Joint Annual Conference 2022

Delivering greater value, together







Joint Annual Conference 2022

Croeso Welcome







Conference Programme

0905	The current state of the industry and why do we need to change?
0920	The Construction Playbook – a better way forward?
0950	"Value" – what is it and how do we measure it? The Value Toolkit
1020	Risk – how do we better manage it for greater value?
1045	Adding value through digitisation
1100	Comfort break

Conference Programme

1100	Comfort break
1120	Using social "value" to attract, develop and retain a skilled workforce
1150	The value of carbon in construction
1220	Panel discussion :

"What can the public and private sectors do better, together, to deliver greater value?"

1250 Summing Up by the Chairs

1300 Close Conference/Lunch

The current state of the industry Ed Evans









Unprecedented global events?!

- Covid
- Brexit
- Ukraine
- Climate change
- What's next?

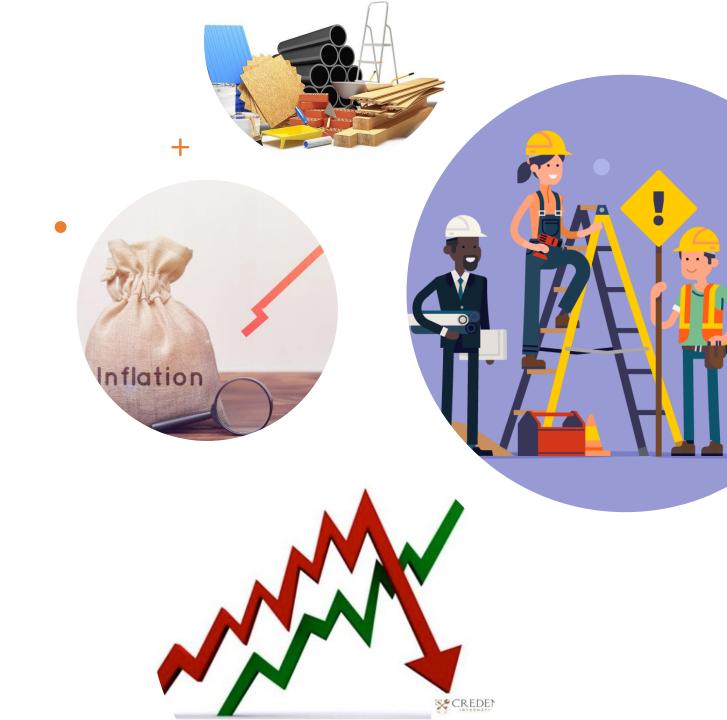


Pressures, uncertainties, risks

- Economic volatility
- Inflation
- Materials
- Labour
- Skills
- Wellbeing
- Peaks and troughs

Impacts on infrastructure sector

- A decade of stability no more!
- Pent up demand vs limited supply
- Construction materials
 - Availability
 - Costs
- Construction workforce
 - Availability
 - Costs
 - Wellbeing
- Rising costs vs outdated budgets
- Value? Where do we go from here?



Construction
Playbook – a
better way
forward?
Alasdair Reisner











Why develop the Playbook?







Background

- In June 2020, the Prime Minister outlined his agenda to deliver 'better, greener, faster' public works and Project Speed was established to deliver government's public investment projects more strategically and efficiently.
- To achieve the PM's ambition, the Construction Playbook built upon the success of the Outsourcing Playbook to **transform how we assess, procure and deliver public works** by setting out policies and principles developed with the private sector and drawing on best practice from across the public sector.
- The Construction Playbook is a key pillar of Project Speed and part of broader changes in public and infrastructure procurement. The Construction Playbook complements these reforms by setting out 14 non-legislative policies and guidance for 'how' government should deliver public works projects and programmes.

Phase 1: Policy sprint on key areas & pathfinders

June to August 2020

Phase 2: Rapid iterative development September to November 2020

Informing pathfinders & the Spending Review

Phase 3: Launch & Implementation

December to March 2023

Input from departments, ALBs, wider public sector and industry has been key to the development process

14 Key Policies



Eight policies have been adapted from the Outsourcing Playbook

ı		
	1	Publication of commercial pipelines
1	2	Market health & capability assessments
	3	Portfolios and longer term contracting
	4	Harmonise, digitalise and rationalise demand
	5	Further embed digital technologies
	6	Early supply chain involvement
	7	Outcome-based approach
	8	Benchmarking and Should Cost Modelling
	9	Delivery Model Assessments
	9	Delivery Model Assessments Effective contracting
		•
	10	Effective contracting
	10 11	Effective contracting Risk allocation
	10 11 12	Effective contracting Risk allocation Pricing & payment mechanisms Assessing the economic and financial



There are **six policies** new to the Construction Playbook

Aims

By adopting the policies in the Playbook, the Government aim to:

Set clear and appropriate outcome-based specifications

Favour longer term contracting across portfolios, where appropriate

Standardise designs, components and interfaces, as much as is possible

Drive innovation and the adoption of Modern Methods of Construction

Create sustainable, effective, win-win contracting arrangements

Increase the speed of end-to-end project and programme delivery

The Playbook looks to create the right environment to enable us to:



1



Improve building and workplace safety

Promote social value

Take strides towards our 2050 net zero goal

1. Commercial pipelines

- Central Government procurement pipeline
- Better understanding of demand
- Support supply chain planning

2. Market health and capability assessments

- Assess market prior during planning stage
- Identify opportunities and limitations

3. Portfolios and longer term contracting

- Long-term plans for key assets
- Contracting across portfolios

4. Harmonise, digitise and rationalise demand

Accelerates use of platform approaches and standard products/components

5. Further embed digital technologies

- Use BIM framework to standardise generation and classification of data
- Support adoption of Information Management Framework
- Create National Digital twin

6. Early supply chain involvement

Engage suppliers to develop business case for projects

7. Outcome-based approach

- Focus on outcomes rather than scope
- Project Scorecard to help set clear outcomes

8. Benchmarking & Should Cost models

- Projects to use benchmark data from previous projects to support better decisions
- Should Cost modelling to better understand whole life cost and value

9. Delivery model assessment

Use evidence-based approach to choose most appropriate delivery model

10. Effective contracting

- Structure contracts to ensure collaboration, data sharing, risk management and value improvement
- Review current approach to construction frameworks to develop 'gold standard'

11. Risk Allocation

- Ensure risk allocation is informed by market engagement
- Transparent communication of risk allocation

12. Payment mechanism & pricing approach

- Payment to be linked to delivery of outputs, work value and supplier performance
- Test payment approach with suppliers before bidding

13. Assessing the economic & financial standing of suppliers

- Ensure supplier has financial capacity to perform
- Transparent, objective and non-discriminatory

14. Resolution Planning

- Understand risks to project/programme if a supplier fails
- Work with suppliers to develop mitigations to limit risks

Cross-cutting priorities

Health, safety and wellbeing

- Health and safety is the Government's highest priority and improved speed must not come at the expense of health and safety. To achieve this, the
 Government are focusing on compliance with legal requirements, reducing the instances of work related ill-health including mental health and
 supporting SMEs to improve risk management and control
- All contracting authorities should embed the priorities into their project and programme planning as part of a comprehensive approach to managing and improving occupational health and safety.

Building safety

- Setting the right behaviours and practices throughout the design, construction, occupation and maintenance stages, and the handoffs between these stages, is critical to ensuring building safety.
- The drive for quality and the required safety outcomes, rather than lowest cost, must start with procurement and the seamless transfer of safety
 critical data and duty holder responsibilities at each handoff, together with a global view of risk, including product assurance, needs to be enabled.

Build back greener

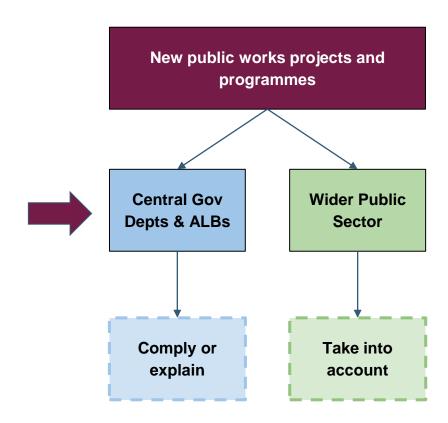
- We must bring all greenhouse gas (GHG) emissions to net zero by 2050.
- Contracting authorities should set out plans for achieving net zero GHG emissions by or ahead of 2050 for their entire estate/infrastructure
 portfolio. These should be aligned under an overarching sustainability framework, and processes should be in place to ensure projects and
 programmes deliver on targets set.
- Recognising the design life of public works, contracting authorities should adopt whole life carbon assessments to understand and minimise the whole life carbon footprint of projects and programmes

Social Value

- A minimum weighting of 10% of the total score for social value should be applied in the procurement to ensure that it will be a
 differentiating factor in bid evaluation and a higher weighting can be applied if justified.
- This will help local communities recover from COVID-19, tackle economic inequality, promote equal opportunities and improve wellbeing.

Scope

- The Construction Playbook applies to all new public works projects and programmes undertaken by central government departments and their ALBs on a 'comply or explain' basis.
- Recognising that there is no one size fits all approach, the Construction Playbook is intended to be taken into account by the wider public sector.
- Where the planning and preparation of projects and programmes is already underway, or there are existing frameworks in place, contracting authorities should adopt a pragmatic approach to embedding the Construction Playbook.
- The Construction Playbook also sets out our expectations for industry, including ensuring the Playbook policies down the supply chain.



The role of industry

Governance

Organisational

management

- Promote proposals to be safe, innovative, sustainable, manufacturing-led solutions using MMC, drive continuous improvement and include a fair margin of profit
- Ensure the principles and policies set out in the Construction Playbook flow down your supply chain.
- Regularly review upcoming procurement pipelines.
- Adopt the principle of value-based procurement and respond with appropriate proposals including social value.
- Set strategies and plans for:
 - Achieving net zero by or ahead of 2050
 - Adopting manufacturing-led solutions and invest in innovation.
 - Continuing to put health and safety at the heart of all public works projects and programmes
- Meet the standards set out by the UK BIM Framework.
- Adopt digital, automated processes and embed prompt payment practices.
- Adopt quality planning processes.
- Use the certainty provided by longer term contracts and pipelines to invest in skills, people and innovation.
- Respond to requests for ongoing financial monitoring and engage collaboratively on potential opportunities and issues.
- For in-scope organisations, provide resolution planning information.

Portfolios

- Consider approach to wider value generation across portfolios including social value, risk management, the capture and use of data.
- Demonstrate continuous improvement in productivity and cost through the life of the programme

Projects and **Programmes**

- Put in place an appropriately experienced SRO and resourced cross-functional teams to meet the expectations set out by the contracting authority.
- Adopt collaborative ways of working to create a 'one-team' ethos with all parties.
- Engage early and extensively with contracting authorities to co-develop solutions.
- Develop safe, innovative, sustainable, manufacturing-led solutions using MMC and drive continuous improvement.
- Bid with a fair margin baked in.
- Provide financial information as set out by the contracting authority.
- Work with the contracting authority to ensure there is an agreed process to wrap-up contracts including the transfer of robust data to contracting authority (or their operator).

Questions/Discussion?







Value and how do we measure it?
Cherie Paterson and Piers
Burroughs







The Value Toolkit and Value-based Delivery

Piers Burroughs and Cherie Paterson

VALUE TOOLKIT

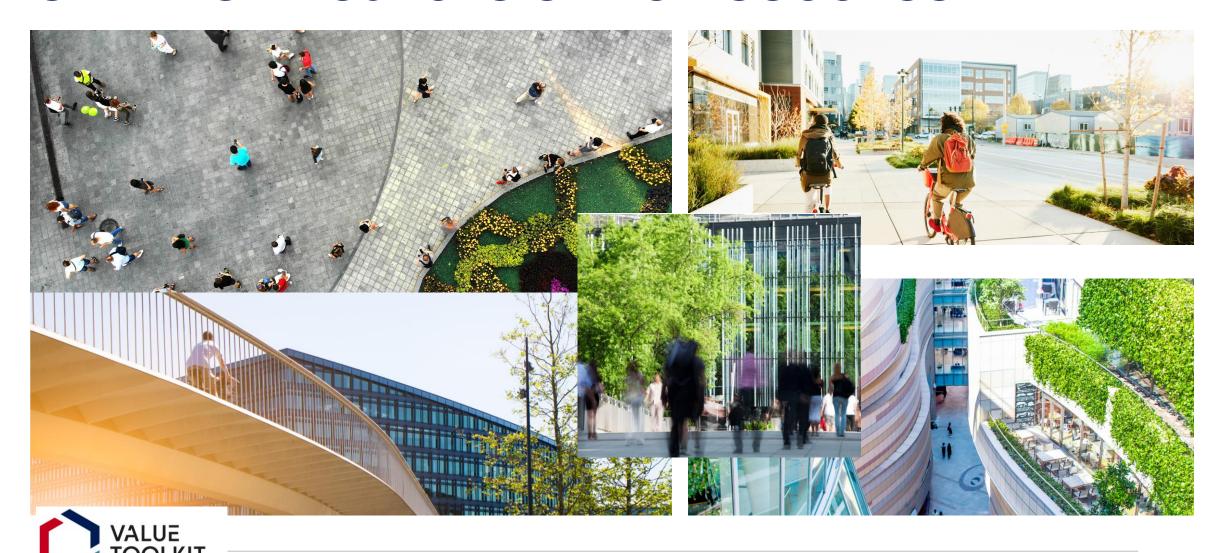




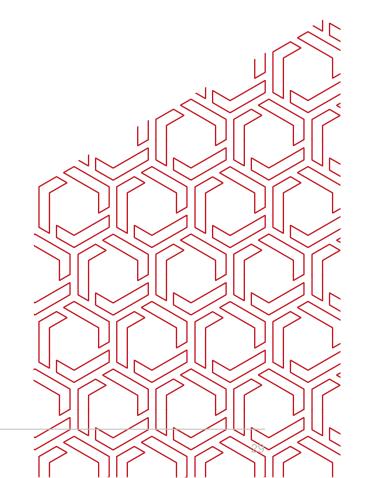




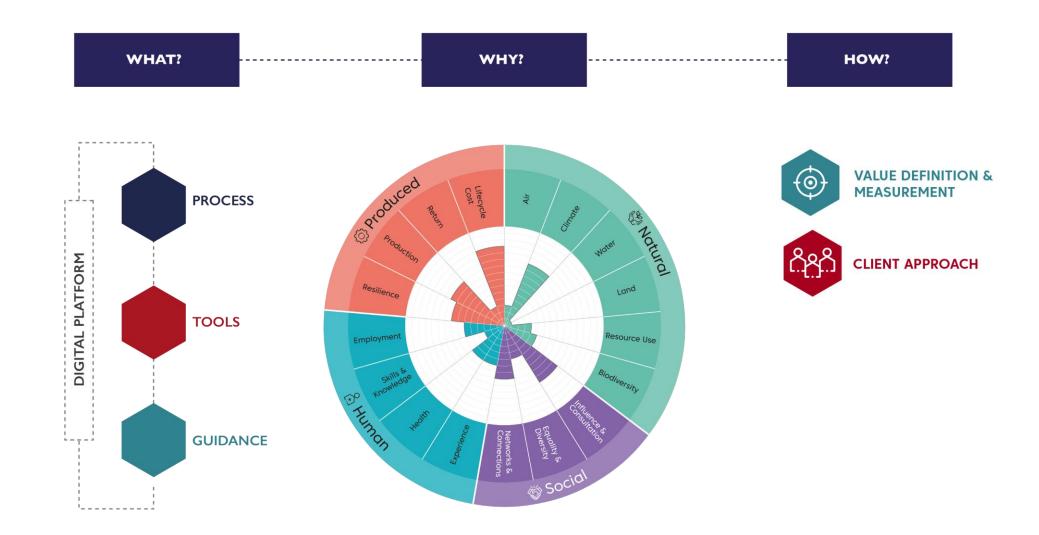
SETTING PROJECTS UP FOR SUCCESS



Value-based decision making focuses on how an investment can deliver the best outcomes and thus value, rather than focusing exclusively on delivering to the lowest possible price.

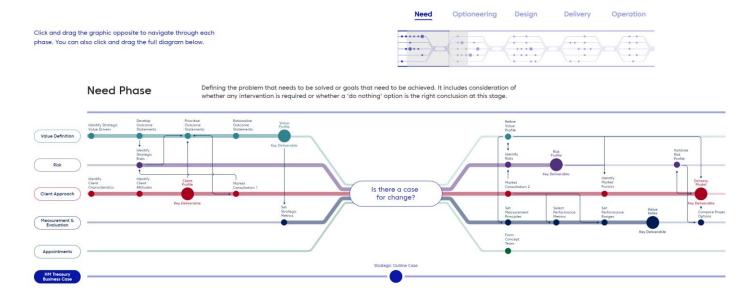


THE VALUE TOOLKIT OVERVIEW



AN INTEGRATED PROCESS

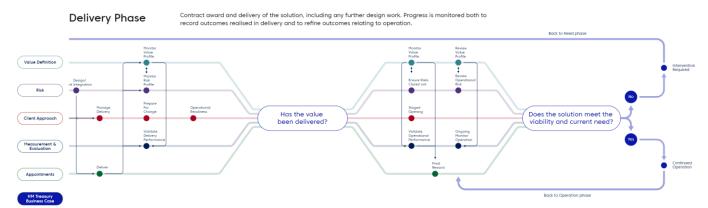




Constructioninnovationhub. org.uk/value-toolkit/

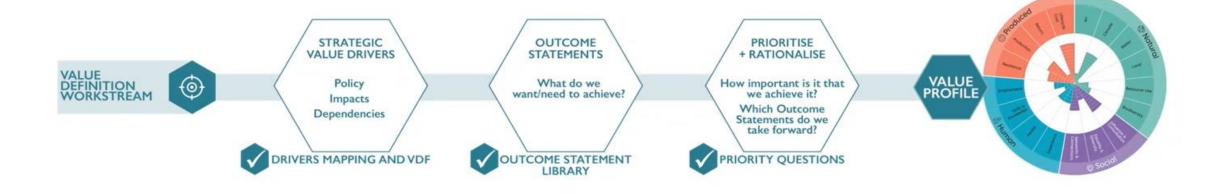
Click and drag the graphic opposite to navigate through each phase. You can also click and drag the full diagram below.

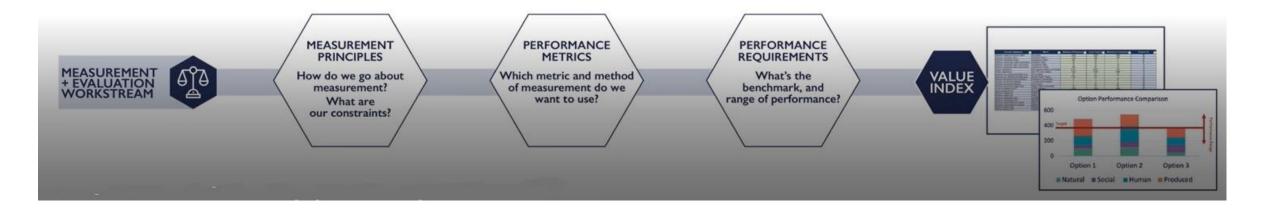




A SIMPLIFIED PROCESS

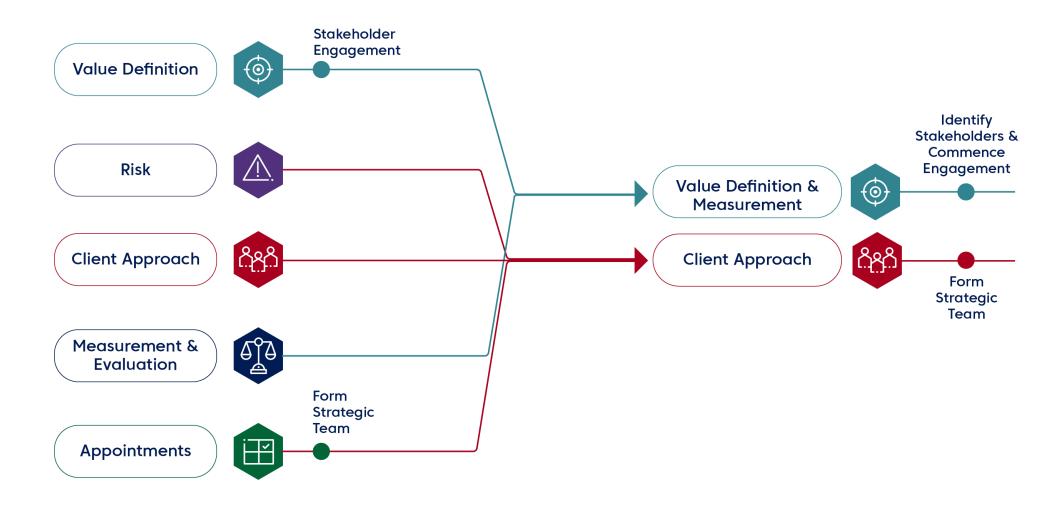




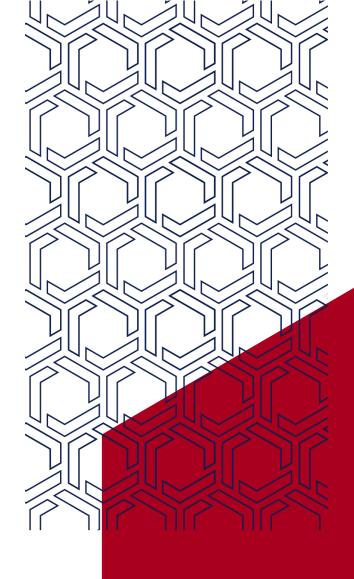


A SIMPLIFIED PROCESS





COLLABORATIVELY LED



THE JOURNEY TO DATE

So in 2019, Construction Innovation Hub set out on a journey to help clients:



Recommendations from the CLC, Procuring for Value Report frame brief for the Value Toolkit

2020

CIOB. RICS. RIBA. Social Value UK and UKGBC join to guide technical development. March 2021

Phase 1 of technical development closes. April - Nov 2021 Pilot of the Value Toolkit

Dec - March 2022 Technical development

based on pilot feedback

Feb 2022 **BSI Flex** standard kick off

April - June Process, guidance & web app updates

July 2022 BSI Flex. updated process and guidance ready

What have ACE Wales done to support this?



2018 Better Value by Design Industry Workshop

2019 Better Value by Design Workstream Reports

2021 Raise profile of Value Toolkit through the

Construction Forum.

Nov 2021 **ACE Annual** Conference Value **Based Delivery**

May 2022 Joint CECA/ACE and CSS Cymru Annual Conference

Future Opportunity Roadmap to adaption



OUR PARTNERS



















































































































PILOT PHASE- APRIL TO NOVEMBER 2022

Pilot phase (April-Nov) of the Value Toolkit working directly with **clients (Early Adopters)** and **practitioners (Early Implementers)**.

- Dublin Metro
- National Highways
- Housing Association
- Local Authority Leisure
- Welsh Housing
- DEO
- SCF Framework

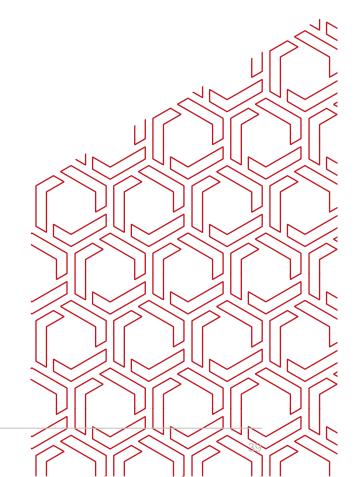
- Home Office
- West of England Combined Authority
- Forestry England
- Sellafield
- The Environment Agency
- University of East Anglia
- Scape Construction Framework

WHY USE VALUE TOOLKIT IN WALES?



- Value is the Golden Thread throughout the life of the project
- Provides a framework to deliver better value
- Slows the process down, to go quicker
- Stimulates the hard questions being asked and answered
- Repeatable process, consistency and auditable
- Ideally suited to accommodates rich Policy Framework in Wales
- Agnostic to Gateway Procedures e.g. RIBA, GRIP, AMP, WG Capital
- Complementary with other measurement tools

Imagine if industry and Clients began to adopt the Value Toolkit process without it being mandated?





Well-being of Future Generations (Wales) Act 2015



THE DUTY	WHAT	HOW	WHO
Public bodies in Wales must carry out sustainable development, which means:	 Future Generations Commissioner Wales, the only role of its kind in the world (Sophie Howe) 	 Public bodies must take account of the 5 ways of working 	 Public Bodies and Public Services Boards Devolution boundaries - only public sector
 the process of improving the economic, social, environmental and cultural well-being of Wales by taking action in 	 Setting the vision of the future Wales – The 7 well-being goals. Public bodies need to take all reasonable steps, set 	Long term Integration Involvement	Public bodies include: Welsh Gov, Local Authorities, Local Health Boards, National Parks Fire and Rescue, National
accordance with the sustainable development principle	and publish objectives that contribute to achieving the goals	Collaboration	(Natural Resources Wales, Arts Council, Sports Council, National library, etc.)
7 Well-being (Goals	Prevention	Currently 44 PBs



Our involvement:

- Participating in the Future Generations Leadership Academy
 - Sam White (MD), Reverse mentoring
 - Manuel Cortes member of the 21/22 cohort



 Continuous and fruitful relationship with the Office of the Future Generations Commissioner



Overarching Aim

To drive better social, environmental, and economic outcomes through value-based decision-making.

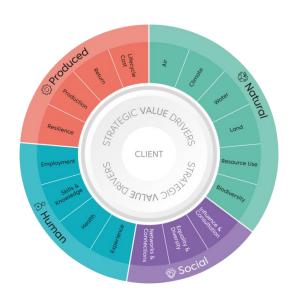






How The Toolkit Works

As a digital resource, the Toolkit enables clients to test different scenarios and decision weightings quickly and in real-time

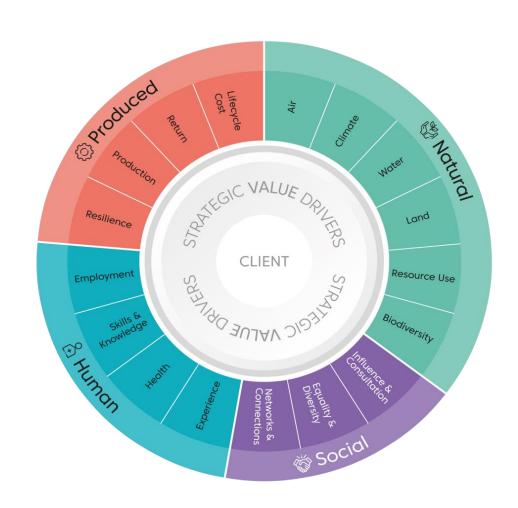


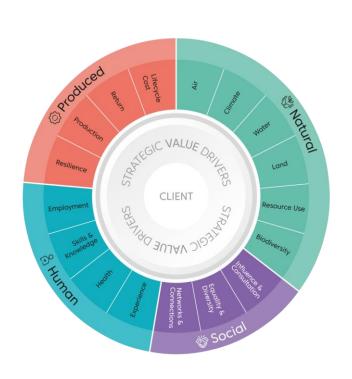






The Toolkit is based upon a framework that evaluates value against a 4 capitals model, in a manner that can be measured and communicated clearly and consistently.







5 Integrated Streams of Activity





The **value** definition stream develops and refines a unique value profile for a project, programme, or portfolio. Enabling clients and their stakeholders to articulate what's important to them – their core values and drivers.



The **Risk** stream helps clients to identify risks and create a *Risk Profile* for the project.



The **Client Approach** stream helps clients to select a Delivery Model and build a Commercial Strategy that best fits the Value Profile of a project. It focuses on how clients work with the market to effectively deliver value and address risks in an effective way.



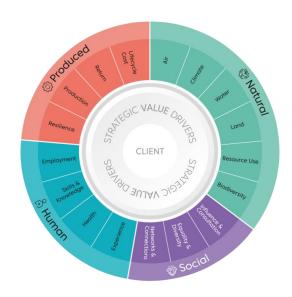
The **Measurement & Evaluation** stream builds on the Value Profile to develop a project- or program-specific *Value Index*



The **Appointments** stream helps the client build a team of highly motivated individuals and organisations that will deliver all phases of a project – from the validation of the business case through to the operation of the asset.



Benefits of the Values Toolkit Workshop





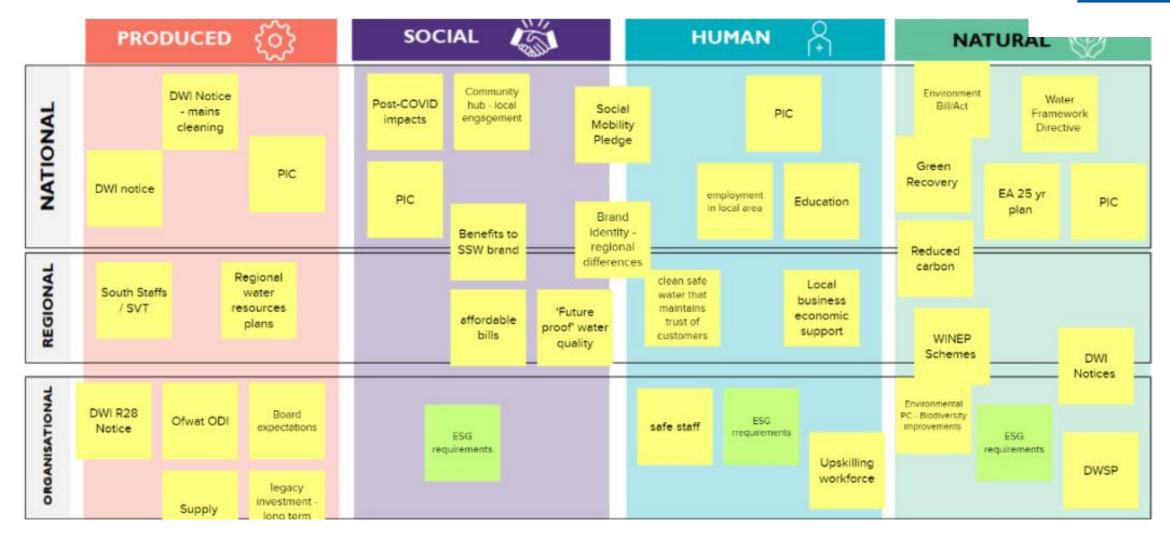














Developing outcome statements

Initial outcomes are identified in each of the 4 capital areas of natural, social, human and produced capital, for both the 'in construction' and 'in operation'





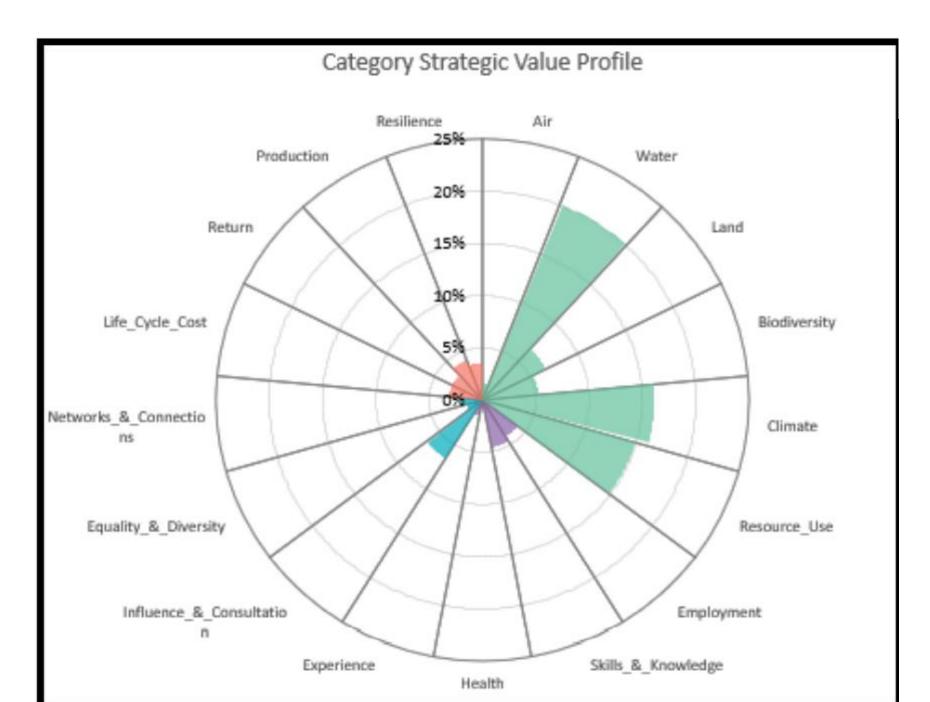




Ref	Capital	Category	Outcome Statement	Strategic Fit	Influence, (1-5)	Risk, (1-5)	Capability / Capacity, (1-5)	Driving Change, (1-5)	Count	Number of Relevant SD References	Weighted Score
OS-1	Natural	Water	Improvement in water quality from existing site conditions (30% in acceptability)	5	5	5	5	5	25	4	5.3%
0S-2	Natural	Air	Low levels of air pollution during the construction phase.	1	3	2	4	2	12	1	1.4%
OS-3									0	0	
OS-4	Natural	Water	Low levels of water consumption in building operation.	5	3	2	5	2	17	4	2.6%
OS-5	Natural	Water	Safeguard water quality during construction	5	5	5	5	5	25	4	5.3%
OS-6	Natural	Water	Work with local land owners to raise awareness of water quality	5	3	3	5	3	19	4	3.3%
OS-7	Natural	Air	Improved atmospheric air quality during the operation of the asset from existing site conditions	1	1	1	1	1	5	1	0.2%
OS-8	Natural	Land	Asset where land value/ amenity are maintained from existing site conditions	1	3	2	4	2	12	1	1.4%
OS-9	Natural	Resource Use	Increased use of electrical equipment over diesel	3	1	1	1	3	9	2	0.5%
OS-10	Natural	Water	Continue to work across our catchment area to treat issues at source	5	4	3	5	3	20	4	3.5%
OS-11	Natural	Biodiversity	Delivery of biodiversity net gain in delivery (green pathways, nature areas)	1	3	1	5	3	13	1	1.5%
OS-12	Natural	Biodiversity	Specific areas of biodiversity improved annually	1	3	2	5	3	14	1	1.9%
OS-13	Natural	Biodiversity	Badger protection	1	2	3	5	2	13	1	1.9%
OS-14									0	0	
OS-15	Natural	Climate	Low upfront carbon emissions during project delivery (module A).	3	2	1	3	2	11	2	0.9%
OS-16	Natural	Climate	Low operational carbon emissions during asset use (module B).	3	4	4	5	4	20	2	3.4%
OS-17	Natural	Climate	Low end of life carbon emissions (module C).	3	2	3	4	3	15	2	2.0%
OS-18	Natural	Climate	Reduced post end of life carbon emissions (module D).	3	2	2	4	2	13	2	1.5%
OS-19	Natural	Climate	Deliver an asset with long life expectancy.	4	3	5	5	4	21	3	4.1%
OS-20	Social	Influence & Consultation	Levels of disruption to local community (incl. managing the negative outcomes such as a pathway blocked)	3	3	2	4	2	14	2	1.7%
OS-21	Social	Influence & Consultation	Quarterly newsletter to reach X residents with Y assessment of usefullness	3	5	2	5	4	19	2	2.7%
OS-22	Social	Influence & Consultation	Engagement with national and local politicians as need dictates	3	3	2	5	3	16	2	2.2%
OS-23	Social	Equality & Diversity	Workforce that reflects the demographics of the local area and/or stakeholder group (e.g. local authority district).	1	2	2	2	1	8	1	0.6%
OS-24	Social	Equality & Diversity	High levels of inclusivity felt by workforce (incl. bullying, respect for identity)	1	2	1	1	1	6	1	0.3%
OS-25	Social	Equality & Diversity	LGBT+ initiatives to raise awareness	1	2	1	1	1	6	1	0.3%
OS-26	Social	Equality & Diversity	Increase in number of woman in the construction team	1	2	1	1	1	6	1	0.3%
OS-27	Social	Networks & Connections	SVT (expand) and sector knowledge share in specific technologies	4	3	2	1	2	12	3	1.0%
OS-28	Social	Networks & Connections	Strength of relationships with local networks and supply chain	4	3	2	2	1	12	3	1.2%
OS-29	Natural	Climate	Significant reduction in operational energy usage	5	4	4	5	4	22	4	4.2%
OS-30	Natural	Land	Ensure in and around the site is maintained to a safe and clean standard	3	5	5	5	5	23	2	4.4%
OS-31	Natural	Land	Contribution to National Trust car parking (measure number of visitors)	3	2	1	1	1	8	2	0.4%
OS-32	Natural	Land	Improved land use for SSW and public	3	2	1	1	1	8	2	0.4%
OS-33	Natural	Resource Use	Low levels of waste produced during construction and operation	4	3	2	5	4	18	3	2.7%
OS-34	Natural	Resource Use	Low use of single use plastic	4	2	3	3	4	16	3	2.1%
OS_35	Matural	Resource Use	Reduced chemical usage as a result of denotimised coagulation	4	5	5	5	5	24	3	4 9%











Methodology for aligning a value-based approach to assets



- Stage 1 Business case and benefit review
- Stage 2 Strategic drivers and outcomes development
- Stage 3 Stakeholder workshop and development of community activity
- Stage 4 Outcomes prioritisation including workshop
- Stage 5 Development of the value index
- Stage 6 Review of commercial strategy for implementation

Questions/Discussion?







Risk – can we manage it better?
Ed Evans







Why are "risk conversations" so difficult?

- Stressful?
- Uncertain?
- Difficult decisions?
- Unwanted answers?
- Complicated?
- Resource intensive?
- "Winners" and "Losers"?

What does the Playbook say about it?

"We need to be confident in our ability to effectively manage risks and solve problems collaboratively throughout the project and programme lifecycle."

"Collaborative and trusted relationships based upon a fair return and sustainable outcomes supports a value-based delivery model. Difficult decisions?"

"Ensuring that risks are owned or jointly owned by the party or parties best able to manage and bear them is key to delivering value for money and successful outcomes with the private sector."

What risks?

- Materials inflation
- Availability of labour
- Pandemics
- Liabilities
- Legislation
- Social value
- Carbon impacts













How can we better manage risk?

Key points from Playbook

- 1. Meaningful market engagement set collaborative tone and provide clear escalation routes for suppliers.
- Allocate risks to those best able to bear and manage them (including client) - allocation should reflect the extent to which parties are responsible for risks and their management.
- 3. Contracts should be designed to be profitable and offer a fair return for the market to be sustainable. Test profitability under different circumstances.
- 4. Payment mechanism and pricing approach (including limits of liability) should reflect the level of risk and uncertainty in the scope of requirement needs greater scrutiny.
- 5. When a contract is publicly designated as onerous, it should prompt a root cause analysis and conversation with the supplier.

Questions/Discussion?







Adding value through digitisation Gwyn Roberts



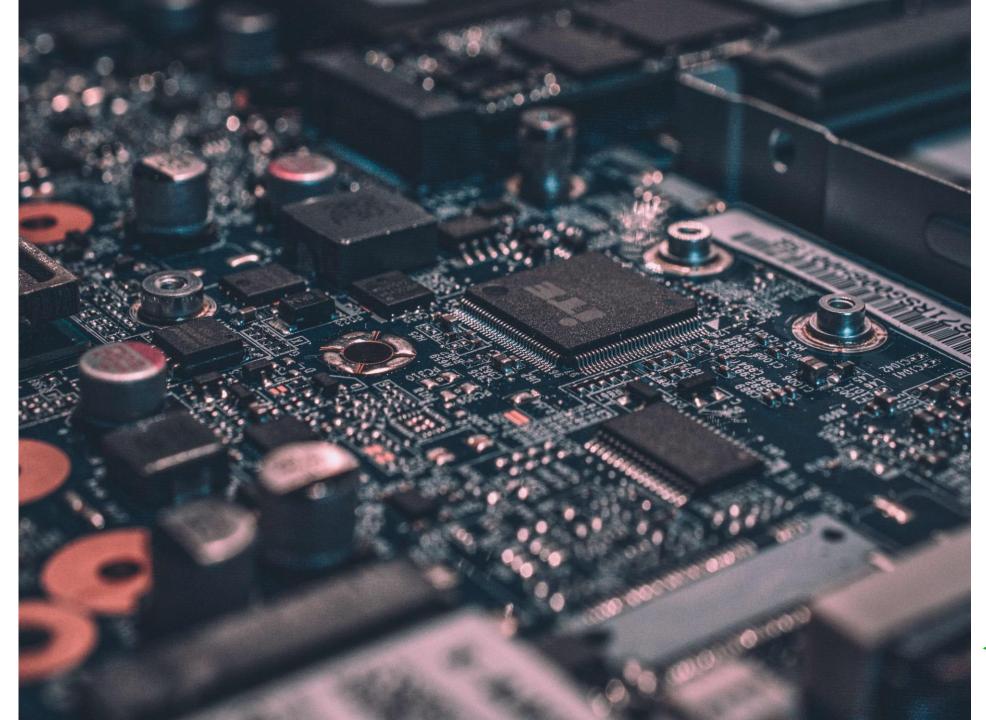








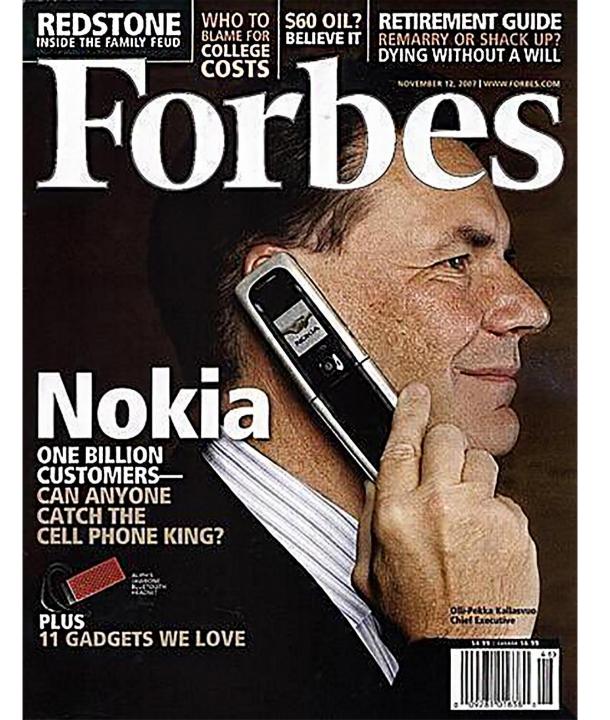




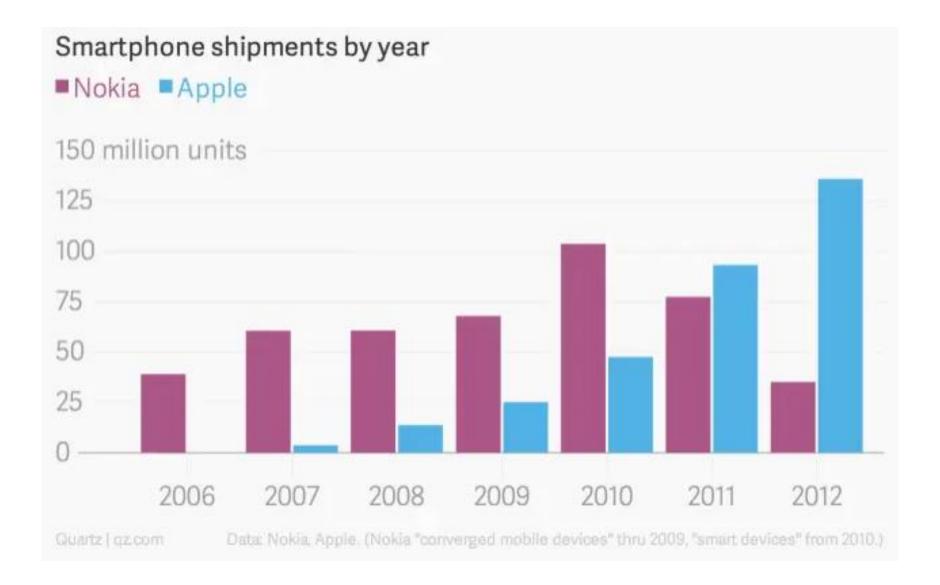






















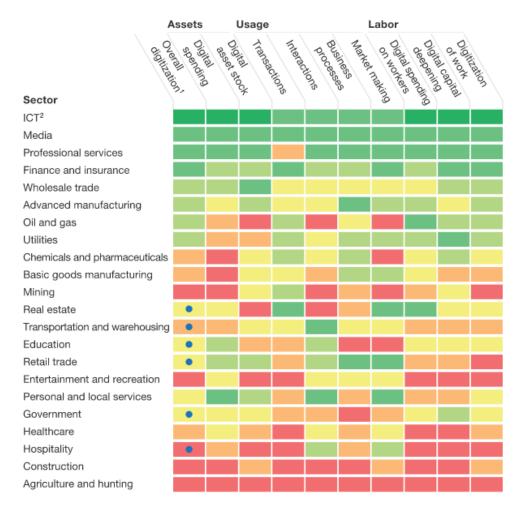


The construction industry is among the least digitized.

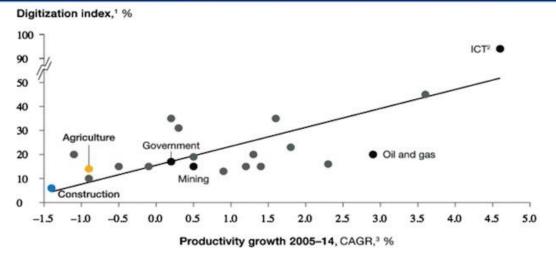
McKinsey Global Institute industry digitization index; 2015 or latest available data



Digital leaders within relatively undigitized sectors





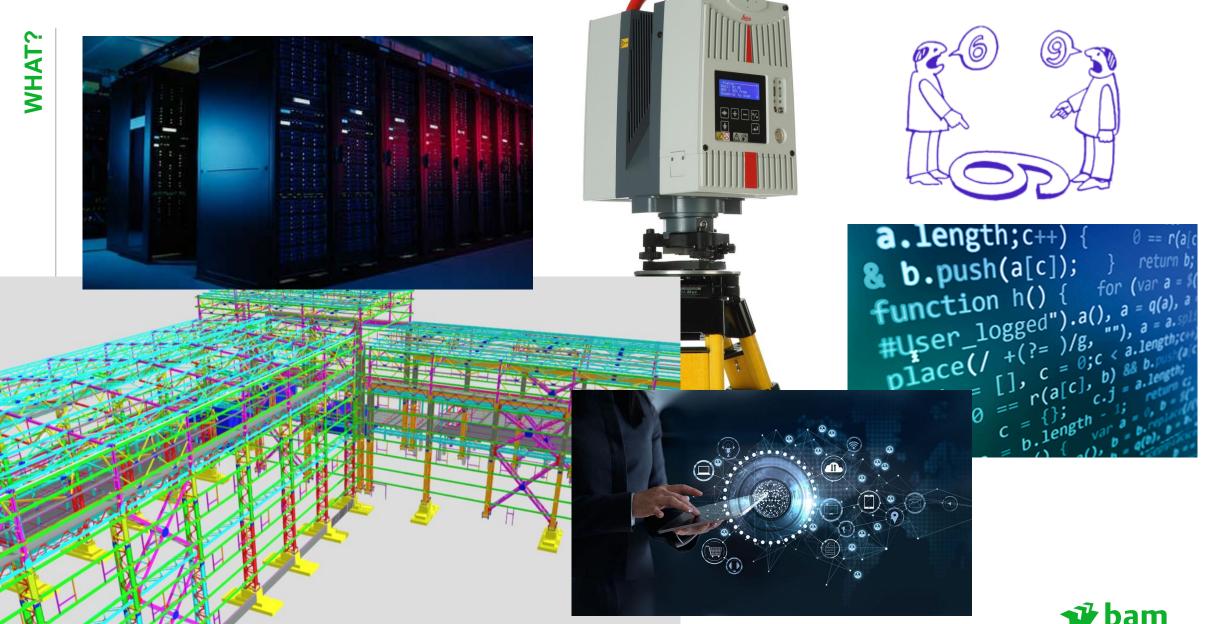


Due to "unique challenges," the ag and construction industries aren't utilzing the advantages offered by digitization technologies to develop innovative products or streamline operations.

¹Based on a set of metrics to assess digitization of assets (8 metrics); usage, or integration of digital tools into business processes (11metrics); and labor (8 metrics); ²Information and communication technology; ³Compound annual growth rate

Source: McKinsey Global Institute analysis







3D Model	Digitalised Engineering Survey	4D Planning	4D Progress / Asbuilt
5D Cost estimating / control	Digital Site Data Capture	CDE & Information Management	Added value



Description	Project Benefit	Labour resources saved	Labour time saved	Labour rate per gang hour	Total labour saving
Improved RFI Process	North bank abutment: optimisation of steel in design led to reduction in materials and labour	1 steel fixing gang	120 gang hours	£1,200	£144,000

Materials quantity saved	Materials cost	Total Materials saving
4 tonnes of steel reinforcing bar	£675 per tonne	£2,700

Total Costs	£40,726
Total Benefits	£452,878
Net Benefits	£412,152



^{*} Dec 2020 prices





Questions/Discussion?







Comfort Break







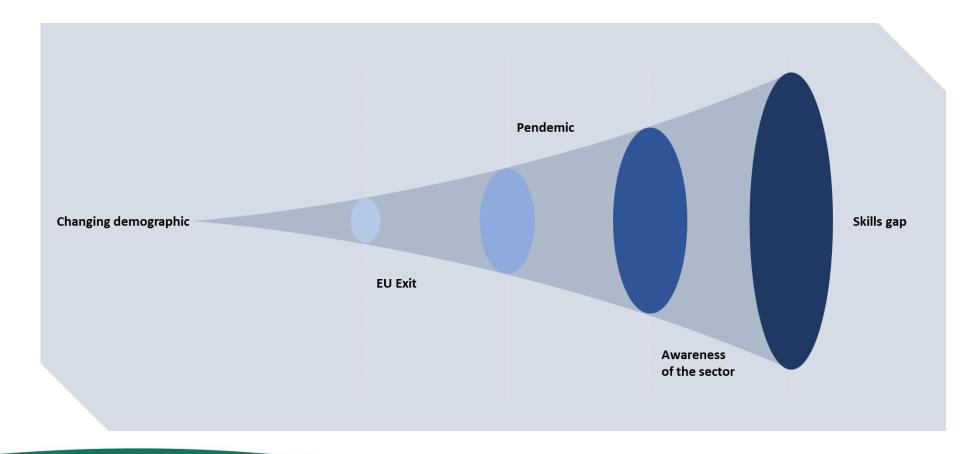
Social Value and the skills crisis — can we do it better?
Stefano
Jefferson







How are we here?





What are the Public Sector doing?

Legislation Policies Planning

Developing a deeper understanding of supply chains



What can we do to unlock further value?

Planning

Leveraging digitisation

Consolidating resource

Culture

Understanding, marketing & communication



Questions/Discussion?







Valuing carbon Alasdair Reisner













Why contractors care about CO₂

- Changing Government policy
 - Net Zero commitments
 - o PPN 6/21, WPN 12/21
- Huge increase in client interest
- Moral responsibility



What are the challenges?

- In 2020 CECA carried out research with SME members in response to 2050 commitment
- Mixed picture of client interest
- Clients struggling with how to assess supplier carbon performance
- ...leads to inconsistency and lack of checking



What are the challenges?

- Difficulty including lower carbon options in bids
- Lack of understanding of carbon reduction by SMEs
- Low incentivization
- Fear of 'buck passing'
- Need for clear advice



Demystifying carbon

- Published Autumn 2021
- Guidance for SMEs on carbon reduction
 - Explains key concepts
 - Carbon management including PAS 2080
 - Estimating, monitoring and reporting
 - Options to reduce carbon





The bigger picture

- We are also interested in the way carbon in highways can be reduced
- Autumn 2021 CECA Net Zero Roads report
- Developed following consultation with members of CECA Roads Forum



Key recommendations

- Standard Net Zero carbon definition
- Earlier supply chain engagement to unlock lower carbon roads
- Monitor supplier carbon performance
- Low carbon construction tax credits
- Focus on carbon as outcome, rather than lowest cost
- Incentives to promote low carbon alternatives to diesel





CO₂nstruct Zero

- Construction Leadership Council has developed CO2nstruct Zero
- Whole of industry campaign to cut carbon
 - a single overarching programme and action plan
 - · measurable targets and performance criteria
 - champion policy change
 - signpost industry and showcased at COP26

Questions/Discussion?







Panel Discussion:

What can the public and private sectors do better, together, to deliver greater value?







Summing Up:

Messages from the three chairs







Close and lunch





