

PRIORITISE

Resource efficiency

1



KICK START

Circular economy

2



RESTORE

Social and natural infrastructure

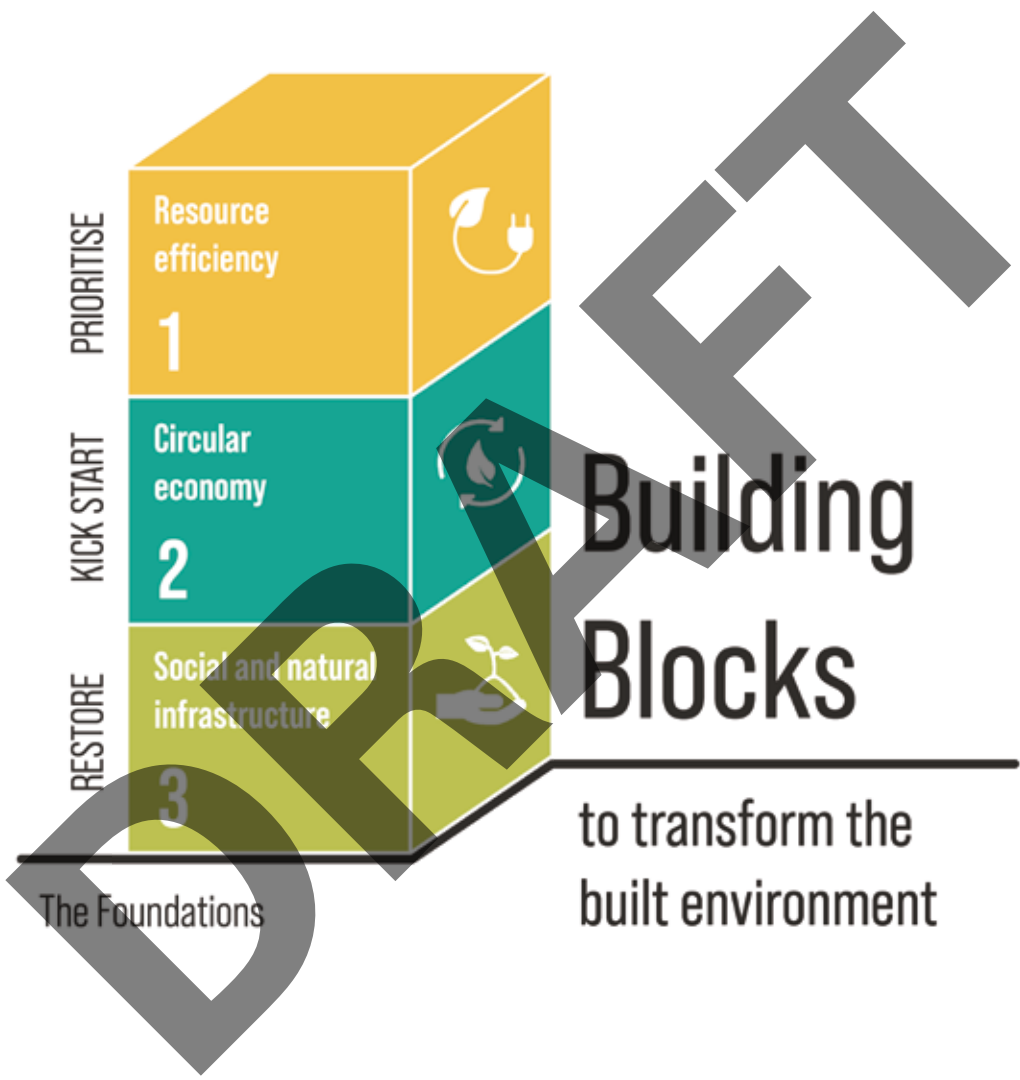
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Building Blocks

to transform the built environment

The Foundations



Architects Declare includes over 1300 signatory practices in the UK who have been actively involved in pushing the sustainability agenda, and calling for more fundamental change aligned with regenerative models.

It is clear that 30 years of sustainable design has not got us where we need to be. The United Nations concluded in 2022¹ that current policies and pledges do not create a credible pathway to achieving the Paris goals, and limiting temperature increase to 1.5°C. The best science tells us that we are heading for horrific climate impacts globally, particularly in some of the poorest parts of the world. The Department for Energy Security and Net Zero has just released their UK's revamped net zero strategy where even the government itself admits its policies will achieve only 92% of cuts² and many experts have said this could be generous in its estimate.

UK Architects Declare
Climate and Biodiversity Emergency

Executive Summary for Policy Makers

We are in a period of inaction on the climate and ecological emergencies. Since the formation of Architects Declare in 2019, the construction industry has offered many practical solutions to solve these crises and create a regenerative and just built environment – but these have not been incorporated into national policy. The construction industry now requires true climate leadership by a government that embraces far-reaching system changes and implements them at a national scale.

Our mission is to turn a climate catastrophe into a climate opportunity. The Architects Declare Building Blocks aims to create a regenerative built environment that enables society and nature to thrive – creating jobs, improving health, and restoring the natural world.

The Building Blocks, underpinned by a foundation of systemic change, offers a practical, impactful and implementable set of policies to transform the built environment.

Building Blocks:



1 Resource efficiency

42% of the UK's carbon emissions are controlled or influenced by the built environment³; these must be radically reduced to align with net zero legally binding targets⁴



2 Circular economy

The construction industry generates 62% of UK waste⁵ and 50% of material use⁶: we must rapidly transition to a fully circular economy through targeted regulation and policy interventions



3 Social and natural infrastructure

10% of worst-off areas in the UK are least likely to secure government funds to renew their social infrastructure⁷. Simultaneously, the UK has lost over 50% of its biodiversity in the last 50 years⁸. Through people and nature centred planning and development, we have an opportunity to: restore societal and ecological health; build resilience and social justice; and create infrastructure that supports sustainable lifestyles and biodiversity.

The Foundations

The Building Blocks must sit upon a foundation that supports them, through advocating systemic economic and political change:

the economy must be aligned within human well-being and planetary limits; UK laws must safeguard future generations; climate literacy must be embedded at all levels of society; and climate leadership must be fostered through reform of the political system.

1 Prioritise
Resource efficiency

2 Kick-start the
Circular economy

3 Restore
Social & natural infrastructure

The Foundations



Prioritise
Resource efficiency

1

1 Resource efficiency

42% of the UK's emissions are controlled or influenced by the built environment.³

These carbon emissions need to be rapidly reduced in order to meet the UK's net zero legally binding targets. Achieving this reduction provides enormous opportunities for the economy, the environment and society as a whole. A national retrofit strategy could result in 500,000 new jobs by 2030 alongside a £309bn boost to the economy⁹.

Benefits



Achieve Net Zero



Eliminate fuel poverty



Create more jobs



Improve health outcomes

How to: - reduce carbon emissions from the construction sector

1. Minimise embodied carbon emissions in construction

- **Legislate to limit embodied carbon** in construction:
 - amend national planning policy and Building Regulations; refer to Part Z campaign¹⁰
 - mandate whole life carbon reporting by 2026
 - set whole life carbon limits from 2028

2. Minimise operational carbon emissions from buildings

- **Align Future Homes and Buildings Standard¹¹ with science-based trajectories** to achieve net zero by 2050 and a 78% reduction by 2035. Refer to the emerging industry-led Net Zero Building Standard¹².
- **Replace Building EPCs** (Energy Performance Certificates¹³). Currently, actual energy consumption in buildings is far higher than the reported emissions, which is skewing our perception of progress towards zero carbon. Revise Building Regulations to specify more accurate 'predictive energy modelling' and 'in-use' data capture.
- **Prioritise climate adaptation with proven design solutions.** e.g. prioritise reduction in building cooling demand through overheating prevention with effective external shading.

3. Align all new infrastructure projects with net zero transition

- **Review whole life carbon emissions of all proposed UK infrastructure** and prevent those that inhibit net zero transition. e.g. review undertaken by the Welsh Government¹⁴, concluded that two thirds of planned road projects should be cancelled.

4. Use our buildings more intensively and efficiently

- **Embed a Place Principle¹⁵**, similar to Scotland, to encourage better use of public buildings and improve the impact of combined energy, resources and investment. Place-based planning moves away from public buildings with individual uses to multiple complementary functions e.g. a building with a library, GP surgery and Police drop-in centre.

How to: - reduce carbon emissions from existing buildings

5. Create a nationwide retrofit strategy¹⁶

- **The retrofit implementation plan should:**
 - accelerate low energy retrofit across the built environment
 - address the employment and skills gap in the retrofit sector
 - create robust and simple professional accreditations, and certification
 - enshrine PAS 2035 and PAS 2030 technical standards¹⁶ within new legislation
 - simplify and streamline the planning process
 - incentivise a mass heat pump roll out with grants and campaigns
 - ban new and replacement gas boilers by 2025.
 - set decarbonisation pathway for private and publicly owned buildings for all sectors
 - develop funding mechanisms for retrofit at scale

How to: - legislate to incentivise emission reductions

6. Reform tax in the built environment

- **Prioritise resource efficiency, low energy use, retrofit of existing resources**, and long-term stewardship of new resources, by reforming tax to:
 - **rebalance VAT between existing and new construction**
 - increasing taxes on short-life products, applying the polluter pays principle
 - reduce tax on labour, and increase tax on materials
 - create rising tariffs to tax those who consume the most energy
 - align gas and electricity prices by: redistributing of subsidies from the fossil fuel to renewables sector; and decoupling wholesale electricity price from that of gas
- **Taxes to fund retrofit training and implementation**, as well as encouraging the market to decarbonise.



Kick-start the
Circular economy

2

2 Circular Economy

The construction industry accounts for 62% of UK waste⁵ and 50% of material use⁶.

The industry must rapidly transition to a circular economy reducing construction waste and primary resource extraction. This will generate new job opportunities: almost 90,000 new UK jobs were created in the emerging circular economy between 2014-2019/20¹⁸. And in turn, this will reduce carbon emissions, environmental degradation and pollution.

Benefits



Reduced waste to landfill



Reduced primary extraction



Boosted economy



More jobs



Reduced pollution

How to: - reduce carbon waste and increase material reuse

1. Maximise potential of existing buildings and infrastructure

- **Develop a policy hierarchy which ensures building retention is considered first**, then reuse of building components and lastly deconstruction.

2. Establish a national circular economy strategy

- **Mandate pre-demolition material audits** and minimum recovery rates as part of National Planning Policy Framework incentivising re-use over demolition.
- **Mandate material passports** in both new build and retrofit. Establish National Standards and a system of recording and recovery of materials.
- **Establish digital and physical material banks** for the resale and reuse of materials, with input from strip out and demolition contractors to rapidly transition their business model.
- **Mandate fixed and escalating percentages of material reuse in construction.** Allow downcycling only in special circumstances; otherwise all materials to be deconstructed (not demolished) to ensure maximum resale value.
- **All buildings to be designed for deconstruction.**
- **Ensure government procured buildings lead the way** by adopting the approaches outlined above to act as catalyst for innovation.

3. Provide financial incentives and tax reform to support the circular economy

- **Introduce a domestic Carbon Tax** on carbon intensive products (such as steel and cement), to help grow businesses focused on reusing existing materials.
- **Adopt a Carbon Border Adjustment Mechanism (CBAM)** to ensure the carbon price of imports is equivalent to the carbon price of domestic production to protect British businesses during the transition.
- **Accelerate investment and testing for reclaimed and biobased materials.** Prioritise investment and tax breaks to low carbon alternatives where supply is secure and will not lead to an increase in emissions outside the UK.



Restore
**Natural and social
infrastructure**

3

3 Social and natural infrastructure

10% of worst-off areas in the UK are least likely to secure government funds to renew social infrastructure⁷. Simultaneously, the UK has lost over 50% of its biodiversity in the last 50 years⁸, ranking at the bottom of the G7¹⁹.

Urban planning plays a crucial role in solving our public health, well-being, and ecological crises, whilst simultaneously enabling sustainable lifestyles. The UN recognises the role that sustainable development plays in ending poverty and deprivations, improving health and education, reducing inequality, delivering growth, whilst positively tackling climate change.

Benefits



Improved
climate
resilience



Improved air
quality



Improved health
outcomes



Improved food
security



Increased
biodiversity

How to: - reverse biodiversity loss and restore our natural assets

1. Implement a national plan to restore and protect natural systems and build resilience

- **Identify, protect, restore and expand natural assets** or regions which provide vital societal benefits such as sequestering carbon, improving air quality, promoting biodiversity, providing water management and flood prevention or moderating urban heat islands.
- **Identify regions or 'policy areas' at risk to climate threats** (e.g. areas at severe risk to flooding, food and water shortages etc.) Evaluate relative priorities at a national scale and develop regional climate adaptation frameworks to prevent or mitigate risk.
- **Identify regions or 'policy areas' of critical natural importance.** Assess the role and function of natural assets spanning multiple districts (e.g. rivers or wild-life corridors). Create 'rewilding opportunity areas', considering the green-belt and the full extent of habitats and migrations routes.
- **Enable a more responsive planning system using live data sets** which accurately and efficiently direct policy and measure its impacts. Decouple the evidence base stage from the Local Plan Review process and enable it to be a more dynamic monitoring tool.
- **Rebalance how nature is designated in the planning system** in relation to construction e.g. extend Tree Protection Orders (TPOs) to include the majority of urban trees in the country, not only conservation areas.



2. Introduce and extend legislation to protect biodiversity

- **Strengthen Biodiversity Net Gain legislation²⁰** to deliver a net gain of 30% from 2026.
- **Implement a Law of Ecocide²¹.** An amendment to the Rome Statute, adding ecocide as a new crime, given that the environment continues to be threatened by severe destruction and deterioration, gravely endangering natural and human systems.
- **Introduce a Toxin Tax²²** on substances that are deleterious to planetary and personal health.

3. Concentrate development on brownfield land or existing urban settlements

- **Advocate a Compact Regenerative Growth Principle.** Grow communities and their ecologies within their existing urban setting. Prioritise existing communities and augment ecosystems with considered growth and resources, to deliver biodiversity, vitality, and socio-economic opportunities.

How to: - promote sustainable lifestyles in urban planning

4. Rethink urban planning to support sustainable life-styles

- **Create a national evidence-based framework²³** for understanding diversity of needs and experiences of users to implement active travel programmes in towns and cities.
- **Revamp neighbourhood plans** to make them community-led tools for local change. Focus on interventions to unlock sustainable lifestyles at the neighbourhood scale:
 - Plans to be informed by the latest data e.g. LGA Climate Change Programme and local cycling, walking and infrastructure studies
 - Work with local communities to assess climate risk impact, seeking input from climate experts, ecologists, planning departments, and built environment professionals
 - Plans should seek to prevent urban sprawl and car dependency by optimising urban form, density, and low-carbon transport connections
 - Plans to identify: the barriers to walking and cycling; local needs for amenities or services and potential active travel networks between these; and opportunities to support climate resilience (e.g. reduction to urban heat island effect)
 - Equip Neighbourhood Planning Groups with greater funding and better access to Council resources to undertake an informed analysis and co-develop strategies
 - Promote adoption of successful urban models e.g. 'National Park City'²⁴ using lessons from cities which have successfully embedded healthy lifestyles



- **Rethink the Green Belt and its strategic potential to address climate emergency.** Green Belts adjacent to cities lack administrative bodies, strategic plans, or a contemporary rationale for their existence. Unlock investment potential for broader sustainable development to complement neighbouring urban development:
 - Consider the socio-economic potential of this land-use wider than just addressing the housing crisis
 - Develop more coordinated approach to waste recycling, food cultivation, water purification, energy production, and community building
 - Establish a unified spatial framework and regulatory alliance for the Green Belt.
 - Create a nationally replicable model and establish a working group representing different cities, and pilot projects across Green Belt areas

How to: - enhance health and well-being

5. Legislate and measure well-being

- **Mandate the 'Well-being Guidance for Appraisal'**, using the proxy of well-being adjusted life years, approach for all public projects, as set out by the Social Impacts Task Force supplementary guidance to the Green Book²⁵, so that all significant construction projects are obliged to measure, monitor and disclose their social impact.
- **Introduce a 'National Well-being Measure'**²⁶, based on the London Well-being and Sustainability Measure, to supplement financial metrics such as GDP and as a tool to understanding how well our social and physical infrastructure is meeting societal needs.

How to: - ensure social justice is achieved with new development

6. National strategy to ensure just and even distribution of jobs across UK

- **Reallocate jobs to accelerate a green transition** (e.g. gas boiler trades could be re-allocated to install heat pumps). Construction linked to social and natural infrastructure will be required in all regions of the UK, providing opportunity to redistribute jobs and economic investment fairly.
- **Follow principles of New Urban Agenda**²⁷ by committing to development that is people-centred, protects the planet, and is age- and gender-responsive, so that no-one is left behind, facilitating a 'just transition' away from a fossil-fuel driven economy. Use participatory engagement, as well as measuring and monitoring approaches that are community-owned and representative of a diversity of local lived experiences
- **Use procurement and funding mechanisms to instill principles of social inclusion** with sanctions to prevent developments that do not comply.

The Foundations

To enable the Building Blocks to succeed, we highlight the foundations upon which they should be built:

A

Provide climate literacy and training at a national scale

B

Align the economy with well-being and planetary limits

C

Safeguard the ability of future generations to act

D

Implement reforms that foster climate leadership

How to ensure a solid foundation?

A: Provide climate literacy and training at a national scale

1. **Climate literacy** should be targeted at four levels:

Government and civil service – climate literacy should be mandatory to ensure all future legislation and policy aligns to national climate objectives.

University and higher education – climate literacy including systems thinking should be taught to ensure newly qualified professionals do not operate in specialist silos.

National curriculum – embed climate literacy within education

General public – public information campaign to raise awareness and sign post towards action. The National Dialogue on Climate Action²⁸ in Ireland provides precedent

2. **Develop tailored apprenticeship and training schemes** to address existing and forecast skilled labour shortages in the retrofit and circular reuse of buildings space.
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B: Align the economy with well-being and planetary limits

3. **UK government to join Wellbeing Economy Government Partnership²⁹** (alongside Scotland and Wales) to prioritise well-being over GDP, and adopt the maximisation of planetary health as the primary purpose driving our economy.
 4. **Implement a Better Business Act³⁰** to impose a duty to wider stakeholders including the living world and to require a clearly stated purpose for the company.
 5. **Move towards Doughnut Economics³¹**, to utilise the built environment to bring all UK citizens above the social foundation whilst staying within planetary limits
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C: Safeguard the ability of future generations to act

6. **Implement a Wellbeing of Future Generations Act**, to represent interests of more-than-human in decision making³², as proposed by Lord Bird³³, and the UN³⁴
 7. **Implement Future Generations Impact Assessments** as a core gateway element of legislation or plan making procedures, which should include how the built environment impacts future existential risks, eg. biodiversity loss and soil degradation.
 8. **Ensure young people are at the table** when decisions are taken about their future. This could include youth parliaments, youth-led citizens assemblies.
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D: Implement reforms that foster climate leadership

9. **Appoint a Future Generations Minister³⁵** empowered to effectively represent the young and unborn in the political process as successfully implemented in Wales.
10. **Put the Treasury in charge of the carbon budget** with input from the CCC (Climate Change Committee). Implement participatory budgeting in all cities to increase accountability and create alignment between financial and carbon planning.
11. **Empower Local Authorities** to incentivise faster and context driven decarbonisation and nature restoration routes.

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Architects Declare is a not-for-profit organisation, launched in the UK on 30 May 2019. At the time of publication, it has over 1,300 signatories in the UK. It is part of Built Environment Declares, which is now represented in 28 countries around the world.

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