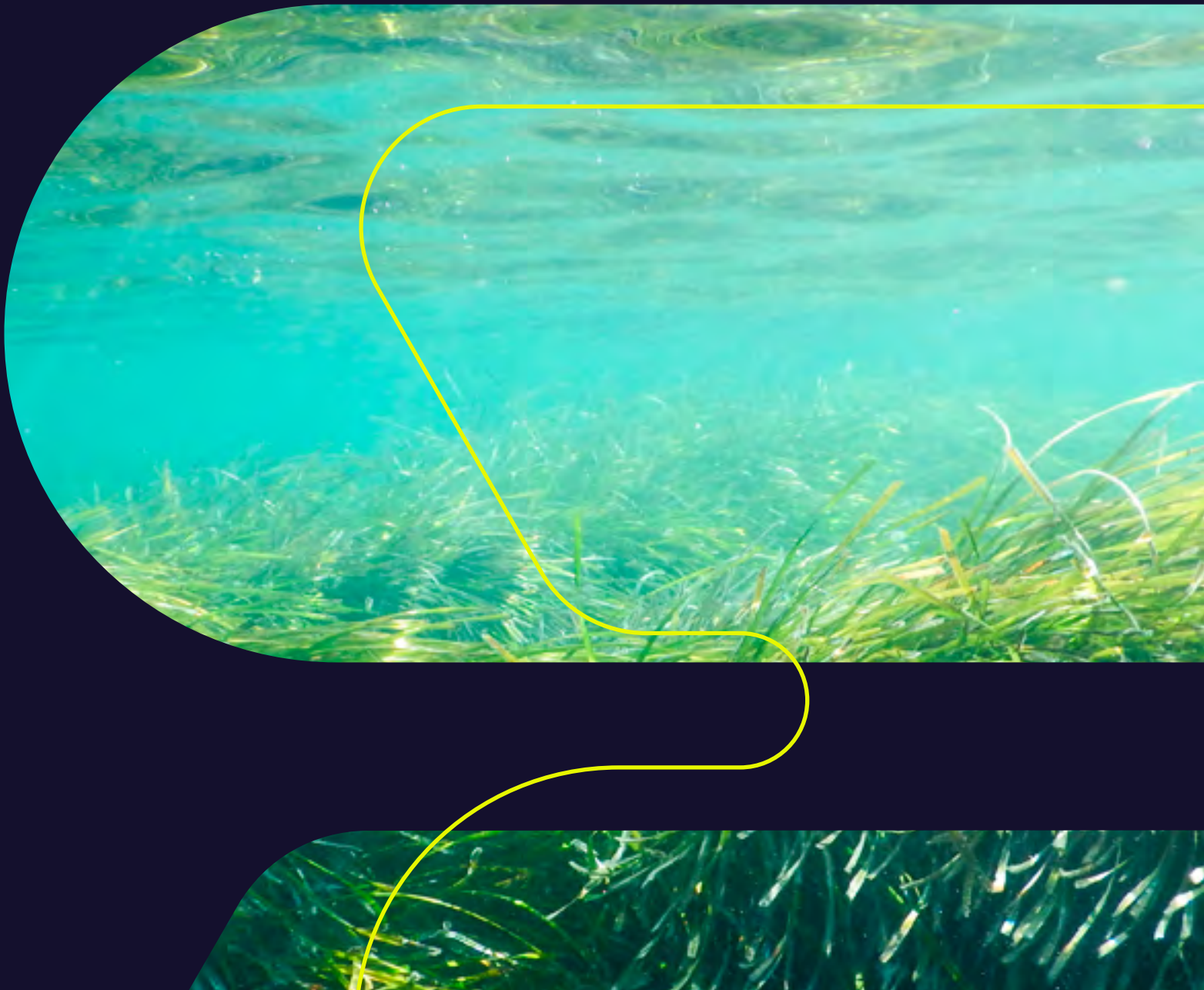
Priority actions for the UK Government: Oceans, seas & coasts

1 Leadership for the ocean...

Strengthen leadership and governance on the marine and coastal environment, informed by systems thinking for a sustainable ocean.

2 to restore biodiversity...

Urgently deliver marine conservation and restoration to increase coastal resilience and meet the UK's commitment to protect 30% of land and sea for nature.

3 invest in the blue economy...

Scale up public and private investment in the sustainable Blue Economy to create economic growth, blue jobs, and food security.

4 unlock critical data...

Work with environmental scientists to unlock the potential of marine science and ocean mapping, as called for by the UN Decade of Ocean Science.

5 ...and reconnect with the public.

Raise the profile of oceans, seas, and coasts in the UK's approach to tackling environmental challenges, from global negotiations to local delivery.

"The consequences of our actions are - quite literally - carried across the waves and felt around the world."

The ocean covers more than 70% of our planet and 80% of the world's biodiversity lives within it.

Britain is an island and the UK's seas cover nearly 30 times the area of our land.

Oceans and seas face exceptional threats from the triple crisis of climate change, biodiversity loss, and environmental pollution. Yet at home and on the global stage, marine and coastal areas are often missing from the environmental agenda.

A significant proportion of the UK's waters are designated protected areas, but these protections are not delivering in practice. For instance, bottom trawling, a highly destructive form of industrial fishing that releases huge amounts of greenhouse gases, occurs in 95% of marine protected areas.

Despite being an island nation, people in the UK are less likely to visit – and less connected to – blue spaces than most people in European countries.

Connecting the public to our marine and coastal spaces is a key step towards creating a society that understands, protects, and restores oceans, seas, and coasts.

Marine and coastal habitats are an invaluable regenerative asset to fight back against the triple crisis.

They hold significant power to support carbon sequestration, climate resilience, rich ecosystems, and widespread social and economic benefits.

We cannot squander these assets.

The UK must maximise their benefits while addressing threats to oceans, seas, and coasts as we seek to protect and enhance our natural environment.

Globally, the situation is no less severe, with widespread pressures including ocean acidification, plastic pollution and intensive trawling practices.

Countries must recognise that oceans and seas do not accept the borders we place on them. This is a collective problem, so it demands collective action.

The UK must be a leading voice for oceans and seas internationally.

A sustainable and resilient approach is possible: built on the concept of a 'global ocean', where the consequences of our actions are – quite literally – carried across the waves and felt around the world.

www.the-ies.org

About the Marine & Coastal Science Community

The Marine & Coastal Science Community is a community of professionals promoting an interdisciplinary approach to marine and coastal issues to support the sustainable management of our coasts and oceans.

They aim to develop tailored professional development opportunities to support researchers and professionals in the marine and coastal sector and to further advance the specialism through the promotion of their work and engagement with key stakeholders.

Our Community's 'Turning The Tide: Systems thinking for a sustainable ocean' project concluded in 2024, bringing together the marine and coastal science community and championing a systems thinking approach to issues affecting the marine and coastal environment. It was endorsed by the UN Decade of Ocean Science for Sustainable Development.

1. **Strengthen leadership and governance on the marine and coastal environment, informed by systems thinking for a sustainable ocean.**

    i. Fill the governance gap on UK oceans with new ministerial leadership and review the extent of joint efforts across departments, including the work of COAST (the Coast and Ocean Applied Systems Thinking Committee).

    ii. Produce transparent guidance for Ministers and public bodies, including GB Energy and the Crown Estate, on decisions affecting the marine and coastal environment informed by marine spatial mapping and systems thinking.

    iii. Take a leadership position on marine conservation and restoration in global forums and negotiations, including the Commonwealth Clean Ocean Alliance. Share technology, tools and implementation methods, and champion a fair approach to oceans, recognising the needs of Small Island Developing States.

    This will support the Government's commitment to **"strengthen Britain's influence abroad"** and will deliver the Environment Secretary's aspiration to **'put Britain back on the global stage to support nature's recovery"**.

2. **Urgently deliver marine conservation and restoration to increase coastal resilience and meet the UK's commitment to protect 30% of land and sea for nature.**

   i. Produce the promised strategy for achieving the UK's 30x30 commitment, with an implementation plan in place by the end of 2025 that clarifies responsibilities for marine conservation and restoration initiatives.

   ii. Tackle the biggest sources of marine pollution, including by delivering commitments on deposit return schemes, banning plastic wet wipes, and through the UK Chemicals Strategy. Ban bottom trawling in Marine Protected Areas.

   iii. Support relevant local authorities to co-produce strategies for marine conservation and adaptation with coastal communities.

This is essential to meeting the UK's international obligations, in line with the Environment Secretary's recognition that **"Nature underpins everything, but we stand at a moment in history when nature needs us to defend it."**

This would be a key step towards meeting the Government's manifesto commitment to **"tackle the ... nature emergency, including the unforgivable pollution of our rivers and seas."**

3. **Scale up public and private investment in the sustainable Blue Economy to create economic growth, blue jobs, and food security.**

   i. Produce ambitious, just, and sustainable Blue Economy plans that take a regenerative approach to the ocean's natural assets, similarly to those developed in Scotland and Portugal.

   ii. Work with environmental scientists to close the gaps in the blue carbon evidence base identified by the UK Blue Carbon Evidence Partnership. Facilitate private investment in blue carbon solutions, including through clarifying and expanding the definition of blue carbon to include important habitats such as kelp forests, oyster beds and biogenic sediments.

   iii. Explore pilot schemes for public and private investment mechanisms to limit delays and barriers to new blue carbon projects.

This aligns with the Government's manifesto commitment to **"strategically use public investment where it can unlock additional private sector investment."**

4. **Work with environmental scientists to unlock the potential of marine science and ocean mapping, as called for by the UN Decade of Ocean Science.**

   i. Support innovative seabed mapping and ocean monitoring technologies to improve UK marine data, including through the development of autonomous and remote sensing technology.

   ii. Promote the work of the Marine Environmental Data & Information Network (MEDIN) to make UK marine data accessible and interoperable. Embrace international data sharing and advocate for a standardised global marine reporting framework and data platform.

   iii. Ensure that the introduction of the marine net gain metric reflects the full value of marine habitats, including carbon sequestration, improved biodiversity, natural value, and environmental resilience (such as coastal flood defence).

> This will realise the Government's aspiration in its Manifesto to embrace **"a new way of doing government that … harnesses new technology"**, in the context of the marine environment.

5. **Raise the profile of oceans, seas, and coasts in the UK's approach to tackling environmental challenges, from global negotiations to local delivery.**

   i. Urgently produce a public engagement strategy on climate change that recognises the importance of coastal communities and the interactions between oceans and climate change.

   ii. Develop marine and coastal citizenship by incorporating ocean literacy into the national curriculum, promoting understanding of the ocean as a complex, interconnected system with the ability to offer multiple ecosystem benefits.

> These recommendations will support the Government's manifesto commitment to **"transfer power out of Westminster, and into our communities"**, giving coastal communities the power to make decisions about their local area.

Chapter six: Transformative action on climate change

Priority actions for the UK Government: Climate

1 Transformative change…

Commit to a 'transformative change' approach to reshaping unsustainable systems, addressing climate change, biodiversity loss, and environmental pollution together.

2 mitigating & adapting…

Take an integrated approach to climate adaptation alongside climate mitigation, bringing resilience funding and support in line with the scale of the UK's adaptation challenge.

3 to close the emissions gap…

Deliver ambitious action to mitigate UK emissions, closing the gap between current commitments and a plan aligned with 1.5°c, with explicit implementation plans.

4 deliver a just transition…

Work with communities and NGOs on a 'just transition' away from fossil fuels which fairly distributes costs and benefits so that no communities are left behind.

5 …and drive sustainability.

Work with businesses to unlock private finance and drive corporate sustainability that supports a nature-positive future.

"The UK can – and should – return to a leadership role for climate action on the international stage."

Climate change is an immediate, immense, and inescapable threat to humanity.

Despite the scale of what must be done, we have reason to be optimistic about our ability to face those challenges.

Complex connections between people, the economy, and the environment created the threat of climate change, so we can also use them to fight back.

We know what actions are needed: the Climate Change Committee is an invaluable source of expert guidance on the steps and pathways to net zero.

We also know that rapid action will unlock 'the economic opportunity of the 21st Century' and will be far more cost-effective than facing the spiralling costs of delay and inaction.

Succeeding in the fight against climate change requires solutions which work with nature, because an integrated approach is the only way to avoid unintended consequences.

An integrated approach can also create better outcomes for people and the economy, because social transformation is achievable alongside environmental transformation.

A just transition towards sustainability can not only protect the UK, it can make it a better place to live. The UK can – and

should – return to a leadership role for climate action on the international stage, particularly at next year's COP30.

Taking transformative climate action requires us to tackle the big systems of consumption: food, energy, transport, buildings, and the economy.

These systems need to be both sustainable and resilient to the effects of climate change.

To succeed, communities and businesses are essential partners in the pursuit of a sustainable society where people and nature thrive.

About the Climate Action Community

The Climate Action Community is an IES Challenge-Led Community focused on championing the work of professionals in the environmental sciences in climate action, promoting the work of experts and evidence around climate change and driving change to ensure adaptation and mitigation measures are accurate, ambitious and achievable.

The Community champions interdisciplinary working and a systems approach to the interlinked crises of climate change, biodiversity loss and pollution.

1. **Commit to a 'transformative change' approach to reshaping unsustainable systems, addressing climate change, biodiversity loss, and environmental pollution together.**

   i. Make climate a strategic priority across government, ensuring that policy makers understand the connections between climate change, biodiversity loss, environmental pollution, and the social and economic drivers of those crises.

   ii. Embed an approach to decision making that seeks to secure multiple benefits from solutions to climate change, even where it costs more in the short-term to avoid increased costs in the long-term.

   iii. Return the UK to a position of climate leadership ahead of COP30, working with international partners to adapt to climate change and drive global emissions reductions.

This realises the Government's vision for Mission-driven Government in the context of the environment: **"focusing on ambitious, measurable, long-term objectives that provide a driving sense of purpose for the country … doing government that is more joined up, pushes power out to communities and harnesses new technology."**

This will deliver the Government's manifesto commitment to **"provide leadership at home so we can influence others to ensure every country plays their part in meeting our collective obligations to future generations."**

2. **Take an integrated approach to climate adaptation alongside climate mitigation, bringing resilience funding and support in line with the scale of the UK's adaptation challenge.**

    i. Embed climate resilience across decision making: make adaptation, resilience, and co-benefits explicit considerations during the design, planning, and consenting of new housing and infrastructure. Support resilience for the rest of the world through the Global Goal on Adaptation.

    ii. Coordinate nature-based approaches to climate mitigation to maximise the ecosystem services provided. Deliver a consistent approach to Environmental Land Management Schemes, soil health, and the Land Use Framework, informed by scientific insights.

    iii. Integrate oceans and seas into the UK's approach to climate change, recognising the vital role of oceans as carbon sinks and improving resilience for UK coasts, saltmarshes and seas through Ocean Literacy and Integrated Coastal Zone Management.

This realises the Government's manifesto commitment to **"not only … tackl[e] the climate and nature emergencies, but also [adapt] to the changes they will bring to our environment."**

3. **Deliver ambitious action to mitigate UK emissions, closing the gap between current commitments and a plan aligned with 1.5°c, with explicit implementation plans.**

i. Close the emissions gap ahead of COP30 to bring the UK in line with a pathway that provides the best chance to limit temperature rises to 1.5°c above pre-industrial levels, making explicit revisions to the Net Zero Strategy and Carbon Budget Delivery Plan. Commit to no further delays or reversals of climate commitments.

ii. Complete the transition to a green energy system by increasing energy storage and grid connectivity, and by removing barriers to community energy generation. Commit to an urgent and complete 'phase out' of fossil fuels in the UK.

iii. Set out delivery plans to reach net zero emissions across the most unsustainable systems, including land management, agriculture and food, the built environment, waste, and transport.

iv. Clarify and capitalise on the role of local authorities in the net zero transition. Recognise that climate action plans represent 'Locally Determined Contributions' as part of the UK's overall net zero objectives, as called for by the CCC.

v. Take a science-led approach to climate action wherever possible, building stronger links between interdisciplinary climate science and Government departments to fill evidence gaps and identify challenges for delivery.

This will deliver the UK's legal obligations around net zero and will support the Government's ambition in its manifesto to **"get Britain back on track to meet our climate targets."**

These actions will support the Government's mission to **'make Britain a clean energy superpower'** and its manifesto commitment for **"clean energy by 2030."**

4. **Work with communities and NGOs on a 'just transition' away from fossil fuels which fairly distributes costs and benefits so that no communities are left behind.**

    i.   Commit to a just transition towards a sustainable society. Where necessary, provide support and funding to facilitate the transition for those who are unable to afford necessary actions. Learn from case studies such as the Alberta Just Transition Taskforce and Scotland's Just Transition Commission.

    ii. Support funding for loss and damage to ensure that the UK's pledge of £60million for the Loss and Damage Fund is new and additional money, supported by further investment where necessary to deliver a global just transition.

    iii. Where appropriate, co-create climate solutions with delivery organisations and communities, supporting the implementation process and allowing people to pursue their own vision for a sustainable future. Support widespread access to Carbon Literacy and climate assemblies.

This realises the Government's vision in its manifesto that **"this transition presents an opportunity to create good jobs, with no community left behind, and support well-paying jobs in existing and future industries."**

This would align with the Secretary of State for Energy Security & Net Zero's pre-election promise to **"fill the vacuum of leadership" on global climate action.**

5. **Work with businesses to unlock private finance and drive corporate sustainability that supports a nature-positive future.**

    i.   Work with international partners, businesses and NGOs to align taxonomies and definitions for green finance, responsible investments, and net zero commitments, creating a certain and stable market for investment.

    ii. Remove barriers to investment and make the upfront public investments needed to attract private capital and grow the market for sustainable innovation.

    iii. Tighten rules around climate accounting, reporting, and certification. Drive compliance with TCFD and TNFD recommendations through sustainability regulations, reporting frameworks, and guidance on best practice for corporate compliance, aligned from the board room down to the shop floor.

    iv. Work with the environment sector to lead a skills audit for climate-relevant careers, driving professionalism by endorsing competency frameworks, skills strategies, and sector-by-sector transition pathways. Facilitate the development of the deep expertise needed in carbon reporting and climate risk management.

These actions will support the delivery of the Government's manifesto commitments to **"make the UK the green finance capital of the world"** and **"shape markets, and use public investment to crowd in private funding … [using the] Green Prosperity Plan … in partnership with business through our National Wealth Fund, … [to] invest in the industries of the future."**

This supports the Government's manifesto commitment to **"create 650,000 jobs across the country by 2030"** and applies the Government's proposals for Skills England to the specific needs of climate action.
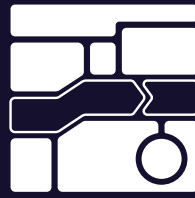
Chapter seven: Championing local authorities to deliver for the environment
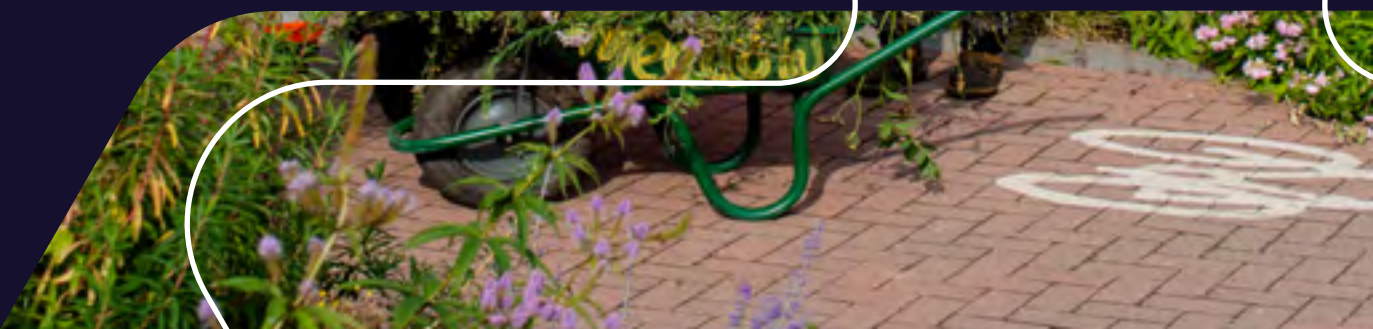
Priority actions for the UK Government: Local authorities

(1) **Devolve powers & resources…**

Champion local authorities to deliver for the environment by clarifying their responsibilities and increasing their powers and resources.

(2) **speed up delivery…**

Accelerate the delivery of England's Environmental Improvement Plan (EIP).

(3) **…and monitor for success.**

Make monitoring, evaluation and response an essential part of the design and implementation of policy.

"Plans must urgently be turned into actions nationally and locally to stop the spiralling decline of our natural world."

Policy delivery is the environmental challenge of the next decade.

The UK now has a web of environmental policies, plans and commitments in place, at the centre of which are the Environment Act and the Environmental Improvement Plans, with equivalent policies in the devolved administrations. These policies connect across departments, public bodies, and local authorities.

Many targets and commitments have not been delivered. The OEP's 2024 Progress Report found that only four out of forty of the Government's environmental targets are on track. The CCC's 2023 Progress Report downgraded the likelihood of the UK meeting its medium-term targets and called for the Government to 'stay firm on existing commitments and move to delivery'.

While further ambition on the environment and net zero is still needed to address policy gaps, the UK must make delivery a priority.

Plans must urgently be turned into actions nationally and locally to stop the spiralling decline of our natural world and the resulting harms to communities and the economy.

Local authorities have a critical role to play in shaping and delivering these outcomes, which cannot be achieved without them. They need the power and resources to play their part.

Decision makers must know what works and understand the risks to successful implementation.

Scientists working in local authorities and other delivery organisations have indispensable insights on environmental challenges and solutions. They must have the support needed to deliver for people, the economy, and the environment.

About the Environmental Policy Implementation Community

The Environmental Policy Implementation Community (EPIC) is a member-led, specialist interest group of local authority officers and other environmental professionals delivering environmental protection, climate action and nature recovery on the ground.

The community works together to understand delivery challenges, share good practice and advocate for implementation-minded policy.

1. **Champion local authorities to deliver for the environment by clarifying their responsibilities and increasing their powers and resources.**

   i. Adopt consistent and coherent governance for implementation, including clear responsibilities for local authorities and delivery organisations on their roles in policy design and evaluation.

   ii. Devolve powers to communities and local authorities for sustainable & active transport, air quality management & wood burning, and nature, with the capacity and resources needed to use them.

   iii. Work with environmental scientists to provide local authorities with access to expertise through training, guidance, and information sharing, as well as support to work together on cross boundary issues.

   iv. Provide long-term non-competitive funding for environmental schemes, allowing local authorities to operate under greater certainty. Commit to funding Local Nature Recovery Strategies for the next 10 years, increasing confidence in their delivery.

> This aligns with the Government's commentary in its manifesto that **"local leaders understand local ambitions and strengths."**

> This realises the Government's manifesto commitment to **"transfer power out of Westminster, and into our communities … ensure those places have the strong governance arrangements, capacity, and capability to deliver, providing central support where needed."**

> This aligns with the Government's manifesto commitment that **"to provide greater stability, a Labour government will give councils multi-year funding settlements and end wasteful competitive bidding."**

2. **Accelerate the delivery of England's Environmental Improvement Plan (EIP).**

    i. Develop and implement transparent, coherent and detailed delivery plans for England's EIP, based on the recommendations of the OEP.

    ii. Design delivery plans to achieve multiple co-benefits, communicate implementation risks and allow for a flexible approach to interim targets which enables innovation.

> These support the Environment Secretary's goal to **"ensure the existing environmental improvement plan is fit for purpose."**

3. **Make monitoring, evaluation and response an essential part of the design and implementation of policy.**

    i. Provide sufficient resources for ongoing policy evaluations and continuous learning and review, so that it is clear whether policies are working as intended. Conduct an urgent assessment of the delivery of statutory Biodiversity Net Gain, as recommended by the NAO.

    ii. Work with environmental scientists to produce a robust framework for prospective analysis of environmental policies, going beyond monitoring and evaluation to understand the drivers and barriers to successful delivery.

    iii. Work with environmental scientists to ensure that the Outcome Indicator Framework contains indicators and metrics which are appropriate for evaluating the success of policies.

> This supports the Government's approach to **"ambitious, measurable, long-term objectives"** particularly for its missions and their focus on delivery and public service.

> This is in line with the Government's general approach in its manifesto to **"work closely with business to map and address the delivery challenges we face."**

"Policy delivery is the environmental challenge of the next decade."

Chapter eight: Modern impact assessment in a sustainable planning system

Priority actions for the UK Government: Impact Assessment

1 **Reform planning processes...**

Create a less adversarial approach to planning and environmental consenting, developing processes which are coherent, flexible, and accessible.

2 **improve consistency...**

Take a joined-up approach to achieving environmental objectives across national development policy, especially for major infrastructure developments.

3 **...and deliver modernised EIA.**

Work with environmental scientists and planning officers to ensure that the transition to Environmental Outcome Reports (EORs) delivers a modern, digital and data-driven system.

"The Government should develop a system that is quick, accessible and that genuinely delivers for communities and our natural world."

Environmental Impact Assessments (EIAs) are essential to understanding the impacts of development and delivering robust, evidence-informed approaches to achieving social, economic, and environmental outcomes.

The transition from EIAs and Strategic Environmental Assessments (SEAs) to Environmental Outcomes Reports (EORs) is an ideal opportunity to modernise the planning system.

Working with environmental assessment professionals, the Government should develop a system that is quick, accessible and that genuinely delivers for communities and our natural world.

Once these urgent reforms are completed, developers and communities need certainty.

Consistent, coherent and rational development policies, particularly for Nationally Significant Infrastructure Projects, can support private investment in transport, energy and housing development.

Our planning system can deliver for people and the environment, as long as it is modernised and focused on achieving sustainable development.

By transforming processes with digital technologies, planning and impact assessment can support the transition towards a sustainable society where people and nature thrive.

About the EIA Community

The Environmental Impact Assessment (EIA) Community provides a forum for thought-provoking, critical conversations around EIA from a science-based perspective.

The Community aims to connect and support environmental scientists and practitioners working across a range of specialisms involved in the EIA process and to facilitate meaningful discussion between disciplines on the key issues facing the sector.

The Community champions the ethos of utilising EIA as a tool to support decision making which leads to better environmental impacts from developments and is focused on providing environmental professionals involved in EIAs with the knowledge and skills to support this.

1. **Create a less adversarial approach to planning and environmental consenting, developing processes which are coherent, flexible, and accessible.**

   i. Update the planning system to deliver for the environment, aligning local plans with the Environmental Improvement Plan and rolling out Air Quality Neutral guidance across the UK to disincentivise developments with poor public transport links, wood burning stoves, or other high-emitting features.

   This delivers the Government's commitment to **"ensure that planning authorities have up-to date Local Plans and reform and strengthen the presumption in favour of sustainable development."**

   ii. Reform planning processes to build a system which brings together developers, planning authorities, environmental experts, and the public early in the process through the shared objective of sustainable development.

   This will be crucial to delivering the Government's objective of **"planning reform to build 1.5 million new homes"** and its ambition for **"exemplary development to be the norm not the exception."**

   iii. Improve accessibility of evidence for decision makers and the public by centralising monitoring data and information on what works in practice, making consenting decisions more transparent to all parties without over-simplifying them or focusing on 'ticking boxes'.

   iv. Embed climate, biodiversity, soil health, and sustainable development as explicit environmental outcomes in impact assessment, retaining a proportional approach by offering greater routes for differentiation between nationally-significant and small project scales.

   This realises the Government's manifesto commitment to **"ensure we are building more high-quality, well-designed, and sustainable homes and creating places that increase climate resilience and promote nature recovery."**

2. **Take a joined-up approach to achieving environmental objectives across national development policy, especially for major infrastructure developments.**

   i. Make development deliver for the environment through consistent long-term policies for investment in significant infrastructure and housebuilding projects that align with environmental objectives.

   ii. Promote a 'needs-based' approach to development, considering alternative locations and proposals alongside the potential to mitigate impacts. Increase the statutory role of the 'feasibility' and 'options appraisal' stages of the development process to encourage genuine consideration of alternatives.

3. **Work with environmental scientists and planning officers to ensure that the transition to Environmental Outcome Reports (EORs) delivers a modern, digital and data-driven system.**

   i. Speed up the development process by urgently investing in a transition to digital EORs, allowing for a quicker, more accessible and more interactive experience.

   ii. Give local authorities access to environmental expertise, either through the resources to hire experts like ecologists directly or through improved access to pooled expert networks. Support retraining of planning staff to ensure that EORs can be properly assessed.

   iii. Work with businesses to provide a centralised, accessible and open EOR data hub, supporting evidence-informed decisions and reducing duplicate assessments.

These will support the delivery and success of the Government's proposals for **"a new National Infrastructure and Service Transformation Authority, bringing together existing bodies, to set strategic infrastructure priorities and oversee the design, scope, and delivery of projects."**

This supports the Government's objective to **'get Britain building again'** and will speed up the delivery of its manifesto commitment to **"build a new generation of new towns"** and **"deliver the biggest increase in social and affordable housing in a generation."**

This would increase the value of the Government's commitment to **"support local authorities by funding additional planning officers",** reducing the reliance of local authorities on externally funded sources of expertise.

"Our planning system can deliver
for people and the environment,
as long as it is modernised."

Chapter nine: Embedding Education for Sustainable Development

Priority actions for the UK Government: Education

1 **Embed sustainability...**

Embed Education for Sustainable Development (ESD) across all types of education and at all levels, from primary school through to the workforce, with a focus on solutions.

2 **fill the skills gap...**

Fill the UK's green skills gap to produce a knowledgeable, skilled and motivated green workforce.

3 **join-up disciplines...**

Develop an interdisciplinary and joined-up education system without compromising on specialist education.

4 **bring in the right people...**

Work with the environment sector to increase access to green jobs and wider awareness of different pathways into the sector.

5 **...and teach by example.**

Use the DfE's own sustainability actions to teach by example, driving 'situated learning' about the environment.

"Education has a fundamental power: to shape the lives of future generations and repair our relationship with nature."

Education is a crucial tool to deliver our sustainable future.

What we learn shapes how we view the world around us, so unsustainable perspectives embedded through education can lead to unsustainable approaches to the environment.

Beyond helping us to understand science and the natural world, education also has many practical consequences for society and the environment: it determines what skills the workforce has, shapes the jobs that people do, and defines the values that people use to make decisions.

Transforming the workforce and providing the skills necessary for green jobs is critical to achieving sustainable development and a just climate transition.

The sustainable education agenda has seen some progress, for instance:

- the QAA and Advance HE Guidance on Education for Sustainable Development (ESD),

- Department for Education's (DfE) Sustainability and Climate Change Strategy, and

- the Concordat for the Environmental Sustainability of Research and Innovation Practice.

Despite the scale of change required, education has a fundamental power: to shape the lives of future generations, position the UK as a leader in the green industrial revolution, and repair our relationship with nature.

By building capacity for ESD and green skills, we can empower young people to become change agents in their communities and throughout their careers.

About CEDHE

The Community for Environmental Disciplines in Higher Education (CEDHE) provides representation and leadership to the environmental education communities.

CEDHE and the IES work to ensure young people from all backgrounds are inspired to begin and sustain an environmental education – from primary to postgraduate.

CEDHE are an active networking organisation enhancing the quality of outcomes for education institutions teaching environmental disciplines.

They facilitate connections between members and develop new avenues of international co-operation within the environmental science community.

1. **Embed Education for Sustainable Development (ESD) across all types of education and at all levels, from primary school through to the workforce, with a focus on solutions.**

    i. Include an element of ESD in all education pathways and routes into the workforce, endorsing toolkits and guidance to help educators translate it into practical steps and teaching resources.

    ii. Deliver, increase, and amplify commitments in the DfE's Sustainability and Climate Change Strategy, including taking more proactive steps to align climate education with ESD.

    iii. Update the secondary curriculum to better engage young people with value-based climate citizenship, empowering them to become change agents in their communities and in their future careers.

This aligns with the ambition stated in the Government's manifesto commitment to **"build an education system that prepares our children for life, work, and the future."**

As environmental challenges like climate change become increasingly relevant to everyday life, education should prepare people to recognise and address those challenges.

2. **Fill the UK's green skills gap to produce a knowledgeable, skilled and motivated green workforce.**

   i. Develop a strategy for achieving an environmentally-literate workforce with widespread access to resources on critical scientific topics, including systems thinking, sustainable futures, Carbon Literacy and process literacy, with unambiguous support for accurate climate science.

   ii. Support key sectors to produce skills audits and transition plans, outlining how they will deliver technical skills, deep climate skills, digital skills, and enabling skills such as communication and public engagement, and setting out how these skills will align with the current and future green jobs market.

   iii. Deliver the UK's ambition for two million green jobs by 2030 through increased investment in careers in environmental science, the circular economy, water resource management, land management, and environmental research.

> This will deliver the Government's objective to create **"A new Britain … where children are equipped with the skills to thrive in the future"** and will be crucial to the success of the Government's mission to **'make Britain a clean energy superpower.'**

> This supports the Government's ambition in its manifesto to **"establish Skills England … [and] ensure we have the highly trained workforce needed to deliver Labour's Industrial Strategy."**

3. **Develop an interdisciplinary and joined-up education system without compromising on specialist education.**

   i. Facilitate links across disciplines by encouraging increased connections and removing barriers between departments and institutions in higher education, including between STEM, SHAPE, and other relevant disciplines.

   ii. Work with the HE sector to redesign curricula with sustainability in mind, retaining the beneficial ways that courses and programmes can drive specialisation, while promoting opportunities for multidisciplinary learning.

> This would realise the Government's comment that **"there is huge potential for growth in the creative industries that benefit every corner of the UK"** and deliver its commitment to **"take a sectoral approach [to industrial strategy] and … back what makes Britain great: our excellent research institutions, professional services, advanced manufacturing, and creative industries",** forging productive links between science and the arts.

4. Work with the environment sector to increase access to green jobs and wider awareness of different pathways into the sector.

i. Take a 'whole education system' approach to helping people access green jobs, including support for the development of modern competency frameworks and technical pathways.

ii. Support efforts by the private and voluntary sectors to increase equity, diversity, and inclusion in the environmental workforce, using the Government's power to convene partners and address specific structural barriers to inclusion through policy.

iii. Facilitate engagement with green jobs from primary school onwards, increasing awareness of sustainable careers and specific routes into the sector.

This aligns with the Government's ambition that the Mission to '**Make Britain a clean energy superpower'** will **"create 650,000 jobs across the country by 2030."**

5. Use the DfE's own sustainability actions to teach by example, driving 'situated learning' about the environment.

i. Take a more ambitious approach to reaching net zero in the education system earlier than 2050: address efficiency of the education estate by 2030, take a whole value chain approach to sustainable procurement, and prioritise adapting existing building stock rather than new construction.

ii. Support situated learning in schools to teach sustainability by example. Promote access to good quality, biodiverse nature within school grounds and local areas, including by delivering on the original ambition of the National Education Nature Park. Add carbon auditing skills and biodiversity surveys to the GCSE curriculum.

iii. Review climate action plans for all education settings to ensure they are clear and accountable, with full details on how sustainability commitments will be delivered, referencing explicit targets and science-based actions.

iv. Issue government guidance and use the DfE's Sustainability and Climate Change Strategy to lay the foundations for common reporting standards across the education sector, working with providers to encourage adoption.

These recommendations realise the Environment Secretary's comment that **"our children and grandchildren deserve to be astounded by the magnificence of our landscapes and coastlines",** providing access to nature in a way that also creates a better environment for learning, addresses energy and waste bills from the education estate, and increases wellbeing for young people.

This aligns with the Government's overall approach to accountability in schools, applying the statement that **"accountability is non-negotiable, which is why Labour supports school inspection"** to the sustainability and climate commitments made by education settings.

Conclusion

Often government policy is about managing a muddle of inconveniences. It's the wrong time to make a change; there are too few resources; or there is a lack of political will.

It is rare, therefore, to have the benefit of absolute convenience. This is one of those rare times.

There is overwhelming political will for change in the state of the UK's environment. The resources we need to make change happen are available and will be returned to the UK at the expense of a future where the costs of climate chaos rise.

And the Government is already committed to widespread change across the country, providing a window of opportunity when the policies needed to protect and enhance the environment can be delivered alongside that wider programme of change.

This is an opportunity that cannot be squandered.

The duty of governments to public service applies not only to the loudest voices, but to all people, including future generations who cannot speak for the changes they would demand.

We must provide them with a future where they can make their own choices, and where they have at least as many opportunities as we have today.

Sustainability is not an abstract ideal of environmentalism: it means what it says. If we want to continue to succeed in the future, we need to ensure that the success we pursue can be sustained for future generations.

That need not be restrictive and can increase opportunities and equity if approached in the right way.

When given the opportunity to thrive, people protect the environment that they value, and they become instrumental parts of our economy.

The economy gives people their livelihoods and the security needed to safeguard the environment.

The environment is the fundamental basis of all human needs and ensures the economy can be sustained into the future.

The Institution
of Environmental
Sciences

Transform the UK
A new Mission for
Sustainable Wellbeing

These three pillars are indivisible, and they measure our success at creating a sustainable society where everyone has what they need: thriving people, a healthy economy, and a flourishing environment.

Those goals underpin what the IES believes would make the UK a great place to live. The recommendations set out in this report will allow the Government to transform the UK in line with that vision, beginning the transition from years of crisis towards a sustainable society where people and nature thrive.

Glossary and key concepts

Biodiversity Net Gain (BNG)

A requirement of development processes in England, which became mandatory in February 2024. Under BNG, a development must result in 10% more (or better quality) natural habitat than there was before the development.

Brownfield land

Developed land that is, or was previously, occupied by a permanent structure. The National Planning Policy Framework (NPPF) notes that planning policies and decisions should "give substantial weight to the value of using suitable brownfield land".

Carbon literacy

"An awareness of the carbon costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis."
- The Carbon Literacy Project

Change agents

Individuals or groups who seek to bring about positive change in how things are done by an organisation or society.

Climate citizenship

Being a participatory member of a community or country's approach to addressing climate change.

Co-benefits

The additional benefits arising from a policy beyond its primary purpose. For example, public health and reduced congestion could be co-benefits of an active travel policy designed to reduce transport-related carbon emissions.

Co-creation

A participatory process of developing services or policies in collaboration with the recipients or consumers of those services. In policy making, it often involves community participation in the process of designing policy.

Communities of practice

Groups of practitioners brought together around a shared professional interest, goal, or challenge.

Competency frameworks

Frameworks that set out the skills, knowledge, and behaviours associated with successful performance for a given profession, specialism, or discipline.

Deep climate skills

A subset of the technical skills necessary for addressing climate change, which will only be necessary for a subsection of the workforce.

These skills include carbon accounting and reporting, knowledge of climate adaptation measures, and a broad understanding of

renewable energy, circular economy, low-carbon infrastructure and whole life carbon management.

Double regulation

A scenario where regulations require the same activity to be subject to the same assessment twice, without an additional benefit.

Ecosystem services

"A service that is provided by an ecosystem as an intrinsic property of its functionality (e.g. pollination, nutrient cycling, nitrogen fixation, fruit and seed dispersal). The benefits (and occasionally disbenefits) that people obtain from ecosystems." - IPBES

Education for Sustainable Development (ESD)

"A lens that permits us to look critically at how the world is and to envision how it might be, and equips us to deliver that vision. ESD develops competencies - skills, attributes and values - and how they link to subject knowledge and knowledge of sustainable development." - QAA

Enabling skills

Skills that support the effective translation of environmental science into action, including communication, problem solving, innovation, leadership, and community engagement. These are often associated with 'transferable' or 'soft' skills.

Environmental Land Management Schemes

Schemes in England to pay farmers and land managers to protect and improve the environment alongside food production, following the UK's exit from the European Union. Alternatively ELMS.

Governance

"Environmental governance includes policy, rules and norms that govern human behaviour and it also addresses who makes decisions, how decisions are made and carried out, the scientific information needed for decision-making and how the public and major stakeholders can participate in the decision-making." - UN Environment Programme

When this report refers to governance, it is not referring to 'Environmental, social, and governance (ESG)' which relates to specific considerations of governance for businesses.

Green jobs

Jobs which contribute to the protection or restoration of the environment, the transition towards a sustainable society, or which function as part of a sustainable and clean economy.

Green skills

The knowledge, competences, and behaviours needed to protect or restore the environment, support the transition towards a sustainable society, or to function as part of a sustainable and clean economy.

Just transition

"Ensuring that no one is left behind or pushed behind in the transition to low-carbon and environmentally sustainable economies and societies." - UN Committee for Development Policy

Nature-based solutions

"Actions that protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

These solutions can range from planting forests and mangroves to restoring coral reefs and peatlands." - UNFCCC

Outcome Indicator Framework (OIF)

"A comprehensive set of indicators describing environmental change that relates to the 10 goals within the 25 Year Environment Plan. The framework contains 66 indicators, arranged into 10 broad themes" - DEFRA

The OIF is intended to show the overall condition of natural capital assets, pressures acting upon them, and the potential to receive benefits from them.

Process literacy

Awareness of how processes work (particularly policy and planning) and the ability and motivation to engage with them, as an individual or community. This includes knowledge of organisational governance and an understanding of the interactions between policy, the public, and science.

Professional bodies

"An organisation with individual members practicing a profession or occupation in which the organisation maintains an oversight of the knowledge, skills, conduct and practice of that profession or occupation." - The Science Council

The IES is a professional body.

Science-policy interface

The ways that science interacts with and support policy and decision making. In some cases, science interacts with policy through the public, industry, or research organisations.

Situated learning

An approach to learning which recognises the context in which learning takes place, including learning by example and understanding the social situations that affect the learning environment.

Sustainable Development

"Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." - Sustainable Development Commission

See the Sustainable Development Goals for further information.

Sustainable Drainage Systems (SuDS)

Interventions using nature-based solutions to improve water drainage in developments, which are a legal requirement for new developments.

"SuDS are designed to reduce the impact of rainfall on new developments by using features such as soakaways, grassed areas, permeable surfaces, wetlands. This reduces the overall amount of water that ends up in the sewers and storm overflow discharges." - DEFRA

Sustainable wellbeing

Building on the ideas of sustainable development and the wellbeing economy, sustainable wellbeing seeks to create a society where benefits for people, the economy, and the environment are collectively achieved, rather than seen as opposing aims.

When this report refers to sustainable wellbeing, it should specifically be understood in the context of three mutually reinforcing pillars: thriving people, a healthy economy, and a flourishing environment.

Systems approach

An approach which recognises how social, economic, and natural systems influence outcomes, adopting ways of working that address the dynamic and complex nature of systems to effect change and avoid unintended consequences.

Systems thinking

A specific systems approach that incorporates tools, methods, and mindsets to provide insights into how systems work and to inform decisions. See the Systems Thinker for more information.

Transformative change

"A fundamental, system-wide reorganisation across technological, economic and social factors, including paradigms, goals and values." - IPBES

Transformative change is distinct from incremental change because it seeks transformation, rather than progress within the same basic system. It is distinct from atomistic change because it seeks to change a whole system, rather than any one element on its own.

Triple crisis

The combined crises of climate change, biodiversity loss, and environmental pollution.

Value chain

"The full range of activities which are required to bring a product or service from conception, through the different phases of production … delivery to final consumers, and final disposal after use." - Cambridge Institute for Sustainability Leadership

"These three pillars are indivisible, and they measure our success at creating a sustainable society where everyone has what they need:

Thriving people, a healthy economy, and a flourishing environment."

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