

## **Response to: National Infrastructure Commission Consultation on - The National Infrastructure Assessment: Process and Methodology**

### **Introduction**

1. IEMA is the membership body for more than 14,000 environment and sustainability professionals worldwide. We support individuals and organisations in setting and achieving globally recognised standards for sustainable practice, in turn driving the development and uptake of sustainability skills.
2. We add value for our members by providing the knowledge, connections and recognition necessary to lead change within organisations at all levels. We are independent and international. We apply the combined expertise of our members to provide evidence and influence decision-making, working towards our vision of transforming the world to sustainability.
3. IEMA members use their knowledge, influence and networks to play a leading role in making business more profitable, more resilient, less wasteful and future-proof. Our members are actively involved across the infrastructure lifecycle from pre-feasibility, through to planning, construction and to decommissioning and legacy. As an organisation, IEMA is a core partner in Crossrail's Learning Legacy, ensuring the environment and sustainability theme has a substantive influence on future UK infrastructure.
4. As an organisation we gather members' views and experiences to deliver evidence to Governments. In responding to consultations IEMA's key aims are to:
  - inform decision-making, based on robust and relevant information;
  - offer impartial credible professional advice; and
  - ensure the expert voice of our members is heard.
5. The following response has been produced by IEMA's Policy Team, based on research and engagement with IEMA members from across the UK.

### **Summary of Key Messages**

- IEMA supports the development of *The National Infrastructure Assessment*, and the Commission's plans to produce such an assessment in each Parliamentary cycle.
- The UK has a skills gap<sup>1</sup> – with only 13% of organisations fully confident that they have the right skills to successfully make the transition and compete in a sustainable economy. This skills gap limits the UK's ability to take advantage of the significant economic opportunities offered by planning and delivering the infrastructure needed to deliver a competitive and low carbon economy.
- NIA methodology should recognise the key enabling role skills and competence play in delivering infrastructure that meets the UK's needs and is fit for the future. **IEMA proposes that the commission ensures the scope of the NIA includes specific examination of *skills acquisition*, via formal education and crucially within the workforce, as a key enabling interdependency that bridges across the four key drivers identified.**

---

<sup>1</sup> Preparing for the Perfect Storm: Skills for a Sustainable Economy (IEMA, 2014)

### **IEMA Detailed Response:**

1. IEMA warmly welcomes the opportunity to engage with the Commission on the development of the National Infrastructure Assessment's (NIA) planned process and methodology. In particular, we are pleased to see the recognition of the need for a broader sustainability objective and the way the approach set out in the consultation embraces the need to respond to environmental issues and climate change in its core remit.
2. IEMA's membership includes thousands of individuals working across the six sectors that will be the focus of the NIA – *Transport, Digital and Communications, Energy, Water and Drainage, Flood Defence, and Waste*. Their knowledge and experience in driving low carbon, sustainable and environmentally aware decision-making in project delivery regularly relates to long-term planning and managing complex cross-cutting issues, such as those listed in paragraphs 49-55 of the consultation.
3. As such, IEMA recognises the cross-disciplinary infrastructure drivers that exist and the challenges of planning, consenting, constructing, operating, renewing and deconstructing such long-term programmes of development. Due to this we would welcome the opportunity to continue to engage in the Commission's work in this area in future to further enable the experience and expertise of our members to support the NIA process.
4. However, in responding to this consultation IEMA has chosen to focus on the fundamental role of skills and knowledge acquisition. Skills play an essential role in the effective planning and delivery of infrastructure from the strategic down to shovels in the ground. IEMA regularly works with infrastructure developers and key contractors in this area, including recent work with Network Rail and Skanska, one of their core contractors, to ensure that appropriate environmental skills are accessible across their infrastructure development and maintenance activities. **We are concerned that the published NIA methodology consultation document has a key gap in relation to systemic issues, in that the role of skills is not listed in the cross-cutting issues listed in Paragraphs 49-55.**
5. IEMA's primary call, in response to the consultation, has direct relevance to Questions 6 & 7. It is our view that skills acquisition is a key enabler of infrastructure development and is already well recognised as a transitional catalyst in moving towards a low carbon economy<sup>2</sup>. As such, we **propose that *skills acquisition* be added to the scope of the NIA as one of the cross-cutting issues that will be a focus of the process.**
6. Broadly speaking we feel that NIA has the right scope of work in exercising its duties. However, to avoid the risk of creating a gap within the assessment the NIA should place greater emphasis on considering the role of an effective national skills recognition and acquisition process plays in planning for the UK's future infrastructure needs. The International Labour Office<sup>3</sup> recognises the vital role that skills play in driving national scale long-term economic performance, in their G20 training strategy, indicating:

*Equipping the workforce with the skills required for the jobs of today and those of tomorrow is a strategic concern in the national growth and development outlooks of all G20 countries.*

---

<sup>2</sup> An Economy that Works (Aldersgate Group, 2014) [www.aneconomythatworks.org](http://www.aneconomythatworks.org)

<sup>3</sup> A Skilled Workforce for Strong, Sustainable and Balanced Growth (ILO, 2010)

7. In a UK context, many well-respected studies into strategic areas of Government policy have identified the key role skills and education play in enabling progress. UCL's Professor Paul Ekins and his colleagues in the *Green Economy Policy Commission*<sup>4</sup> identified innovation, infrastructure and information as the core pillars of a green economic strategy to enable the UK to take a more strategic approach to driving UK innovation system. The study identified the fundamental role skills acquisition must play in delivering progress, stating:  
*It is increasingly accepted that those individuals, companies and countries that have generated and absorbed the **skills**, technologies and working practices that promote resource efficiency and environmental sustainability will prosper...* [emphasis added]
8. Further to this, the Institute of Civil Engineers' 2014 State of the Nation report<sup>5</sup> focussed on UK infrastructure provision, placing significant emphasis on workforce capability and capacity. It stated that: *the focus on infrastructure and desire to attract investment **provides the UK with a once in a generational opportunity to grow the skills of the domestic workforce to help meet the demand for increased capital and maintenance infrastructure projects*** [emphasis added]. The report recognised the link between planned skills acquisition and infrastructure planning, recommending the *National Infrastructure Pipeline* both assess and plan for future capability and capacity needs to ensure the UK work force fully benefits from infrastructure projects. It is IEMA's view that this recommendation is equally valid to the forthcoming work of the Commission and Government progress over the past two years should be built upon within NIA process.
9. Traditional skills acquisition in infrastructure planning and delivery should form a key role in the Commission's NIA process. In relation to sector specific skills and the demand for such skills, we refer the consultation response provided to the Commission by *Energy and Utility Skills*, who have specific expertise in this area. However, the Commission's consultation recognises climate change and the environment as a key driver for future infrastructure. It is IEMA's considered view that while traditional skills development and apprenticeships cater very well for technical sector specific skills, an approach focussed solely on this approach will not be sufficient to ensure we equip the UK for skills needed in for a 21<sup>st</sup> century economy.
10. IEMA's research (Skills for a Sustainable Economy: Preparing for the Perfect Storm<sup>6</sup>) has identified a significant skills gap across the UK in relation to the skills needed to enable an effective transitioning to a low carbon sustainable economy. The study identified the need for improvements in skills acquisition across the economy, including: greater emphasis on core sustainability knowledge, systems thinking, collaborative partnership, lifecycle thinking, and disruptive innovation. The Commission's consultation recognises (paragraph 29) that the NIA may not always look to recommend new physical infrastructure, but instead identify where existing assets can be used differently to provide the required infrastructure services.
11. This is a clear area where enhanced environment and sustainability skills can play a critical role. An example of this can be seen from the outcome of the Environmental Impact Assessment of

---

<sup>4</sup> Greening the recovery – the report of the UCL Green Economy Policy Commission (UCL, 2014) <http://discovery.ucl.ac.uk/1421233/>

<sup>5</sup> State of the Nation – Infrastructure 2014 (ICE, 2014) <https://www.ice.org.uk/getattachment/media-and-policy/policy/state-of-the-nation-infrastructure-2014/State-of-the-Nation-Infrastructure-2014.pdf.aspx>

<sup>6</sup> Preparing for the Perfect Storm (IEMA, 2014) [http://oldsite.iema.net/system/files/perfect\\_storm-amended\\_version\\_july\\_2015.pdf](http://oldsite.iema.net/system/files/perfect_storm-amended_version_july_2015.pdf)

Billund Airport, in Denmark. In this case, environment and sustainability professionals positively influenced the infrastructure decision-making process to generate increased capacity and wider sustainability benefits. The project's Environmental Impact Assessment<sup>7</sup> drove a more sustainable and economically beneficial outcome – reducing noise levels to 1,000 homes, doubling the airport's flying capacity and saving E40.4M in avoided construction costs – by recognising and promoting revised operational take-off procedures at the existing runway facilities to achieve the same goals, without the need to invest in a new northern runway.

12. IEMA works with infrastructure developers and organisations in key supporting sectors to enhance the uptake and mainstreaming of environmental, low carbon and sustainability skills and knowledge. As a core partner on the Crossrail Learning Legacy's (CLL)<sup>8</sup> environmental theme we are working to share many of the environmental tools, templates and processes developed during the delivery of Crossrail. We are leading a project, as part of CLL, to assess the feasibility on an environmental and sustainability skills passport system for both back-office and on-site staff and contractors, to enable client confidence in such skills as the infrastructure workforce moves between major projects.
13. In summary, evidence from IEMA<sup>9</sup> and other leading organisations demonstrates the vital role skills acquisition plays in delivering future infrastructure. As such, **IEMA recommends that the Commission include *skills acquisition* within the scope of the NIA as one of the key cross-cutting issues that will be focussed upon in bridging across the key infrastructure drivers it identifies.**
14. IEMA would be happy to participate in future calls for evidence in relation to the NIA's development, and – alongside Energy and Utility Skills – would be happy to engage with and shape the development of an expert panel in relation to skills acquisition. Please contact either myself, or our CEO - Tim Balcon ([t.balcon@iema.net](mailto:t.balcon@iema.net)), to follow-up on the above and discuss future ways in which IEMA can support the NIA process.

Mr Josh Fothergill  
Policy Lead  
IEMA  
E: [j.fothergill@iema.net](mailto:j.fothergill@iema.net)  
M: 07708 074 046

**August 2016**

---

<sup>7</sup> <http://ec.europa.eu/environment/eia/eia-billund-airport.htm>

<sup>8</sup> <http://learninglegacy.crossrail.co.uk/learning-legacy-themes/environment/>

<sup>9</sup> Position Statement: Skills for a Sustainable Economy (IEMA, 2014)  
[http://oldsite.iema.net/system/files/iema\\_skills\\_for\\_a\\_sustainable\\_economy\\_-\\_position\\_statement\\_forweb.pdf](http://oldsite.iema.net/system/files/iema_skills_for_a_sustainable_economy_-_position_statement_forweb.pdf)