



Perspectives on European Chemical Engineering

Professor Richard Darton, EFCE President
Berlin, 25 September 2011

The European Federation of Chemical Engineering

A non-profit association, formed:1953

Today: 39 member societies represent 100,000 chemical engineers in Europe, from Ireland to Russia.

Newest members: Turkey and Israel.

Corresponding societies in Brazil, Canada, India, Japan, Nigeria, South Africa and USA.



Objective: to promote co-operation in Europe between non-profit-making professional scientific and technical societies for the general advancement of chemical engineering and as a means of furthering the development of chemical engineering...

What does EFCE do?

A network including 20 working parties and 6 Sections embracing 1000 experts from academia and industry covering:

- Food, Product Design
- Education
- Safety & Loss Prevention, Environment and Sustainability
- Thermodynamics, Reaction Engineering, Separations and more...

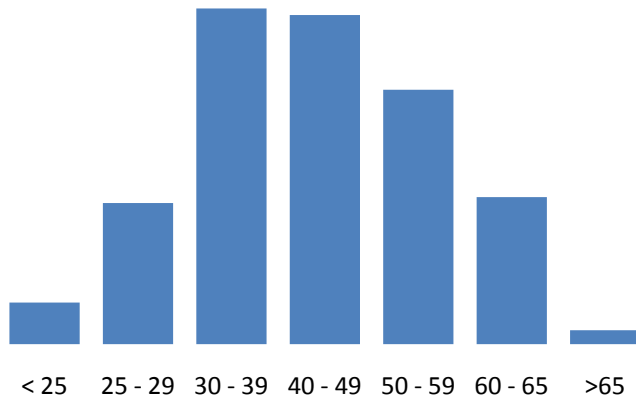
Supporting awards, meetings, student mobility, standardisation, sharing/specifying best practice, publications. We aim to help all member societies and their members address issues in

Technology, business, education and regulation

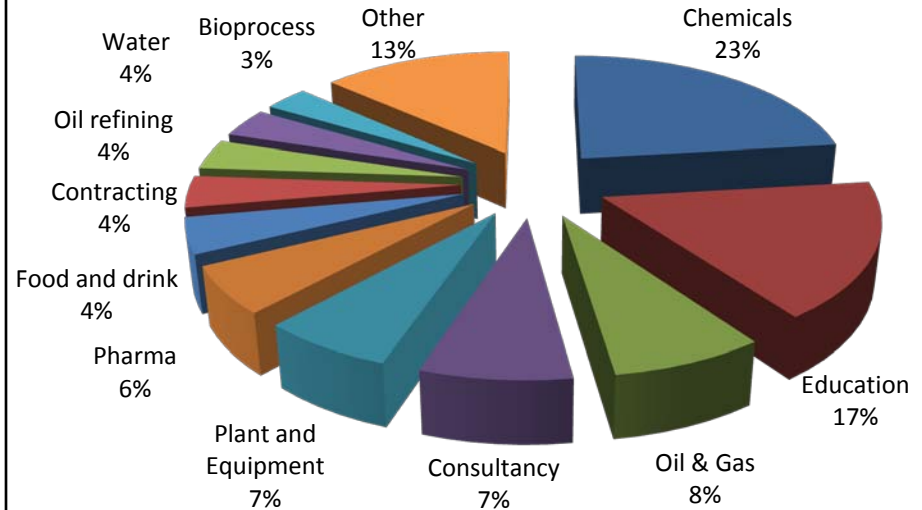


The EFCE 'Perspectives' Survey

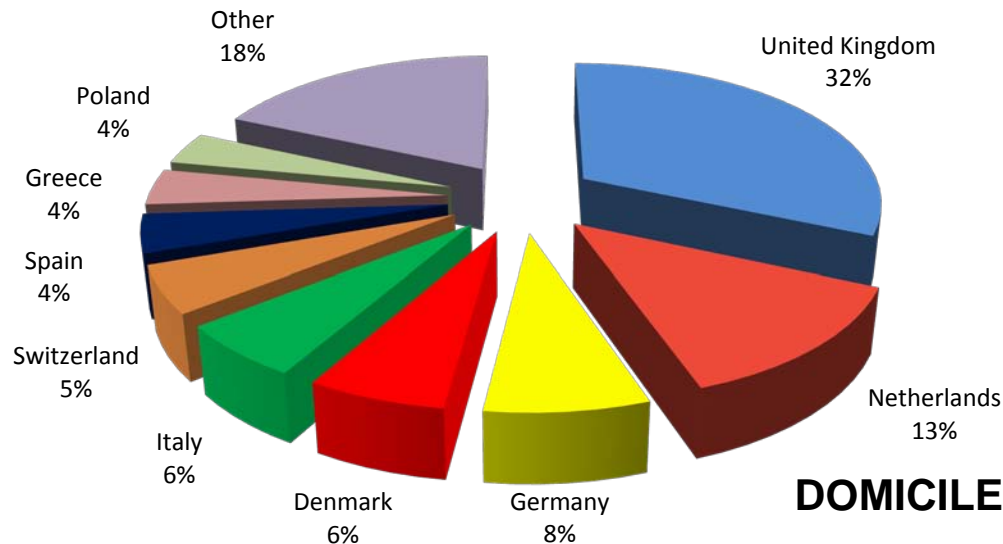
AGE DISTRIBUTION



SECTOR

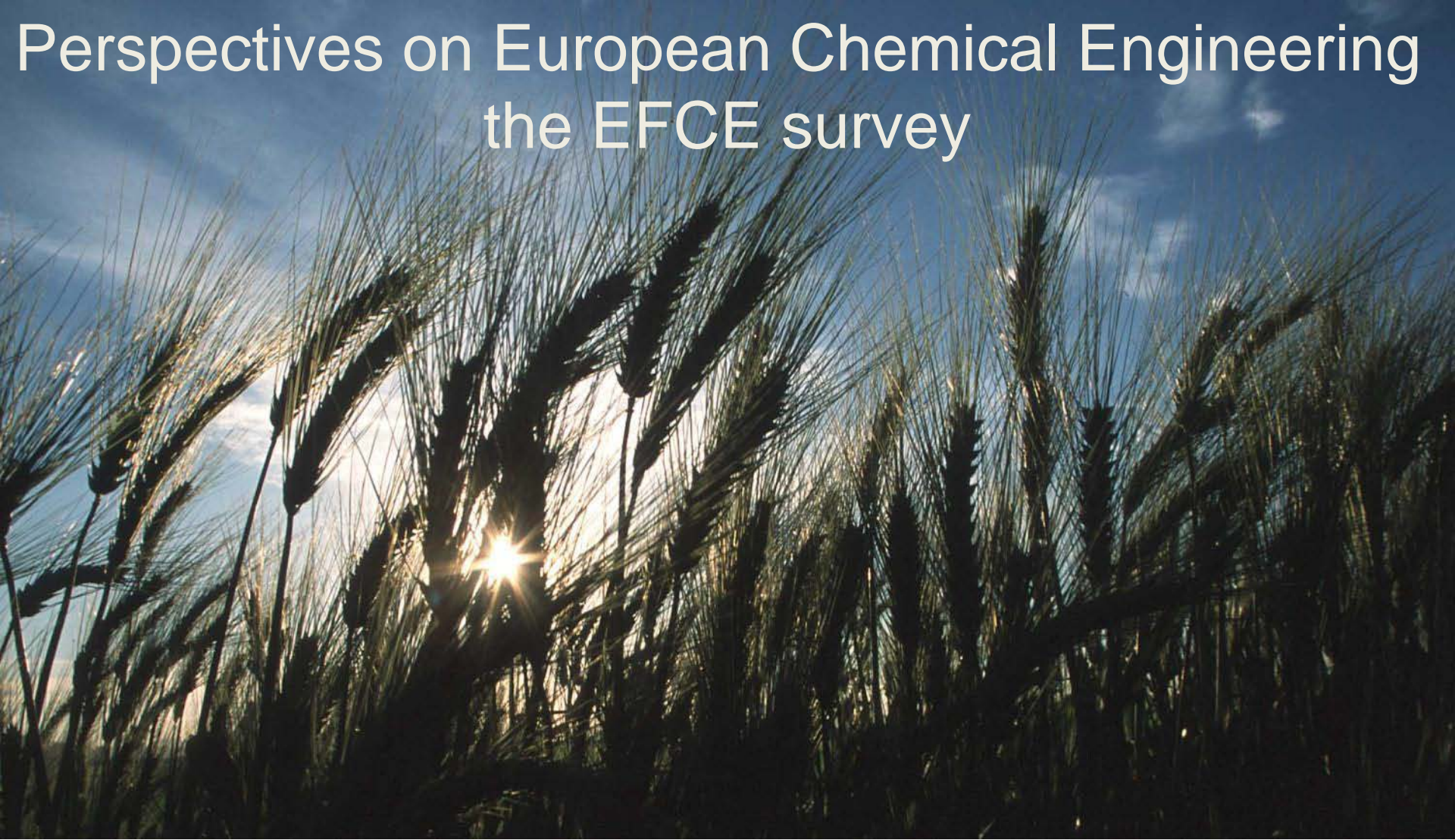


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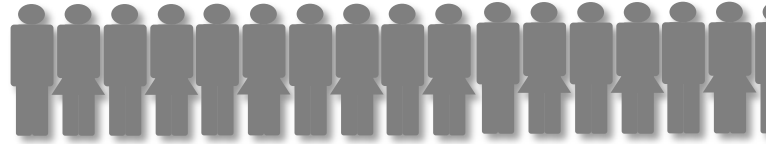
1797
Responses in
35 European
Countries

Perspectives on European Chemical Engineering the EFCE survey

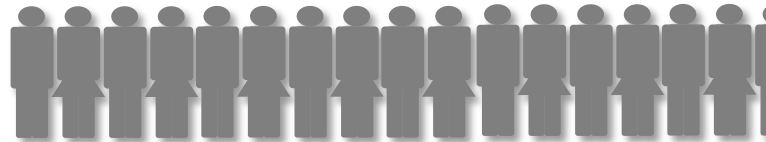


Career Satisfaction

Chemical Engineering is the right career for me...



83%
AGREE



84%
AGREE



84%
AGREE



94%
AGREE



96%
AGREE



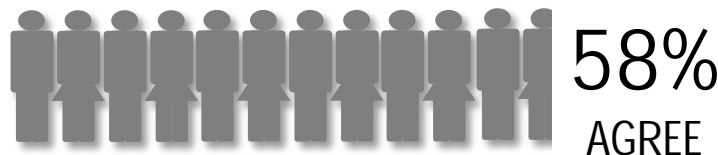
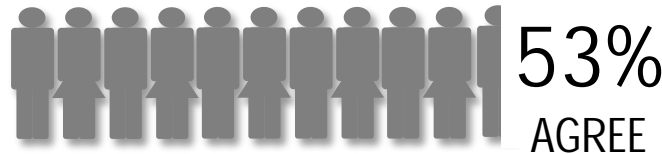
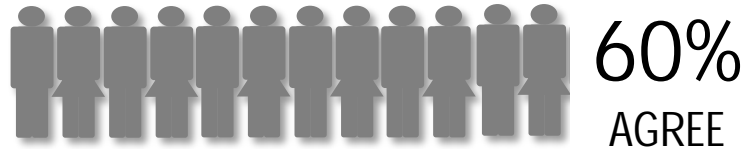
84%
AGREE





Industry Support

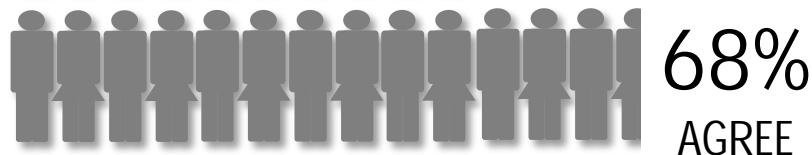
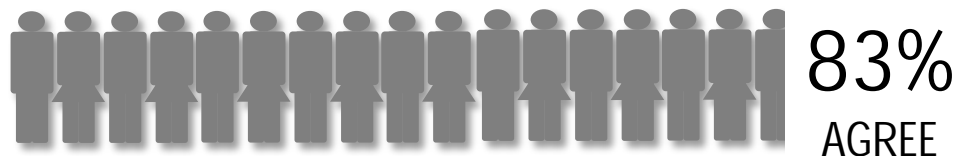
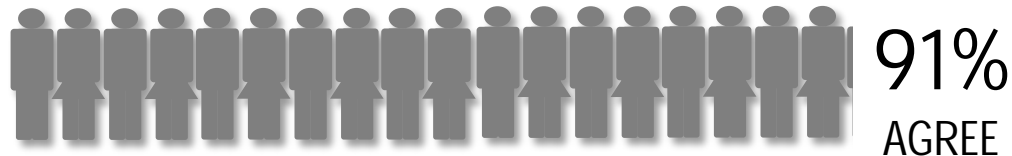
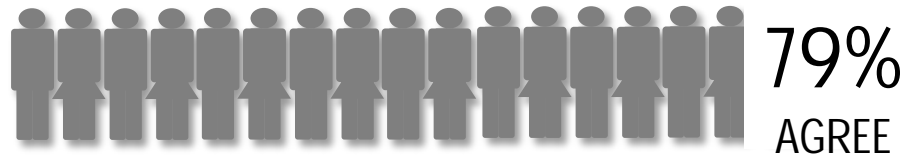
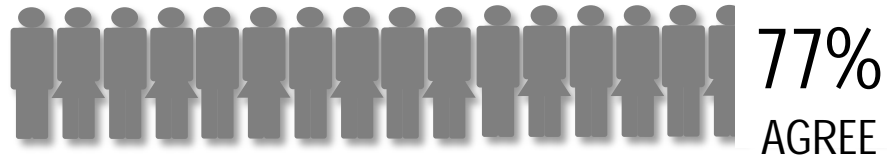
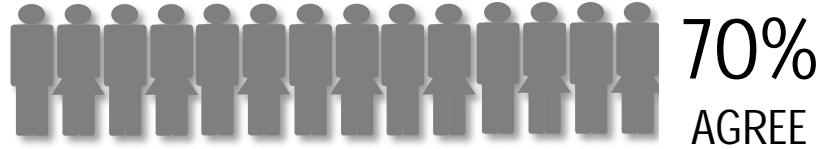
I was helped by industry during my education and training...



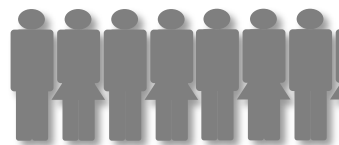


Prospects and Mobility

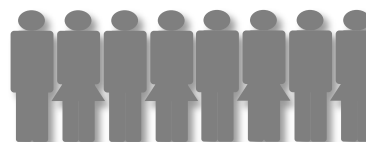
There are good opportunities for chemical engineers in my country...



I may be working in another country in five years time...”



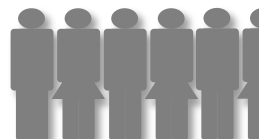
36%
AGREE



38%
AGREE



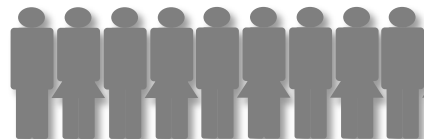
28%
AGREE



27%
AGREE



22%
AGREE



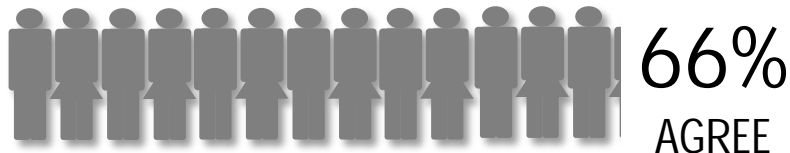
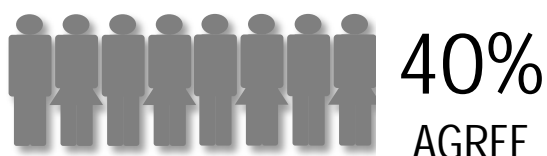
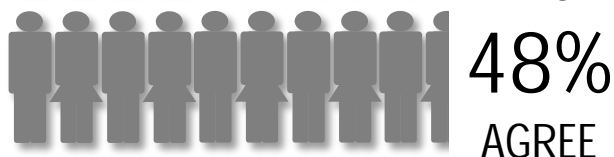
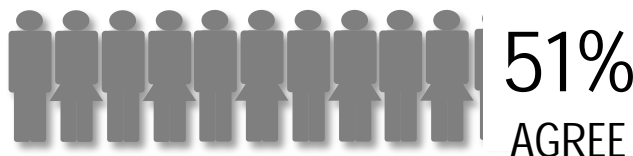
45%
AGREE



Ethical Standards

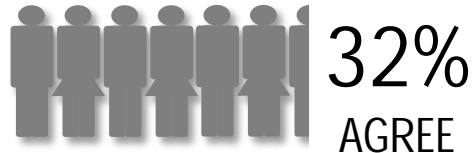
Ethics

“My education and training gave me a strong understanding of ethical standards and behaviours...”



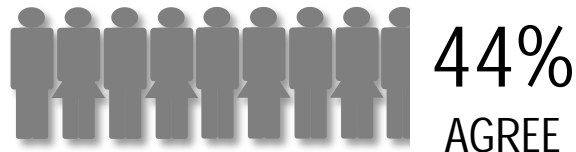
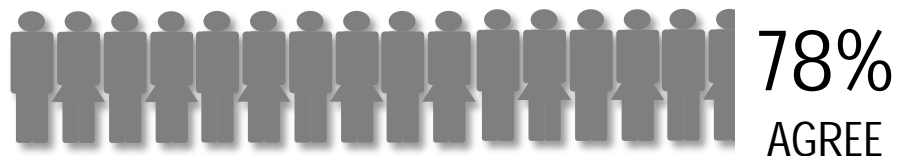
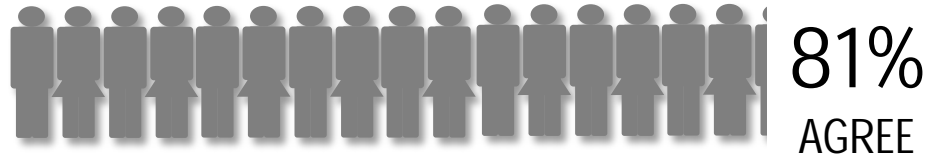
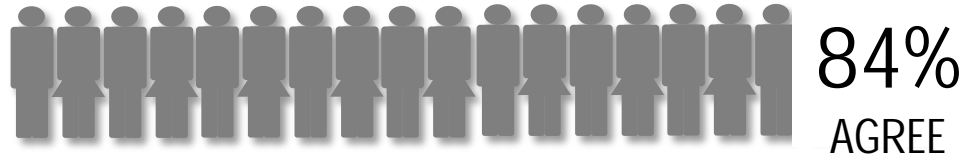
Ethics

“I require training to help me deal with ethical issues...”



Ethics

“I am confident that my management has a genuine commitment to ethical standards...”

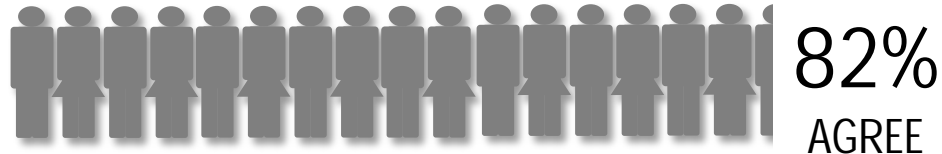
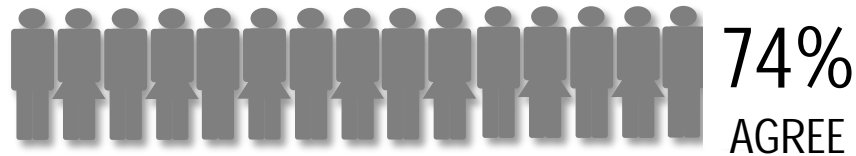
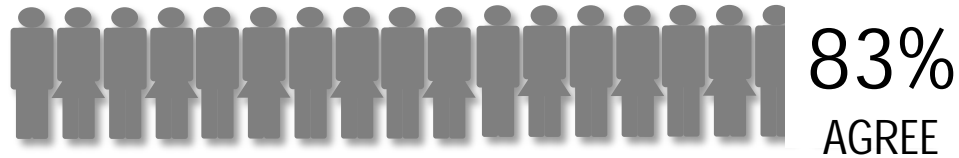
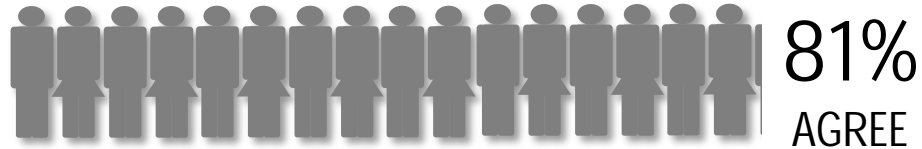




Energy & Climate Change

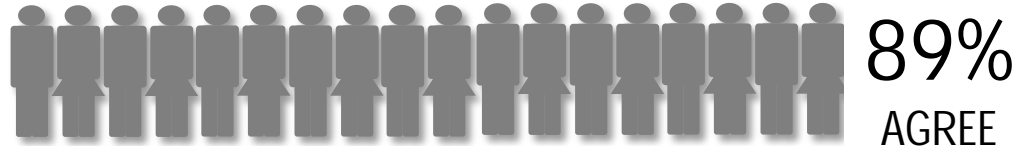
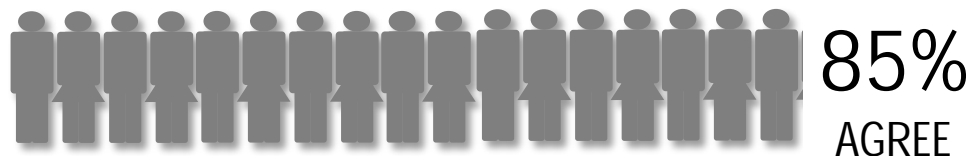
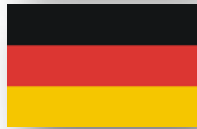
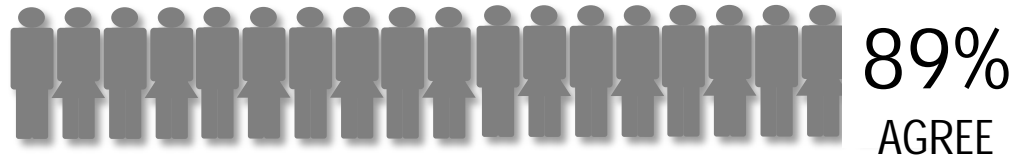
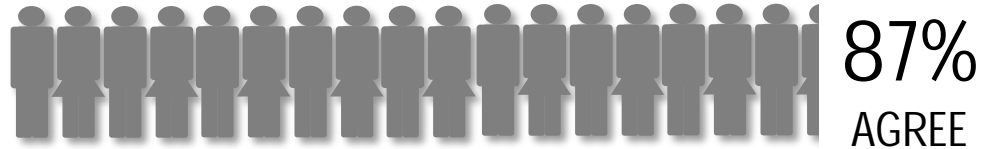
Energy & Climate Change

“Climate change is a big challenge for the future of humanity...”



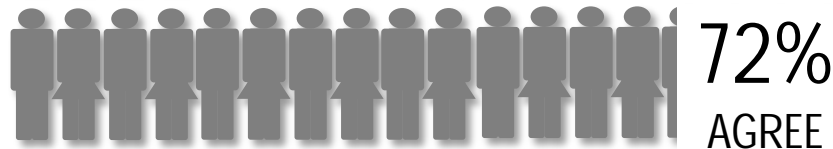
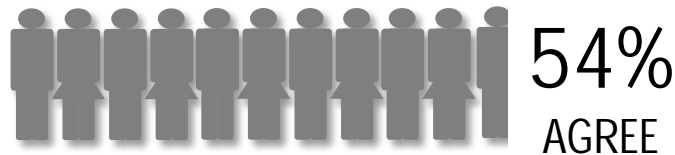
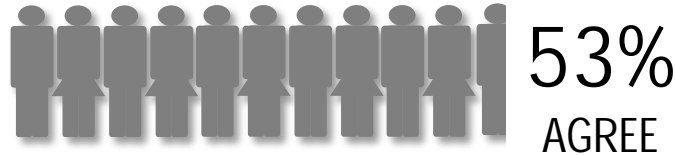
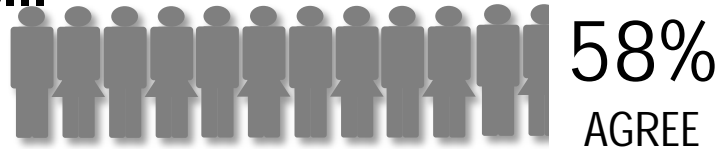
Energy & Climate Change

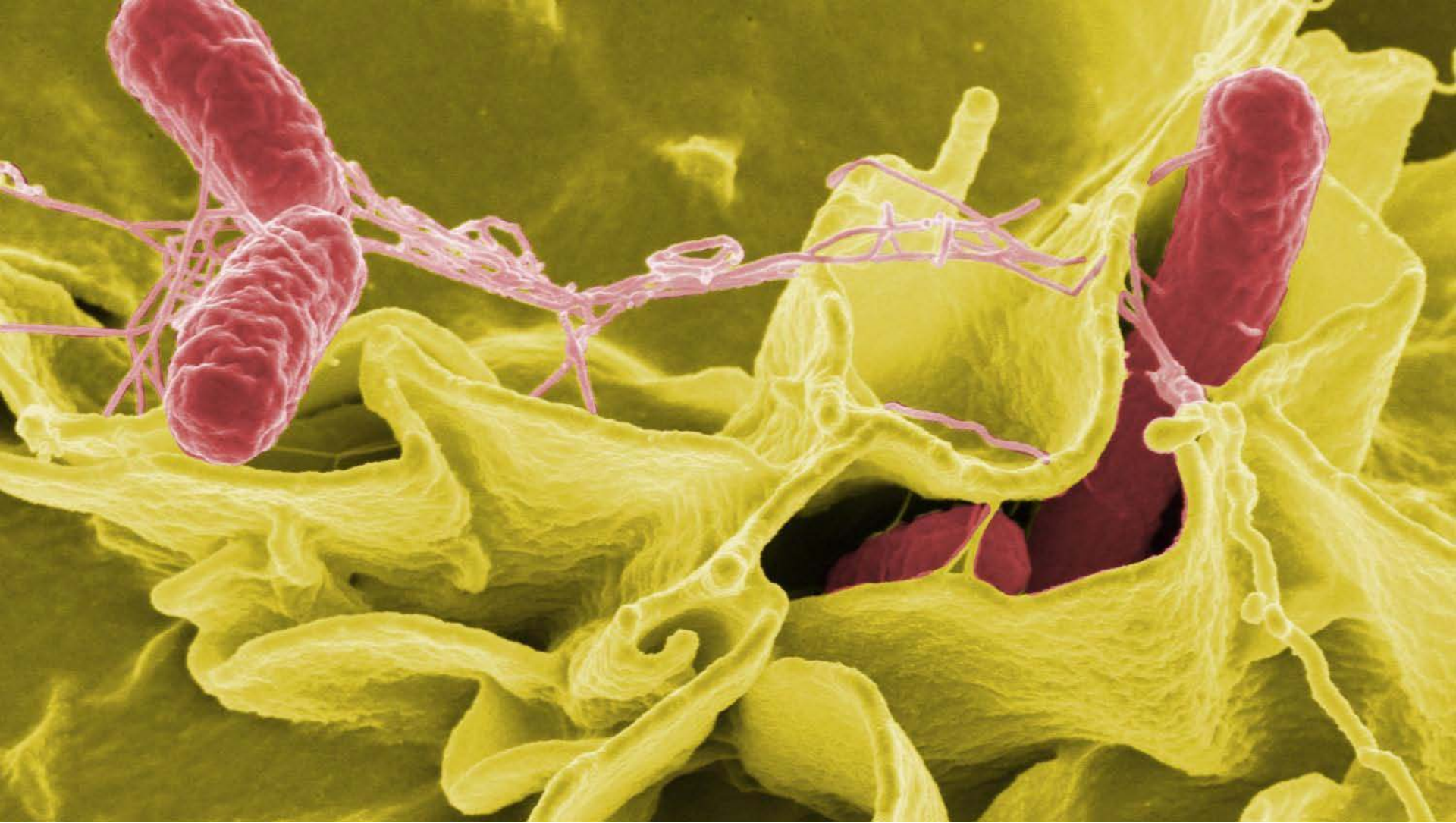
“My country must do more to reduce its reliance on fossil fuels...”



Energy & Climate Change

“I need more factual information to understand energy and climate issues...”

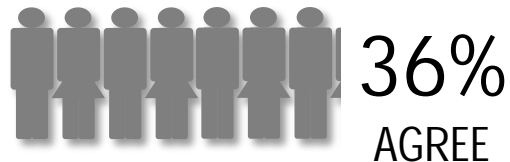
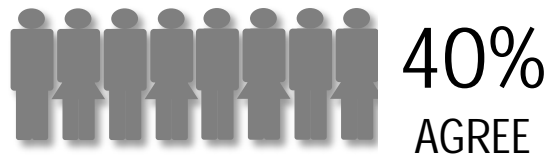
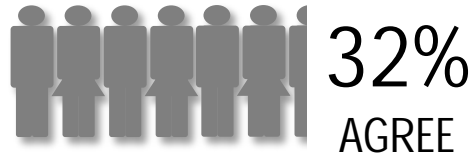
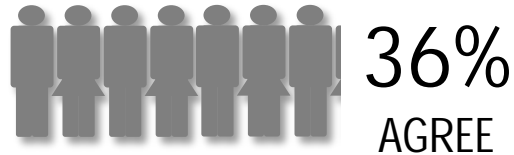




Biological Engineering

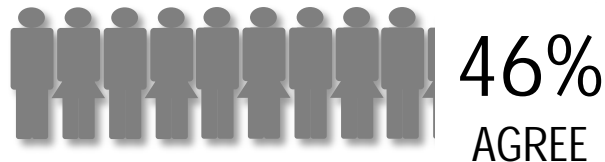
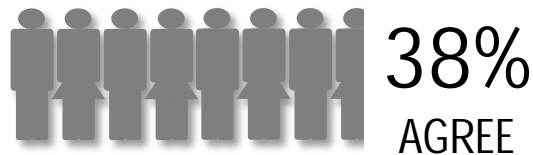
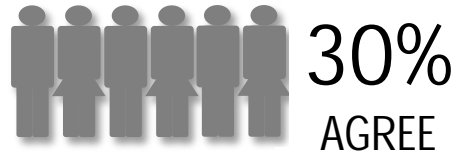
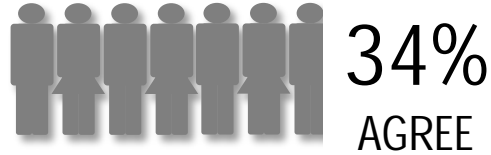
Biological Engineering

“Bioscience is important in my current role...”



Biological Engineering

“My future lies in bioprocess engineering...”





From survey to strategy

- Biofutures: to ensure that “bio” is part of the programme
- Ethics and professional standards: raising awareness
- Energy, climate change and the low carbon economy
- Innovation, employment and mobility

Delivering the strategy

- Strategy, planning and **delivery** is focus for your Board
- EFCE as a portal for knowledge and networking (website/e)
- Supporting Member Societies and *their* members
- Engage more with industry and policy makers eg around employment and mobility issues, major challenges



Perspectives on European Chemical Engineering

Further information: **Andy Furlong**
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