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Sustainability and the Global Challenge

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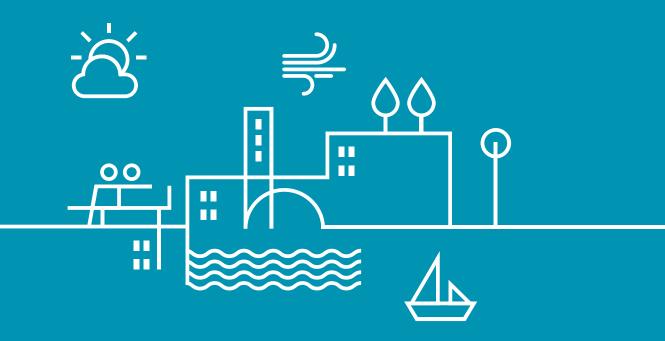
We are the global membership body of environment and sustainability professionals, working to make businesses and organisations futureproof

- Recognition
- Support
- Influence

.....it's time to act

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The Challenge

The Perfect Storm



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- Current global population 7.3bn
- United Nations Population Projections:
 - 8.5bn by 2030
 - 9.7bn by 2050
 - 11.2bn by 2100

UN DESA "World Population Prospects: The 2015 Revision"

UK population 2014-2029 – ONS project 15% increase to 74.3 million



- An Ethiopian born 1990-1995 had a life expectancy of 48.1yrs – for someone born today it is 65.7yrs
- In Zambia the increase has been from 42.8 years to 62.3 years
- In UK 76.2yrs to 81.2yrs



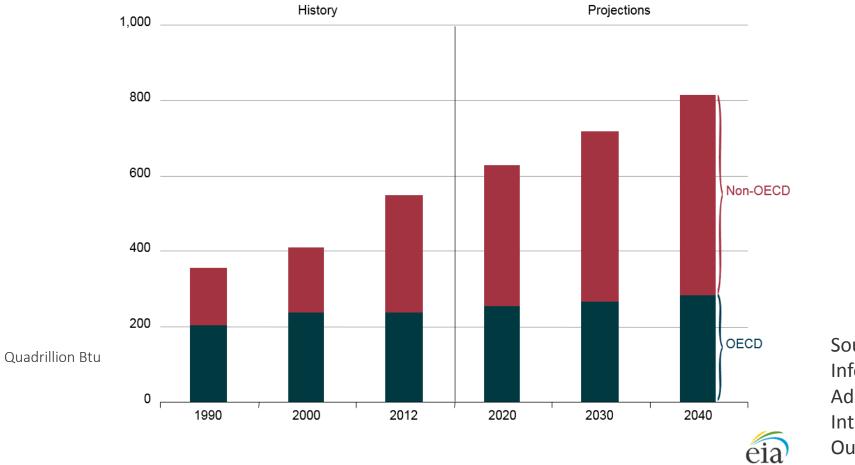
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Population growth fuels consumption

- Food
- Energy
- Water
- Materials
- Infrastructure
- ...etc



World Energy Consumption 1990-2040



Source: U.S. Energy Information Administration (EIA) International Energy Outlook 2016

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Large scale consumption drives environmental change



Environmental Change



Climate change In 2015, global warming reached 1°C above pre-industrial times for the first time; 1.6 billion people live in countries and regions with absolute water scarcity – with climate change this is expected to rise to 2.8 billion by 2025 Water An estimated 1.8 billion people are drinking water contaminated by faeces; between 1990 and 2012 2.3 billion people gained access to improved drinking water



Pollution Global output of chemicals increased 84% between 2000 and 2010; 4.9 million deaths worldwide were attributable to exposure to chemicals in 2004; plastics weighing 191 times that of the Titanic are dumped in oceans each year



A reminder of our throwaway society





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The response?

We need to improve what we do....and do things differently

UN Sustainable Development Goals



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Rethinking in Imaginative Ways





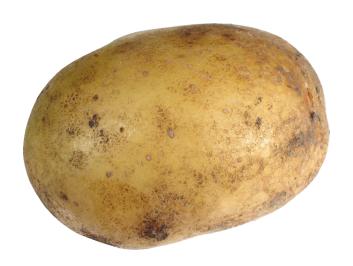
Reducing waste!





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Sustainability and Products







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In a new age of rapid communication....the world has got smaller





Disruptive Innovation....electric cars!



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How are we going to do it?



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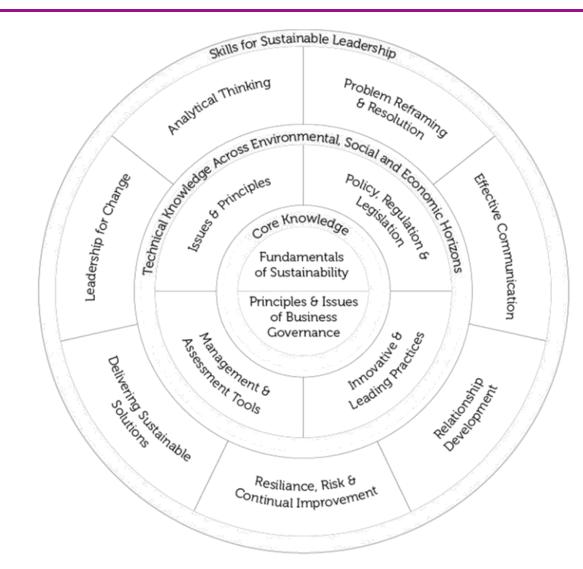
People!

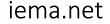
- Working together
- Collaboration
- Enhancing knowledge
- Developing skills and capability



IEMA Skills Map

Developing your skills for the future!





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Summary

- The sustainability challenge is real
- Start by thinking about the way we make products and what products we need......then rethink how to do it more sustainably!
- All jobs will need to be done in a greener way – whether you're fully time in environment, or you're an engineer or designer – everyone needs to be involved



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Thanks!

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