Appendix: Charts and Figures

IET International Green Skills Survey 2023

Part of our
IET COP
series

Section 1 - Reactions to climate change

Tables referenced in section 1:

Table 1

Q26. How concerned, if at all, are you about the impact of climate change on your business in the future?	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Very concerned	23%	30%	37%	50%	65%	48%	56%	36%	43%	38%
Fairly concerned	42%	40%	48%	38%	33%	36%	35%	41%	37%	46%
Not very concerned	23%	25%	12%	9%	2%	13%	7%	16%	14%	10%
Not at all concerned	10%	4%	1%	3%	-	4%	2%	6%	2%	6%
Don't know	2%	1%	2%	0%	-	-	-	2%	4%	-
Net: Concerned	65%	71%	85%	88%	98%	83%	91%	77%	80%	84%
Net: Not concerned	33%	29%	13%	11%	2%	17%	9%	21%	16%	16%

Table 2

Q27. For the following question, by "resilient", we mean being able to withstand or recover quickly from changing conditions. Which, if any of the following skills do you think your organisation needs to be resilient against any impacts of climate change? Please select all that apply.	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Leadership/management skills (e.g. to enact change)	38%	19%	39%	35%	39%	35%	30%	24%	27%	32%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	35%	21%	46%	42%	56%	37%	31%	28%	29%	40%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	20%	31%	39%	30%	52%	33%	36%	33%	30%	29%
Technical/engineering skills (e.g. to implement or integrate changes)	32%	29%	39%	29%	42%	36%	26%	28%	36%	32%
Solving complex problems (e.g. requiring a solution specific to the situation)	31%	29%	52%	37%	52%	41%	34%	32%	33%	39%
Innovative thinking (e.g. to come up with new solutions)	39%	25%	37%	36%	40%	40%	33%	35%	31%	35%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	37%	27%	37%	32%	37%	30%	31%	35%	33%	25%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	31%	32%	35%	36%	47%	26%	32%	44%	21%	42%
Other	1%	1%	-	-	-	-	-	-	-	1%
Don't know	12%	-	3%	3%	1%	2%	1%	2%	3%	2%
Not applicable - my organisation has all the necessary skills to be resilient against the impacts of climate change.	10%	4%	1%	3%	1%	7%	3%	2%	3%	4%
Net: Organisation does not have all necessary skills to be resilient against the impacts of climate change	77%	96%	96%	95%	98%	92%	96%	96%	94%	94%

Key throughout

Highest answer*

2nd highest

3rd highest

* By % per country, (for table 8: % by net answers)

Table 3

Q29. For the following question, by "agile" we mean being able to apply existing skillsets to new situations, adapt to new technologies. Is your engineering workforce agile enough to adapt to the impacts of climate change?

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
More than enough	13%	39%	23%	29%	17%	32%	32%	27%	39%	30%
About the right amount	46%	52%	59%	56%	73%	58%	57%	59%	48%	62%
Not enough	29%	9%	15%	13%	10%	10%	11%	11%	6%	5%
Net: enough/more than enough	59%	91%	82%	85%	90%	90%	89%	86%	87%	92%

Table 4

Q28. In which, if any, of the following ways have you seen your supply chain reacting to climate change? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Processes have been changed	24%	27%	35%	33%	33%	38%	20%	16%	22%	39%
Timelines have been changed	23%	21%	36%	35%	29%	32%	29%	29%	30%	33%
Shortages of some goods and services	33%	28%	40%	34%	36%	40%	29%	35%	36%	30%
Increasing costs of some goods and services	44%	37%	48%	40%	44%	48%	38%	36%	38%	41%
Supply chain partners have closed their business	11%	30%	24%	26%	27%	23%	31%	22%	25%	30%
We have begun using different suppliers	21%	31%	34%	33%	52%	23%	36%	35%	33%	31%
Supply chain partners have stopped selling the goods and services we previously used	14%	37%	37%	37%	52%	22%	31%	35%	31%	38%
Other	1%	-	-	1%	-	-	-	-	1%	-
Don't know	11%	1%	3%	2%	1%	-	1%	3%	3%	3%
Not applicable – we have not seen any reaction to climate change in our supply chain	20%	6%	4%	5%	-	11%	5%	2%	6%	6%
Net: Seen a reaction to climate change in supply chain	69%	93%	93%	93%	99%	89%	94%	95%	91%	92%

Section 2 - Barriers to net zero

Tables referenced in section 2:

Table 5

Q24. For the following question, by "net zero", we mean a 100% reduction of greenhouse gas emissions. Some emissions can remain if they are balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, to a point where effective emissions are "zero". What, if any, of the following are barriers to your organisation becoming net zero? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Initial "investment" costs (e.g. to adapt old technologies, purchase new technologies)	32%	22%	39%	34%	39%	34%	26%	31%	26%	27%
Increased operating costs (e.g. to operate in "green" manner costs more money)	36%	30%	37%	31%	47%	27%	28%	20%	36%	26%
Lack of resources (e.g. employee time)	22%	21%	21%	17%	23%	20%	17%	17%	19%	20%
Lack of appropriate substitutes/ alternatives (i.e. there are no "greener" technologies to use)	30%	19%	29%	23%	37%	31%	18%	29%	22%	24%
Lack of appropriate infrastructure (e.g. cloud computing, availability of electric charging ports for vehicles)	20%	25%	35%	32%	32%	24%	17%	26%	36%	28%
Lack of knowledge or skills within the workforce to adapt to greener processes (e.g. technical skills needed to adapt existing	26%	28%	38%	38%	40%	23%	31%	37%	33%	29%
Lack of knowledge or skills within management to adapt to greener processes (e.g. strategic skills to encourage sustainability)	25%	26%	44%	32%	41%	35%	33%	26%	37%	29%
It would make our organisation uncompetitive (e.g. would require charging higher prices)	26%	27%	21%	29%	27%	22%	21%	22%	23%	25%
Other	2%	2%	-	-	-	-	-	-	1%	2%
Don't know	12%	1%	5%	3%	-	1%	1%	5%	5%	3%
Not applicable – there are no barriers to my organisation becoming net zero	9%	7%	1%	4%	7%	13%	7%	6%	4%	11%

Table 6

Q10. In which level of your organisation do you find the biggest skills gap?

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Gaps in engineering or technical skills at a professional level, including people with degrees or higher qualifications	22%	29%	33%	25%	49%	29%	29%	22%	23%	25%
Gaps in engineering or technical skills at a technician or skilled craft level	20%	37%	20%	21%	23%	30%	19%	26%	20%	19%
Gaps in engineering or technical skills at operative or semi-skilled level	11%	20%	17%	15%	9%	6%	19%	19%	23%	13%
Gaps in the skills of your apprentices or other young trainees	8%	2%	12%	16%	5%	10%	14%	11%	14%	22%
Gaps in non-technical skills such as commercial, project management, marketing, or other types	9%	3%	7%	12%	10%	7%	7%	6%	5%	9%
Gaps in leadership or management skills	9%	2%	6%	6%	2%	6%	7%	7%	4%	6%
Other	1%	-	-	-	-	-	2%	-	-	-
Don't know	10%	1%	1%	1%	-	1%	-	4%	8%	1%
Not applicable – my organisation does not see skills gaps at any level in particular	10%	8%	5%	3%	1%	12%	3%	5%	3%	5%
Net: See gaps at particular skills levels	80%	91%	94%	95%	99%	87%	97%	91%	89%	94%

Table 7

Q1. Which, if any, of the following are currently key priorities for your organisation? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Lowering environmental impact (e.g. lowering carbon emissions)	41%	41%	40%	34%	53%	24%	33%	24%	32%	33%
Developing solutions/ technologies for environmental sustainability	40%	41%	50%	53%	67%	50%	44%	41%	40%	50%
Adapting to new technologies	50%	32%	53%	54%	72%	57%	50%	46%	37%	55%
Upskilling/ reskilling current staff	49%	24%	56%	42%	80%	50%	45%	41%	37%	40%
Recruiting staff with specific new skills or knowledge	45%	51%	45%	46%	61%	54%	37%	55%	43%	50%
Increasing productivity	62%	29%	56%	56%	73%	66%	44%	46%	42%	54%
Other	3%	-	-	1%	-	1%	2%	-	-	-
Don't know	5%	4%	-	2%	1%	1%	-	2%	3%	2%

Table 8

Q4. You said the below is currently a priority for your organisation. To what extent do you think your organisation has the skills in each of these areas needed to meet this priority?

Q4_1. Lowering environmental impact (e.g. lowering carbon emissions)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	434	46	43	80	70	26	40	25	32	39
Base: all	416	46	43	80	70	26	40	25	32	39
We have all the necessary skills	19%	24%	30%	44%	64%	35%	40%	24%	31%	46%
We have most, but not all the necessary skills	46%	28%	47%	35%	26%	50%	40%	64%	50%	38%
We have some of the necessary skills	29%	41%	21%	16%	10%	15%	18%	8%	16%	15%
We have none of the necessary skills	3%	7%	2%	5%	-	-	3%	4%	3%	-
Don't know	3%	-	-	-	-	-	-	-	-	-
Net: All/Most of the skills	65%	52%	77%	79%	90%	85%	80%	88%	81%	85%
Net: Some/None of the skills	32%	48%	23%	21%	10%	15%	20%	12%	19%	15%

Q4_2. Developing solutions/ technologies for environmental sustainability	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	417	46	54	123	89	53	53	42	40	60
Base: all	402	46	54	123	89	53	53	42	40	60
We have all the necessary skills	25%	15%	37%	46%	69%	51%	43%	33%	38%	45%
We have most, but not all the necessary skills	48%	48%	35%	41%	27%	38%	40%	52%	45%	45%
We have some of the necessary skills	24%	24%	28%	11%	4%	11%	17%	14%	13%	7%
We have none of the necessary skills	1%	9%	-	1%	-	-	-	-	3%	2%
Don't know	2%	4%	-	-	-	-	-	-	3%	2%
Net: All/Most of the skills	73%	63%	72%	88%	96%	89%	83%	86%	83%	90%
Net: Some/None of the skills	25%	33%	28%	12%	4%	11%	17%	14%	15%	8%

Q4_3. Adapting to new technologies	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	529	36	57	127	95	61	60	47	37	66
Base: all	504	36	57	127	95	61	60	47	37	66
We have all the necessary skills	21%	39%	26%	50%	64%	34%	65%	38%	41%	45%
We have most, but not all the necessary skills	49%	33%	42%	40%	25%	57%	28%	55%	24%	38%
We have some of the necessary skills	27%	22%	30%	9%	11%	8%	5%	6%	30%	12%
We have none of the necessary skills	2%	6%	2%	1%	-	-	-	-	5%	5%
Don't know	2%	-	-	-	-	-	2%	-	-	-
Net: All/Most of the skills	70%	72%	68%	90%	89%	92%	93%	94%	65%	83%
Net: Some/None of the skills	29%	28%	32%	10%	11%	8%	5%	6%	35%	17%

Table 9

Q5. You mentioned that your organisation doesn't have all the skills to lower your organisation's environmental impact... What skills do you think are still missing in order to meet this priority? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	329	35	30	45	25	17	24	19	22	21
Base: Organisation does not have all the skills to lower organisations environmental impact	325	35	30	45	25	17	24	19	22	21
Leadership/management skills (e.g. to enact change)	31%	29%	37%	29%	28%	18%	33%	53%	32%	24%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	54%	40%	50%	51%	68%	47%	42%	53%	45%	48%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	25%	40%	50%	38%	64%	53%	42%	42%	36%	29%
Technical/engineering skills (e.g. to implement or integrate changes)	29%	29%	33%	42%	56%	47%	29%	42%	50%	19%
Solving complex problems (e.g. requiring a solution specific to the situation)	31%	20%	53%	42%	48%	41%	42%	79%	27%	43%
Innovative thinking (e.g. to come up with new solutions)	31%	31%	27%	40%	56%	53%	38%	42%	41%	33%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	34%	34%	53%	29%	44%	35%	17%	58%	23%	14%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	35%	37%	43%	36%	76%	24%	38%	47%	45%	48%
Other	1%	-	-	-	-	-	-	-	-	-
Don't know	9%	-	-	-	-	-	-	-	-	-

Table 10

Q6. You mentioned that your organisation doesn't have all the skills to develop solutions/technologies for environmental sustainability... What skills do you think are still missing in order to meet this priority? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	301	37	34	66	28	26	30	28	24	32
Base: Organisation does not have all the skills to develop solutions for environmental sustainability	292	37	34	66	28	26	30	28	24	32
Leadership/management skills (e.g. to enact change)	28%	32%	32%	29%	43%	15%	30%	43%	17%	34%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	44%	38%	41%	55%	50%	58%	43%	50%	33%	38%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	30%	38%	41%	36%	57%	38%	37%	39%	46%	28%
Technical/engineering skills (e.g. to implement or integrate changes)	32%	24%	41%	44%	50%	50%	33%	43%	25%	28%
Solving complex problems (e.g. requiring a solution specific to the situation)	28%	41%	50%	42%	50%	42%	23%	68%	38%	34%
Innovative thinking (e.g. to come up with new solutions)	36%	24%	47%	39%	54%	50%	30%	46%	25%	31%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	30%	32%	38%	21%	36%	38%	37%	36%	25%	16%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	36%	38%	41%	29%	50%	23%	43%	50%	33%	50%
Other	0%	-	-	-	-	-	-	-	-	-
Don't know	9%	-	-	-	-	-	-	-	4%	-

Table 11

Q7. You mentioned that your organisation doesn't have all the skills to adapt to new technologies... What skills do you think are still missing in order to meet this priority? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	407	22	42	64	34	40	20	29	22	36
Base: Organisation does not have all the skills to adapt to new technologies	389	22	42	64	34	40	20	29	22	36
Leadership/management skills (e.g. to enact change)	29%	41%	33%	31%	24%	28%	30%	45%	18%	44%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	25%	32%	36%	41%	47%	20%	30%	38%	41%	11%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	36%	32%	43%	39%	68%	53%	25%	38%	64%	28%
Technical/engineering skills (e.g. to implement or integrate changes)	38%	27%	48%	41%	32%	55%	30%	45%	27%	33%
Solving complex problems (e.g. requiring a solution specific to the situation)	27%	36%	38%	44%	50%	28%	35%	59%	50%	17%
Innovative thinking (e.g. to come up with new solutions)	28%	18%	31%	36%	41%	48%	35%	41%	32%	36%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	30%	36%	43%	20%	47%	35%	30%	45%	41%	33%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	30%	27%	45%	31%	59%	25%	45%	38%	27%	44%
Other	3%	-	-	-	-	-	5%	-	-	3%
Don't know	7%	-	5%	-	-	-	-	-	-	3%

Section 3 - Sustainability strategies

Tables referenced in section 3:

Table 12

Q17. For the following questions, by "sustainability strategy" we mean specific activities and goals to lower your organisation's environmental impact. This can be integrated into the organisation's wider business strategy or as a separate strategy. Does your organisation have a sustainability strategy?

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Yes, it does	67%	82%	71%	78%	98%	76%	83%	76%	70%	87%
No, it doesn't	25%	13%	22%	19%	1%	21%	13%	17%	19%	10%
Don't know	8%	5%	7%	3%	1%	4%	4%	8%	11%	3%

Table 13

Q20. Now thinking about your organisation's ability to meet its sustainability strategy specifically. Which, if any of the following skills do you think your organisation is missing? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	683	92	76	182	130	81	100	78	70	103
Base: Organisation has a sustainability strategy	671	92	76	182	130	81	100	78	70	103
Leadership/management skills (e.g. to enact change)	29%	20%	41%	31%	32%	28%	25%	27%	29%	30%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	32%	35%	41%	44%	54%	28%	33%	35%	36%	41%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	20%	45%	32%	36%	43%	28%	27%	38%	31%	34%
Technical/engineering skills (e.g. to implement or integrate changes)	20%	28%	42%	38%	38%	37%	34%	22%	33%	30%
Solving complex problems (e.g. requiring a solution specific to the situation)	20%	16%	38%	39%	45%	35%	29%	36%	29%	31%
Innovative thinking (e.g. to come up with new solutions)	28%	23%	41%	37%	39%	37%	30%	36%	30%	31%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	27%	20%	33%	30%	39%	27%	28%	31%	31%	34%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	29%	28%	42%	41%	42%	31%	31%	31%	31%	32%
Other	1%	1%	-	1%	-	-	-	-	-	-
Don't know	10%	-	-	2%	-	1%	1%	-	-	-
Not applicable – my organisation has the skills we need to meet our sustainability strategy	14%	7%	3%	2%	2%	10%	5%	3%	1%	6%
Net: Organisation needs skills to meet sustainability strategy	76%	93%	97%	97%	98%	89%	94%	97%	99%	94%

Table 14

Q18. You told us you have a sustainability strategy. Which, if any, of the following are the aim(s) of your strategy? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	683	92	76	182	130	81	100	78	70	103
Base: Organisation has a sustainability strategy	671	92	76	182	130	81	100	78	70	103
Reduce your organisations carbon emissions	71%	33%	38%	51%	56%	48%	45%	42%	40%	44%
Make your organisation net zero	50%	36%	36%	27%	47%	33%	20%	36%	39%	37%
To gain an environmental qualification (e.g. certified B corp)	29%	32%	50%	47%	70%	37%	49%	42%	26%	42%
To meet regulations for new markets	36%	40%	50%	49%	59%	49%	51%	47%	40%	50%
To make the organisation more appealing to customers	47%	40%	61%	53%	54%	53%	39%	42%	26%	43%
To mitigate the potential impact of climate change on our business	46%	49%	54%	47%	62%	35%	36%	44%	39%	46%
Other	3%	-	-	1%	-	-	-	-	-	1%
Don't know	3%	4%	-	1%	-	-	-	-	1%	-

Table 15

Q22_multi. In the last 3 years (i.e. since 2020)… Which, if any, of the following organisational changes has your organisation implemented in order to lower its environmental impact? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Change work techniques or procedures	27%	29%	37%	34%	51%	34%	33%	34%	29%	34%
Change the organisation of work (e.g. change team structures, allocation of work)	21%	36%	42%	30%	50%	27%	36%	30%	33%	34%
Introduced business resilience planning	16%	27%	30%	30%	30%	22%	24%	28%	27%	34%
Introduce initiatives to improve environmental sustainability of the organisation	35%	29%	42%	44%	59%	33%	40%	30%	29%	40%
Introduce flexible working arrangements (e.g. working from home, remote working)	40%	34%	34%	41%	55%	35%	31%	31%	41%	43%
Stop flexible working arrangements	6%	13%	23%	24%	18%	12%	15%	27%	23%	24%
Improve flexible working arrangements	35%	23%	42%	36%	42%	32%	23%	27%	30%	29%
Reduce the number of staff	15%	12%	22%	16%	11%	15%	17%	25%	22%	18%
Increase the number of staff	15%	16%	22%	21%	25%	30%	27%	20%	21%	31%
Other	1%	1%	-	0%	-	1%	-	-	1%	-
Don't know	6%	1%	3%	1%	1%	2%	-	4%	5%	1%
Not applicable – we have not made any organisational changes in order to lower the organisation's environmental impact in the	16%	10%	1%	4%	1%	9%	3%	1%	4%	3%
Net: Made organisational changes to lower environmental impact in last 3 years	78%	89%	96%	95%	98%	89%	97%	95%	91%	97%

Table 16

Q23. Still thinking about the last 3 years (i.e. since 2020)… Which, if any, of the following technological changes has your organisation implemented in order to lower its environmental impact? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Introducing robotic/ automated equipment to complete a physical task	18%	33%	28%	25%	43%	24%	31%	22%	25%	27%
Introducing / upgrading IT hardware (e.g. computers, smartphones, any hand-held devices for work tasks)	37%	28%	48%	38%	48%	50%	33%	41%	33%	43%
Introducing equipment/ software that uses Artificial Intelligence (AI) (i.e. which is able to learn from data, reasoning or self-	17%	33%	34%	39%	59%	35%	31%	31%	25%	37%
Introducing/upgrading networks to 5G to increase efficiencies	13%	21%	36%	34%	45%	20%	33%	32%	25%	24%
Introducing or expanding online communication/ networking applications/ platforms for work purposes (e.g. instant messaging, video	36%	32%	43%	40%	58%	41%	41%	47%	37%	45%
Introducing remote sensing/ monitoring systems (e.g. smart detection systems, GPS)	14%	28%	37%	37%	36%	23%	33%	37%	23%	37%
Introducing high-performance/ technologically advanced materials	16%	19%	34%	36%	48%	32%	36%	27%	27%	33%
Introducing any other kind of new software	24%	18%	35%	29%	34%	27%	27%	20%	20%	27%
Other	2%	-	-	-	-	-	-	-	-	-
Don't know	9%	2%	2%	1%	-	-	-	4%	4%	2%
Not applicable – we have not made any technological changes in order to lower the organisation's environmental impact in the	20%	9%	2%	3%	1%	9%	2%	2%	8%	4%
Net: Made technological changes to lower environmental impact in the last 3 years	71%	89%	96%	96%	99%	91%	98%	94%	88%	94%

Section 4 – Entrants to the workforce

Tables referenced in section 4:

Table 17

Q13. Thinking about the skills people entering the engineering workforce have…   Which, if any, of the following skills do you think people…

Q13a_1. Leadership/management skills	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	54%	44%	76%	77%	89%	76%	82%	70%	58%	65%
…Are missing	37%	36%	26%	29%	13%	22%	16%	26%	32%	42%
Don't know	15%	21%	2%	2%	1%	4%	4%	6%	13%	4%

Q13a_2. Specialist environmental or sustainability skills/knowledge	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	52%	47%	77%	69%	89%	73%	77%	69%	59%	71%
…Are missing	33%	38%	21%	32%	11%	23%	15%	26%	31%	31%
Don't know	21%	14%	4%	6%	2%	6%	8%	7%	14%	8%

Q13a_3. Specialist digital skills/knowledge	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	63%	44%	84%	71%	89%	82%	86%	72%	56%	72%
…Are missing	28%	40%	13%	32%	13%	19%	12%	27%	35%	26%
Don't know	15%	17%	4%	3%	3%	1%	2%	4%	11%	7%

Q13a_4. Technical/engineering skills	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	79%	54%	85%	78%	89%	87%	88%	70%	70%	77%
…Are missing	18%	38%	13%	26%	14%	14%	10%	29%	19%	24%
Don't know	9%	11%	3%	3%	-	1%	3%	2%	15%	4%

Q13a_5. Solving complex problems	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	70%	47%	73%	72%	89%	77%	84%	78%	62%	74%
…Are missing	27%	44%	22%	34%	13%	21%	11%	20%	27%	32%
Don't know	11%	13%	7%	2%	2%	6%	6%	6%	12%	3%

Q13a_6. Innovative thinking	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	70%	46%	72%	77%	82%	80%	83%	78%	62%	66%
…Are missing	28%	44%	26%	25%	19%	22%	15%	19%	31%	29%
Don't know	11%	12%	4%	3%	2%	2%	2%	5%	10%	11%

Q13a_7. An agile mindset	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	68%	46%	77%	65%	87%	79%	89%	76%	60%	69%
…Are missing	29%	47%	22%	37%	15%	22%	7%	23%	30%	29%
Don't know	11%	11%	4%	6%	2%	-	4%	4%	14%	8%

Q13a_8. Whole systems thinking	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
…Should have	56%	51%	75%	69%	92%	75%	81%	72%	67%	66%
…Are missing	36%	40%	28%	35%	10%	28%	15%	21%	26%	34%
Don't know	16%	12%	3%	3%	1%	3%	6%	7%	10%	7%

Table 18

Q15. How well, if at all, do you think the country's education system prepares young people to work in your industry?

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Very well	7%	34%	27%	39%	43%	33%	35%	51%	41%	34%
Fairly well	28%	43%	37%	39%	52%	48%	35%	35%	24%	51%
Not very well	47%	17%	29%	17%	5%	19%	21%	10%	27%	13%
Not at all	15%	6%	6%	5%	1%	-	10%	2%	4%	2%
Don't know	2%	-	1%	-	-	1%	-	2%	4%	1%
Net: Well	35%	77%	64%	78%	95%	80%	69%	86%	65%	85%
Net: Not Well	63%	23%	35%	22%	5%	19%	31%	12%	31%	14%

Table 19

Q16. Where, if anywhere, does technology and engineering education at a university level need to improve in order to provide more high-quality engineering and technology candidates for the industry? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Industry placement years	44%	19%	34%	29%	29%	31%	27%	28%	23%	25%
Summer placement schemes	28%	21%	17%	26%	22%	17%	19%	27%	19%	22%
Graduate networks	18%	14%	31%	27%	19%	25%	23%	24%	24%	25%
Industry seminars	15%	19%	33%	24%	39%	25%	25%	21%	25%	29%
Industry targeted projects	34%	23%	37%	34%	52%	27%	28%	30%	30%	24%
Research projects in collaboration with industry	30%	28%	37%	38%	41%	42%	32%	35%	30%	34%
Group projects within the University	18%	15%	33%	32%	30%	24%	29%	22%	34%	29%
Teaching of open source (as opposed to proprietary software)	14%	27%	36%	32%	30%	27%	31%	25%	33%	35%
Greater specificity of courses	19%	23%	30%	33%	37%	22%	36%	18%	14%	28%
Dedicated careers department support	19%	14%	36%	30%	43%	27%	39%	24%	20%	29%
Internationally focussed training	11%	18%	27%	30%	34%	30%	31%	25%	23%	24%
Soft skills	25%	21%	40%	37%	42%	26%	23%	32%	31%	29%
Reducing the cost of STEM education	25%	21%	24%	29%	39%	18%	14%	25%	24%	32%
Other	4%	-	-	0%	-	-	2%	-	-	1%
Don't know	13%	-	2%	1%	1%	1%	-	3%	4%	2%
Not applicable – nothing in particular would provide more qualified engineering and technology candidates	4%	3%	1%	1%	-	1%	2%	1%	1%	2%

Table 20

Q9. In general, which, if any, of the following skills do you struggle to find within the external labour market when you try and recruit? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Leadership/management skills (e.g. to enact change)	21%	30%	32%	29%	31%	21%	36%	35%	26%	26%
Specialist environmental or sustainability skills/knowledge (e.g. of how to lower your environmental impact)	24%	29%	35%	38%	57%	29%	32%	30%	31%	34%
Specialist digital skills/ knowledge (e.g. to update our systems and track our progress)	21%	33%	34%	37%	56%	33%	30%	36%	32%	29%
Technical/engineering skills (e.g. to implement or integrate changes)	36%	26%	40%	34%	39%	40%	25%	25%	23%	34%
Solving complex problems (e.g. requiring a solution specific to the situation)	24%	21%	37%	43%	60%	32%	21%	36%	33%	36%
Innovative thinking (e.g. to come up with new solutions)	25%	21%	35%	37%	51%	34%	33%	33%	34%	30%
Agile mindsets within your workforce (e.g. the ability to adapt to change)	25%	24%	37%	27%	39%	20%	21%	32%	28%	23%
Whole systems thinking (e.g. systems engineering skills to address wider solutions)	23%	22%	38%	32%	57%	26%	33%	39%	31%	34%
Other	2%	-	-	0%	-	1%	2%	-	1%	-
Don't know	9%	-	1%	1%	-	-	-	2%	1%	-
Not applicable - we don't struggle to find certain skills when we recruit	11%	6%	4%	2%	2%	12%	3%	1%	3%	6%

Table 21

Q11. How is/ will your organisation respond to these skills gaps? Please select all that apply.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	803	102	101	223	131	93	117	94	88	112
Base: Organisation has skill gaps	809	102	101	223	131	93	117	94	88	112
Upskilling/ re-training existing employees	53%	27%	62%	47%	79%	56%	44%	43%	38%	41%
Hiring new employees in my country	40%	41%	37%	41%	44%	45%	32%	32%	26%	44%
Hiring new employees from overseas	16%	25%	22%	24%	25%	31%	22%	31%	19%	34%
Outsourcing the necessary tasks to another organisation	24%	32%	43%	40%	48%	22%	33%	39%	23%	29%
Increasing contingent labour (e.g. contractors, agency workers)	21%	50%	29%	34%	36%	32%	34%	37%	34%	41%
Automating work/ tasks	17%	25%	33%	33%	57%	31%	27%	33%	25%	30%
Other	2%	-	-	-	-	-	-	-	-	-
Don't know	5%	-	-	-	-	2%	-	-	1%	-
Not applicable – my organisation will not do anything in particular	4%	1%	1%	1%	-	-	-	3%	2%	2%
Net: Organisation is/will respond to skills gaps	91%	99%	99%	99%	100%	98%	100%	97%	97%	98%

Section 5 - Country readiness for net zero

Tables referenced in section 5:

Table 22										
Q32. Where could your government focus on improving their policies to support the engineering industry in their efforts to meet net zero?										
	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	-	107	121	103	100	119
Base: all	1007	112	107	234	-	107	121	103	100	119
Funding for up/re-skilling: funding for employees to train-up their skill level in their current profession / funding to retrain into a	34%	30%	31%	28%	-	38%	35%	35%	32%	32%
Promotion of 'green jobs': jobs related to activities and industries that reduce carbon emissions – examples include renewable energy engineers, retrofit engineers, nuclear	21%	31%	42%	34%	-	24%	36%	35%	23%	35%
The green economy: sectors of the economy that seek to reduce carbon emissions – for example, sustainable energy	36%	29%	49%	47%	-	49%	41%	30%	39%	39%
The education pipeline: the route through education from start to the end of a career	28%	25%	39%	35%	-	30%	27%	29%	23%	29%
Innovation funding investment into science and technology capacity/and or research and development	36%	25%	31%	36%	-	50%	38%	29%	25%	31%
Industrial strategy: coordinating a range of policies to boost businesses and the economy	39%	30%	28%	35%	-	47%	33%	32%	41%	41%
Regionalisation / local strategies: policies that focus on local economic and societal development	19%	33%	22%	29%	-	19%	26%	28%	19%	24%
Other	3%	-	-	0%	-	-	2%	-	-	-
Don't know	14%	9%	5%	4%	-	3%	1%	6%	5%	4%

Table 23

Q30. Which, if any, of the following areas do you think are the most important to help your country meet net zero targets? Please select up to 5.

	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
New buildings and construction Materials, incorporating sustainable technologies, e.g. solar panels	29%	45%	45%	40%	30%	46%	36%	50%	48%	31%
Retrofit of existing buildings Updating or replacing materials or sustainable technologies to make a building more efficient, e.g. insulation, glazing, LED lighting	34%	31%	27%	19%	24%	24%	23%	33%	34%	32%
Heating and cooling of buildings the move from gas/oil/coal to e.g. electrified heat/ cooling or hydrogen	39%	34%	37%	33%	36%	43%	30%	29%	29%	32%
Digital twins a digital version/copy of an intended or actual real-world physical product, system, or process with a two-way flow of data between them	5%	13%	14%	14%	17%	16%	16%	14%	23%	18%
Renewable energy generation (wind/solar/ tidal generation etc.)	36%	22%	34%	34%	43%	37%	38%	33%	23%	35%
Nuclear (reactors) Standard traditional reactors	22%	21%	12%	18%	10%	9%	14%	20%	12%	19%
Nuclear (modular) smaller nuclear reactors, designed to be transportable and used at a separate site	16%	5%	13%	15%	13%	7%	10%	13%	14%	14%
Nuclear Fusion nascent technology: a proposed form of power generation that would generate electricity by using heat from nuclear fusion reactions	17%	9%	12%	11%	11%	10%	9%	7%	8%	18%
Energy infrastructure and storage distribution, cabling, metering, storage solutions	31%	8%	24%	20%	30%	24%	21%	16%	13%	27%
Green hydrogen production and infrastructure hydrogen production from electrolysis, a process that produces no greenhouse gasses	19%	6%	24%	18%	21%	16%	17%	14%	18%	11%
Zero emission road vehicles electric vehicles, hydrogen or fuel cell vehicles	26%	9%	25%	27%	27%	31%	26%	17%	17%	22%
Zero emission rail electrified rail or other technologies	11%	9%	11%	15%	15%	12%	17%	11%	18%	18%
Zero emission aviation sustainable aviation fuels, electric or hydrogen	16%	6%	7%	18%	18%	18%	7%	9%	14%	17%
Zero emission shipping ammonia, electric etc.	11%	6%	9%	12%	15%	12%	7%	9%	12%	13%
Manufacture of key net zero technologies and products (i.e. batteries)	12%	9%	17%	14%	20%	18%	19%	13%	10%	17%
Circular economy a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products, reducing waste	15%	10%	14%	12%	42%	20%	8%	14%	11%	15%
Carbon Capture, Utilisation and Storage (CCUS) Capturing carbon emissions instead of releasing them into the atmosphere	15%	5%	11%	17%	16%	12%	9%	20%	9%	16%
None of these	3%	4%	-	0%	3%	3%	3%	1%	3%	3%
Don't know	8%	3%	6%	4%	-	1%	2%	2%	5%	1%

Table 24

Thinking about the areas that could be used to meet net zero targets in your country; in which, if any of the following areas do you think your country…

Q31_1. New buildings and construction (materials, incorporating sustainable technologies, e.g. solar panels)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	59%	43%	59%	58%	78%	66%	65%	62%	37%	60%
Does not have the skills needed	22%	38%	28%	31%	14%	19%	18%	21%	19%	29%
Don't know	17%	16%	12%	9%	5%	11%	13%	17%	15%	8%
Not applicable – this area isn't relevant to my country	2%	4%	1%	2%	2%	4%	3%	-	29%	3%

Q31_2. Retrofit of existing buildings (updating or replacing materials or sustainable technologies to make a building more efficient, e.g. insulation, glazing, LED lighting)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	55%	36%	55%	54%	78%	70%	65%	60%	34%	62%
Does not have the skills needed	24%	35%	27%	28%	14%	20%	20%	23%	26%	26%
Don't know	19%	24%	13%	14%	7%	9%	14%	14%	11%	8%
Not applicable – this area isn't relevant to my country	2%	5%	5%	4%	2%	1%	1%	3%	29%	4%

Q31_3. Heating and cooling of buildings (the move from gas/oil/coal to e.g. electrified heat/cooling or hydrogen)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	53%	38%	53%	52%	77%	73%	58%	55%	37%	65%
Does not have the skills needed	25%	38%	30%	30%	17%	18%	25%	24%	24%	25%
Don't know	20%	20%	14%	13%	5%	7%	12%	17%	15%	9%
Not applicable – this area isn't relevant to my country	2%	5%	3%	5%	2%	2%	5%	3%	24%	1%

Q31_4. Digital twins (a digital version/copy of an intended or actual real-world physical product, system, or process with a two-way flow of data between them)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	23%	33%	49%	48%	68%	53%	54%	52%	27%	52%
Does not have the skills needed	25%	38%	32%	27%	22%	19%	26%	33%	33%	29%
Don't know	48%	26%	20%	21%	8%	23%	17%	14%	13%	16%
Not applicable – this area isn't relevant to my country	4%	4%	-	4%	2%	5%	3%	1%	27%	3%

Q31_5. Renewable energy generation (wind/solar/tidal etc.)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	63%	36%	56%	65%	83%	70%	75%	58%	44%	61%
Does not have the skills needed	19%	35%	25%	23%	12%	19%	14%	29%	23%	29%
Don't know	16%	25%	15%	9%	5%	9%	10%	13%	12%	8%
Not applicable – this area isn't relevant to my country	2%	4%	4%	3%	1%	2%	1%	-	21%	2%

Q31_6. Nuclear (reactors) (standard traditional reactors)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	44%	40%	37%	55%	65%	36%	45%	37%	26%	54%
Does not have the skills needed	27%	34%	37%	24%	24%	31%	32%	39%	32%	30%
Don't know	24%	21%	14%	15%	7%	22%	17%	19%	14%	9%
Not applicable – this area isn't relevant to my country	5%	5%	11%	6%	4%	10%	6%	5%	28%	7%

Q31_7. Nuclear (modular) (smaller nuclear reactors, designed to be transportable and used at a separate site)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	36%	36%	30%	56%	70%	44%	41%	47%	32%	46%
Does not have the skills needed	29%	38%	44%	19%	20%	27%	31%	30%	24%	32%
Don't know	30%	19%	16%	18%	7%	20%	19%	18%	19%	18%
Not applicable – this area isn't relevant to my country	4%	7%	10%	7%	4%	9%	9%	5%	25%	4%
Q31_8. Nuclear Fusion (nascent technology: a proposed form of power generation that would generate electricity by using heat from nuclear fusion reactions)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	27%	34%	31%	55%	66%	40%	38%	41%	28%	55%
Does not have the skills needed	37%	41%	40%	26%	22%	29%	37%	39%	27%	29%
Don't know	31%	21%	18%	13%	8%	21%	16%	16%	12%	13%
Not applicable – this area isn't relevant to my country	5%	4%	11%	6%	5%	10%	9%	5%	33%	4%
Q31_9. Energy infrastructure and storage (distribution, cabling, metering, storage solutions)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	44%	35%	52%	61%	78%	63%	60%	59%	37%	61%
Does not have the skills needed	31%	44%	32%	25%	14%	22%	26%	22%	25%	29%
Don't know	23%	16%	15%	11%	6%	14%	13%	16%	10%	7%
Not applicable – this area isn't relevant to my country	2%	5%	1%	3%	2%	2%	2%	3%	28%	3%
Q31_10. Green hydrogen production and infrastructure (hydrogen production from electrolysis, a process that produces no greenhouse gasses)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	32%	43%	52%	52%	76%	63%	59%	50%	35%	50%
Does not have the skills needed	37%	38%	35%	32%	17%	20%	26%	31%	25%	36%
Don't know	29%	16%	10%	12%	6%	16%	13%	17%	13%	11%
Not applicable – this area isn't relevant to my country	2%	3%	3%	4%	2%	2%	2%	1%	27%	3%
Q31_11. Zero emission road vehicles (electric vehicles, hydrogen or fuel cell vehicles)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	45%	36%	50%	52%	80%	56%	57%	54%	29%	63%
Does not have the skills needed	34%	43%	35%	33%	14%	26%	30%	35%	29%	24%
Don't know	20%	20%	12%	12%	5%	17%	12%	10%	16%	11%
Not applicable – this area isn't relevant to my country	2%	2%	3%	3%	-	1%	1%	1%	26%	2%
Q31_12. Zero emission rail (electrified rail or other technologies)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	35%	39%	45%	50%	72%	52%	55%	49%	29%	53%
Does not have the skills needed	36%	34%	36%	33%	19%	33%	28%	34%	25%	30%
Don't know	26%	21%	15%	14%	8%	13%	13%	16%	19%	13%
Not applicable – this area isn't relevant to my country	4%	5%	4%	3%	2%	2%	3%	2%	27%	4%

Q31_13. Zero emission aviation (sustainable aviation fuels, electric or hydrogen)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	28%	37%	46%	48%	72%	44%	49%	45%	29%	56%
Does not have the skills needed	42%	42%	38%	36%	22%	35%	36%	38%	27%	26%
Don't know	27%	14%	12%	11%	5%	18%	12%	15%	13%	14%
Not applicable – this area isn't relevant to my country	3%	7%	4%	5%	2%	4%	2%	3%	31%	3%

Q31_14. Zero emission shipping (ammonia, electric etc.)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	30%	41%	44%	49%	68%	51%	48%	51%	25%	55%
Does not have the skills needed	36%	31%	37%	35%	25%	27%	31%	32%	31%	31%
Don't know	30%	22%	14%	13%	5%	21%	15%	15%	14%	12%
Not applicable – this area isn't relevant to my country	3%	5%	5%	3%	2%	1%	6%	2%	30%	3%

Q31_15. Manufacture of key net zero technologies and products (i.e. batteries)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	37%	39%	51%	59%	84%	68%	67%	56%	39%	59%
Does not have the skills needed	36%	31%	40%	29%	12%	21%	21%	30%	34%	25%
Don't know	24%	24%	7%	10%	4%	8%	5%	13%	8%	10%
Not applicable – this area isn't relevant to my country	2%	5%	1%	2%	-	3%	7%	1%	19%	6%

Q31_16. Circular economy (a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products, reducing waste)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	34%	44%	45%	53%	83%	58%	64%	55%	28%	52%
Does not have the skills needed	32%	29%	38%	32%	11%	23%	19%	26%	29%	31%
Don't know	31%	23%	17%	13%	5%	18%	14%	17%	13%	13%
Not applicable – this area isn't relevant to my country	3%	4%	-	3%	1%	1%	3%	1%	30%	4%

Q31_17. Carbon Capture, Utilisation and Storage (CCUS) (Capturing carbon emissions instead of releasing them into the atmosphere)	UK	Germany	Malaysia	India	China	Australia	Brazil	Saudi Arabia	Egypt	USA
Unweighted base	1007	112	107	234	132	107	121	103	100	119
Base: all	1007	112	107	234	132	107	121	103	100	119
Has the skills needed	32%	46%	48%	47%	70%	49%	50%	46%	28%	58%
Does not have the skills needed	35%	36%	36%	35%	21%	32%	30%	38%	26%	28%
Don't know	30%	14%	16%	14%	8%	17%	17%	16%	20%	8%
Not applicable – this area isn't relevant to my country	3%	4%	1%	4%	1%	3%	3%	1%	26%	6%

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