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Mainstreaming Resiliency for ESG Alignment and Impact – Perspectives from the public- private sector and the UNFCCC High Level Climate Champions Team

*Case Studies that Prioritize Infrastructure
Resilience Policies and Actions Based on
Consequence*

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UNFCCC HLC Climate Team – Mainstreaming Resilience

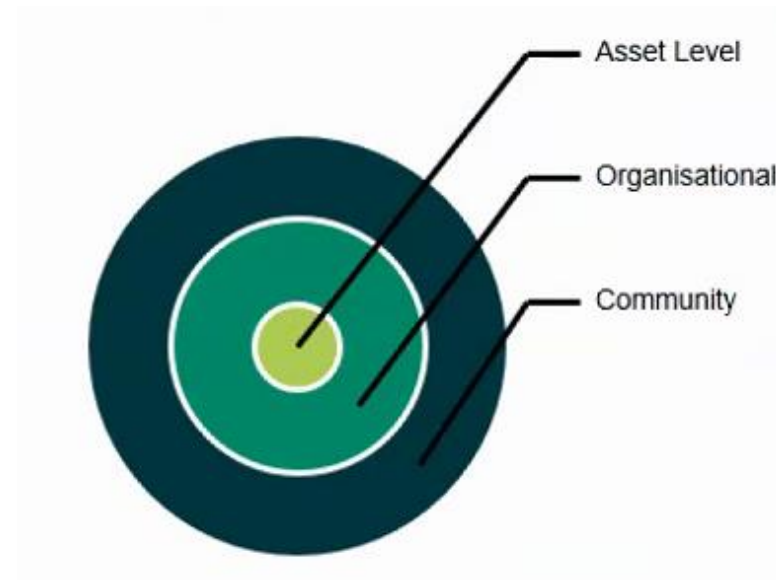
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Overview

Mainstreaming Resiliency for ESG Alignment and Impact

- Framing the Issue (why)
- The Challenge (of what, to what, for whom)
- Mainstreaming Resiliency and ESG (how)
- Partners and Scale (accelerate)
- ❖ *what assets are connected to matters as much as the asset itself*



Transforming infrastructure

Cost benefits through asset lifecycle



- **42%** of companies with a \$10+ bn market cap **aligned with TCFD** and over **60%** of the world's 100 largest public companies support its aims
- The **\$2.2 T ESG debt market** could swell to **\$11 T** by 2025
- Nature-positive transitions could generate up to **\$10 T** in annual value and create **395 M** jobs by 2030 **aligning with TNFD**



Global energy capex to increase from \$1.8tn per year to \$2.6tn annually by 2050



\$15+ trillion infrastructure gap to meet by 2030



Critical infrastructure for society and business requires c. \$90trn in funding

Modelled three major climate hazards to calculated populations exposed

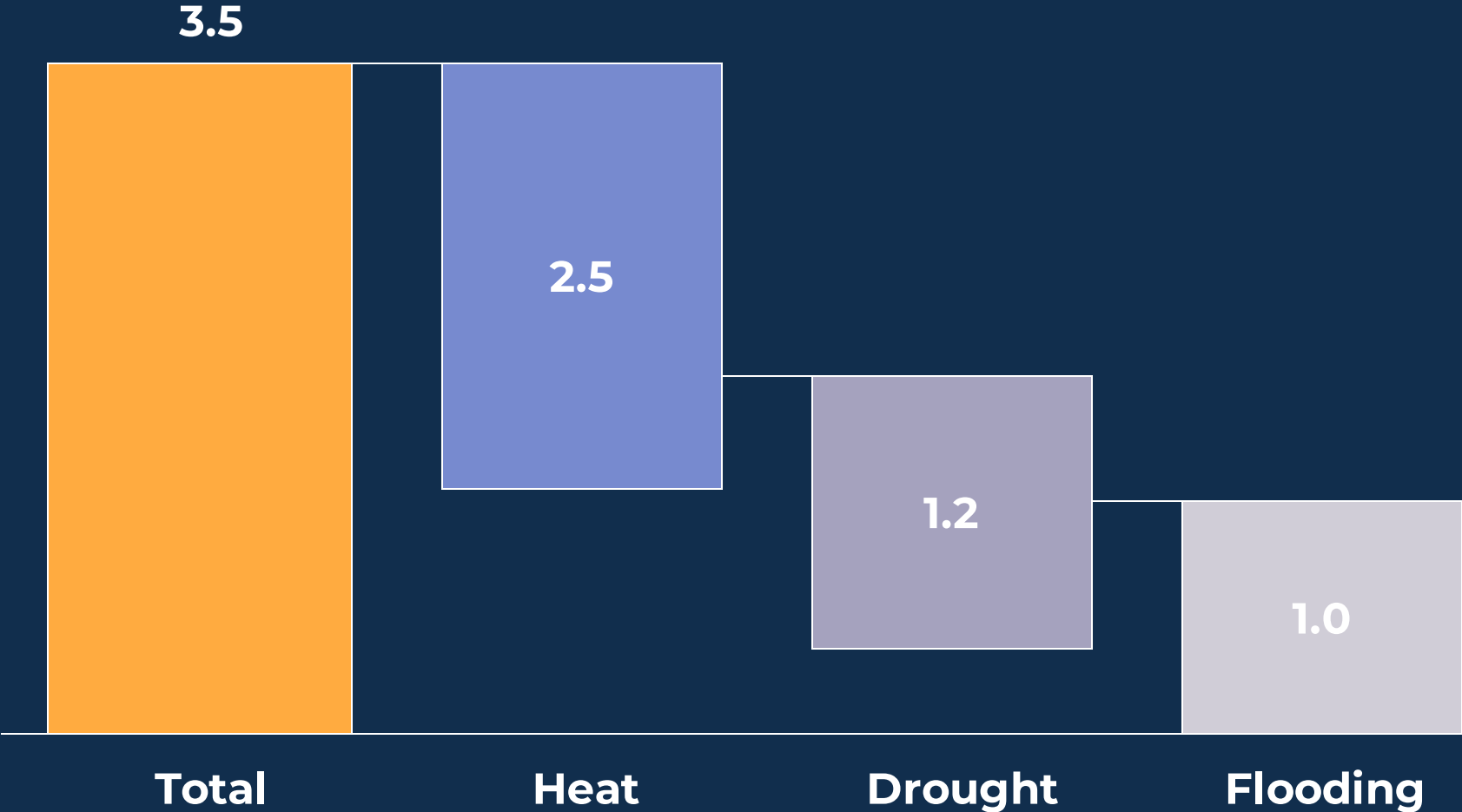


Climate Hazards	Description	Populations exposed	Driving Resilience in Coastal, Urban & Rural areas
Heat	People exposed to both heat shocks and stresses when wet-bulb globe temperature exceeds 35C	<ul style="list-style-type: none">❑ People in outdoor jobs where heat affects working hours❑ People whose life / health is at risk due to lethal heat waves	
Drought	People exposed to water shortages as a result of rural drought and urban water stress	<ul style="list-style-type: none">❑ People employed in agriculture where drought affects livelihoods❑ People living in cities suffering from water stress	
Flooding	People exposed to flooding from riverine and coastal flood events	<ul style="list-style-type: none">❑ People living in areas exposed to riverine and coastal flooding	

Building resilience is critical now even in 1.5C world



Total population exposed to climate hazards today, Billions



3.5b

people are exposed to five major climate hazards today, **primarily heat stress**

Many are exposed to multiple hazards

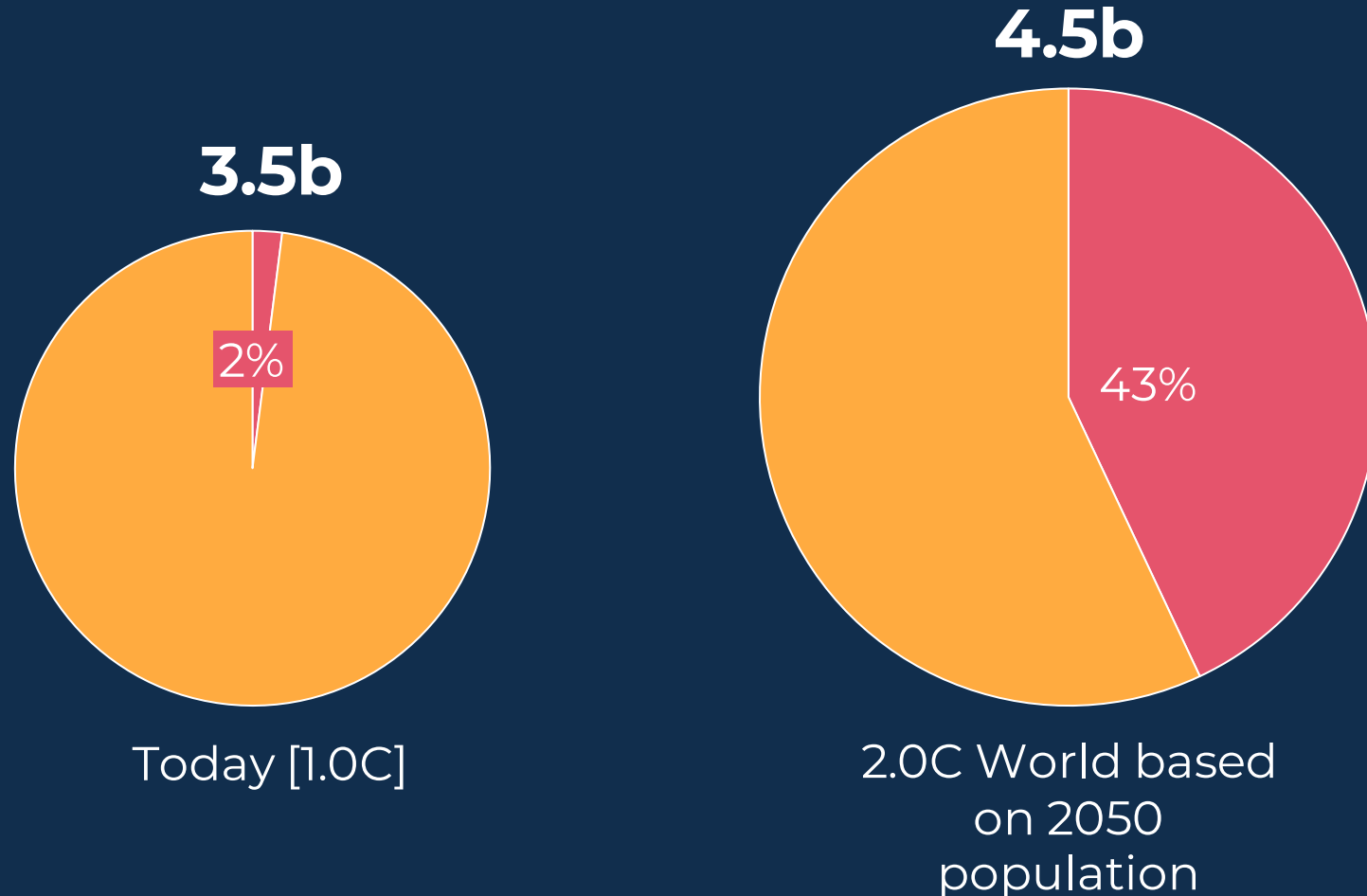
Challenge will get bigger

Those least responsible are the most impacted



Total population exposed to climate hazards, Billions

■ Population exposed to a severe level of hazard



1.0b

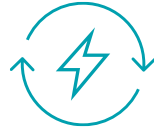
More people will be exposed to climate hazards, of which **nearly half will be exposed to high severity hazards**

Hazard severity is graded low, medium and high based on probability and intensity

A just and resilient recovery leveraging resiliency and ESG



Infrastructure that can respond to the shocks and stresses of a changing climate



Assets that build toward a net-zero world



Financed through new funding approaches and developed through public private partnerships



Improved quality of life in the cities where we live and work



Projects that leverage and integrate sustainability across their lifecycle and value chain



Resiliency dividend achieved through the lifecycle of a project or asset



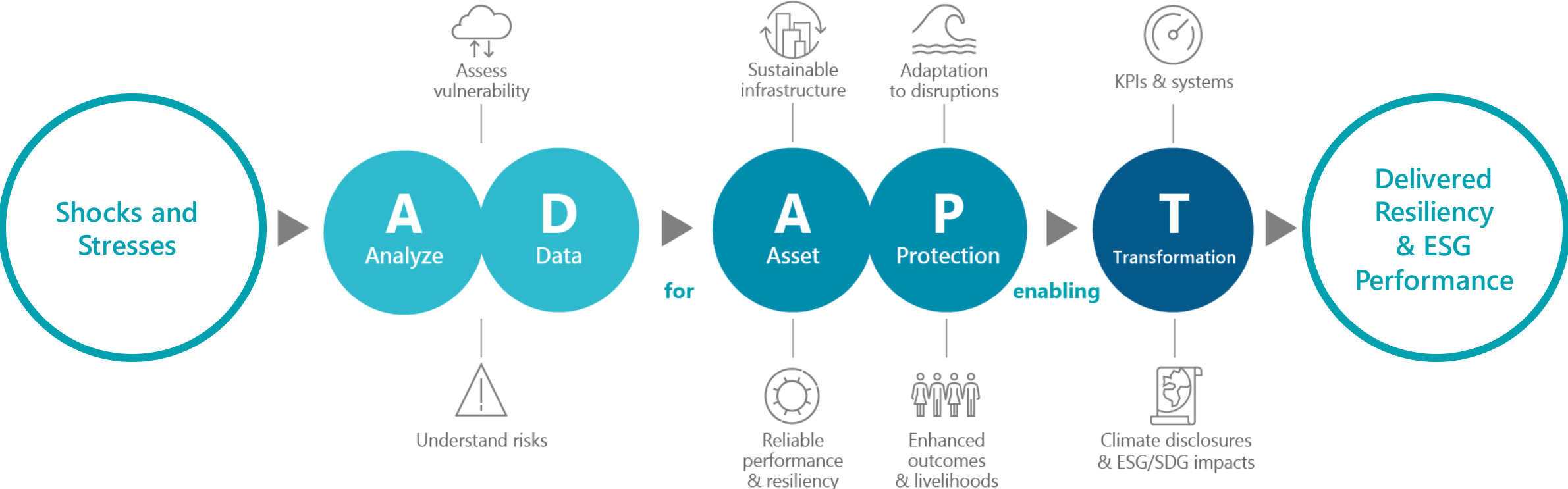
An opportunity to thrive, not just survive.

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Mainstreaming Climate Resiliency & ESG

Analyze. Protect. Transform.

Leveraging **ADAPTSM** to Deliver Resilience and ESG Impact – Reduce risk, create value and improve lives & livelihoods



Mainstreaming Resilience – Integration of climate shocks to infrastructure and their services



Analyse data

- What data do you need to include in your design?
- Are you capable of transforming data into actionable intelligence?
- Do you understand your project risks and vulnerabilities?



Understand Assets and Protect Investments

- How do your projects contribute to the lives of the communities they serve?
- How have you built in resilience, adaptability, and mitigation to cope with our changing world?
- What is your plan for SDG alignment?
- How does the project remove climate shocks?
- What critical assets does the project protect?
- How vulnerable are your projects and assets to climate impacts?
- Do you know how to increase transparency with a TCFD?



Transform Projects

- How does your project contribute to the sustainable goals of your stakeholders, your organization, society and investors?
- Which communities, supply chains or environments do you need to protect?
- Do you know how to implement an ESG strategy?

Partners and Scale

<https://infrastructure-pathways.org/overview/>

Resilience outcomes:



Service continuity and reliability – the most basic objective of climate-resilient infrastructure is to provide reliable delivery of services to users who depend on them. This objective relates to the physical resilience of infrastructure as well as the resilience of its operational systems.



Environmental co-benefits – climate-resilient infrastructure supports resilience through infrastructure, by minimizing negative environmental degradation, water and energy use, and carbon emissions and by maximizing positive impacts, including promoting nature-based solutions and improving environmental health.



Equity and social co-benefits – climate-resilient infrastructure also supports resilience through infrastructure by seeking to increase social cohesion, equity, and well-being.



Capacity building – one specific social co-benefit that climate-resilient infrastructure aims to achieve is capacity building, or the improvement of individual skills and abilities and organizational or community processes and resources^[17]

What is Resilience Value?

The Resilience Shift defines the critical functions of infrastructure as the ability to sustain societal needs through protecting, connecting and/or providing essential services. Ensuring that these are delivered and maintained in ordinary as well as extraordinary circumstances is **Resilience Value**^[12]



Race to Resilience CRITERIA

PLEDGE

Pledge at the head-of-organization level to help support 4 billion people from vulnerable groups and communities be more resilient in the face of increased physical risks associated with climate change, by 2030.

PLAN

Within one year of joining the Race, use the best knowledge and scientific evidence to develop and share a clear plan to take action towards this commitment with interim targets and milestones.

PROCEED

Take immediate action toward achieving the commitment in support of the Race to Resilience, consistent with delivering interim targets specified.

PUBLISH

Commit to publicly report progress against interim and long-term targets at least annually, starting at COP26, in line with the Race to Resilience metrics framework.

(PROVE)

Measure, verify and improve actions undertaken to improve resiliency.



UN CLIMATE
CHANGE
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UK 2021

IN PARTNERSHIP WITH ITALY

TOGETHER, WE CAN DO THIS.
TOGETHER, WE WILL THRIVE.



RACE TO
RESILIENCE

RACE TO ZERO



Keeping the Momentum: Our Core Campaigns



Launched in Jan '21 alongside the Adaptation Action Coalition

Goal by 2030 to catalyse action by NSAs that builds the resilience of 4 bn people vulnerable to climate risks

Composed of partner initiatives & resilience transformations



Launched in Dec '19

World's largest coalition of non-state actors committed to halve emissions by 2030 & achieve net zero by 2050

Complemented by the Champions' 2030 Breakthrough campaign



Launched in Apr '21

A unifying net-zero coalition for FIs within Race to Zero

Co-led by HLCs and Mark Carney

Aims to support portfolio alignment of FIs and mobilization of private finance for sectoral transition



The 2030 Breakthroughs were launched in January 2021, to drive alignment around a shared vision of what concrete near term actions, investments, etc. need to be taken now to drive change at the pace required to reach global net zero by 2050.

Early insights from Egyptian govt indicate initial priorities:



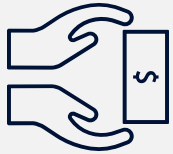
Whole of Africa COP

- United COP representing African priorities



Adaptation

- Putting adaptation and resilience on an equal footing with mitigation
- Addressing loss and damage



Finance

- Mobilising financial flows for climate solutions especially in emerging markets and developing economies



Nature

- Demonstrating nature's place as the nexus between adaptation and mitigation



"A UNITED AFRICA FOR A RESILIENT FUTURE."

Resilient projects for an uncertain future that drive ESG

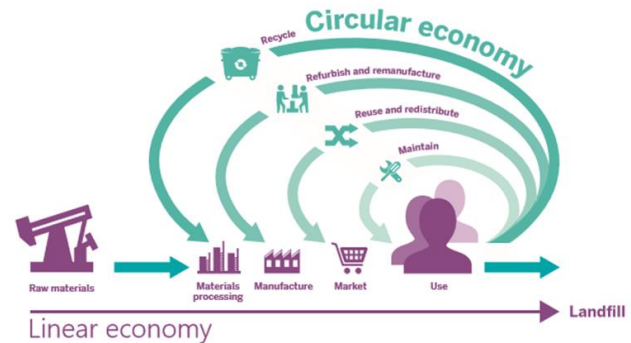
Environmental restoration



Enhanced livability in the communities where we live and work

River restoration, trail construction and improvements that restore to a naturally meandering flow to prevent flooding, improve water quality, create a more resilient ecosystem and improve access to services and housing.

Circular economy roadmap



Innovative waste management

Zero waste model development and implementation with identification of business innovation opportunities, commercial feasibility assessments, developing business and commercial cases and delivering and supporting circular economy business model trials.

Digital twin old city networks



Optimised transit networks

Lead partner to the City of York in delivering its Smarter Travel Evolution Programme (STEP), to reduce congestion, emissions and journey times in the city, as well as improve reliability of the network, create better public spaces and enhance safety. A first connected vehicle project of its kind in the UK.

A roadmap-embedded resilience screen

- Maximise investment opportunity, access capital
- Create 'bankable projects' pre-feasibility
- Critical link between infrastructure and finance
- Demonstrate the resilience dividend
- Prioritise projects and drive key resiliency features
- Enable delivery of a just and resilient recovery



ESG Focus Areas for Value Creation and Impact

Environmental



Greenhouse Gas Emissions



Land Use



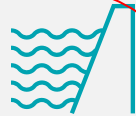
Circular economy



Waste & Pollution



Water Use



Climate Resiliency

Social



Workforce & Diversity



Communities



Social Inclusion



Safety Management



Customer Engagement



Integration of D&E Into Infrastructure

Governance



Structure & Oversight



PMO for Implementation



ESG, TCDF, TNDF Reporting



Code, Values & Policies



Transparency & Reporting



C-Suite Engagement



Financial & Operational Risks

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One chance to build back better

A post-Covid return to business as usual is not predestined. The shock of the pandemic gives us an opportunity to build a different future that is more resilient and equitable.

Roadmap and measure to realize resiliency dividend

A structured and dynamic process is needed to set relevant targets, map assets, identify the right solutions to protect, adapt and transform to deliver resiliency, critically aligned with net zero.

Build partnerships, innovate and prioritise

Success will require teamworking across public and private sector, solution enablers, and technology providers. Prioritise the biggest opportunities and focus on them.

