environmentanalyst Leadership Network

Outcomes Report

Environment Analyst Leadership Network Roundtable: Making the Business Case for Investing in Resilient Infrastructure

25 March 2026

Executive Summary

Better methodologies, common frameworks, and stronger cross-sector collaboration are needed to help infrastructure organisations make more robust business cases for investing in resilience.

At present, many of those responsible for making infrastructure fit for the future are struggling to make compelling business cases because, despite resilience being clearly valuable, it is difficult to monetise, standardise, and communicate that value.

These were the key themes discussed during the first Environment Analyst Leadership Network Roundtable. The session heard from over 20 leaders from the UK, Europe and North America, working to deliver resilient and sustainable infrastructure. Sectors represented include water, transport, energy, mining and both private and public sector organisations. Representatives from government, NGOs and the insurance sector also participated.

In the wide-ranging discussions, five key themes emerged:

1. **Clear regulatory drivers, standards and definitions are missing.** The sector could do more to develop and promote cost-effective solutions that provide multiple benefits – and use these to demonstrate the value of such interventions.

2. **Methodologies are fragmented or inconsistent, making comparable assessments difficult.** Taking holistic, value plus risk-based approaches will help shift attitudes that are currently focused on narrow CapEx justifications.

3. **It is difficult to quantify costs, benefits and ROI, and identify who is responsible and who benefits from investments.** Resilience spending should be reframed as an investment, not a cost.

4. **There is a lack of alignment between resilience and sustainability experts and those that control budgets.** Engage and align with multiple stakeholders early in projects. Focus on benefits – number one is sustaining operations.

5. **There are specific challenges for upgrading existing infrastructure.** Take a layered, additive approach. Build up evidence to support further investment.

Full report

Roundtable participants identified a number of challenges they face when trying to make the business case for infrastructure resiliency.

Short-term regulatory cycles can make longer-term planning difficult. In the current economic climate, the drive towards affordability can hamper progress on resilience being sought by public utilities as regulators/authorities seek to keep consumer costs down.

Further, funding streams often do not explicitly reward or require resilience. And engineering codes are limiting the ability of infrastructure owners to "go beyond compliance," due to liability concerns.

Generally, participants said that policy and guidance are fragmented and inconsistent. While there is some international guidance emerging (for example, from the UNECE, uptake is slow. The US lacks strong federal frameworks; although individual cities and states have developed their own approaches. The UK government has several guidance documents to support resilient infrastructure investment (for example, the Green Book).

It was also noted that social value and natural capital methodologies are way behind financial frameworks in terms of being "a common, trusted currency". This means that non-financial valuations appear weaker than financial ones, and resilience benefits are being undervalued.

Specific challenges and solutions to making the business case for resilience in infrastructure

1. Clear regulatory drivers, standards and definitions are missing

Many infrastructure sectors lack statutory resilience standards. Without mandated requirements, resilience spending becomes discretionary, making it harder to justify compared to statutory obligations. Further, organisations struggle to define "no regrets" investments and to ensure short-term actions align with long-term resilience needs.

> **Solutions:** To enable the evolution of the right policies and standards, infrastructure, organisations should advocate for stronger, clearer resilience standards.

To do this, they should develop and promote cost-effective solutions that provide multiple benefits – and use these to demonstrate the value of such interventions.
As well as influencing regulators and authorities, these case studies should be used to demonstrate value to funding mechanisms for energy, water and transport infrastructure.

2. Methodologies are fragmented or inconsistent, making comparable assessments difficult

There is no agreed, overarching way to measure resilience, assess climate risks, or quantify social/natural capital.

Existing models give widely varying results, even within the insurance industry.
This hampers credibility and encourages a focus on “value” engineering, where resilience measures are cut to reduce costs.

Solutions: Common frameworks for valuing resilience would help regulators, infrastructure asset owners and other stakeholders to interpret costs and benefits consistently. Examples include the UK water sector’s Common Value Framework.

Standard metrics are needed for climate impacts, pollution, ecosystem services and social value.

Taking holistic, value- and risk-based approaches will help shift attitudes that are focused on narrow CapEx justifications. Examples include LEED’s v5 climate resilience assessment.

A focus on improving climate risk data would help to reduce variance between model outputs. And the insurance and engineering sectors should work more closely to reduce inconsistencies between the models they use.

Generally, collaboration across sectors and regions will help to build consensus on methodologies for making the business case for different types of resilience – bearing in mind that implementation will be, by necessity, dependent on the type of infrastructure and where it is being built or upgraded.

One participant noted that frameworks are great, but they need to scale up and down relative to the infrastructure built and where it is in the globe. Emerging economies have different resiliency issues than advanced economies and with global connectivity. “Ground-truthing is essential.”

Some good examples of collaboration already exist, for example, in the UK water sector companies are working with NGOs such as the Rivers Trust and the National Farmers Union.

Also in the UK, Nature North is a pan-regional cross sector collaboration of more than 50 organisations, partnerships, agencies and businesses working for nature recovery across the North of England. It includes Green Northern Connections which is a collaboration for nature recovery and infrastructure resilience. Infrastructure organisations, including rail, highways, energy and water companies are involved. It is currently sharing and mapping data to find areas of opportunity.

In Armenia, the mining sector is engaging with the ICMM, Canada and Australia.

3. Difficulty quantifying costs, benefits and ROI, and identifying who is responsible and who benefits

Resilience benefits often occur far in the future, while budget cycles and investor expectations are short-term.

Avoided losses, such as prevented service failures, are hard to quantify financially.

There is no standardised valuation framework for Nature-based Solutions – but these are being developed.

A lack of robust data means insurers and investors struggle to link investment in resilience, with reduced risk and financial savings.

It was also noted that it can be difficult to identify who is actually responsible for making infrastructure resilient – it is so interconnected that one organisation or sector can't solve the problems alone, it needs collaboration.

Further, the beneficiaries of spending on resilience may not be the primary investor. One participant noted: "Our economic, political and societal institutions are not optimised for multi stakeholder benefit".

Solutions: Reframe resilience as an investment, not a cost. For example, position it as an insurance-type mechanism, with measurable avoided losses. Evidence already exists showing every $1 invested yields up to $13 in avoided losses.

Translate resilience outcomes into financial terms, such as avoided claims, reduced downtime, and improved insurability. For example, LA Metro has incorporated equity assessments into its work. This shows benefit to specific communities in economic terms.

Infrastructure organisations should also learn from the standards adopted in the financial industry – applying the climate risk assessments required by lenders to demonstrate compliant and bankable projects.

4. A lack of alignment between resilience and sustainability experts and those that control budgets.

Subject matter experts understand risks relating to poorly resilient infrastructure, but budget holders mostly prioritise short-term financial performance; consumer affordability; and regulatory compliance – especially if the investment is innovative.

This gives rise to risk perception gaps, misaligned priorities, and difficulty gaining internal buy-in.

Solutions: Roundtable participants stressed that integrating resilience early in the project life cycle – before design – leads to savings overall (so future climate stresses can be factored into the design). It also generally makes these options more defensible.

Our next online Roundtable on 7th May will explore building resilient infrastructure from the outset, so you can discuss this topic in more detail.

They also said it was important to get all stakeholders engaged early on – this includes engineers, financiers, regulators, communities, and environmental specialists. And to ensure

“human intelligence” is clear and present – so that judgements do not rely solely on modelling outputs.

To communicate with decision makers, framing needs to be improved. The most important objectives should be sustained operational performance with an ability to adapt to developments like climate change, regulation and global mega trends.

Aligning language with decision-makers or other stakeholders, like regulators, can be effective. For example, think about “service measure” benefits, like pollution reduction, leakage prevention, and reliability.

In terms of tangible financial benefits, the group discussed the role of insurance.
One participant noted that insurance brokers have a central role in shaping how resilience is valued. In some cases, resilience measures may help projects maintain coverage or avoid major premium increases.

However, it was noted that the link to consistently lower premiums is still evolving. What has been found is that projects that can clearly demonstrate risk awareness and mitigation – including through approaches like the LEED v5 Climate Resilience Assessment, the Enhanced Resilient Site Design Credit, and the Resilient Spaces Credit – are likely to be better positioned in those conversations

Often resilience is seen as complex, so the options need to be presented as the “path of least resistance” for decisions. And messaging needs to be adapted for different audiences. For example, it might be simplified for certain audiences with a traffic light indicator for ecosystem services. Further, benefits may be interpreted differently by different audiences.

Thinking about enhancing public and community engagement, roundtable participants talked about the benefits of equity assessments that show how localised benefits are distributed. There were also examples of infrastructure owners paying community-based organisations to participate in decision-making and providing “training” for local communities to build understanding of resilience, reduce resistance, and increase support.

5. There are challenges specific to existing infrastructure
Existing infrastructure – especially assets that are decades old – was not designed with climate risks in mind. This creates technical and cost barriers when the assets are upgraded.

Solutions: For ageing or constrained infrastructure, it was suggested that a layered or additive approach is taken. For example, engineered designs should be kept to the required codes, but nature-based solutions could be layered alongside to boost drainage capacity/performance. It was also noted that such investments could be used as evidence to build confidence for future standards.

Attendee list

Name	Job title	Company	Country
Sally Vivian	Sustainability Advisory Growth Lead	AECOM	UK
Alex Scott	VP, Energy Transition	APTIM	US
Peter Athey	Business Compliance and Sustainability Manager	AV Dawson	UK
Kate Stein	Insurance Director	EDF	US
Jon Gibbard	Director	Empowered2	UK
Mark Edwards	Head of Sustainability	Gatwick Airport	UK
Charles Haine	Head of ESG & Safety	iCON Infrastructure	UK
David Dodd	CEO	International Sustainable Resilience Center Inc	US
Cris Liban	Chief Sustainability Officer	LA Metro	US
Caspar Probert	Director Environment	Mott MacDonald	UK
Ruth Voigt	Head of Environment & Sustainability	National Grid	UK
Hariom Newport	Head of Environment & Sustainability	National Infrastructure and Service Transformation Authority (NISTA)	UK
Steph Hepworth	Project Manager	Nature North	UK
Burke J Brooks	Principal	Ramboll	US
Tracey Draper	Director - Sustainable Finance	Ramboll	UK
Thomas Barden	Asset Strategy Lead	Severn Trent Water	UK
Joe Charlesworth	Transport Planner	Sweco	UK
Luke McLaughlin	Investor Relations - ESG and Sustainability Lead	United Utilities	UK
Karema Enos	Associate Director, LEED Technical Development	US Green Building Council (USGBC)	US
Matt Tooby	Strategic Growth Director, Resilient Infrastructure	WSP	UK
Lusine Manucharyan	Senior Adviser Climate Change and Sustainability	ZCMC	Armenia

With support from:

- Emma Chynoweth, Roundtable Moderator
- Amanda Rafferty, Community & Events Director
- Emily Ridge, Community & Events Manager
- Ross Griffiths, Managing Director

Useful Resources

Global and regional

Draft guidance on resilient infrastructure. UN Economic Commission for Europe (UNECE), October 2025
This UNECE draft guide highlights the importance of Public-Private Partnerships (PPPs) in addressing the challenge of infrastructure development and climate resilience – focusing on how PPPs can contribute to climate adaptation and resilience, while aligning with the Sustainable Development Goals. Its policy recommendations and best practices aim to help public authorities integrate these critical aspects into the planning, development, and implementation of infrastructure projects.

The Equator Principles
The Equator Principles are a voluntary risk management framework adopted by financial institutions for assessing and managing environmental and social risks in project-related financing. Updated in 2020, EP4 provides a minimum standard for due diligence to ensure projects are developed responsibly. Guidance note on climate change risk assessment. September 2020.

Developing Sustainable Communities, ASCE 73-23. American Society of Civil Engineers.
ASCE 73-23 is a globally accepted, infrastructure standard by engineering societies. It provides a baseline performance-standard for resilience and infrastructure and can be achieved with rating systems used around the world.

UK

Infrastructure Business Case: International Guidance. UK Government, February 2022
The guidance offers a proven methodology and framework for thinking about the development, approval, procurement, and delivery of infrastructure project proposals. This second edition includes best practice materials on decarbonisation, climate change, and green finance.

The Green Book. UK Government, February 2026
The UK government's guidance on appraisal – the process of assessing the costs, benefits and risks of different options for achieving government objectives. It is applied to public infrastructure projects.

Business Case Guidance for Projects and Programmes. UK Government, 2018
Companion guidance to The Green Book, providing a framework for thinking about spending proposals and a structured process for appraising, developing and planning to deliver best social value for money.

Investment for a well-adapted UK. Climate Change Committee, January 2023
The report lays out where investment will be needed to build climate resilience, the barriers associated with delivering this, and how key investment streams for adaptation can be scaled up. This summary is structured in two sections: investment needs for a well-adapted UK; and unlocking investment in climate change adaptation.

Nature North's Green Northern Connections
Through stakeholder engagement and early-stage project support, the GNC team aims to lay the groundwork for future investment, ecological restoration, and long-term environmental resilience.

US

The Preparedness Payoff: The Economic Benefits of Investing in Climate Resilience. US Chamber of Commerce, 2024
Climate resiliency report indicates that for every dollar invested in resilience and preparedness can save $13 in damage, cleanup, and economic losses.

Building Community Resilience with Nature-based Solutions: A Guide for Local Communities. Federal Emergency Management Agency
This guide aims to help communities identify and engage the staff and resources that can play a role in building resilience with nature-based solutions. It identifies the many departments that may need to be involved in planning and carrying out the strategies it proposed.

Business approaches

Common Value Framework. United Utilities, 2026
A tool being developed to assess a broad range of benefits from Nature-based Solutions (NbS). It is part of an Ofwat (UK water regulator) Innovation Fund project involving over 20 partners who are working together to mainstream NbS by demonstrating value to society and the environment.

LA Metro's Sustainability Vision - About
LA Metro's vision is to create an organizational culture and workforce that continually integrates the principles of sustainability into all aspects of decision-making and execution to enhance communities through mobility and access to opportunity.

EU Taxonomy Report. National Grid, 2024/2025
National Grid Group's capital investment plan is to invest around £60 billion in the five-year period from April 2024 to March 2029. As part of this plan, it aims to deliver £51bn of green capital investment across the five-year period.

Insurance policy tools can turn post-disaster recovery into resilience. Environmental Defense Fund, September 2025
A practical pathway for insurers to transform post-disaster recovery into an opportunity for resilience, helping build safer, more climate-ready communities, and offering policymakers a model to stabilize coverage for the future.

Investible Infrastructure. Ramboll, March 2026
Why policy and regulation increasingly determine the bankability of European infrastructure assets.

Global Infrastructure Resilience Survey Working Paper. March 2026
LinkedIn post regarding a webinar on the Global Infrastructure Resilience Survey (GIRS) Working Paper, developed by the International Coalition for Sustainable Infrastructure (ICSI) for the Coalition for Disaster Resilient Infrastructure (CDRI).

Marsh's Climate Adaptation Survey. September 2025
Marsh Risk's global survey on how climate adaptation is viewed by private sector organisations, particularly through the lens of risk managers.

Landscape Enterprise Networks
Landscape Enterprise Networks (LENs) brings organisations together to co-fund and implement regenerative agriculture and nature-based solutions to drive landscape resilience. LENs Pilot in Oxfordshire, UK

Louisiana Fortify Homes Program
The State of Louisiana mandates that insurers provide premium discounts for homes with fortified roofs, effective with new rules in 2026. Insurers must offer significant discounts – up to 29% on the hurricane portion for fortified roofs and 49% for "gold" standard roofs. Additionally, the state offers grants of up to $10,000 for roof upgrades.

Resilient buildings case studies from USGBC

Spaulding Rehabilitation Hospital | Boston
The first floor was elevated 42 inches above the current 100-year flood line and 30 inches above the 500-year flood line. This was rated LEED Gold. It features site planning, operational continuity, and risk-informed healthcare design.

Credit Human Headquarters Earns USGBC's Texas Decarbonization Award
The Credit Human Development has received numerous honors for its sustainable design integrating leading-edge clean technologies. It was rated LEED Platinum and sits 1 foot above a 500-year-old floodplain. The development features a wastewater thermal recovery system which reducs energy use for heating and cooling by 48%, a green roof and a 40,000-gallon cistern.

DC Water's Green Glass Headquarters
DC Water's Iconic Green Glass Headquarters was awarded LEED Platinum Distinction. It uses full-height impact-resistant glazing designed for winds ~300 mph and goes beyond what code required at the time.

Brock Environmental Center
This centre was rated LEED Platinum, and demonstrates proven resilience performance, including coastal resilience, and water independence. It's elevated above the floodplain and successfully weathered Hurricane Joaquin while maintaining a net-positive energy balance.

ENR2 | Arizona Institute for Resilience
This developed was designed to withstand extreme heat and desert temperatures. It was rated LEED Platinum and includes water-saving strategies that reduce heat and drought exposure, while supporting long-term building performance.