

A Golden Opportunity?

Delivering future-fit
infrastructure for the UK through
enhanced sustainability skills



Introduction



A Sustainable Economy is one that delivers social and economic value in a way that is low carbon and resource efficient, operates within environmental limits, is resilient to changing environmental conditions, and contributes to the UN's Sustainable Development Goals.¹

Infrastructure underpins the fabric of society. It must be fit for the future if the UK is to make the transition to a sustainable economy.

This research builds on the findings of 2014's Perfect Storm², aiming to develop a deeper understanding of the role environment and wider sustainability skills (hereafter simply called 'sustainability skills') are now playing in delivering world-class infrastructure and major projects. This is particularly timely as the UK enters what is being hailed as a new 'Golden Age' of investment. With the publication of the National Infrastructure and Construction pipeline 2016 which contains 720 projects with a value of over £500bn, major projects are expected to drive economic growth, boost productivity and improve quality of life. Getting these investments right will be critical to whether the UK locks itself into a high or low-carbon growth trajectory.

The relative certainty of this pipeline looks more precarious against a backdrop of domestic political uncertainty, Brexit and an ongoing labour crunch which present undeniable challenges for the sector. Nevertheless, IEMA's research shows there is a golden opportunity to use this period of surging development to transition to a sustainable economy, optimise the existing sustainability skills base and fill the gaps with targeted capacity building and training. This report draws on views from members and industry commentators to:

- Consider whether the UK's infrastructure workforce has the skills to make this vision a reality
- Identify which roles and knowledge areas are particularly important
- Highlight examples of good practice, and recommend what can be done to maximise the opportunity

This report is for all those interested in building foundations for a sustainable economy in the UK. It is also for those who wish to ensure the infrastructure workforce has the right skills to deliver this long-term vision. It is for infrastructure clients, owners, operators and maintainers, HR professionals and trainers, professional bodies - organisations with a stake in ensuring the infrastructure we plan, design and upgrade now facilitates sustainable living and inclusive growth.



Despite the turmoil, and perhaps even because of it, we have a once in a generation opportunity to transform the infrastructure backbone of our country in ways not seen since Victoria was on the throne... this really can be a golden age of infrastructure.

Carolyn Fairbairn
CBI Director-General³

1. Adapted from IEMA Position Statement: Skills for a Sustainable Economy (IEMA, 2014)
2. Preparing for the Perfect Storm: Skills for a Sustainable Economy (IEMA, 2014)

3. <https://goo.gl/ahgD61>

Infrastructure: Shaping Our Common Future

Simplified version of Kate Raworth's original diagram (Oxfam International, 2012)

The UK's infrastructure ambitions are supported by the National Infrastructure Commission, which assesses long-term needs, and the Infrastructure and Projects Authority, which oversees successful project delivery across the lifecycle from policy to execution and assurance. The National Infrastructure Delivery Plan (NIDP) provides a timetable for delivery and improves visibility for the supply chain and investors.

UK Trends: Devolution of cities and regions, smart grids, an aging population and the need to adapt to a changing climate...these are just some of the trends preoccupying business as it scans the horizon.⁴ In particular, advances in technology, computing power and the sheer volume of data available look set to transform how infrastructure is operated and what it can do for its users.

Global Goals: The post-2015 development agenda includes 17 Sustainable Development Goals (SDGs), each with targets and indicators, and a plan for implementation. Infrastructure features both as an explicit goal (SDG 9, targeting resilient infrastructure and inclusive and sustainable industrialisation) and as a means to achieve other SDGs. Innovative approaches to infrastructure finance and sustainable public procurement will be critical to their success.



What if we reimagine the prevailing approach and build agile infrastructure? Infrastructure that is not just designed to accommodate change but infrastructure that is responsive and can flex to the changing needs of the user.

ICE Infrastructure Transformation Project⁵

The Repeal Bill white paper states that



Government is committed to ensuring that we become the first generation to leave the environment in a better state than we found it.



It is essential for the implementation of the SDGs that infrastructure projects are assessed based on value-for-money across the asset lifecycle. Indeed, only then will projects be assessed not only on their initial capital investment but also on the operational cost, maintenance, and disposal of the asset. This will make the business case for much more sustainable infrastructure projects that are likely to have a higher initial capital cost, but perform much better across the lifecycle.

IISD⁶

21st Century Economics: Economist Kate Raworth's model 'doughnut of planetary and social boundaries', helps to frame the sustainability challenge. The ceiling consists of nine planetary boundaries beyond which lie unacceptable environmental degradation or tipping points. The social foundation consists of 11 priorities, identified by world governments, below which lies unacceptable deprivation, such as hunger, ill-health and income poverty. Infrastructure projects should seek to deliver value within the doughnut, enabling inclusive and sustainable development.



The Clean Growth Plan sets out how the UK will achieve economic and environmental progress in the future. The UK's fifth carbon budget requires emissions to fall 57% below 1990 levels by 2032. The UK is on course to meet its first three carbon budgets and the Clean Growth Plan sets out the government's approach to closing the gap between projected emissions and the fourth and fifth carbon budgets.

The Government's green paper on a new Industrial Strategy for the UK was published in 2017. Built around 10 pillars, it highlights upgrading infrastructure and developing skills as part of plans to modernise and rebalance the economy.

The 10 Pillars of the UK Industrial Strategy

- Developing Skills**
Build a proper system of technical education, and boost key skill in science, technology, engineering, maths and digital proficiency, to ensure people have the skills employers need now and in the future
- Upgrading Infrastructure**
Upgrade our digital, energy, transport, water and flood defence infrastructure, and join up centre government investment and local growth prioritises more effectively.
- Investing in science, research & innovation**
- Supporting businesses to start & grow**
- Improving procurement**
- Encouraging trade & inward investment**
- Delivering affordable energy & clean growth**
- Cultivating world-leading sectors**
- Driving growth across the whole country**
- Creating the right local institutions**



4. A megatrends toolkit to aid strategic planning is available at <https://goo.gl/kKXmEG>
5. <https://goo.gl/CZCv3U>
6. <https://goo.gl/HPxYcf>

7. K Raworth (2017) Doughnut Economics: Seven Ways to Think Like a 21st Century Economist, Penguin Random House

The Stakes

Infrastructure underpins our daily lives. The decisions we make today will impact society, the environment and the economy for generations to come.

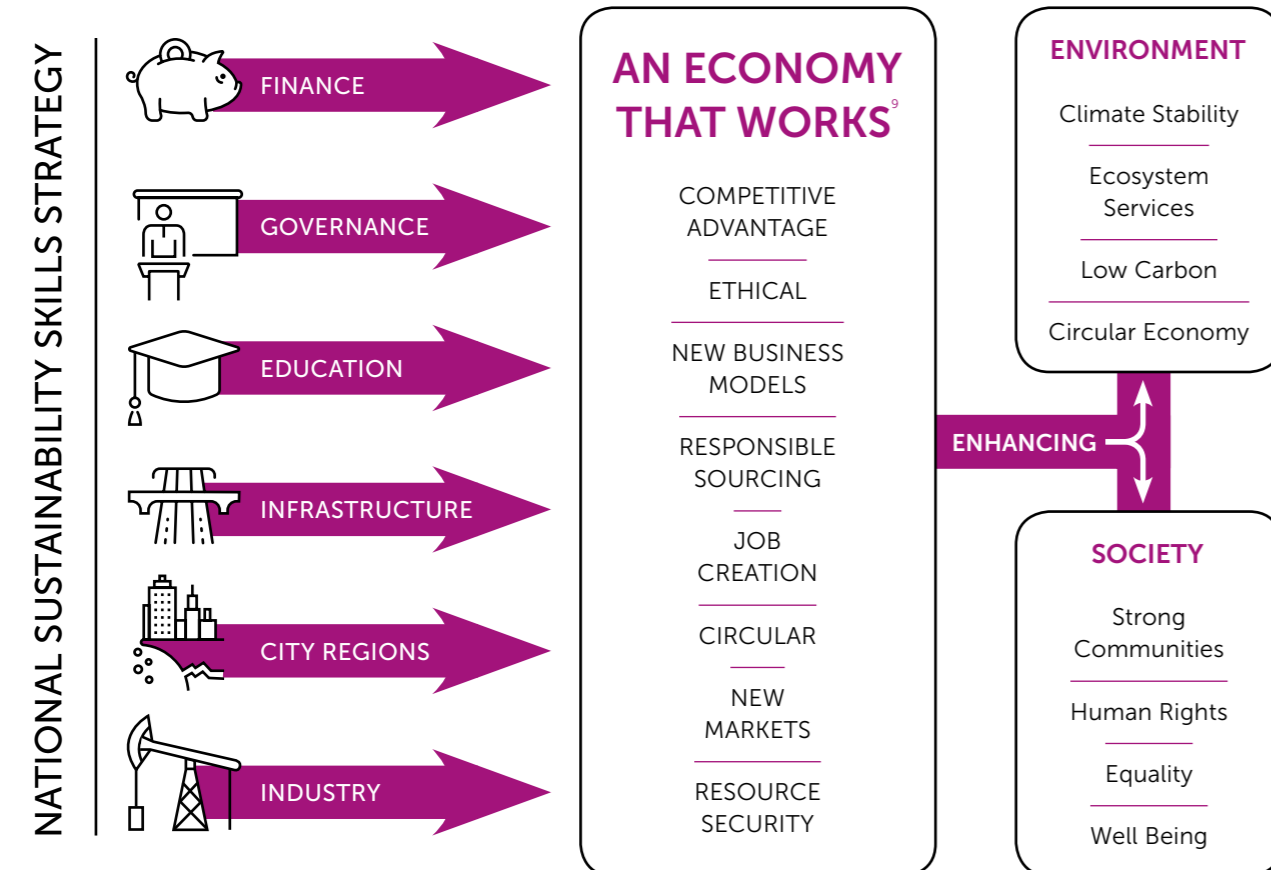
The next two to three years will be critical if we are to change course. A shrinking carbon budget challenges design teams to create ever more efficient and regenerative designs, and capital and technology, once committed, are locked-in. We have a real opportunity to deliver inclusive economic growth, reduce the risk of climate change and re-skill for a sustainable economy.

Low interest rates, more accessible pools of capital and ongoing technological change are all in our favour.



We have a unique opportunity to transform the way infrastructure is planned. No one has done this before, been quite so ambitious"

Philip Graham, Chief Executive, National Infrastructure Commission (NIC)⁸



IEMA (2014) Position Statement: Skills for a Sustainable Economy

Challenge and Opportunity

To fulfil the promise of the new 'Golden Age', infrastructure developers and their contractors face multiple challenges:

- **Access to skilled workers:** There is an infrastructure skills shortage. In some areas, there is intense competition for skilled workers and it is estimated that British construction must hire 400,000 people every year between now and 2021 - one every 77 seconds - if it is to meet demand.¹⁰
- **Forward planning of constraints:** The sheer scale of projects underway places added pressure on the need to obtain the right materials at the right time- HS2 calculated that there were not enough saplings in the UK to meet demand for the planned 7 million native saplings along the route, prompting a special partnership with a Lincolnshire grower.¹¹
- **Complexity of Projects:** Schemes must grapple with complex issues of consent and budgets to deliver - and the larger the project, the higher the accompanying reputational risk.
- **Collaborative Delivery:** New ways of working in alliances have emerged, placing new demands on contractors and requiring new skill sets.
- **Political climate:** By its nature, long-term infrastructure decisions are vulnerable to short-term politics - something the NIC is intended to mitigate.

Balanced against these substantial challenges, there is great potential to deliver future-fit infrastructure supported by enhanced sustainability skills. We have a golden opportunity to:

- **Pave the way for transition to a Sustainable Economy:** The surge in investment should allow us to meet societal needs - from transport to energy - in far more effective ways, embedding circular economy principles and slashing carbon emissions.
- **Leave a legacy of skills and improved practice:** The recruitment and skills-drive required to fulfil the UK's infrastructure ambitions opens the door to a new set of competencies for sustainability which can spread to other sectors. Initiatives have sprung up to support this change such as the Supply Chain Sustainability School¹³.
- **Positively transform communities and regions:** Well designed, planned and managed infrastructure can bring a swathe of benefits to local communities and places - and leave a net positive impact beyond this.
- **Build a truly 'agile' infrastructure:** We can rethink how we design infrastructure to be responsive and flexible according to future social, economic and environmental change.



Failure to secure the skilled workforce required to deliver...infrastructure projects could lead to higher project costs, delays, reduced quality, reliance on overseas skills, loss of intellectual property, stifled innovation and damage to the UK economy and its global competitiveness.

Energy & Utilities Skills Partnership¹²



Should we reframe questions of skills shortages? Do we instead need to talk about future needs?

ICE Infrastructure Transformation Programme¹⁴

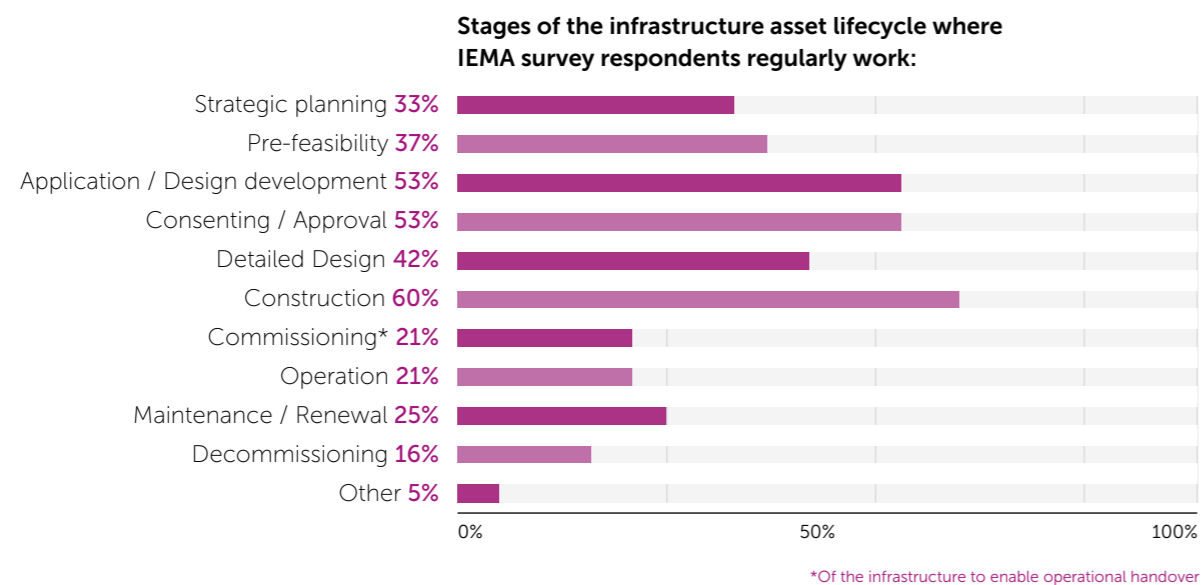
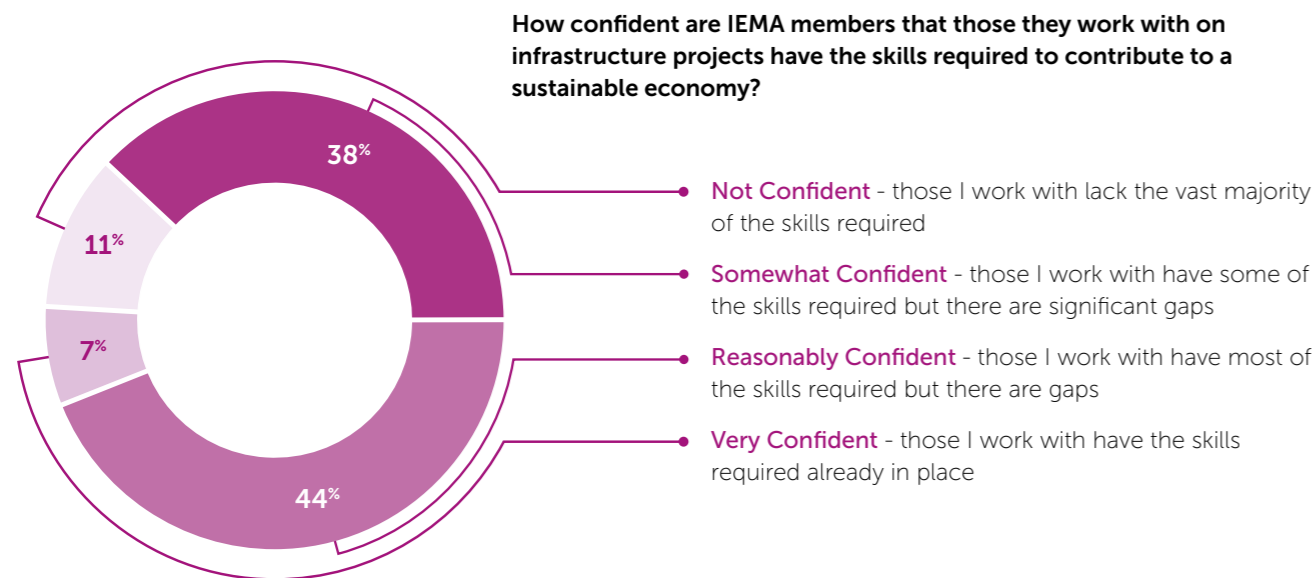
8. National Infrastructure Forum June 2017, ExCel London
9. An Economy that Works (Aldersgate Group, 2014) www.aneconomythatworks.org

10. <https://goo.gl/r7xE6>
11. <https://goo.gl/grrMoq>
12. <https://goo.gl/L7WrHr>

13. The school is a collaboration between clients, contractors and 1st tier suppliers who have a mutual interest in building the skills of their supply chain: <https://goo.gl/cH8oKn>
14. <https://goo.gl/wKztk2>

Sustainability Skills Across UK Infrastructure: A Snapshot¹⁵

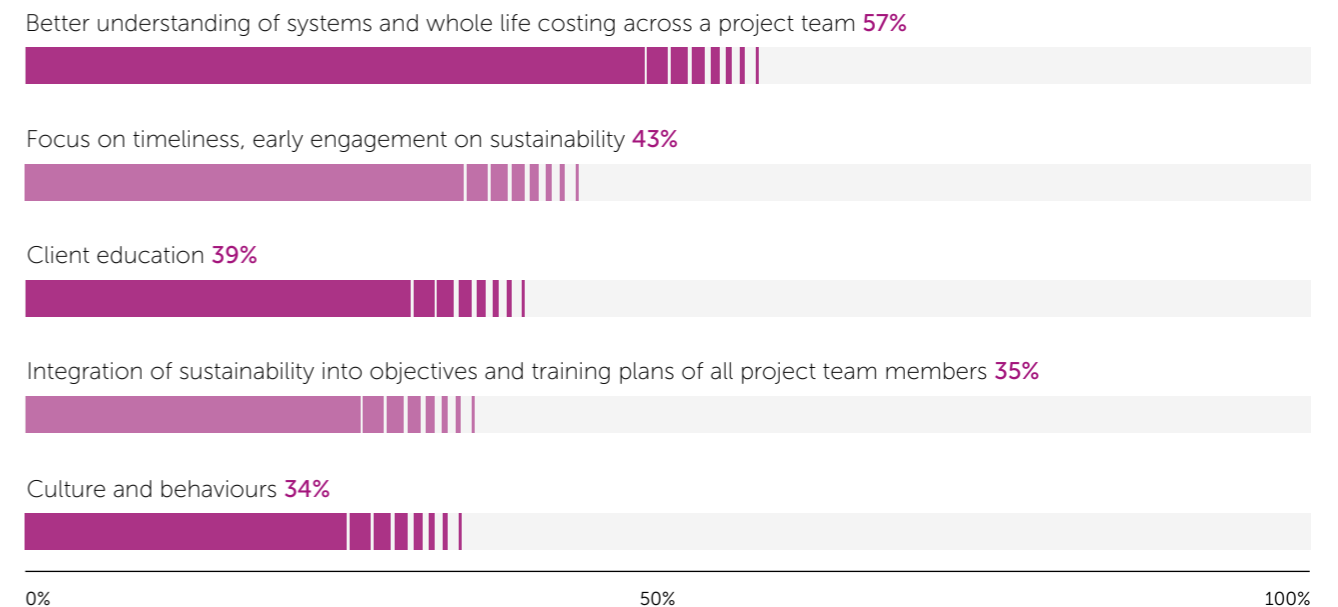
IEMA's research shows that sustainability professionals working in infrastructure¹⁶ feel energised by the opportunities presented by the UK pipeline, despite the deep policy uncertainty surrounding Brexit and future legislation. **A picture emerges of a workforce with gaps, but many of the right skills to facilitate the transition to a sustainable economy.**



75% Believe that a broad based sustainability skills gap exists

94% Believe 'soft skills' (e.g. communication, persuasion and collaboration) must play an important role alongside STEM in enabling improved sustainability performance of future infrastructure / major projects. These skills, which are all valued business competencies, should not be ignored when addressing training needs.

Greatest deficiencies reported in moving sustainability performance forward within major infrastructure projects:



15. All data derived from IEMA Sustainability Skills & Infrastructure research 2017

16. IEMA's research involved a survey of 220 members working extensively in infrastructure, workshops in London, Birmingham and Edinburgh, and a series of interviews from across the infrastructure community (see acknowledgements p.18)

Optimising Solid Sustainability Skills

More than half of members surveyed were confident, or very confident that those they work alongside possess effective sustainability skills. This is a good base, though there are deficiencies to be addressed. Attention must be focussed on optimisation, enabling professionals to employ their existing skills to best effect, as well as filling in training gaps and cultivating new recruits – something IEMA’s research strongly suggests should start at school with full integration with STEM curricular courses.

Sustainability, say IEMA members, is still seen as a ‘bolt on’ for the majority of organisations and this lack of integration hampers effective utilisation of existing sustainability skills across the board.

72% of members believe sustainability issues should be fully integrated within STEM/curricular courses taught in full-time education

Targeted upskilling

Bexhill to Hastings Link Road (B2HLR) Taylor Woodrow¹⁷

Taylor Woodrow’s monthly Environmental Leadership Score (ELS) was introduced to allow B2HLR to internally track environmental management performance on a monthly basis. The ELS significantly helped to improve environmental performance by identifying specific knowledge gaps for the environment team to focus on, enabling Toolbox Talks to be updated accordingly, with additional topics and copies distributed to the relevant managers and section Environmental Champions.

There is some evidence, particularly among larger projects that it is increasingly hard to recruit suitably commercially skilled Sustainability Managers - resulting in large firms competing over a few well qualified candidates. More positively, EDF Energy reports a surge in the number of young joiners attracted by a sense of purpose in their job. 13.6% of employees aged 18-24 said they’d taken part in at least one of EDF Energy’s sustainability programmes/activities while in education; 75% of these said it played a role in their decision to join EDF Energy.

EDF Energy Environmental Education and Skills

Strategy: EDF Energy has been leading on the development of an environmental education and skills strategy; tackling a growing shortage of young people studying the skills needed to run and develop the company’s new low carbon energy assets and inspiring the next generation of energy consumers to reduce energy consumption. In 2016, EDF Energy published its Education and Skills Strategy focusing on company-wide investment in education activities. Read more at: <https://goo.gl/zyqpyc>

East West Rail Alliance is a collaborative partnership consisting of Atkins, Laing O’Rourke, Network Rail and VolkerRail. Its mission is to connect the economic centres of Oxford, Milton Keynes, Aylesbury and Bedford by designing and building a quality railway and integrated transport system that improves regional and national connectivity and increases network capacity. The Alliance has made training its staff in collaborative working a priority, and is developing and implementing a fully integrated management system which meets the requirements of ISO 44001, the new collaborative business relationships standard.

Addressing the Whole-Life Competency Gap

Whole-life asset understanding is consistently cited as a priority for improvement. When looking purely at capital costs, sustainability initiatives are intensely vulnerable to value engineering and can be overlooked when the team is under pressure. Operational, maintenance and HR teams rarely have sufficient influence to advocate for tangible changes impacting the whole lifecycle of an asset, be it operational cost and carbon savings or benefits to the health, wellbeing and productivity of users.



For infrastructure, sustainability needs to be tied into whole-life asset management. There needs to be better understanding of the value sustainability can bring to a project (not just financial) and how this thinking needs to be embedded from the earliest of stages of a project to enable informed decisions to be made from the start.

IEMA member

It is also clear that whole-life asset education must include clients:



Client education is important since often low capital cost solutions prevail with little consideration of lifecycle costing.

IEMA member

IEMA’s research uncovered a clear need for more support for sustainability professionals in using whole-life tools to effectively sell messages internally.

Budget phasing trumps lifecycle approaches: Reflections from the Railways¹⁸

“Budget phasing often leads to constraints in the planning process. You have government level planning, project or initiative level planning (eg HS2, Crossrail etc) as well as the Train Operating Company (TOC) and Network Rail too. Each of those organisations, bound by financial and policy constraints must make the best of their budget, which means it’s unsurprising that value engineering when viewed at the level of just one of those phases becomes cost cutting because the true value of the project is difficult to incorporate into the planning. It is virtually impossible in this structure to give true lifecycle thinking full justice.”

Sandra Norval, Catalicity

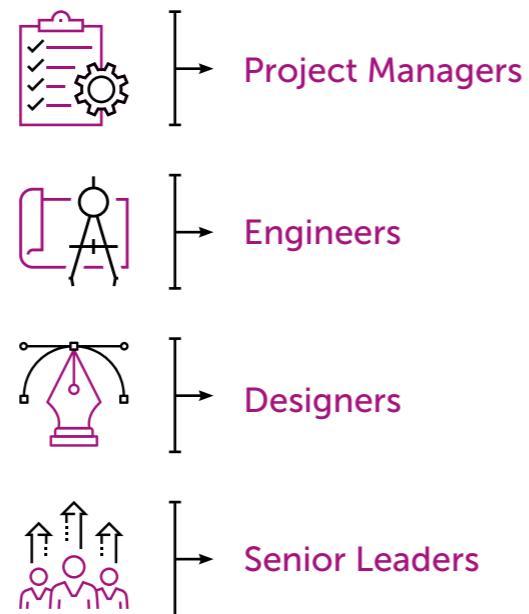


Professionals Pushing Performance

The research highlighted the contribution of other infrastructure related professions in helping to deliver sustainable outcomes. Many are making a significant impact - but it is not consistent.

It was universally agreed that every role should play a part according to their specific responsibilities, but Project Managers, Engineers, Designers and Senior Leaders were identified as being particularly effective enablers.

Members were conscious of their own role as catalysts, but recognised that champions across the lifecycle are vital. Sustainability Professionals, quite simply, cannot do the job alone, and they do not aspire to.



Sharing Objectives, Spreading Skills: East West Rail 2

East West Rail Alliance routinely distributes ownership of its corporate sustainability objectives outside the sustainability team. This has proven successful in creating new, influential advocates throughout the business supported by sustainability professionals within the core team. This is an effective, targeted method of upskilling professionals in the wider business while achieving operational goals.



Tier 3 contractors and specialists are often great at sustainable innovation, but don't get a chance to get a foot in the door. Anglian Water try and address this using alliances - the contractors, designers and asset manager all sit round the same table which can help unlock innovative solutions.

Peter Crosland, National Civil Engineering Director, Civil Engineering Contractors Association

Sustainability Professionals as Facilitators

The research suggests that Sustainability Professionals can be most effective in major infrastructure projects when acting as commercially astute catalysts, facilitators and advisors, supporting other well-informed advocates in the business to deliver sustainable outcomes.

While skills development is considered to be moving in a positive direction, the concept of sustainability across major projects ranges from the longer term/ holistic view of the environmentalist, to the performance focus of engineers and the materials approach of the procurement specialist. The influence of the two latter groups, closely aligned with cost and finance decisions can force the sustainability specialist into an advocacy role to bring forward options or concepts which may otherwise fail to be considered.

Sustainability Professionals are often stretched, meaning that crucial opportunities to support and advise at the right time can be missed. There is a very strong case to build sustainability competency across the project team to allow Sustainability Professionals more leeway to support their colleagues while identifying improvement opportunities.



Sustainability Professionals should be facilitators for major infrastructure projects. Too often they are trying to gather data and then influence teams.

IEMA member

There is evidence that Sustainability Professionals would benefit from further training to develop commercial awareness and their ability to 'speak the language' of the rest of the business. IEMA's research indicates that many graduates enter business sustainability roles with excellent social and environmental knowledge and clear values, but with insufficient commercial understanding, which hampers their effectiveness in delivering sustainable outcomes. Even Sustainability Professionals many years into their career may benefit from honing their business skills to more effectively take-up a facilitation role.

Future needs

The Thames Tideway Tunnel is a major new sewer, urgently needed to protect the tidal River Thames from the pollution of tonnes of sewage spilling into the river every year.

As the largest privately financed utility infrastructure programme in Europe, the scheme will require a workforce of 4,000 at the height of construction in 2019. Tideway is working with a range of organisations to fill identified skills gaps ranging from engineers, sustainability managers to skilled mariners through apprenticeships, recruitment of local labour and those from under-represented groups, to reinvigorate the river economy for decades to come.

The primary purpose of the Thames Tideway Tunnel project is to deliver the core benefit of a cleaner River Thames. Sustainability skills are therefore considered highly important and the whole project team is responsible for delivering environmental objectives with facilitation and support from 40 full-time specialists.

Head of Environmental Sustainability Darren White feels his role has evolved, with technical tasks moving outside his remit to be delivered by the wider team as opportunities such as green finance options and dealing with the project's investors takes up more of his time.



Leadership for Transformative Impact

The following roles were identified as most in need of upskilling in relation to incorporating sustainability into project performance (Top 5 responses):

1 Leadership/
Governance

2 Project Managers

3 Contractors

4 Engineers

5 Procurement

“The most significant changes are made when the top leadership make it part of the core business strategy - skills and knowledge at that level is the most influential for change.”

IEMA member

“Senior management and directors with vision and a can do attitude. Crossrail have achieved what seemed impossible through a governance structure that insisted on sustainability.”

IEMA member

The need for a senior leader to champion the cause emerged as crucial. This is important not only in setting organisational strategy, but also in creating a culture conducive to sustainable innovation and a commitment to doing things differently. This means leadership from the bottom up too- a culture where project managers, engineers and designers are empowered to take action and fully exploit the potential of emerging technologies. The Sustainability Professional must be fluent in the language of their colleagues in order to best support this change.

“Achieving the targets set out in the [UK Construction Strategy] 2025 will require... business leaders to think strategically about the implications of offsite construction to their business. This change will also require strong leadership and management for the benefits of these changes to be realised in the future.”

Supply Chain Sustainability School¹⁹

The Crossrail Learning Legacy is the collation and dissemination of good practice, innovation and lessons learned from the Crossrail construction programme aimed at raising the bar in industry and showcasing UK PLC. The Crossrail learning legacy builds on the work previously undertaken on the London 2012 Learning Legacy and contributes to an overall body of knowledge on major construction projects. It aims to share knowledge and insight gained during the lifetime of the Programme that may be of benefit to future projects and programmes as well as documents and templates that have been used successfully on the Programme that can be ‘pinched with pride’ by other projects.²⁰

Laying Firm Foundations

You can employ the most skilled professionals in the sector, yet those individuals will struggle to make a difference if the project process does not support sustainability, a lifecycle approach is not mandated or seen as important by those procuring. As one member states:



There needs to be a client imperative; without one, there is no perceived need in much of the supply chain.

East West Rail Alliance has secured delivery of sustainability objectives as one of the client's KPIs. Successful delivery, or not, is therefore linked to the pain/gain maturity payment model. This provides a financial incentive to deliver against objectives.

Timeliness of sustainability interventions is consistently raised as an issue. If sustainability is not fully integrated at planning stage, many chances will be missed. IEMA's research highlighted multiple examples of schemes that have successfully built a culture of sustainability from the outset, led from the top (e.g. London 2012 and Crossrail). Crucially, this can lead to champions taking learning with them to their next project:

It is clear that the owner of the asset has a big impact on skills investment. The scale of the project and the resultant reputational risk is directly proportional to efforts invested in sustainability and related capacity building. This means that smaller projects rarely receive the same support, rendering learning legacy projects such as Crossrail's initiative on page 14 all the more important.



London 2012 remains the benchmark for embedding a sustainability ethos and culture from project inception through construction and delivery to legacy. I have carried my learning from the Olympic Delivery Authority into Crossrail 2 to embed sustainability from the project outset.

IEMA Member

The role of Insurers Promising sustainability innovations can be obstructed if the insurance industry does not keep pace with technological change. A new efficient system of water treatment already in use in Holland proved challenging in the UK after the water company seeking to adopt it failed to find an insurer capable of providing cover. In this case, the water company's skillsets were not the barrier. Conversely, Aviva's proactive efforts to develop insurance for driverless cars has helped to grease the wheels of the market.

There is a case for government procurement policy to integrate sustainability more prominently:



Lack of political...focus over last five years has created a "what will happen if we don't do this - nothing, no one cares anymore, so go with the cheapest option" mentality. However, some projects still buck the trend.

IEMA Member

The right strategy must be in place to support innovation for sustainability:



The primary purpose of infrastructure is to provide a service for society. In that context, it is no surprise that the infrastructure industry is traditionally highly risk-averse... However, if everyone is waiting for 'proven innovation' before doing something new, how will anything ever change? Collaboration across industry sectors can help address this.²¹

IEMA Member

The UK Green Building Council suggests that sustainable innovation is best supported using a cross-sector approach:



A Golden Age of Infrastructure and Sustainability Skills

IFEMA's research makes a clear case to strengthen the existing skills base within infrastructure to ensure sustainable outcomes across all roles and at all stages of the project lifecycle. Though this may seem a daunting task, many of the building blocks are already in place.

Infrastructure developers are already facing recruitment challenges exacerbated by the uncertainties of Brexit. 47% of skilled EU workers are considering leaving the UK in the next five years, and across the UK skills shortages in Britain are costing businesses more than £2bn a year in higher salaries, recruitment costs and temporary staffing bills.²² It is vital, therefore, that sustainability skills are built into planning, recruitment and training for the wider workforce rather than treated as a separate issue.

They are part of the same challenge.

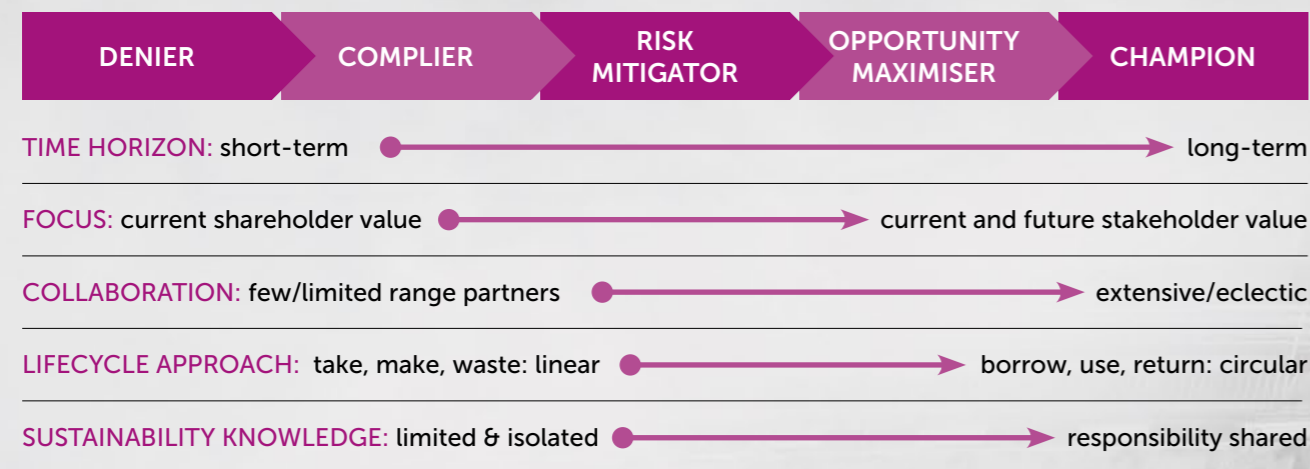
Common challenges call for common solutions, and there is a strong case for collaboration across sectors and a commitment to developing sustainability skills in partnership. There is an appetite to develop recognition of sustainability skills across projects and roles that

enables transferability between schemes and a trickle down of knowledge into associated sectors; consultancy, contractors, construction and operation.

While specific skills gaps exist and must be addressed, notably in asset lifecycle understanding, it is clear that we will not ready our workforce to deliver future-fit infrastructure simply by increasing training budgets. Professionals must be given the opportunity to use their skills effectively in a supportive culture, endorsed by senior leaders. Ultimately, this will be driven by asset owners and those procuring schemes. Further, we must look to assess the skills we are likely to need in five, ten years' time and start planning for those now.

If we can address these points, capitalising on the surge of investment the 'Golden Age' represents, the result will be assets that perform better across their operational lives and adapt readily to changing needs. The legacy will be a workforce armed with enhanced sustainability skills to accelerate the UK's transition to a sustainable economy.

Sustainability skills must permeate across the project process to champion a new culture of sustainable infrastructure:



IFEMA (2014) Position Statement: Skills for a Sustainable Economy



Collaborative Sustainability Skills Charter

If society requires sustainable, agile infrastructure fit for the long-term, logic dictates we need a sustainable workforce with the skills to deliver. This must be embedded in the education system through STEM teaching that incorporates sustainability principles and systems thinking, through apprenticeships and graduate courses, workforce induction, training and retraining. IEMA's research identifies the following actions to stimulate sustainability skills and performance across the board:



Next Steps

Collaborative Sustainability Skills Charter

IEMA will work in partnership with infrastructure organisations and other bodies (e.g. ICE, RICs, etc) to create an Infrastructure Sustainability Skills Charter for launch at IEMA's 2018 summit. This will identify areas where cross-industry partnership working can strengthen the UK sustainability skills base, building on the four priority areas identified in IEMA's Perfect Storm position statement:

SUSTAINABILITY AT THE HEART OF DECISION-MAKING

The active pursuit of sustainable decision-making by enabling economies, organisations and individuals to deliver on opportunities to drive change through skills, knowledge and innovation.

COLLABORATIVE SYSTEMIC CHANGE

An acceleration of joint initiatives that drive systemic changes to deliver a sustainable economy through enhanced investment in collaborative skills.

RECOGNISED SUSTAINABILITY SKILLS

Action to strengthen organisational, regulatory and investor confidence in those delivering sustainability initiatives through greater recognition of the skills and knowledge needed to drive success over the long-term.

EMBEDDING SUSTAINABILITY

Government, businesses and professions to make sustainability a core component of their strategy and commit to mainstream the skills and knowledge needed to deliver a sustainable economy.

Focus training efforts on improving asset lifecycle understanding

IEMA urges managers and HR teams to address asset lifecycle understanding through personal development plans. Employers and training providers should use this understanding as the backbone for all sustainability training within infrastructure. More should be done to embed asset lifecycle thinking across all professions, enabling sustainability practitioners, leaders, project managers and clients to make optimum decisions for the long-term.

Explore collaboratively developing a Sustainability Skills Passport type scheme

IEMA will continue exploring the development of a Passport type scheme with major firms in the sector to ensure transferability and consistency of skills projects and avoid unnecessary duplication of training as contractors move between clients.

Scale up sustainability mentoring

Some of the best examples of sustainability upskilling come where professionals have supported peers to work on skills gaps, or champions from one successful project have shared knowledge. IEMA will work with other bodies to champion mentoring for improved sustainability performance, and commits to review and upgrade its own approach to mentoring to deliver improved outcomes for individuals and the projects they work on.

Embed sustainability skills development in procurement processes

IEMA will campaign for the full inclusion of sustainability skills development in procurement and contracting processes. This will require extensive consultation and collaboration to tie down how such capacity building could be financed and delivered in practice, ensuring coherence with ISO 20400, the 2017 International Sustainable Procurement Standard.

About IEMA

We are the worldwide alliance of environment and sustainability professionals, working to make our businesses and organisations future-proof. Belonging gives us the knowledge, connections and authority to lead collective change, with IEMA's global sustainability standards as our benchmark. By mobilising our expertise we will continue to challenge norms, drive new kinds of enterprise and make measurable progress towards our bold vision: transforming the world to sustainability.

Join us at www.iema.net

Thank You

This report was co-authored, and its related research led, by Josh Fothergill (IEMA; Fothergill Training & Consulting) and Jennifer Ekelund (Oak Grove Associates Ltd). The report's findings are the result of a collective effort made possible by IEMA members participating in the survey, workshops and follow-up conversations.

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Infrastructure underpins our daily lives. IEMA believes it holds the key to enabling the transition to a sustainable economy.

We now have a golden opportunity to build on the sustainability skills base within the sector, delivering enhanced operational performance and truly future-fit infrastructure for the UK.





IEMA

Transforming the world
to sustainability

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