Anticipating tomorrow: the future of the European construction industry

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Anticipating Tomorrow

The future of the European construction industry

Recent years have been marked by rapid and quickening change in Western Europe and the rest of the world, which is altering the way in which infrastructure and manufacturing assets are produced and maintained. In response to these pressures, the ECI established the Industry Futures Task Force to improve the European construction industry’s understanding of where it may be in 20 years’ time. The Task Force has developed this suite of future scenarios for the European construction industry, and an action plan to help the ECI and its member companies adapt to the challenges ahead.
The axes and the scenarios they produce

The horizontal axis represents a range of future possibilities for the availability of energy. At one extreme is Energy Scarcity, where energy becomes less available than we expect today. At the other is Stabilised Supply: here, energy is readily available. This could happen because new reserves are discovered, or through technological advances in the supply and use of energy.

The vertical axis represents the balance in co-operation — ranging from Interdependent – between and within supply chains, international relationships and trade as a whole. These two variables lead us to four scenarios which illustrate what the European construction industry could look like 20 years from now. These scenarios were developed by extrapolating a range of today’s key issues for the European construction industry, for the ECI, and for its member organisations.

They range from a world where energy is scarce, renewable technology is widely used and it is culturally unacceptable to waste energy, which we call Tough love, to one with a stabilised energy supply in which individual self-interest takes precedence over the common good, which we term Fence Me In. The timelines for each scenario depict a sequence of possible events which lead from the present day to the year 2030.

Tough love

Here energy is scarce and comes from nuclear fission and fusion or from renewable sources. People are energy-sensitive, energy means are unacceptable, and home is where the heart is.

In construction, standardisation has encouraged prefabrication. The speed of building has increased. Planning takes account of embodied energy and energy in use. Railroad tunnels have been built under new builds. Travel tends to mean walking or public transport. Jobs are fewer because the home is where the heart is. New housing is concentrated in high-density urban areas and health and education services are used together.

2030

Energy scarce, nuclear energy system relies on 
- jobs are fewer because the home is where energy is scarce
- European energy system is renewable
- nuclear energy is used in power generation
- nuclear energy is used in power generation
- EU energy policy is to support new builds
- energy is scarce, nuclear energy is used in power generation
- nuclear energy system relies on

Happy days

In this world, energy is abundant and its price is predictable. Europeans are content with living in traditional houses. Construction companies are international and creative and have the people and resources they need. Legislation encourages energy efficiency, and the technology to reduce climate change.

Coalition is an advantage, as technology, high-energy industry. A global database of contractors and clients provides detailed information on their quality of service. Technology has made virtual meetings normal, although the possibility of teleporting matter to remote locations no longer seems like science fiction.

2030

Nuclear fusion in use
- energy is abundant, nuclear energy is used in power generation
- legislation encourages energy efficiency
- the European construction industry, for the ECI, and for its member organisations
- the full text of the European Construction Industry Task Force report can be found on the ECI website: wwweci-online.org

Our vision for 2030

We want the European Construction Industry of 2030 to be the world’s principal centre of excellence in the development of the built environment and manufacturing facilities. To achieve this we need to meet these challenges, which the ECI regards as the guiding vision of this task force.

- Be seen as an attractive, vibrant industry which school leavers, graduates and experienced professionals are attracted to and want to stay in.
- Work in a way which encourages collaboration and support along the whole supply chain and which feeds innovation and improvement.
- Welcome and work with the skills in building construction, in geography, practices and requirements.
- Develop and apply new construction techniques using the latest available technology to improve the construction process in design, speed, safety, value and control.
- Ensure our activities are environmentally and socially unacceptable, and home is where the heart is.
Next steps towards the vision

For the ECI:

- Support the Industry Futures Task Force, and especially the new task forces on people and on collaboration
- Run annual award schemes to recognise sustainability, collaboration, innovation, people and natural resources
- Work to expand membership, and its engagement in best practice
- Influence regulation
- Collaborate with other organisations to develop and promote best practice
- Encourage members’ innovation
- Drive stewardship, corporate social responsibility, ethics and sustainability
- Help members to use natural resources more efficiently and protect the environment
- Define sustainable best practice for the design of the built environment and manufacturing plant
- Encourage member companies to get involved with renewable energy.

For Members of the ECI and those associated with the construction industry:

- Engage with the ECI and its task forces
- Collaborate along the supply chain to encourage innovation and best practice
- Increase R&D and take controlled risks to embrace new techniques
- Recognise the value of people
- Develop and reward them to attract and retain excellence
- Increase links with schools, universities and the supply chain to share and use best practice
- Implement local practices to improve environmental performance and encourage sustainable construction and use
- Enter the ECI award scheme.

The European Construction Institute (ECI) is Europe’s only transnational network of construction excellence. It brings together many of the most innovative clients, contractors, specialists and support organisations in Europe to develop and share knowledge aimed at improving the entire construction supply chain.

To learn more, contact the ECI:
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