

Study on Gender Balance in the R&I Field to Improve the Role of Women in the Energy Transition (CINEA/2021/OP/0012)

Questionnaire for online survey of students' attitudes towards the energy transition and a career in energy



Background

The survey is targeted at **students in tertiary education (regardless of gender and the field of their studies)**.

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INTRO SCREEN

The education and training landscape across the world is currently facing an urgent demand to prepare students for positions at the core of what is known as the energy transition, i.e. the global shift from relying on traditional, non-renewable energy sources (like fossil fuels) to a cleaner and more sustainable energy system mainly based on renewable sources. Each country needs to manage the energy transition in an effective but also socially sustainable way, for which individuals with new (combinations) of skills are required at all levels, from manual labour positions to top executives.

Against this background, we are conducting a survey of students in universities and other tertiary education institutions across the world to explore their perceptions about the energy transition and gauge their interest in a career in the energy sector or in other positions at the centre of the energy transition.

We cordially invite you to participate in this survey, which is being conducted by [empirica](#) as part of a study commissioned by the [European Climate, Infrastructure, and Environment Executive Agency \(CINEA\)](#), an agency of the European Commission. Your input is incredibly valuable in shaping the energy transition in Europe and beyond.

We sincerely appreciate your time and willingness to share your experiences and perspectives. Completing the survey should take approximately 5 minutes of your time. Rest assured that your participation is entirely voluntary, and your responses will be handled with strict confidentiality, fully complying with EU data protection rules. The survey will not allow any identification of your person or the organisation you work for. Its purpose is to contribute to policy research, and the results will be published only in aggregated form.

Together, let's drive positive change and foster an environment that promotes the development of study programmes and job profiles that effectively address the demands arising from climate change and the energy transition.

Questionnaire for student survey- final master

TOPIC	Sub-topic	Target group	Question wording	Response option	Comments
Screener question	Confirmation that person is member of target universe	ALL	SCOPE Are you currently enrolled in a programme of education at a university or another tertiary education institution?	[Single answer] 1 Yes 2 No => screen out (Display: This survey is not for you, as it is targeted exclusively at students in tertiary education. Thank you, however, for your willingness to participate!)	
		If SCOPE = 1	LEVEL What is the current level of education in which you are enrolled?	[Single answer] 1 Bachelor's or equivalent 2 Master's or equivalent 3 Ph.D. 4 Vocational Education and Training (VET) programme 5 College programme 6 Technical or trade school programme 7 Professional certification programme 8 Other, please specify [...] 9 No answer	
Studies		If SCOPE = 1	GRAD In which year are you expecting to graduate?	ENTER NUMBERS ____ year 98 Don't know 99 No answer	

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Field of study (ISCED-F 2013)	If SCOPE = 1	FIELD1 What field(s) of study are you currently pursuing?	<p>[Multiple answers]</p> <ul style="list-style-type: none"> 1 Education 2 Arts and humanities 3 Social sciences, journalism and information 4 Business, administration and law 5 Natural sciences and mathematics 6 Information and Communication Technologies (ICTs) 7 Engineering, manufacturing and construction 8 Agriculture, forestry, fisheries and veterinary 9 Health and welfare 10 Services 11 Other, please specify [...] 10 No answer 	Source: ISCED-F 2013
	If FIELD1 = 5	FIELD2 What field(s) of study <u>within the natural sciences and mathematics</u> are you currently pursuing?	<p>[Multiple answers]</p> <ul style="list-style-type: none"> 1 Biology and related sciences 2 Environmental sciences and related 3 Chemistry 4 Earth sciences 5 Physics 6 Mathematics and statistics 7 Other, please specify [...] 	Source: ISCED-F 2013

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		<p>If FIELD1 = 7</p>	<p>FIELD3 What field(s) of study <u>within engineering, manufacturing and construction</u> are you currently pursuing?</p>	<p>[Multiple answers]</p> <ol style="list-style-type: none"> 1 Chemical engineering 2 Environmental protection 3 Electricity and energy 4 Electronics and automation 5 Mechanics and metal trades 6 Motor vehicles, ships and aircraft 7 Food processing 8 Manufacturing and processing of materials 9 Manufacturing and processing of textiles 10 Mining and extraction 11 Architecture and town planning 12 Building and civil engineering 13 Other, please specify [...] 	<p>Source: ISCED-F 2013</p>
<p>Reason for choice of field</p>		<p>If SCOPE = 1</p>	<p>REASON1 Why did you decide to study in the field you are currently enrolled in? Mark all that apply.</p>	<p>[Multiple answers]</p> <ol style="list-style-type: none"> 1 I always expected to work in this field 2 It is a field in which I excel during my studies 3 I was interested in the subject matter (fun and interesting) 4 Influence of faculty members or teaching assistants 5 Influence of advisor or mentor 6 It was recommended to me 7 Because of relative(s) in the field 8 Because of friend(s) in the field 9 Career fairs and career counsellor 10 Prospects for personal development 11 Looking for a challenging job 12 Work conditions and benefits (good salary prospects) 13 Good prospects for employment (career opportunity) 14 Social aspect of expected job with a diploma 15 Other, please specify: ____ 16 No answer 	<p>Source: SAGA survey</p>

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Uncompleted degree programmes	If SCOPE = 1	<p><i>For the next questions, we would like to know if you have ever been enrolled in an education programme in which you did not receive a diploma. If you have been enrolled but have not completed one or more programmes, please complete the following questions in reference to the programme in which you were enrolled for the longest period of time but did not complete.</i></p> <p>UNC1 Were you ever enrolled in an education programme that you did not complete?</p>	<p>[Single answer]</p> <p>1 Yes 2 No 3 No answer</p>	Source: SAGA survey
	If UNC1 = 1	<p>UNC2 Why did you enrol in this programme initially?</p>	<p>[Multiple answers]</p> <p>1 Interested in the subject matter 2 Field in which I excelled 3 Influence of faculty members or teaching assistants 4 Influence of advisor or mentor 5 Prospects for personal development 6 Social aspect of expected job with a diploma in this field 7 Career fairs and career counsellor 8 Work conditions and benefits expected 9 I always thought I would study in this field 10 Other, please specify: ____ 11 No answer</p>	Source: SAGA survey
	If UNC1 = 1	<p>UNC3 Why did you not complete this programme?</p>	<p>[Multiple answers]</p> <p>1 Found another major more interesting 2 Moved to another level of education (e.g., master's to Ph.D.) 3 Lost interest in the programme 4 Discouraged by conceptual difficulties 4 Feeling overwhelmed by the pace and load of curriculum and demands</p>	Source: SAGA survey

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		<p>5 Discouraged by low grades</p> <p>6 Reward not worth the effort</p> <p>7 Poor teaching</p> <p>8 Low self-confidence</p> <p>9 Discrimination related reasons</p> <p>10 Harassment related reasons</p> <p>11 Received compelling job offer before graduation</p> <p>12 Not enough support (mentoring or advising)</p> <p>13 Moved to another institution to continue in a similar programme</p> <p>14 I was required to leave by the university due to low grades</p> <p>15 I was required to leave by the university due to taking too long to reach degree</p> <p>16 I was required to leave by the university due to disciplinary action</p> <p>17 Other, please specify: ____</p> <p>18 No answer</p>	
	<p>If UNC1 = 1</p>	<p>UNC5 What field(s) of study was this programme in?</p>	<p>[Multiple answers]</p> <p>1 Education</p> <p>2 Arts and humanities</p> <p>3 Social sciences, journalism and information</p> <p>4 Business, administration and law</p> <p>5 Natural sciences and mathematics</p> <p>6 Information and Communication Technologies (ICTs)</p> <p>7 Engineering, manufacturing and construction</p> <p>8 Agriculture, forestry, fisheries and veterinary</p> <p>9 Health and welfare</p> <p>10 Services</p> <p>11 Other, please specify [...]</p> <p>10 No answer</p> <p>Source: ISCED-F 2013</p>

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	If UNC5 = 5	UNC6 What field(s) of study <u>within the natural sciences and mathematics</u> was this programme in?	[Multiple answers] 1 Biology and related sciences 2 Environmental sciences and related 3 Chemistry 4 Earth sciences 5 Physics 6 Mathematics and statistics 7 Other, please specify [...]	<i>Source: ISCED-F 2013</i>
	If UNC5 = 7	UNC7 What field(s) of study <u>within engineering, manufacturing and construction</u> was this programme in?	[Multiple answers] 1 Chemical engineering 2 Environmental protection 3 Electricity and energy 4 Electronics and automation 5 Mechanics and metal trades 6 Motor vehicles, ships and aircraft 7 Food processing 8 Manufacturing and processing of materials 9 Manufacturing and processing of textiles 10 Mining and extraction 11 Architecture and town planning 12 Building and civil engineering 13 Other, please specify [...]	<i>Source: ISCED-F 2013</i>
Attitudes to the energy transition	If SCOPE = 1	SERIOUS1 How serious a problem do you think climate change is at this moment?	[Single answer] 1 Not at all a serious problem 2 3 4 5 6 7 8 9 10 An extremely serious problem 11 No answer	<i>Source of first question: Eurobarometer 513 and previous editions</i>

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		If SCOPE = 1	SERIOUS2 How important would you say is the success of the <u>energy transition</u> for combatting climate change?	[Single answer] 1 Not important at all 2 3 4 5 6 7 8 9 10 Extremely important 11 No answer	
		If SCOPE = 1	INFLU1 To what degree has your opinion about the importance of climate change and the energy transition influenced your choice of study programme? INFLU2 To what extent will it influence your career choices from now on?	[Single answer] 1 Not at all 2 Not really 3 Yes, a little 4 Yes, a lot 5 No answer	
Explicit interest in career in energy		If SCOPE = 1	ENERGY To what extent would you consider the prospect of pursuing a career in the energy sector upon completion of your studies? <i>By 'energy sector', we mean organisations involved in energy generation, storage, management, or distribution. This also includes positions in associated fields such as manufacturing, servicing, or distributing energy-related products or equipment, research and consultancy on the energy transition.</i>	[Single answer] 1 Not at all 2 Slightly 3 Moderately 4 Strongly 5 Very strongly 6 No answer	
		If SCOPE = 1	FIT How well do you believe your	[Single answer]	

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			skills, interests, and values align with a career in the energy sector?	FOR EACH: 1 Not at all 2 3 4 5 6 7 8 9 10 Extremely well 11 No answer	
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<p>Factors influencing choice of employer/ sector</p>		<p>If SCOPE = 1</p>	<p>FACTOR On a scale of importance, how would you rate the following factors as criteria for selecting among potential jobs after completing your studies? FACTOR1 Salary FACTOR2 Employee benefits, i.e. non-salary perks, incentives, advantages FACTOR3 Job security FACTOR4 Job location FACTOR5 Working conditions FACTOR6 Work-life balance FACTOR7 Flexibility in the workplace FACTOR8 Opportunities for advancement FACTOR9 Training opportunities FACTOR10 International mobility opportunities FACTOR11 Job content FACTOR12 Intellectual and personal challenges FACTOR13 Level of responsibility FACTOR14 Degree of independence FACTOR15 Contribution to society FACTOR16 Equitable treatment of people FACTOR17 Relationship with colleagues</p>	<p>[Single answer] 1 Not important at all 2 Not important 3 Neutral 4 Important 5 Very important 6 No answer</p>	<p><i>Adapted from SAGA survey</i></p>
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Job content preferences		If SCOPE = 1	<p>CONTENT Please rate the importance of different types of job content by indicating the level of preference for each item below.</p> <p>CONTENT1 Hands-on work that involves practical tasks and activities</p> <p>CONTENT2 Analyzing data and working with numbers</p> <p>CONTENT3 Interacting and working directly with people</p> <p>CONTENT4 Creative work that allows for innovation and problem-solving</p> <p>CONTENT5 Research and gathering information</p> <p>CONTENT6 Working with technology and digital tools</p> <p>CONTENT7 Planning and organising projects or events</p> <p>CONTENT8 Writing, communication, and content creation</p> <p>CONTENT9 Working in a team and collaborating with others</p> <p>CONTENT10 Continuous learning and staying updated with industry trends</p>	<p>[Single answer]</p> <p>For each:</p> <p>1 Totally undesirable</p> <p>2 Rather undesirable</p> <p>3 Neutral</p> <p>4 Important</p> <p>5 Essential</p> <p>6 No answer</p>	
Sociodemographics	Gender of respondent	If SCOPE = 1	GENDER Regarding gender identity, which of the following options best describes how you think of yourself?	<p>[Multiple answers]</p> <p>1 Female</p> <p>2 Male</p> <p>3 Non-Binary / Other</p> <p>4 No answer</p>	
	Age	If SCOPE = 1	AGE What is your age (in years)?	<p>ENTER NUMBERS</p> <p>__ years</p> <p>99 No answer</p>	
	Country of birth and residence	If SCOPE = 1	NATION1 In which country were you born?	Drop-down list from EUSurvey	Drop-down list entire world

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		If SCOPE = 1	<p>NATION2 In which country do you study?</p> <p><i>If you are a resident of more than one country, please refer to the country you spend most of your time in</i></p>	Drop-down list from EUSurvey	
Discrimination	Perception of discrimination	If SCOPE = 1	<p>MINOR1 Would you describe yourself as being a member of a group that is discriminated against in the country you live in?</p>	<p>[Single answer]</p> <p>1 Yes 2 No 3 No answer</p>	<p>Source: European Social Survey (2020). ESS Round 10 Source Questionnaire. ESS questions C18, C19, C20</p>
	Reason for discrimination	If MINOR1 = 1	<p>MINOR2 On what grounds is your group discriminated against?</p>	<p>[Multiple answers]</p> <p>1 Colour or race 2 Nationality 3 Religion 4 Language 5 Ethnic group 6 Age 7 Gender 8 Sexuality 9 Disability 10 Other, please specify [...]</p>	
			<p>Many thanks for your contribution to this research study! Your data will be treated strictly according to the European data protection legislation. If you have any questions or would like to be notified when results become available, please get in touch with Karsten Gareis from the study team, who can be reached at GenderInEnergy@empirica.com.</p>		

