

CLIMATE GOALS:

Winning the challenge of climate goals
through the creation of skills and
competences worldwide

ADDENDUM 2: FOCUS QATAR - ARGENTINA



**WITH AN UPDATED
FOCUS ON CHINA AND THE USA**

2025 Edition

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1 INTRODUCTION

to CLIMATE GOALS

research 2025

By Ilaria Catastini, General Manager of Fondazione MAIRE - ETS

Successfully managing the energy transition depends on the strategic alignment of policy, innovation, and human capital. With the “Climate Goals” research, Fondazione MAIRE – ETS has been scouting, since 2023, at a worldwide level, public awareness and attitude towards the energy transition and people’s perception around the importance and urgency of training skills and competences for the energy transition.

2025 (the third) edition of the “Climate Goals” research conducted with IPSOS, has added two more countries – Qatar and Argentina - to the previous twelve ones – Italy, UK, Turkey, Algeria, KSA, UAE, India, China, USA, Chile, Azerbaijan and Kazakhstan – and at the same time has begun a review of the first 2023 edition of the data, starting with two countries, China and USA, that seemed to be very interesting from the point of view of the changes in their institutional scenario and the trends in their energy transition.

In the next chapter of the report you will find the general executive summary and the sections of the research comparing data across 14 countries that cover 4 continents (using the new 2025 figures as far as China and USA are concerned).

In the following chapter you will find the focus on China, with the specific executive summary and the sections comparing the 2023 figures with those of 2025. Finally, in the last chapter you will find the focus on the USA, with the specific executive summary and the sections comparing the 2023 figures with those of 2025.

The study involved a total of 2,300 individuals, selected for their extensive knowledge in the field of environmental sustainability. This target was chosen for its advanced level of education and active engagement with environmental matters. The main goal in focusing on such individuals was to obtain responses that explore the finer details, going beyond the surface-level understandings that often come with complex issues. This approach was used to learn more about the details and different viewpoints that shape energy transition strategies.

1.1 Considerations on the global results

It is almost interesting to see which of the 14 countries have greater **awareness** of the energy transition processes and which have less, according to results of our interviews. The “champion” is India, with 63% of the respondents being very familiar with this concept, while coming last is Kazakhstan, with only 29% of respondents being very familiar with the energy transition, not very far behind Argentina, with 36%. Despite these results and somehow encouraged by them, we will go on adopting a view that suggests helping countries that are behind in the ranking, in order to increase their confidence and competence, this is what I hope to continue doing, by leveraging on MAIRE’s strong professional international presence.

The energy transition is a **priority** for 70% of the respondents in India and Turkey, followed by 67% of Qatar, while in Argentina priority is given only by 34% of the sample.

Algerians are the most convinced about the **opportunities** that the energy transition offers both for having a cleaner environment, and for better health and job opportunities. India and Saudi Arabia see a potential in energy transition to help increase the inclusion of women in the energy sector. China is the country that recognizes best the value of Energy Transition for the creation of new jobs and new occupation.

India, with 71% of respondents, and Saudi Arabia, with 62%, are the countries that evaluate more positively the **commitment of their Governments** to the Energy Transition as a priority. The lowest evaluations comes from Kazakhstan with 15% and Argentina with 23%. Chinese respondents are the most convinced of their own country being ahead of other countries in the Energy Transition. India, Saudi Arabia, Qatar and the Emirates are the countries where Energy Transition seems to be at the same level of priority both for the respondents themselves and, in their perception, for the Governments, with levels varying between 60 and 70%.

Looking at the results, **raising public awareness** about energy and environmental issues is a challenge mainly for Algeria and China. Engaging private companies in the adoption of renewable energy is a particular challenge for Chile. Ensuring the **active involvement of all stakeholders** in the energy transition process is a challenge mainly for China. Development and **implementation of new infrastructures** is very much considered a priority in the UAE and in the USA. **Training of professionals** in the energy transition process is a key goal in particular in Azerbaijan, while Qatar is the country that results more sensitive to the risk of **Job losses** in traditional sectors that do not embrace sustainable solutions for the environment and climate. Government development of **energy and environmental policies** is considered especially significant in Turkey, Algeria, the USA, and the UK.

Saudi Arabia is the country where respondents consider more appropriate the **efforts of the Institutions** in comparison with those of both the private companies. The country where engagement of Institutions and of the private sector is valued as more appropriate is China, while the country where they are both valued as more inappropriate is Kazakhstan. Kazakhstan has the highest share of respondents who are concerned that energy transition costs will exceed benefits, with 57% fearing this in the short term and 34% in the long term. In Saudi Arabia, on the contrary and surprisingly, 50% of respondents believe that the benefits of the energy transition will outweigh the costs in the short period while in the long period costs and benefits will balance out.

In China almost half of the respondents give a high value to **sustainable innovation**, of production processes, products and services and 68% of them consider **technology** as a significant area of the energy transition. In Italy this is lower, as is the perception regarding the significance of education and culture in energy transition.

The **need for training** on the energy transition is diffused everywhere, with very high rates in almost all countries, as also high almost everywhere is the belief that it is important to develop educational programs. In any case, the country where the preparation is considered sufficient is India, with 28% of respondents saying there is no need to improve it. The perception of how urgent training needs to be delivered is higher in China and Chile and lower in Italy and Kazakhstan.

China is also the country which best recognizes the equal importance of **technical and soft skills** in the energy transition sector. In many countries there is a wide awareness that problem solving, critical thinking, creativity and innovation are the soft skills most in demand in this sector. Understanding environmental issues and analysing and assessing their environmental impact is a technical skill which is in high demand in Azerbaijan, while knowledge of various renewable energy sources is required mainly in Algeria and greater know-how in alternative renewable raw materials and recycled materials to substitute traditional materials is required in Algeria, Qatar, China and USA.

The **availability of skilled professionals** for the energy transition is considered inappropriate in Kazakhstan (82% of respondents) while in China and India it is considered appropriate.

One of the most powerful conclusions of the study is that countries like China and Qatar, seem set to lead global energy transition initiatives. In China and Qatar, there is a strong emphasis on integrating educational and training programs as critical components of their strategies, reflecting a broader trend among the advanced Asian economies.

1.2 Considerations on the two new countries in the 2025 edition: Qatar and Argentina

The research results regarding the two new countries were interesting.

Qatar

Qatar shows a strong dedication to the energy transition, aligning with other Gulf nations like UAE and KSA in its proactive approach. Results in Qatar confirmed our local MAIRE experts' knowledge and view on how the energy transition is moving in the region.

Mohammed Nafid (MAIRE MIDDLE EAST STS REGION VICE PRESIDENT), in charge of the Middle East Region business development in the Sustainable Technology Solutions Business Unit of MAIRE Group, commented that "Qatar has intensified its Energy Transition policy and investments in recent years. Qatar will continue to leverage on its world-leading liquefied natural gas (LNG) exports as a transition pathway while accelerating investments in solar, hydrogen, and carbon-capture technologies. Important to note that Qatar's Energy Transition strategy is to balance maximizing near-term hydrocarbon revenues with laying the groundwork for a diversified, low-carbon economy by 2030 and beyond." As a matter of fact, in relation to LNG as a cleaner Bridge Fuel "Qatar plans to boost LNG production capacity from approximately 77 MTPA to over 140 MTPA by 2030. Natural gas is positioned as a "cleaner" fossil fuel replacing coal and oil in power generation as it may also benefit from more efficient carbon capture solutions. Revenues from LNG exports will be used to fund amongst other domestic decarbonization projects and sovereign-wealth investments." Looking at the scaling up of Renewable Energy, Mohammed notes that "Qatar's National Renewable Energy and Energy Efficiency Strategy targets at least 20 percent of power generation from solar and wind by 2030. Major projects include a 700 MW solar PV plant near Al Khor and pilot wind farms along the northern coast. Eventually, around Hydrogen, CCUS, and the Blue Economy, Mohammed comments that "Qatar is looking at blue hydrogen production, mainly combining reforming technologies (e.g. SMR, ATR) with carbon capture technologies. Qatar may invest in a hydrogen export terminal, which could position Qatar as an important Blue Hydrogen supplier to Asia and Europe. In parallel, we are seeing several CCUS initiatives being studied at large (existing and new) petrochemical complexes with the objective of possible sequestration."

Arthur Vellozo (MAIRE UAE, QATAR, IRAQ, JORDAN IE&CS REGION VICE PRESIDENT) in charge of the local business development in the Integrated Engineering and Construction Solutions Business Unit of MAIRE Group, commented that "Qatar's renewable energy investments, particularly in solar power projects are contributing to economic diversification and cost savings. These investments create new employment opportunities in renewable technology, engineering, and maintenance sectors, strengthening non-hydrocarbon employment." He added that "Qatar has committed £1 billion (\$1.3 billion) toward climate technology investments in the UK, aiming to establish climate technology hubs in both countries. This initiative should generate thousands of high-skilled positions in renewable energy, carbon capture, and green hydrogen sectors. This partnership enhances Qatar's global climate finance influence while enabling green technology transfer, strengthening its knowledge-based economy."

In terms of skills and competences, in Qatar, the emphasis is on technical knowledge, particularly in renewable energy sources and environmental issues, which aligns with a trend observed across several Asian and Gulf nations. Here, creativity is viewed as an important soft skill.

Argentina

Respondents in Argentina have less familiarity with energy transition concepts, and the interviews seem to indicate citizens asking the country to align its policies and public perception more closely with global standards. Argentina's approach to the energy transition, as a matter of fact, is less prominent, with a gap between public awareness of the issue and concrete government programs. Argentina identifies renewable energy sources as the most crucial technical knowledge required, with a multidisciplinary approach and problem-solving being the key soft skills.

MAIRE's SOUTH AMERICA REGION VICE PRESIDENT, Piero Antonio Sartore, underlines that "the country had to face important challenges in the past and the green agenda has been implemented quite consistently both by past governments and by the current one. Surely, the critical aspect is related to the perception of the priority of the energy transition in the political agenda: other topics seem to be more relevant nowadays. Argentina is a country in which the poverty index rose from 42% to 52% in less than three years, to fall to a still relatively high 32% in mid-2025 (on the other hand, the positive fiscal results have been increasing in the past two years, after more than 25 years of negative balance)".

The outcome of the research is confirmed by the various talks and initiatives that MAIRE has ongoing with private Groups in this country, says Piero. "Today there are only a few initiatives in the energy transition sector, encouraged by private Argentinian companies located outside the country or by foreign companies that are attracted by the enormous feedstock availability. The Government, in any case, has implemented laws allowing for a "liberalization" of the market: growth and welfare are expected to increase in the long term, not in the short term, and this will probably also help the energy transition in the next decades".

As a matter of fact, "Argentina is a country with plenty of renewable sources and strong hydroelectric production. Despite its scarcity of capital, it is investing in gas as one of the elements of the energy mix for the transition and it is a country with a high degree of strategic potential, on which we pay great attention for the development of industrial projects in the area of Sustainable Technology Solutions" says Giovanni Sale, CORPORATE AND BUSINESS STRATEGY SENIOR VICE PRESIDENT of MAIRE.

1.3 Considerations on the China Focus

Results of the section of the research aiming at verifying any relevant change in the perception of respondents in China and the USA since 2023 were interesting, too.

China's focus on the energy transition is backed by robust government initiatives, positioning it as a potential leader in Asia. As a matter of fact, 52% of respondents consider China "ahead of other countries" in the energy transition process, and 88% consider the strategies and the efforts of private companies "adequate", +9 p.p. since 2023.

There is a growing recognition of the need for education and training to equip the workforce with the necessary skills for sustainable practices (+7 p.p. since 2023, even if rebalancing from essential to important) prioritizing creativity and innovation, focusing on advancing new ideas and technologies. In this context, expertise in renewable raw materials and recycled materials is highly valued.

Awareness among this group has increased in the last three years, demonstrating not only a widespread recognition of the energy transition but also a deepening familiarity with the topic (+7 p.p. since 2023), even if the perceived urgency of the energy transition among individuals may have slightly diminished. However, enhancing public awareness and engaging all stakeholders are still seen as crucial for advancing environmental initiatives.

Christina Cai, CHINA REGION VICE PRESIDENT of MAIRE, says that "Indeed, China has positioned green and low-carbon development as a national strategic priority, and its energy transition is progressing at an unprecedented pace and scale. This transformation represents not only a strategic necessity for addressing climate change, but also a key driver in fundamentally reshaping the economic structure. Looking ahead to the "15th Five-Year Plan" period (2026-2030), China's green and low-carbon transformation is expected to enter a new phase characterized by deeper systematization, marketization, and digitalization".

1.4 Considerations on the USA Focus

As far as the USA is concerned, the feedback from 150 respondents (all with a high level of education, all employed, concerned and engaged in the environment) seem to suggest that prioritizing sustainable energy remains a part of the national strategy, reflecting similar commitments by other developed western economies.

From these interviews the picture seems to say that while the energy transition is acknowledged as a critical issue among people (60%), it is now increasingly viewed as one of several national priorities rather than as the primary focus. The interviews record a perception of reduced governmental urgency (-6 p.p. since 2023); while corporate commitment is perceived as stable (63% consider them “appropriate”), declining public approval of governmental policies (47% consider them “appropriate”, -5p.p. since 2023) indicates a need for better alignment between policy outcomes and public expectations.

While this seems to be aligned with a common perception, according to Giovanni Sale, CORPORATE AND BUSINESS STRATEGY SENIOR VICE PRESIDENT of MAIRE, “The rapid expansion of AI infrastructure in the United States is significantly accelerating the already high demand for power and electrification. This surge carries profound implications for the US energy and high-tech industries, which are responding to the challenge by diversifying their solutions for produc-

ing low-carbon energy. Among the innovative approaches are small modular reactors (SMRs) and advanced modular reactors (AMRs), which offer higher capacity and supply stability, along with associated fuel circularity. Additionally, the role of critical minerals remains central to the global energy strategy, supporting transitions in the energy, AI, and defense sectors”.

It is moreover crucial to remember that the transition encompasses much more. Energy transition also involves the design of new low-carbon and more circular products. The innovation in creating these sustainable products is a significant piece of the puzzle. Moreover, it requires the development of new distribution systems and business models that can support and sustain these advancements.

Vitality is somehow confirmed also by the research with the recognition of a growing trend of private sector research and energy companies (+ 15 p.p. since 2023) playing increasingly significant roles in educational and training initiatives, due to the demand for a skilled workforce in these business initiatives. There is now less urgency for immediate training (in the next 12 months) compared to previous years (-8 p.p. since 2023), but there remains robust support for implementing training initiatives within the next three years (78%), with a critical need for a balance with soft skills like problem-solving and flexibility.

1.5 Our next steps

Across countries, there is a strong, unified recognition of the need for both soft and hard skills to develop well-rounded professionals, which is essential for advancing the energy transition.

Technical expertise in renewable energies and sustainable technologies is crucial for fostering innovation and implementation, while soft skills such as problem-solving, adaptability, and critical thinking are vital for navigating the dynamic challenges of energy transitions. Governments, Institutions, business and society should do more, invest more, for providing this kind of training. Fondazione MAIRE – ETS is strongly committed to this goal and is carrying out several training projects to develop soft skills together with technical competence for the energy transition, dedicating a special effort to fill the gap in educational poverty and gender disparity, to make the transition more inclusive and to offer equal opportunities to all.

The awareness of a “social bright side” of the energy transition is something we are investing a lot of effort in, in the Foundation’s initiatives, helping students understand what and how many opportunities the energy transition can offer them in their professional future, careers and business opportunities.

Fondazione MAIRE – ETS will go on spreading these data and information all over the world, as a matter for discussion and debate, which, in our view should draw more attention to the investment that needs to be made to grow skills and competences for the energy transition worldwide. Next year we will probably invest in a focus on Europe, bringing to 17 the total number of countries involved in the survey, and adding a new data check on a couple of countries, to compare the 2023 data with 2026.

This research, together with other socio-economic studies and with a number of initiatives that Fondazione MAIRE is carrying out in orienteering and training of students on the themes related to climate change, decarbonization, circularity, empowers the role that our Foundation may play as a player of the international scenario. Fondazione MAIRE - ETS may help to support the development of knowledge, experience and best practices to improve skilling and re-skilling necessary for adaptation to and mitigation of climate change and to build a new low carbon industry and society through a path of sustainable development.

2 KEY FINDINGS FROM RESEARCH CONDUCTED BY IPSOS

To explore the topic of energy transition and understand the role of skills and education in defining an effective and inclusive process, Ipsos conducted in 2023, 2024 and 2025 an international survey involving public opinion (2,300 highly educated individuals) and opinion leaders (19 in-depth interviews, managed by psychologists, with experts and professionals belonging to different areas of expertise/memberships). The sample included individuals from 14 countries and 4 continents worldwide – Italy and the United Kingdom from Europe; United States of America, Chile and Argentina from the Americas; Algeria from Africa; Turkey, Saudi Arabia, the United Arab Emirates, Azerbaijan, Kazakhstan, Qatar, China and India from Asia – with a specific focus for the Middle East.

The interviews with the educated population were self-completed and collected through the Ipsos online panel (Computer Assisted Web Interviews). The opinion leader interviews were conducted via a phone or web call, based on a discussion guide.

Please see the methodological note at the end of the report for additional information.

The IPSOS research team was coordinated by Nando Pagnoncelli, President of Ipsos Italy, and included Andrea Alemanno, Head of Corporate Reputation and Public Affairs, Ilaria Ugenti, Corporate Reputation Leader and Paola Simonetta, Senior Researcher.

The following chapters aim at presenting the survey's main findings as far as the third edition of the research is concerned, focused on Qatar and Argentina, with a data refresh for China and USA. The results of the third survey have been compared to those of the first and second surveys (2023 and 2024 respectively). Please refer to the previous reports for an in-depth analysis of the [first](#) and [second](#) editions of the research "**Climate Goals: Winning the challenge of climate goals through the creation of skills and competences worldwide**".

2.1 Executive Summary 2025

Cross Country

The urgent need to shift from fossil fuels to cleaner, renewable energy sources is one of the defining challenges of our time, affecting economic stability, environmental health, and global geopolitical dynamics. As nations worldwide aim to reduce carbon emissions and achieve sustainable energy models, the energy transition becomes a crucial factor in promoting long-term resilience and growth. Successfully managing this transition depends greatly on the strategic alignment of policy, innovation, and human capital.

Building on comprehensive studies conducted in previous years, the Maire Foundation's 2025 survey, in collaboration with Ipsos, explores the key factors that enable the transition to renewable energy, emphasizing the role of skills and education. The interviews were conducted with a target population selected for their high level of education, employment status, and active engagement with and knowledge of environmental sustainability, as identified through Ipsos sustainability clusters. Originally covering 10 countries in 2023 and adding two more in 2024, the 2025 survey focuses specifically on China, the USA, Argentina, and Qatar. These nations, with their distinct approaches and innovative energy policies, provide invaluable insights into the strategic drivers of the energy transition due to their potential to set global standards. The survey examines how these countries leverage educational frameworks to progress in their energy transition goals and highlights strategies that can inform international cooperation and drive national policy reforms.

The study underscores differences in both the perception and implementation of the energy transition across countries, revealing that while awareness is broadly high, the ability to translate this into concrete actions differs widely by region. Countries like China and Qatar, where strong governmental prioritization exists, are set to lead global energy transition initiatives. The USA also plays an essential role, given its considerable industrial base, enabling significant progress if strategic policies are effectively applied. Conversely, Argentina is at a pivotal moment, with the opportunity to enhance its leadership in the energy transition by aligning its policies and public perception more closely with global standards. This could unlock new pathways for increased public engagement and improved sustainability outcomes.

Western economies like the USA demonstrate significant awareness and familiarity with energy transition concepts, along with strong engagement in sustainability. However, the US government assigns a relatively lower priority to the energy transition compared to other Western economies, such as the UK and Italy, and advanced economies like China. This situation is partly due to the current global political climate and the US economic policies that have reshaped the national agenda, affecting the priority given to energy initiatives. The clean energy sector may face additional setbacks due to policies from the Trump administration, leading to a lower perceived priority for the energy transition compared to other advanced economies. Meanwhile, China and Qatar remain committed to sustainable practices, while Argentina, despite its high level of awareness, has less familiarity with energy transition concepts, presenting opportunities for educational development to boost understanding and public support.

In the rapidly evolving global context, the energy transition is widely recognized as a cornerstone for sustainability and economic strategy. While awareness and understanding of this process are generally high worldwide, the level of engagement varies among countries. The USA and China demonstrate a strong commitment to the energy transition. In the USA, prioritizing sustainable energy remains a part of the national strategy, reflecting similar commitments by other western developed economies. China's focus on the energy transition is backed by robust government initiatives, positioning it as a potential leader in Asia. Qatar also shows a strong dedication to the energy transition, aligning with other Gulf nations in its proactive approach. The country's efforts highlight a high convergence between public awareness and governmental actions, making it a notable example in the region. Conversely, Argentina's approach to the energy transition is less prominent. While there is public awareness of the issue, there is a noticeable gap between this awareness and concrete government programs. Argentina has the opportunity to better leverage public awareness as a catalyst for increased government action towards sustainable practices. By enhancing both public engagement and government commitment, Argentina can work towards a more effective approach to the energy transition.

The energy transition promises significant benefits across China, Qatar, the USA, and Argentina, particularly in job creation. Each country identifies the transition as a pivotal opportunity for employment growth, attracting both public interest and governmental support. Public engagement is highlighted as crucial for fostering environmental strategies, with Qatar, the USA, and China emphasizing the need for community support to propel sustainable initiatives forward. In Argentina, the focus on governmental action to develop energy and environmental policies, alongside incentivizing private companies to adopt renewable technologies, is deemed vital for advancing its energy transition efforts. Collectively, these efforts underscore the potential for substantial economic growth and improved sustainability, rooted in effective collaboration between the public sector and governmental bodies.

However, these opportunities come with inherent challenges. In China, enhancing public awareness and engaging all stakeholders are crucial for advancing environmental initiatives. The USA and Argentina struggle to integrate private companies into renewable energy projects, an issue that also affects their infrastructure development efforts, as well as those in Qatar. Additionally, Qatar must address potential job losses in non-sustainable sectors, highlighting the need for careful management to ensure the benefits of the transition are equitably distributed.

Expanding public engagement and education is crucial for driving the global energy transition. Effective strategies ensure that the public understands the importance of sustainable energy and adopts practices aligned with both national and global goals. In China and Qatar, there is a strong emphasis on integrating educational and train-

ing programs as critical components of their strategies, reflecting a broader trend among advanced Asian economies. This commitment highlights the need for dedicated efforts to equip the workforce with the necessary skills. In contrast, while Argentina recognizes the role of education in advancing sustainable energy practices, the urgency and scale of such programs appear less pronounced compared to Asian nations. Meanwhile, in the USA, while there is an acknowledgment of the importance of training, there is a relatively lower emphasis on specialized educational programs. However, both countries see education as a key component in driving progress towards sustainability goals, underlining the necessity for continued development in this area.

Countries engaged in proactive energy transition efforts recognize the pivotal role that education and training programs play in cultivating a knowledgeable workforce capable of meeting new economic and technological challenges. Technical expertise in renewable energies and sustainable technologies is crucial for fostering innovation and implementation, while soft skills such as problem-solving, adaptability, and critical thinking are vital for navigating the dynamic challenges of energy transitions. In the USA, technical skills related to environmental impact and the use of renewable raw and recycled materials take precedence, but there remains a critical need for a balance with soft skills like problem-solving and flexibility.

In Qatar, the emphasis is on technical knowledge, particularly in renewable energy sources and environmental issues, which aligns with a trend observed across several Asian and Gulf nations. Here, creativity is viewed as an important soft skill. China prioritizes creativity and innovation among professionals engaged in the energy transition, focusing on advancing new ideas and technologies. In this context, expertise in renewable raw materials and recycled materials is highly valued. Meanwhile, Argentina identifies renewable energy sources as the most crucial technical knowledge required, with a multidisciplinary approach and problem-solving being the key soft skills. Across these countries, there is a strong, unified recognition of the need for both soft and hard skills to develop well-rounded professionals, which is essential for advancing the energy transition.

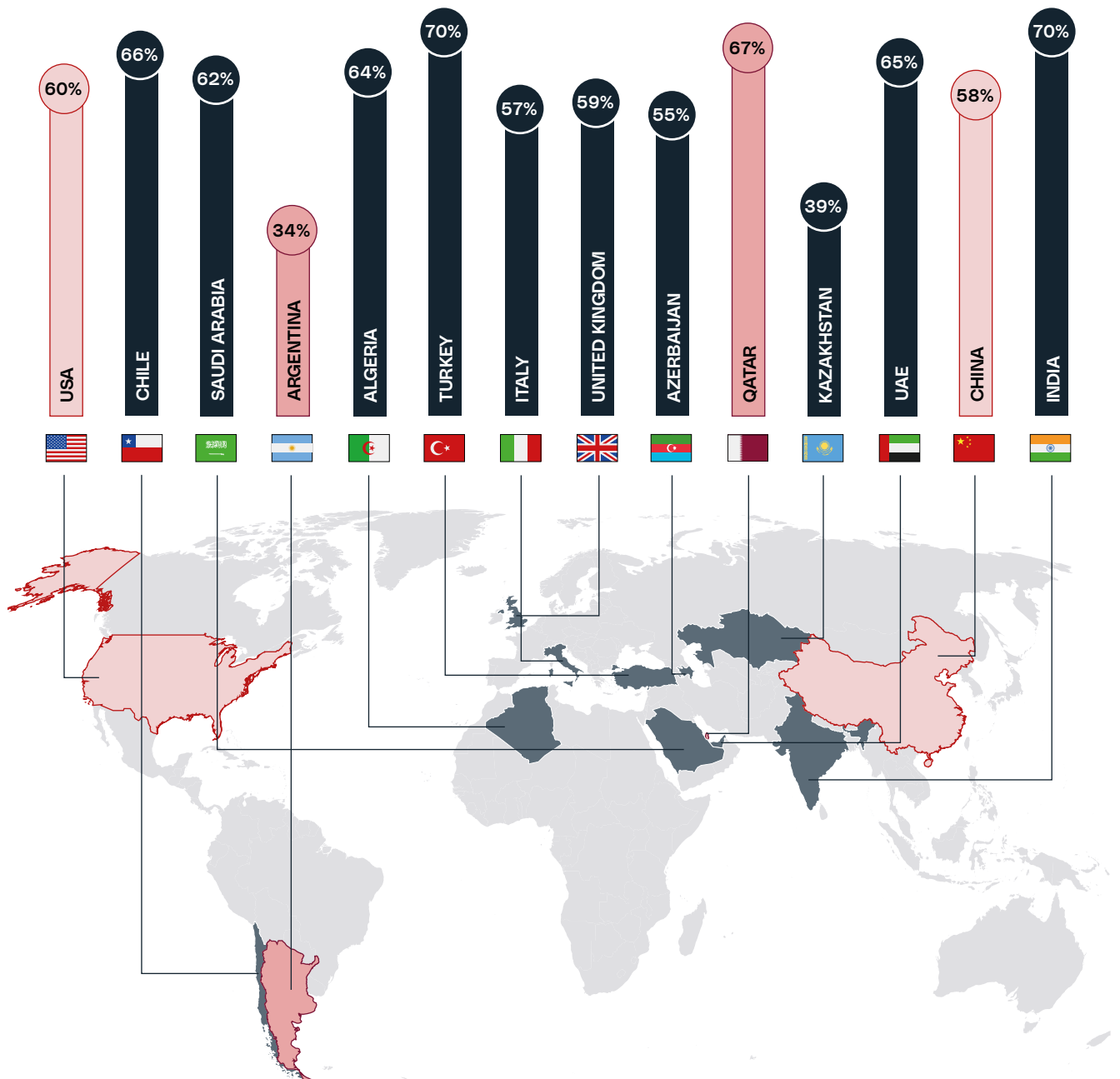
Strategic partnerships among governments, educational institutions, and private sectors stand out as pivotal in amplifying training efforts. By ensuring alignment with both current and future industry needs, these collaborations are essential for accelerating the shift towards sustainable energy and bolstering economic resilience. Such a collaborative approach not only supports the development of energy transition professionals but also ensures a cohesive and effective response to global energy challenges. Moving forward, nations are encouraged to continue fostering these partnerships, enhancing educational frameworks, and promoting innovation to create an adaptable and proficient workforce ready to lead the charge in the energy transition. This effort will ultimately contribute to a more sustainable and resilient global economy.

How countries' respondents look at the energy transition as a priority

Q.2.2 In your opinion, how important is energy transition?

% It is a priority

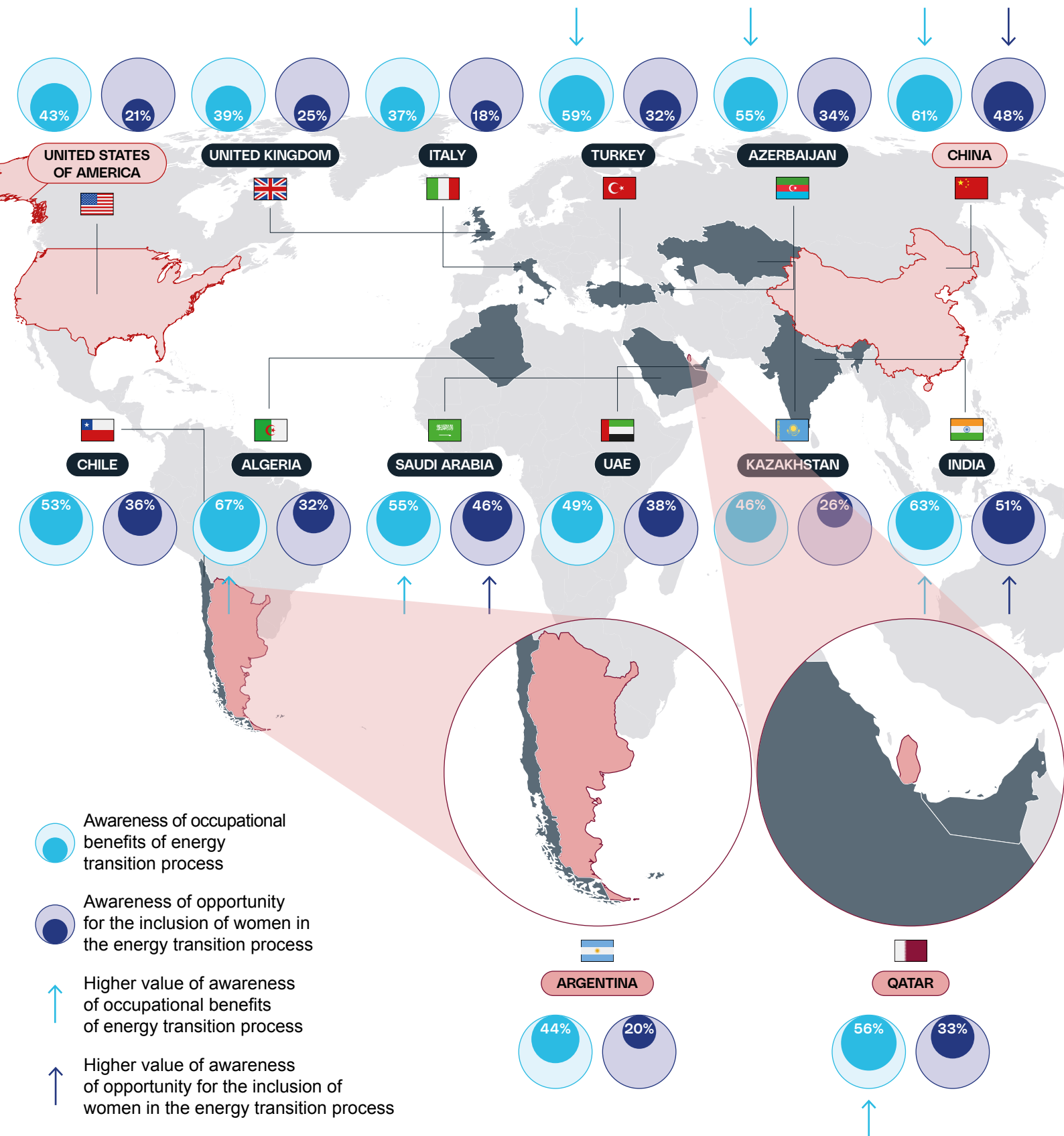
■ Countries covered ■ Countries updated in 2025 ■ Countries surveyed in 2025



Perception of energy transition benefits across countries: awareness of occupational benefits and opportunity for the inclusion of women

Q.3A How much do you agree or disagree with each of the following statements? Energy transition...

■ Countries covered ■ Countries updated in 2025 ■ Countries surveyed in 2025



Key skills and competences prioritized for energy transition

Q9_1. What are the most important personal skills for those involved in energy transition?

Q8_2. What are main technical knowledge requirements for those involved in energy transition?

■ Countries covered ■ Countries updated in 2025 ■ Countries surveyed in 2025

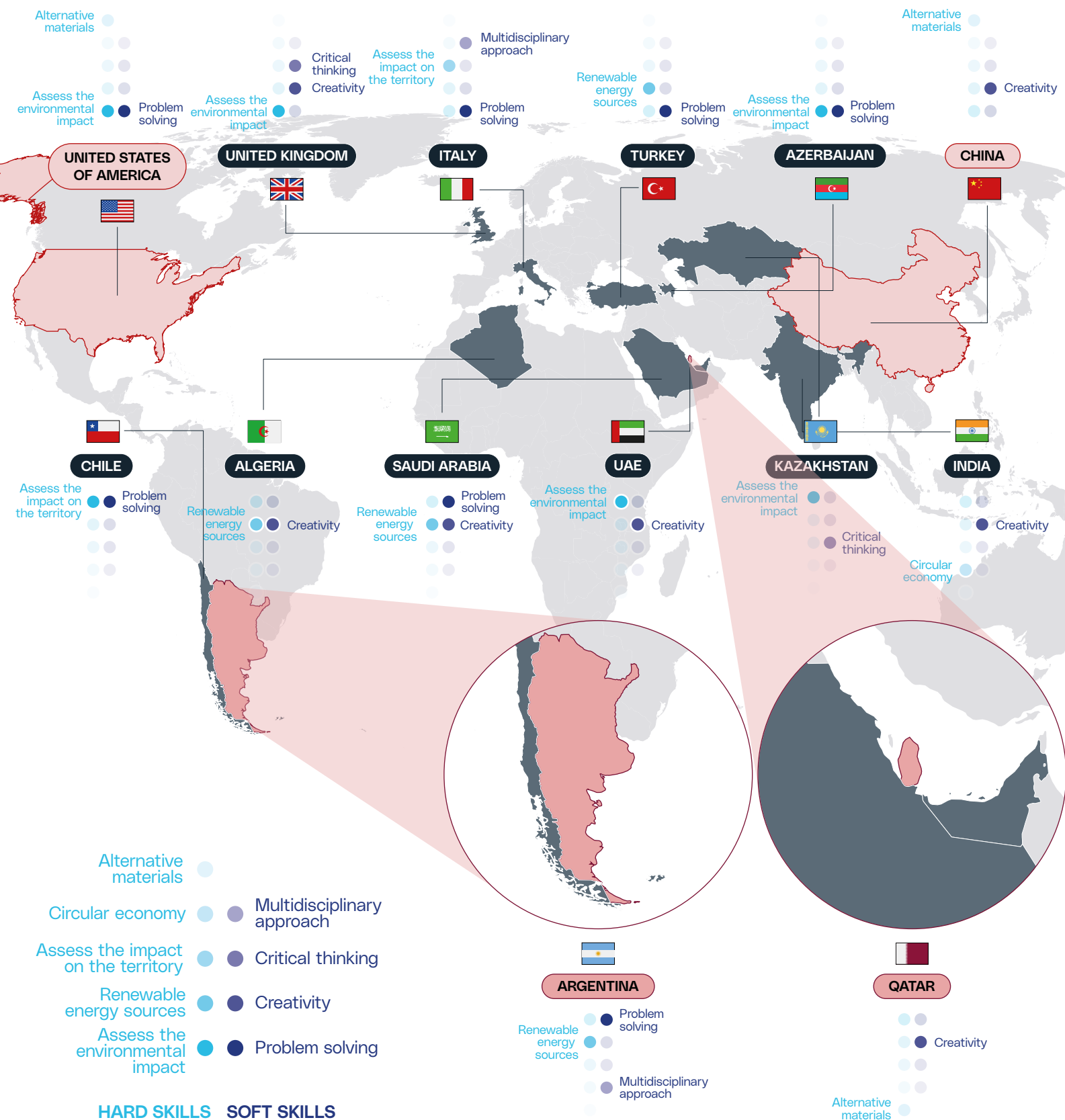


Table 1 Awareness on energy transition process**Q1A. Have you ever heard of energy transition?**

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
TOTAL AWARENESS	97%	95%	90%	96%	97%	95%	96%	93%	98%	95%	96%	99%	96%	97%
I am very familiar with it	60	59	47	55	50	63	43	29	44	47	56	42	58	36
I have heard of it, but I only have a vague idea	37	36	43	41	47	32	53	64	54	48	40	57	38	61
I have never heard of it	3	5	10	4	3	5	4	7	2	5	4	1	4	3

Data from Table 1 on the awareness of the energy transition process shows a significant level of understanding across countries. Diving into specifics, while a large majority in Italy, the UK, the USA, and India report a high level of familiarity with the concept of the energy transition, other nations present a varied level of engagement.

Looking at South America, Argentina presents an impressive 97% awareness of the energy transition, but compared to its neighbour Chile, a smaller percentage (36%) is "very familiar" with it. While Argentina's high awareness indicates engagement with sustainability issues, the depth of familiarity suggests an area for growth and more extensive education on energy transition topics.

China demonstrates remarkable recognition of the topic, with 98% of participants having heard of the energy transition and 44% being "very familiar" with it. This level of awareness is indicative of a society deeply engaged with the shift towards sustainable practices.

Qatar also exhibits a heightened awareness, with 95% of respondents recognizing the energy transition and nearly half of them, 47%, reporting being "very familiar." This aligns closely with a transformative movement within Gulf nations (including the UAE and Saudi Arabia), suggesting a pattern of heightened commitment to and understanding of sustainability issues in the region.

“The energy transition started not so many years ago, and it is very much influenced by global public opinion. [...] I think that nowadays this is an important topic, but I also think that we have to review the way of informing people because currently the way in which governments are explaining the problem to people is very emotional.

Institution, Argentina

Table 2 Perceived importance of the energy transition process**Q2_2. In your opinion, how important is energy transition?**

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
It's a priority	57	59	70	62	65	70	55	39	58	67	64	66	60	34
It is important, but on par with other areas of commitment	41	40	28	35	34	29	39	55	40	31	35	31	37	62
It is of secondary importance	2	1	2	3	1	1	6	6	2	2	1	4	3	4

Overall, there is a strong recognition of the importance of the energy transition as “a priority” or “equally important to other key areas of commitment”. The advanced Western economies like the USA (60%), the UK (59%), and Italy (57%) exhibit high priority levels, signifying a strong consideration for the energy transition and reflecting a widespread acknowledgment of its critical role in addressing sustainable development and climate change efforts. China (58%) aligns with these economies, indicating a strategic, proactive engagement with energy transition initiatives, that reflects a broader recognition of their importance.

Qatar's view emphasizes the importance of the energy transition, similar to other developing Asian countries such as Turkey, Saudi Arabia, the UAE, and India. These countries are all showing a strong commitment to sustainability. With high percentages of people recognizing the importance of energy transition (70% in Turkey, 62% in Saudi Arabia, 65% in the UAE, and 70% in India). Qatar's focus on sustainable energy practices aligns with the growing dedication to environmental progress within the region (67%).

Argentina's perception places a lower degree of importance on the energy transition, with only 34% considering it a priority. This points to an opportunity to elevate the public understanding and appreciation for the energy transition through more thorough educational initiatives and policy development. Despite this, the majority view it as at least as important as other areas, suggesting a potential for Argentina to increase its commitment to the energy transition and align with broader international efforts.

“During the years there is very little understanding by the general population about all these topics. So many of these things are difficult to discuss [...] Argentina comes from many years of that sort of miseducation or wrong signals [...] So that's part of the challenges.

Top Manager, Argentina

Table 3 The energy transition perception across countries

Q3_A. To what extent do you agree or disagree with each of the following statements? Energy transition...

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
% Scores 10-9 Ranked on Italy														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
It is crucial for combating climate change and global warming	38	52	65	62	61	62	64	53	68	62	74	65	49	48
It creates new job opportunities in the renewable energy and clean technology sectors	37	39	59	55	49	63	55	46	61	56	67	53	43	44
It reduces dependence on imported energy sources and the risk of supply disruptions	36	39	49	53	47	61	43	43	61	48	52	52	35	35
It significantly benefits human health and the environment by reducing greenhouse gas emissions and air pollution	36	42	59	58	58	65	58	61	66	57	79	66	49	47
It leads to better energy efficiency, reducing long-term costs	35	38	57	52	51	61	52	40	61	53	62	56	41	38
Investment in energy transition is a priority over other areas	25	29	41	55	49	58	40	32	53	43	45	37	28	21
It represents an opportunity for greater participation by women and provides them with better opportunities for employment	18	25	32	46	38	51	34	26	48	33	32	36	21	20

The global perspective on the energy transition, as shown in Table 3, reveals a multifaceted approach. The understanding of the transition extends beyond environmental considerations to embrace economic and social factors.

The USA exhibits a high recognition of the critical role that the energy transition plays in combating climate change and promoting human health. This understanding aligns the USA with other countries that also recognize the urgency in addressing climate change through sustainable energy practices for the benefit of human health.

In China, there is also a strong emphasis on creating new job opportunities (61%), leading to better energy efficiency (61%) and reducing dependence on imported energy sources (61%), all of which resonate strongly with the data observed in Qatar and Argentina. Argentina (38%) and Qatar (53%), despite showing percentages that are lower than Chi-

na's, reflect a shared understanding that the energy transition presents a practical means to enhance energy efficiency. This aligns them with a global movement that views the switch to sustainable energy resources as not just a necessity for environmental conservation but also as a key driver of economic innovation and development.

“ We are a country that wants to be more open. In the past we were closed and now we have to observe the rules of the world. We are convinced that it's necessary to end this transition with a net zero emission, but we also think that during the next three decades we can profit from the transition by selling natural gas to the world.

Institution, Argentina

Table 4 Countries' commitment to energy transition**Q2_1.** Which of the following statements best describes the level of commitment in your country?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

ENERGY TRANSITION is the shift from traditional fossil-based energy sources and raw materials to renewable, recycled, and sustainable energy sources and raw materials to reduce greenhouse gas emissions and address climate change

	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
It's a priority	53	51	37	62	55	71	31	15	57	57	38	48	48	23
It is important, but on par with other areas of commitment	40	42	42	34	40	26	50	58	41	36	43	41	38	53
It is of secondary importance	7	7	21	4	5	3	19	27	2	7	19	11	14	24

Table 5 Country positioning on energy transition**Q13.** In your opinion, compared to other countries how would you rank your country's level in the energy transition process?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Ahead of other countries	8	29	14	41	44	43	16	2	52	26	1	20	33	3
On par with other countries	47	46	26	46	42	46	29	12	44	51	41	29	32	30
Behind other countries	45	25	60	13	14	11	55	86	4	23	58	51	35	67

RANK BY ETI SCORE*

2023	38°	13°	65°	57°	63°	67°	32°	76°	17°	59°	86°	30°	12°	85°
2024	41°	13°	59°	58°	52°	63°	38°	98°	17°	50°	91°	20°	19°	82°
2025	36°	16°	50°	60°	48°	71°	42°	94°	12°	75°	89°	21°	17°	57°

Perceived importance vs Country positioning on the energy transition

Q2_2. In your opinion, how important is energy transition?

Q2_1. Which of the following statements best describes the level of commitment in your country?

Q13. In your opinion, how would you rank your country's level in the energy transition process?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Priority for ME	57	59	70	62	65	70	55	39	58	67	64	66	60	34
Priority for COUNTRY	53	51	37	62	55	71	31	15	57	57	38	48	48	23
Country's level in the energy transition process: BEHIND other countries	45	25	60	13	14	11	55	86	4	23	58	51	35	67

The USA exhibits a strong government commitment to the energy transition process, similar to that of Italy (53%) and the UK (51%). With 48% respondents in the USA acknowledging this priority, there is a clear convergence among these developed Western economies on the importance of integrating sustainable energy into their national strategies. In China, 57% view the energy transition process as a priority that stands above other national issues. This strong commitment positions China as one of the potential leaders in advocating for and implementing sustainable energy policies within the Asian context.

Qatar (57%) mirrors the developing nations within the Gulf region, showing similar dedication to that of Saudi Arabia (62%) and the UAE (55%). By contrast, Argentina's approach to the energy transition appears less pronounced (23%). Similar to countries like Algeria (38%), Turkey (37%), Azerbaijan (31%) and Kazakhstan (15%), data suggest a potential gap between governmental action and public perception, indicating the need for greater efforts to reinforce the public's awareness of government commitment. (Table 4).

Considering the Energy Transition Index (ETI) score and the corresponding self-assessments of advancements in the energy transition process (Table 5), it is clear that there is a difference between how countries view their progress on energy transition and their actual achievements. Countries with high ETI scores such as the USA and European nations do not always see themselves as ahead in the energy transition process.

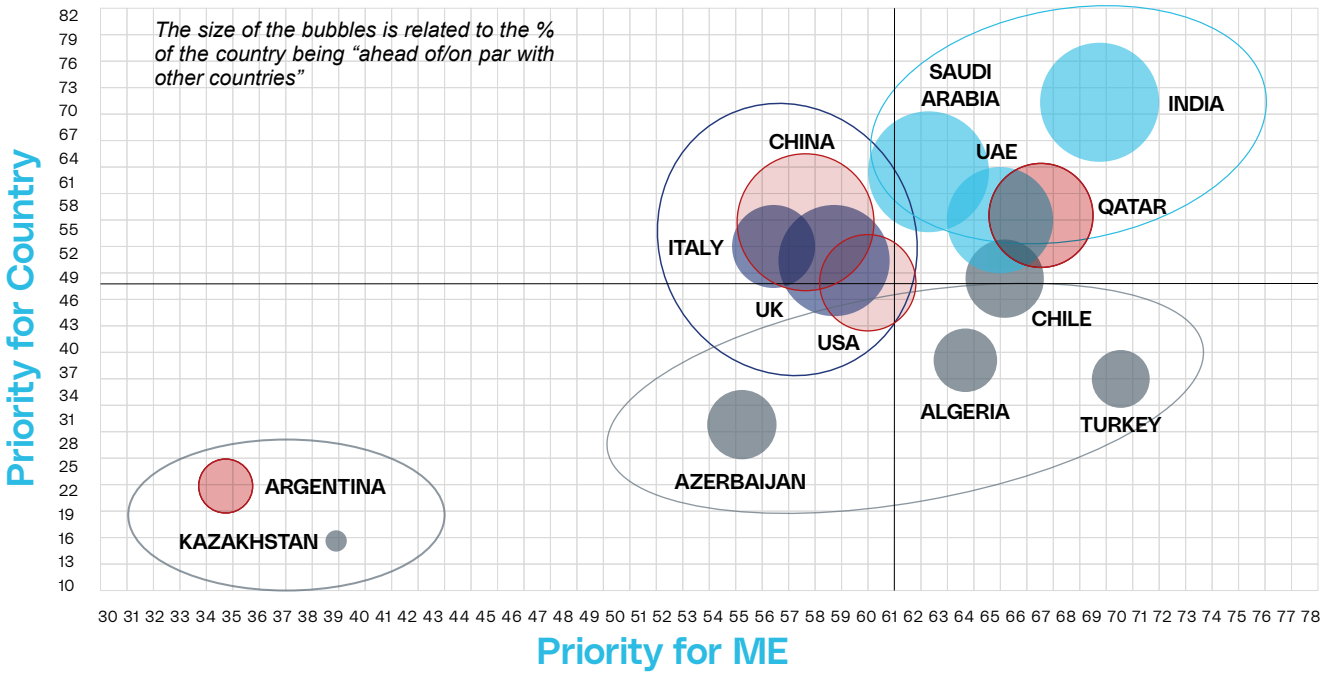
On the other hand, China's high ETI ranking aligns with their self-perception as a leading country in the energy transition process. In contrast, Qatar and Argentina, perceiving themselves to be behind in the energy transition, find their views confirmed by their lower ETI rankings, showing an awareness of their slower progress and highlighting opportunities for advancement.

“ In terms of emissions, I think that Argentina is not placed so well compared to other countries. Of course, we are trying to reduce the carbon footprint in terms of tons per megawatt hour - or whatever unit we use to measure that - but I think that currently Argentina is not doing so much, that's the reality. However, due to the energy matrix that we have there is also no rush to make much effort in that sense.

Top Manager, Argentina

Table 6 Positioning map

Q2_2. In your opinion, how important is energy transition?
Q2_1. Which of the following statements best describes the level of commitment in your country?
Q13. In your opinion, how would you rank your country's level in the energy transition process?
■ Countries updated in 2025 ■ Countries surveyed in 2025



	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Cases	150	150	150	150	150	200	150	150	200	150	200	150	200	150

Table 6's Positioning Map visualizes countries' personal priority and government-assigned priority regarding the energy transition.

Qatar, Saudi Arabia, the UAE, and India share a vision where the energy transition is seen as a top priority, suggesting a high convergence between the public importance attributed to the issue and the proactive efforts by their governments to address it. Conversely, in nations like Chile, Turkey, Algeria, and Azerbaijan, there is notable public awareness of the importance of the energy transition, yet this does not always reflect in governmental actions or efforts. For Argentina and Kazakhstan, the situation differs; neither considers the energy transition as a priority for the government or the population. These countries illustrate the need to improve both international positioning and public opinion to incite more

engagement with environmental topics and concerted action. Meanwhile, the USA, Italy, the UK, and China find themselves in an intermediary position, with a lower but balanced level of priority assigned to the issue of energy transition by both governments and citizens.

“ It will be important to highlight to people that this transition will last many decades as it will be very complex to change the current energy matrix (which is 80% fossil) because the oil industry is engaging in strong lobbying action as they want to monetize all the resources they have.















Institution, Argentina

Table 7 Main opportunities and benefits of energy transition

Q5_1. Which are main opportunities and benefits of energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

The most mentioned options for each country are highlighted	EUROPE		ASIA								AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZER-BAIJAN	KAZAKH-STAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGEN-TINA	
															
Ranked on Italy															
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025	
Ensuring the active involvement of all stakeholders in the energy transition process	32	21	21	21	19	16	18	22	27	21	16	27	12	24	
Creation of new jobs in sectors focused on sustainability and climate solutions	27	35	36	37	33	39	31	31	43	35	37	32	34	32	
Development of energy and environmental policies by the government	24	29	27	32	29	23	32	19	27	26	30	32	23	31	
Engagement of private companies to adopt renewable energy	24	19	23	20	23	26	20	20	14	20	17	25	26	29	
Development and implementation of new infrastructures	21	23	21	21	22	25	25	25	24	25	27	26	26	27	
International collaboration for sharing knowledge, resources, and experiences	19	19	17	19	18	29	19	22	23	25	25	16	24	17	
Training of professionals in the energy transition process	18	12	11	17	17	13	25	19	15	14	14	21	16	21	
Raising public awareness about energy and environmental issues	17	35	29	25	31	29	23	26	27	31	32	18	30	13	
None of these	5	2	2	1	-	-	1	3	-	1	1	-	4	3	

When considering the main opportunities and benefits of the energy transition (Table 7), countries recognize it as a multifaceted opportunity.

One cross-cutting theme across all countries is the potential for job creation linked to the energy transition (43% in China, 35% in Qatar, 34% in the USA and 32% in Argentina).

Public engagement, underscored by Qatar (31%), the USA (30%), and China (27%), highlights the importance of building public support for environmental strategies. The data also highlights the importance of governmental action in developing energy and environmental policies, in particular for Argentina (31%), where such policy development is deemed vital alongside efforts to motivate private companies to adopt renewable energy (29%). Government policies are considered crucial in China as well, with 27% of respondents highlighting their importance. Additionally, ensuring the active involvement of stakeholders is also seen as vital, with another 27% emphasising this aspect.

“From now on, I think that there is a good opportunity for companies to start doing business related to the energy transition.

Institution, Argentina















“Something is changing but that change is going to take time, and we will need the market to somehow embrace that change and recognize it. I think that there are many things that can be done in Argentina, but they are going to take time.

Top Manager, Argentina

Table 8 Main challenges of energy transition**Q5_2.** In your opinion, what are the main challenges with energy the transition process?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

The main challenges for each country are highlighted	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZER-BAIJAN	KAZAKH- STAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGEN- TINA
														
Ranked on Italy														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Raising public awareness about energy and environmental issues	27	17	27	32	31	23	22	17	37	25	39	27	23	21
Engagement of private companies to adopt renewable energy	26	30	17	17	14	26	17	21	20	27	22	40	30	30
Ensuring the active involvement of all stakeholders in the energy transition process	25	27	28	25	23	32	21	31	35	23	15	32	22	27
Development and implementation of new infrastructures	23	33	29	29	36	33	27	35	19	27	27	17	35	27
International collaboration for sharing knowledge, resources, and experiences	23	18	16	27	21	17	22	14	21	20	24	14	18	21
Training of professionals in the energy transition process	21	17	21	19	23	29	28	25	17	23	21	23	15	21
Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate	21	17	20	21	20	15	20	17	18	27	19	12	15	19
Development of energy and environmental policies by the government	20	31	33	21	22	25	27	27	28	24	31	31	32	26
None of these	2	2	1	1	1	-	3	3	1	-	-	-	3	2

Looking at Table 8, which addresses the challenges of the energy transition, it is clear that different countries are dealing with different issues as they aim for sustainable energy. Although there's a broad recognition of the benefits of the energy transition, practical challenges in its implementation and adoption are evident.

A key problem highlighted in countries like Algeria (39%), China (37%), Saudi Arabia (32%) is raising public awareness of energy and environmental issues, highlighting that despite general awareness, there is a fundamental need to deepen understanding and public engagement. Engaging private companies in renewable energy adoption is also a challenge observed in Chile (40%), the USA (30%), Argentina (30%) and in Qatar (27%) pointing to potential barriers despite willingness to implement such practices.

Furthermore, another significant challenge is enhancing active stakeholder involvement in the process, as noted by China (35%), India (32%), Kazakhstan (31%), Turkey (28%), and Argentina (27%). This underlines a need for co-operative efforts that account for different viewpoints and capabilities. Developing government policies on energy and the environment, as well as setting up the right infrastructure is considered a key challenge across much of Gulf nations (Qatar, Saudi Arabia and the UAE) and also in the USA (35%) and Argentina (27%).

In Qatar, there is also concern about job losses in sectors not supporting sustainable practices (27%). This points to the importance of managing the energy transition carefully to ensure it benefits everyone.

“ From now on when talking about energy transition I see that education and information for the public are key priorities.

Institution, Argentina

Table 9 Opportunities vs challenges of energy transition

Q5_1. What are the main opportunities and benefits of energy transition?

Q5_2. In your opinion, what are the main challenges with the energy transition process?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Difference % of total mention Q5_1 vs Q5_2														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Development of energy and environmental policies by the government	4	-2	-6	11	7	-2	5	-8	-1	2	-1	1	-9	5
Development and implementation of new infrastructures	-2	-10	-8	-8	-14	-8	-2	-10	5	-2	0	9	-9	0
International collaboration for sharing knowledge, resources, and experiences	-4	1	1	-8	-3	12	-3	8	2	5	1	2	6	-4
Engagement of private companies to adopt renewable energy	-2	-11	6	3	9	0	3	-1	-6	-7	-5	-15	-4	-1
Raising public awareness about energy and environmental issues	-10	18	2	-7	0	6	1	9	-10	6	-7	-9	7	-8
Training of professionals in the energy transition process	-3	-5	-10	-2	-6	-16	-3	-6	-2	-9	-7	-2	1	0
Job creation in traditional sectors that do not embrace sustainable solutions for the environment and climate*	6	18	16	16	13	24	11	14	25	8	18	20	19	13
Ensuring the active involvement of all stakeholders in the energy transition process	7	-6	-7	-4	-4	-16	-3	-9	-8	-2	1	-5	-10	-3

*Change in wording for Q5_2 "Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate"

While the energy transition promises new job opportunities and sustainable development, countries face tangible challenges in workforce training, public engagement, and policy implementation, challenges that demand targeted strategies and coordinated efforts to be effectively addressed.

New job creation emerges as a major opportunity in many countries, particularly for China (+26), India (+24), and Chile (+20). This trend highlights the potential of the energy transition to drive global economic growth, offering growth in renewable and sustainable sectors.

Across countries, the need for skilled professionals in the energy sector is recognized as a critical challenge, with Turkey (-10), India (-16), and Qatar (-9) showing particular concern. In China (-10) and Argentina (-8), low public awareness of the energy transition is highlighted as another major concern, reflecting the importance of public education on the benefits and necessity of shifting to greener practices.

“[...] society and public opinion influence political decisions. So, society and the information conveyed to society is the key.”















Institution, Argentina

In the USA, challenges are focused on developing supportive policies and infrastructure. Perceived shortcomings in designing effective energy and environmental policies (-9), implementing new infrastructure (-9), and ensuring active stakeholder engagement (-10) indicate significant barriers to advancing both government action and inclusive collaboration in the U.S. energy transition.

Table 10 Key players in energy transition**Q7. In your opinion, who are the key players in the energy transition in your country?**

Base: Total Sample - % Values

 Countries updated in 2025
 Countries surveyed in 2025

The most/least mentioned options for each country are highlighted Ranked on Italy	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Public entities/government	48	37	57	34	39	39	66	53	55	55	42	57	36	47
Private companies	45	45	37	39	43	32	29	34	42	37	41	56	42	45
Citizens	37	39	37	37	35	36	47	38	28	40	30	45	38	45
Scientists and experts	27	31	31	31	31	36	17	27	36	29	43	29	32	29
Politicians from your country	23	43	37	13	16	27	18	13	27	21	25	33	37	29
Engineers and technicians	20	19	13	20	24	19	21	33	31	15	11	12	23	18
International organizations	17	20	15	26	27	25	23	14	16	22	14	16	15	19
Politicians from other countries	9	15	7	13	9	13	7	3	6	9	4	6	9	5
NGOs, non-profit organizations	8	9	17	22	17	18	17	11	9	19	16	11	12	11
Journalists	8	5	5	13	6	5	7	3	5	7	21	4	6	3
Climate change activists	7	16	12	21	22	27	11	31	14	13	30	7	15	10
Celebrities and influencers	7	5	7	13	14	11	8	3	17	16	10	5	7	2

Public entities and government are highlighted as crucial (Table 10), often viewed as the primary players of the energy transition framework. Private companies also play a key role, highlighting the interdependence between the public and private sectors in achieving a shared vision for a sustainable energy future.

The involvement of citizens is also recognized, underlining the need for public engagement and collective responsibility in supporting the transition.

“The provincial governments are the main players in setting up the regulations. On the other hand, I will say private companies, are also moving in this direction. Many international companies - also operating in Argentina - have specific targets for emissions, and they are executing their plans according to the roadmap that they might have from their headquarters.”

Institution, Argentina

“So, I would say that the government, industries and large companies have collaborated to have this rational energy matrix in Argentina. Currently we are also focusing on nuclear development. We've had nuclear energy power plants for 70 years, and we export reactors for investigation all over the world. So, in the academy and in the investigation, we have significant potential.”

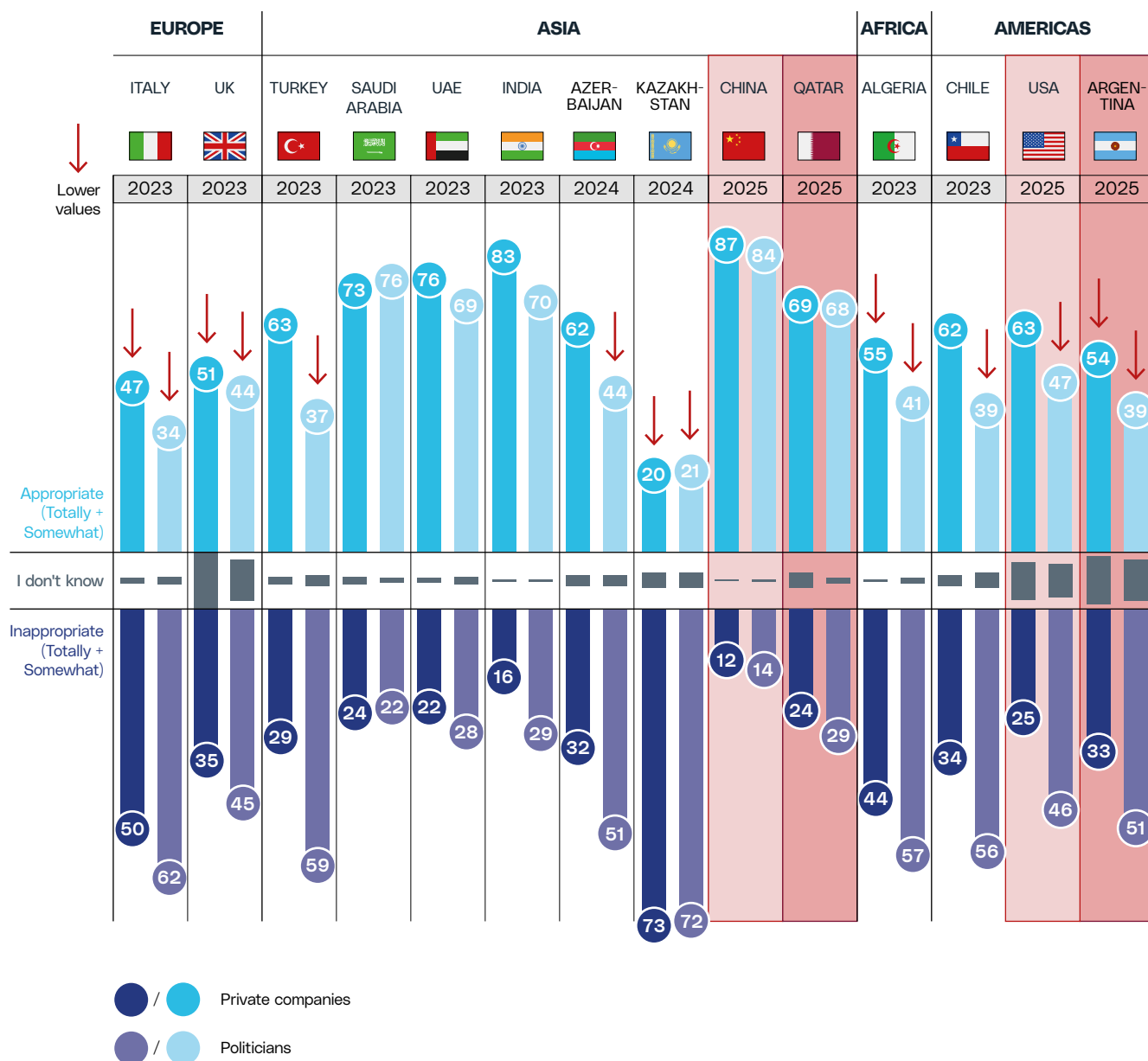
Institution, Argentina

In China (36%), India (36%), and Algeria (43%), scientists and experts are identified as key influencers in advancing the energy transition. Their expertise and research efforts contribute to address the energy transition challenges.

Table 11 Evaluation of strategies and efforts

Q15. Thinking about the energy transition challenges in your country, how would you rate the strategies and efforts of...

□ Countries updated in 2025 □ Countries surveyed in 2025



Overall, the data highlights the need for increased synergy between government and private sectors to effectively promote the energy transition process, with businesses frequently viewed as more dynamic and effective than political entities in driving change (Table 11).

In China, Saudi Arabia, the UAE, and Qatar, both private companies and governmental entities play significant roles in driving the energy transition process. Compared to other countries, the USA and its neighbors, Chile and Argentina, show a less optimistic view of the contributions made by both

businesses and politicians towards the energy transition, highlighting the need for stronger coordination to match the level of commitment seen in developed Asian economies.















“ In Argentina industries and governments have to start to change their approach to the energy transition process.

Institution, Argentina

Table 12 Most important actions to ensure
a successful transition process**Q6.** What are most important actions to ensure the energy transition process is a success in your country?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

The most mentioned options for each country are highlighted	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZER-BAIJAN	KAZAKH-STAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGEN-TINA
														
Ranked on Italy														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Reduction in waste by companies and individuals	33	37	34	25	35	33	40	49	34	35	34	34	38	37
Engagement of local communities in energy transition process	31	30	31	37	35	40	24	26	35	35	36	32	32	31
Adoption of renewable energy sources	30	37	26	26	30	24	18	28	36	29	34	28	37	26
Improvement of energy efficiency in industrial and transport sectors	24	28	20	29	21	25	20	18	16	23	14	26	28	29
Facilitation of investments into renewable energies(public policies and regulations)	23	26	41	27	27	23	33	25	19	31	44	33	23	33
Development of smart energy grids for efficient energy management	23	19	22	21	21	23	29	19	16	25	26	18	18	19
Improvement in companies' production processes	21	19	23	23	28	28	28	23	24	29	32	31	24	23
Improvement in energy efficiency in residential buildings	20	29	19	18	16	22	19	15	10	13	11	13	19	11
Transition of traditional vehicles to sustainable mobility	19	14	16	23	25	31	30	14	37	23	21	22	18	14
Innovation in energy technology	17	25	23	23	24	15	25	22	27	24	23	21	21	21
Innovation in low-carbon industrial technology	10	15	12	24	18	20	11	12	30	21	11	21	17	23

The reduction of waste by companies and individuals is seen as a key action in driving the energy transition forward, particularly in Asian nations such as Azerbaijan (40%) and Kazakhstan (49%), along with Qatar (35%), the UAE (35%) the USA (38%) and Argentina (37%).

In Argentina, there's a clear emphasis on facilitating investment in renewable energies, as shared by 33% of respondents. This focus is similar to that in Azerbaijan, also at 33%, and is even a top priority in Turkey (41%) and Algeria (44%), highlighting a shared recognition across these countries of the critical need to streamline financial inputs into sustainable energy sectors.

“ The problem in Argentina in the end is the money, current investments are very little for all the projects we have on the table, and this is due to a political problem.

Institution, Argentina

“ The Qatar Research Fund is also important as it is offering scholarships and grants to support research in green areas - among other areas. This fund is very important as most of the academic and research staff apply for its grants. This research fund defines an agenda each year to establish what the areas of interest in research are for Qatar and one of these areas of interest is energy safety and energy transition.

Academic, Qatar

China (36%), the UK (37%), and the USA (37%) collectively acknowledge the adoption of new sustainable energy sources as one of the most critical actions. This stance showcases their commitment to reducing reliance on fossil fuels. Specifically, in China, the top priority is the transition from traditional vehicles to sustainable mobility, rated at 37%, emphasizing the country's targeted approach to transforming its transport sector in line with greener practices.

Table 13 Cost-benefit analysis of energy transition process

Q14_1. Over the **short-term** (1-3 years), what would you say regarding energy transition in your country?

Q14_2. Over the **medium to long-term** (more than 3 years), what would you say regarding energy transition in your country?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
OVER THE SHORT-TERM														
The benefits will outweigh the costs	37	46	26	50	34	45	21	15	28	35	17	34	44	29
The costs and benefits will balance out	42	35	43	43	55	44	48	28	55	46	57	44	37	43
The costs will outweigh the benefits	21	19	31	7	11	11	31	57	17	17	26	22	19	28
OVER THE MEDIUM/ LONG-TERM														
The benefits will outweigh the costs	51	51	39	41	39	45	40	22	53	49	35	47	52	41
The costs and benefits will balance out	42	43	37	52	55	47	42	44	42	45	46	41	40	44
The costs will outweigh the benefits	7	6	24	7	6	8	18	34	5	6	19	12	8	15

When assessing the cost-benefit analysis of the energy transition process (Table 13), the data highlight a greater ability of countries to recognize the value of investment in the energy transition despite the initial costs, particularly when projecting possible economic and environmental returns in the future.

In the USA, generally there is positive sentiment regarding the economic benefits, not only in the medium to long term but also in the short term, aligning with the sentiment of other advanced European economies. Argentina's expectations are lower for short-term gains, much like neighbouring Chile. Both nations express greater hope for the long-term outcomes of their energy investments, highlighting the regional focus on sustainable growth and expectations for its long-term benefits.

“At the beginning there will be no positive numbers for investment in the energy transition. But in the future, things will change, and we will have a better cost-benefit ratio.”

Institution, Argentina

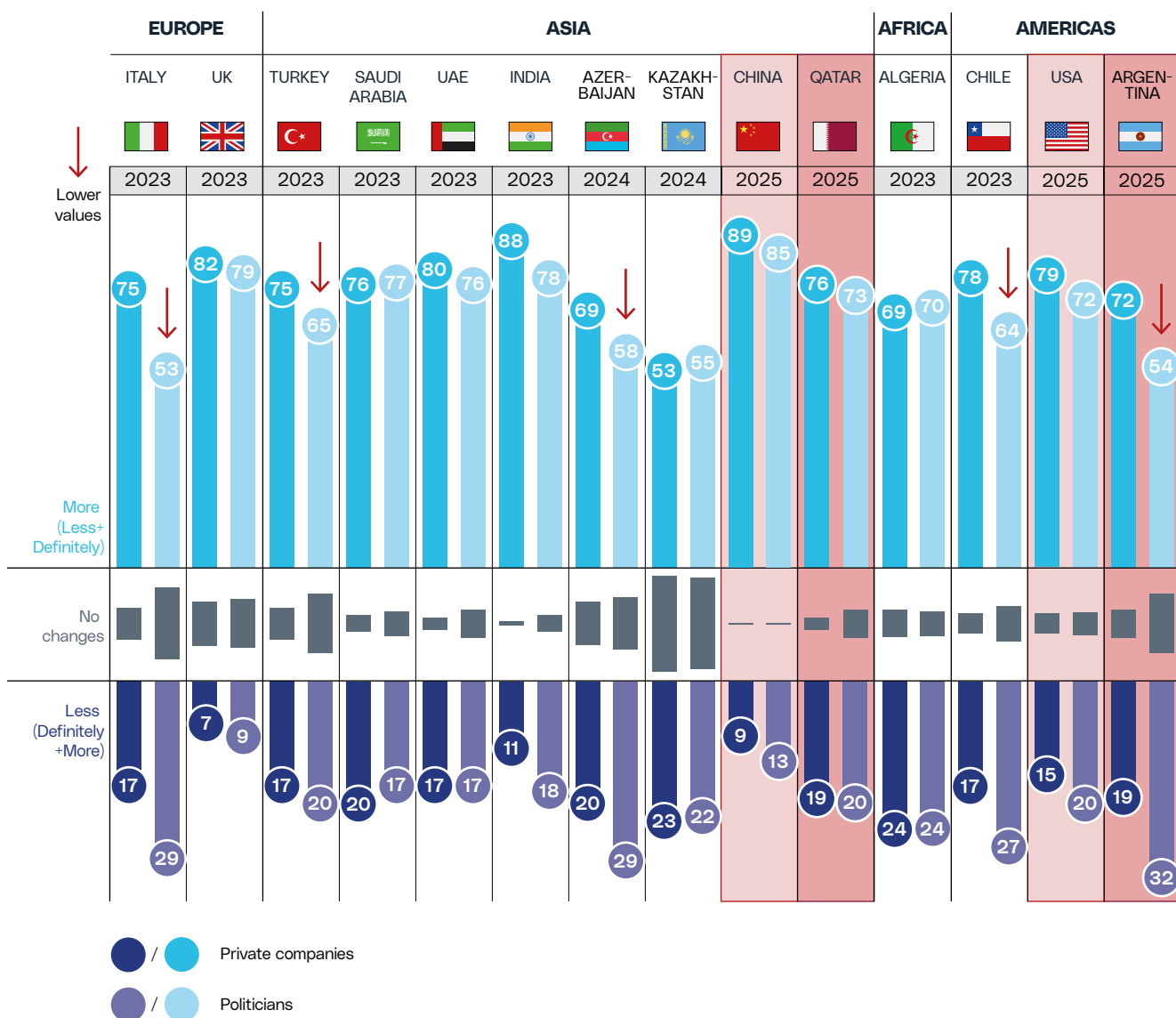
“In the long run, I think that this is the only way to achieve this goal because you need to be conscious of the implications, you need to explain and to make people understand that it might come with a cost, that it might be expensive, but that afterwards it will be better.”

Top Manager, Argentina

In China, there is a strong belief that in the medium to long term, the benefits of the energy transition will significantly outweigh the costs, as indicated by half of the respondents. This level of confidence sets China apart from other Asian countries, such as Turkey and Kazakhstan, and aligns with the sentiment of Qatar, where despite initial doubts in the short term, many anticipate that the long-term advantages will outweigh the costs.

Table 14 Attention to energy the transition issue**Q16.** Thinking about 2-3 years ago, do the following pay more/less attention to energy transition today?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025


The positive response toward recognizing the benefits of the energy transition observed in China, the USA, Qatar and other advanced economies is mirrored in the increased commitment from both private companies and governments (Table 14). The acknowledgment and engagement across various sectors suggests an awareness and action-oriented stance that resonates with public expectations and aligns with the necessary steps toward achieving energy sustainability.

In Argentina, as in countries like Chile, Italy, Turkey and Azerbaijan, private companies are seen as taking more positive steps than governments, highlighting a difference in the efforts of the corporate and public sectors.

“ Now they [private companies] are starting to pay attention to the problem. In the past, I think that nobody was aware of the problem.

Institution, Argentina

“ Maybe one of the most important issues is how to finance the energy transition. The Gulf countries have the funds to be able to make the move towards new energy sources but other countries, like Sudan or Iraq, need international support and grants to be able to make the necessary effort for the transition as the transition is costly especially in the short run.

Academic, Qatar

Table 15 Companies' commitment to energy transition

Q17. Which of the following actions should companies focus on most for energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Adopting new production processes	34	37	33	25	25	39	35	49	45	39	29	38	38	42
Providing training/education for skills development	28	31	19	29	37	30	39	44	31	38	36	23	24	33
Innovating products and services in a sustainable way	25	37	35	31	34	38	17	29	46	37	39	37	39	41
Promoting a cultural shift	25	23	18	15	14	14	15	7	12	15	11	27	23	26
Implementing new organizational strategies with dedicated roles	23	19	13	21	28	31	15	19	15	19	21	18	20	17
Defining decarbonization plans	18	15	26	25	20	17	26	9	24	13	21	15	14	9
Undertaking dedicated outreach activities	15	10	6	25	17	13	23	18	11	15	19	12	7	8
Reporting on sustainability	14	15	16	21	15	17	12	8	17	17	17	18	19	10

Overall, adopting new production processes and innovating products and services are two aspects considered essential for companies to facilitate the energy transition process (Table 15). These practices are recognized as the key shifts businesses must make to support the movement toward sustainable energy solutions. In the USA, the need for training and education to develop skills is highlighted as crucial (24%), mirroring the sentiment in other Western economies, Argentina (33%) and Chile (23%). This focus is important in other Gulf countries such as Qatar (38%), Saudi Arabia (29%) and the UAE (37%), as well as in developing Asian economies like China (31%) and India (30%). Similarly, in both Azerbaijan and Kazakhstan, the provision of adequate skills and knowledge for the workforce is recognized as vital for advancing the energy transition.

Alongside training and skills development, promoting a cultural shift toward sustainability gains particular importance in South American countries, with the USA (23%), Chile (27%) and Argentina (26%) emphasizing the need for a societal mindset shift as fundamental for advancing energy policies.

“It will probably be good if there were more sharing of knowledge on how they are achieving those targets, and what compromises they are making. There is a need for more sharing of information related to the specific programs that these companies are already implementing.”

Top Manager, Argentina

“So far, the message has been shared that we are switching to renewable energy”, but there is no information on how they are doing it, what the strategies are, how they are making sure that they will have access to affordable energy, or whatever. It's just a matter of communication. So, I think that there is an opportunity there for more communication.”

Top Manager, Argentina

Table 16 Perceived importance of energy transition areas**Q4. Which of the following aspects do you consider most important for energy transition? RANKING**

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

<div> <div></div> <div>The most mentioned options for each country are highlighted</div> </div> <div>% 1st + 2nd + 3rd positions</div> <div>Ranked on Italy</div>	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
ENVIRONMENT	65	69	49	54	60	63	59	59	64	62	65	53	65	58
ECONOMY	54	56	51	49	49	42	46	51	60	49	50	49	51	51
TECHNOLOGY	53	61	51	50	48	51	59	61	68	44	57	49	55	45
REGULATION	37	41	30	34	27	34	28	31	42	35	24	33	34	39
SOCIETY	35	27	35	33	35	40	48	37	24	32	25	35	37	31
EDUCATION	28	25	55	51	47	41	38	39	24	51	54	48	31	47
CULTURE	27	21	29	29	33	30	23	22	19	27	26	34	28	29

Table 16 presents a global overview of the energy transition from different national perspectives, highlighting the importance of addressing environmental, technological, regulatory, social, and educational factors in harmony to achieve key energy transition goals.

Overall, the environment emerges as the top area of importance across countries, denoting a collective acknowledgment of the urgent need for actions aimed at ecological conservation and sustainability. Additionally, economic concerns play a critical role, identified by approximately half of respondents in each country, with particular emphasis in China, where it was mentioned by 60%, following closely behind technology (68%) and environment (64%).

The area of technology plays a pivotal role in the energy transition, with many countries investing in technological innovation to enhance the efficiency and effectiveness of renewable energy solutions. Economic considerations are also crucial for funding research and development, creating jobs in the renewable energy sector, and ensuring that the transition is both sustainable and profitable.

The role of education is prominently emphasized in nations such as Qatar (51%), Saudi Arabia (51%), and the UAE (47%). The importance placed on education signals an acute awareness of the necessity for well-informed populations that are capable of adopting new attitudes and behaviours that support sustainability efforts. Argentina (47%) and Chile (48%) similarly stress the value of education in the transition process, understanding that a population educated about sustainable practices is crucial for the continuity and effectiveness of the energy transition.

“ There are several educational programs offered by different associations or universities. Many times, they are jointly run between the chambers of commerce of different countries in association with local universities. Some European agencies, and in particular the German Chamber of Commerce, have also been very active on this topic for many years.

Top Manager, Argentina

“ Technology is thus very important. The economy is following...the economy cannot stop in order to obey the energy transition.

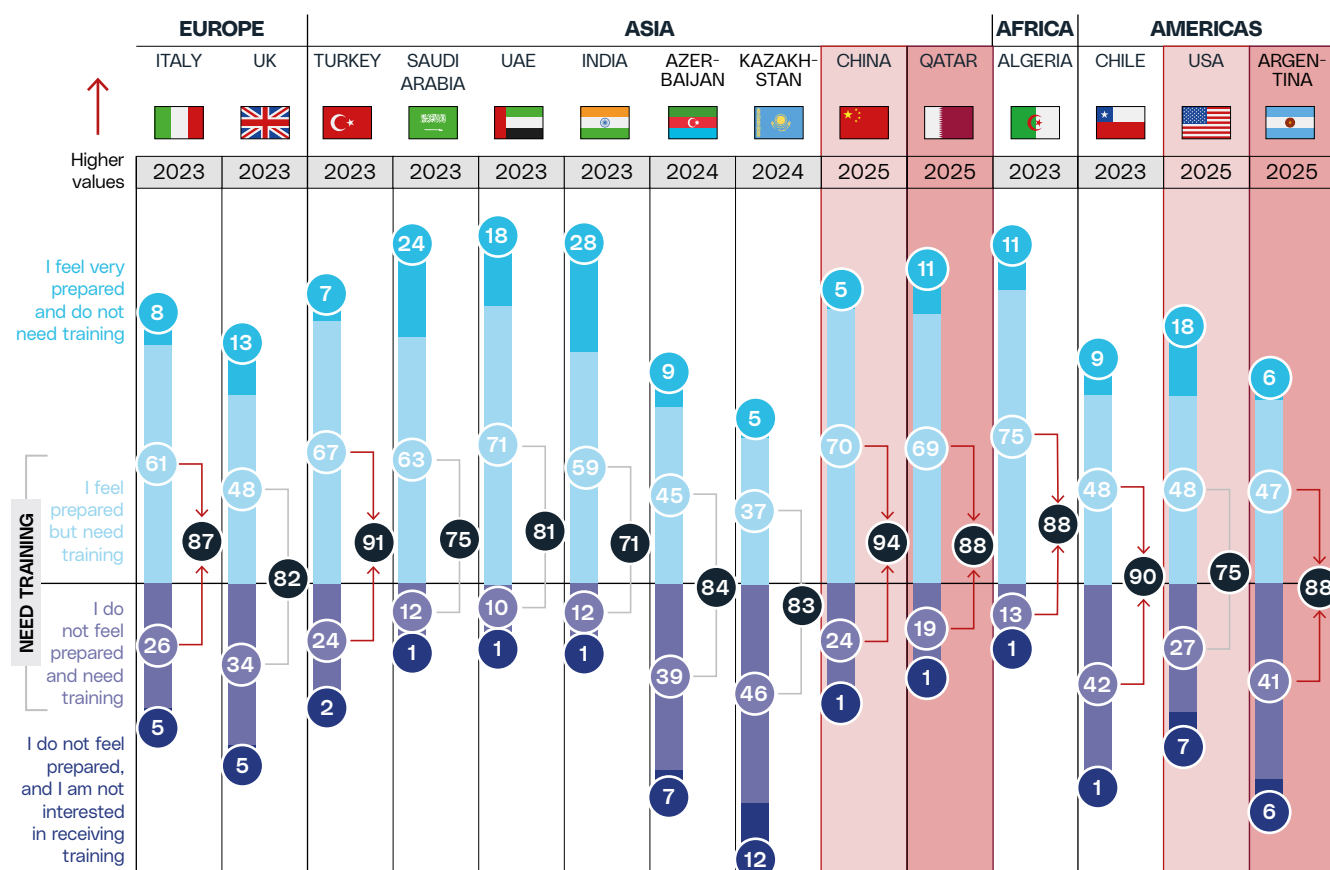
Top Manager, Argentina

Table 17 Need for training on energy transition

Q11. How prepared do you feel on the topic of energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025



Overall, the consideration of training as a fundamental component of the energy transition strategy reflects a global consensus on the need to strengthen skills to achieve sustainability goals (Table 17).

Although it is a cross-cutting issue that affects different countries, the need for training is particularly evident in China (94%), Qatar (88%, similar to other Gulf Economies) and Argentina (88%).

In the USA, half of the respondents feel ready for the energy transition, yet still recognize the importance of ongoing training, signifying a recognition of the evolving nature of the energy sector and the necessity to stay informed.

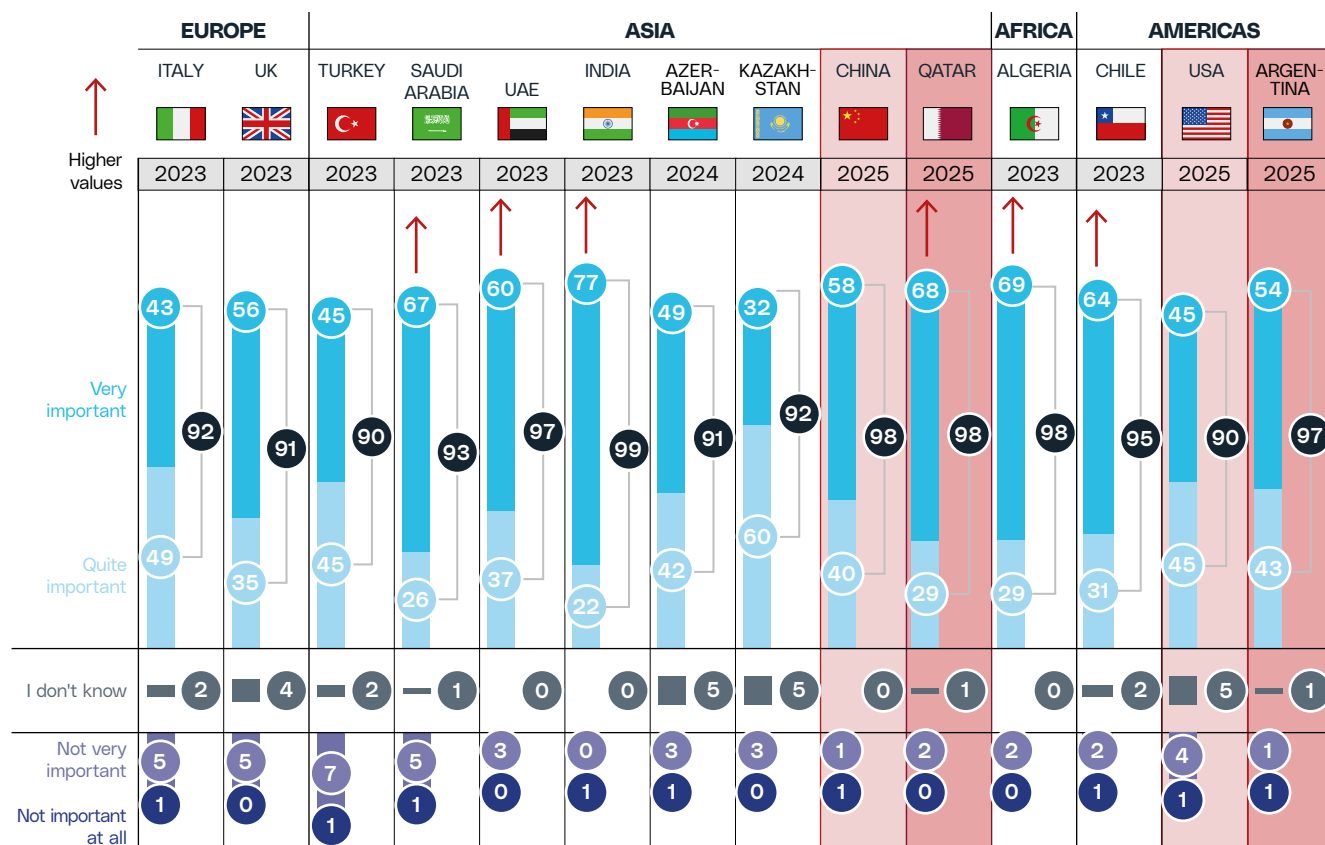
This understanding is also visible in Chile and Argentina, where, however, a considerably larger percentage of the population feels unprepared and recognizes the need for more training (42% in Chile and 41% in Argentina).

In China, 70% acknowledge their preparedness, reflecting the country's efforts in public education regarding sustainable energy practices. A similar situation is observed in Qatar, Saudi Arabia, and the UAE, yet with a generally higher level of preparedness.

Across all countries, only a small number of people feel unprepared and show no interest in training, showing a worldwide readiness to participate in the energy transition and a shared dedication to sustainable practices.

Table 18 Importance of developing educational programs
on energy transition**Q12.** In your opinion, how important is developing educational and training programs for energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025


Overall, the consideration of training as a fundamental component of the energy transition strategy reflects a global consensus on the need to strengthen skills to achieve sustainability goals (Table 18).

In Asia, advanced economies such as India (77%), Qatar (68%), Saudi Arabia (67%), the UAE (60%), and China (58%) view education and training as essential elements for a successful energy transition, with high proportions of respondents emphasizing the importance of dedicated programs. This contrasts with nations like Turkey (45%), Azerbaijan (49%), and Kazakhstan (32%), where, despite a recognized need for more training, a relative minority of respondents consider such programs critically important.

In South America, education is valued for its role in the energy transition, with a majority of those surveyed in Chile (64%) and Argentina (54%) regarding it as key to progress in sustainable energy practices. Similarly, Western economies like Italy (43%), the UK (56%), and the USA (45%) acknowledge the necessity for more training, though fewer respondents believe there's a pressing need for specialized educational programs compared to their Asian counterparts.

“ In my country, I think they have to be trained from the very beginning. There is a need to change the way of thinking. People think about the environment like children.

Institution, Argentina

Table 19 Reliable sources on energy transition

P0. Which sources do you consider reliable for information on energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Specialised magazines	43	35	19	49	44	55	14	25	53	43	41	44	38	31
Academic publications/articles	37	51	69	47	44	53	45	57	42	53	48	58	57	48
TV	35	38	24	47	51	73	48	57	57	63	40	51	46	45
National newspaper	33	42	20	45	47	73	30	10	40	59	29	37	42	26
Websites	31	35	36	31	31	59	49	46	47	58	53	43	42	53
None of these	6	11	3	1	0	1	1	1	0	2	0	0	7	4

Academic publications and television are considered the most reliable sources of information on energy transition, mentioned by about half of the respondents (Table 19).

“ I think that education has to change in order to explain, both technically and scientifically, what the environment means. Not only “the bears and the flowers”. In the end you have to understand the real danger that could arise for the environment if it's treated badly by society.

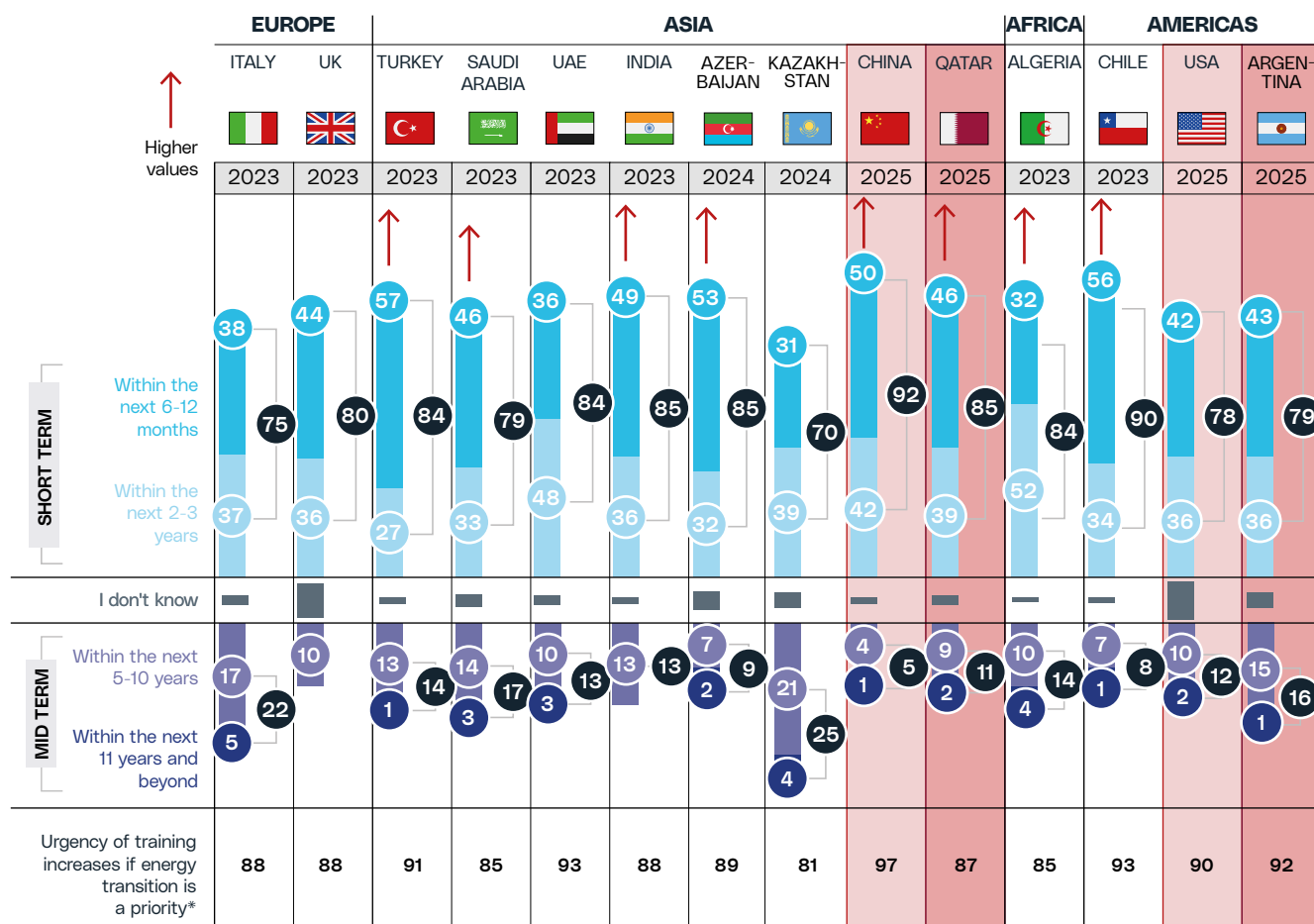
Institution, Argentina

For advanced economies, such as the USA and European countries, specialized magazines or academic publications are highly regarded, indicating the importance of research-based insights and the public desire for in-depth understanding of the topic.

China's emphasis on television (57%) and specialized magazines (53%) as top sources may also reflect the government's role in public information. Qatar, along with the UAE, Saudi Arabia, and India, places trust in television and national newspapers for information on the energy transition. Furthermore, like Argentina, where 53% of individuals turn to websites, in Qatar (58%) there is a strong preference for online platforms as the main source of information, connecting a technologically adept public to worldwide conversations about sustainable energy practices.

Table 20 Timing of training in energy transition**Q12_1.** Considering the current situation in your country, when do you think training for those involved in energy transition should take place?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025


*Energy Transition is considered a priority in public's opinion

There's widespread agreement on the importance of providing education rapidly for the energy transition (Table 20). Most respondents express a preference for receiving this crucial training sooner, favoring a timetable within the next 6 to 12 months. This shared viewpoint emphasizes the immediate and pressing challenges of the energy transition, highlighting the importance of preparing the workforce with timely, adaptive skills for the industry's impending evolution.

In the USA, there is a clear demand for energy transition training within the next 3 years, with 78% of people emphasizing the need, which mirrors the urgency shared by European countries and Argentina (79%).

In Qatar 85% of respondents agreed with the need for short-term training; a perspective shared by Gulf countries like Saudi Arabia (79%) and the UAE (84%). All these countries acknowledge the rapid transformation occurring in the energy sector that requires a skilled workforce. China shows an even stronger focus, with 92% of participants recognizing the immediate importance of training, setting it apart from other Asian nations.

The urgency for training in energy transition increases for those who consider it a high priority. Furthermore, differences in how urgent training is perceived across countries becomes less pronounced among those who recognize the its importance.

“ At the moment the government is not so sympathetic towards climate change and energy transition [...] I think that Argentina is in favour of the energy transition and agrees with it. Maybe there are different points of view on the timing and on how to carry it out.

Institution, Argentina

“ There are many people working in the gas and oil sector, and they are targeted in receiving more training in the areas of the energy transition through executive masters or BA business administration programs. So those managers are another relevant target.

Institution, Argentina

Table 21 Competence requirements for energy transition

Q8_1. In your opinion, when it comes to training those involved in energy transition...

Base: Total Sample - % Values

■ Countries updated in 2025 ■ Countries surveyed in 2025

The most mentioned options for each country are highlighted	EUROPE		ASIA								AFRICA	AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Technical knowledge is more important than personal skills and qualities	37	28	37	45	48	51	31	23	17	35	25	32	29	33
Technical knowledge and personal skills are equally important	61	69	60	51	49	48	61	75	83	63	73	67	69	63
Technical knowledge is less important than personal skills	2	3	3	4	3	1	8	2	0	3	2	1	3	3
MOST REQUIRED Technical Knowledge	Impact on the region	Environmental impact	Renewable energy sources	Renewable energy sources	Environmental impact	Recycling/circular economy	Environmental impact	Environmental impact	Renewable raw materials and recycled materials	Renewable raw materials and recycled materials	Renewable energy sources	Impact on the region	Environmental impact	Renewable energy sources
MOST REQUIRED Personal skill	Problem-solving Multidisciplinary approach	Critical thinking Creativity	Problem-solving	Problem-solving Creativity	Creativity	Creativity	Problem-solving	Critical thinking	Creativity	Creativity	Creativity	Problem-solving	Problem-solving	Problem-solving Multidisciplinary approach

Overall, the data on competence requirements reflect an understanding that the successful implementation of the energy transition depends on a combination of technical skills and personal qualities (Table 21).

In the USA, similar to other American countries, technical skills are slightly more emphasized than personal skills, with one in three respondents considering them more important.

A more pronounced tilt towards technical knowledge is observed in Qatar (35%) and across several Asian countries, including Saudi Arabia (45%), UAE (48%), India (51%), and Turkey (37%), with over 30% stressing the central role of such expertise.

However, across all countries, there's a clear need for a balance between hard and soft skills. Professionals involved in the energy transition process must be not only equipped with technical know-how but also adept at interpersonal and creative capacities.

“In Qatar in the higher education, we are offering degrees, bachelor, master's degrees, and PhDs where you can concentrate on issues that also support the energy transition from a technical point of view”.

Academic, Qatar

Table 22 Soft skills for energy transition**Q9_1. What are the most important personal skills for those involved in energy transition?**

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

 The most/least mentioned options for each country are highlighted
% 1st+2nd+3rd positions -Positioning 1st

Ranked on Italy

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Problem-solving skills	46	43	59	47	38	37	62	58	52	45	48	50	55	45
A multidisciplinary approach	45	33	34	30	27	32	33	34	49	35	31	43	33	46
Critical thinking and analytical skills	43	52	34	25	38	38	29	68	30	41	27	31	43	39
Creativity and innovation	37	51	47	48	63	43	42	30	60	50	69	45	42	44
Flexibility and adaptability	33	38	23	40	36	39	38	33	34	35	39	35	44	27
Teamwork skills	27	30	50	37	34	36	45	37	34	37	49	38	28	40
Emotional intelligence	25	15	15	17	17	26	19	9	9	13	5	24	19	19
Communication and networking skills	23	28	25	29	33	32	22	22	24	28	19	25	27	29
Fluency in the English language	20	10	13	27	13	20	11	9	10	15	13	9	10	11

Problem-solving skills, creativity and innovation are mentioned as the most important competencies.

In China (60%), Qatar (50%), other Gulf countries, and India (43%), creativity and innovation are ranked top among the soft skills needed by professionals engaged in the energy transition. Problem-solving ranks first in the USA (55%), Chile (50%), Argentina (45%) and also in Saudi Arabia (47%) and Turkey (59%). In Argentina a multidisciplinary approach (46%) and creativity and innovation (44%) are deemed equally essential.

Critical thinking and analytical ability represent other key skill, emphasized in the USA (43%), Qatar (41%) and they rank first in the UK and Kazakhstan.

Emotional intelligence and teamwork, fluency in the English language and communication and networking skills can facilitate effective collaboration and clear communication, although they rank lower in emphasis, with emotional intelligence and fluency in English often seen as less critical.

“Communication is key in terms of being able to effectively communicate what has been done and what the challenges are. Transversally I would say that communication is key as always.”

Top Manager, Argentina

Table 23 Technical knowledge requirements for energy transition soft skills for energy transition**Q8_2.** What are main technical knowledge requirements for those involved in energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

The most/least mentioned options for each country are highlighted
% 1st+2nd+3rd positions -Positioning 1st

Ranked on Italy

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Analyse and assess the impact on the region	42	27	35	27	29	27	28	39	29	32	32	39	32	32
Understanding environmental issues and analyse and assess their environmental impact	37	46	33	29	41	33	53	44	31	41	45	36	41	34
Knowledge of various renewable energy sources	37	41	39	39	39	37	37	27	34	39	47	35	39	43
Knowledge of alternative renewable raw materials and recycled materials to substitute traditional materials	36	38	35	33	29	36	35	27	42	43	44	37	42	37
Knowledge of regulatory frameworks	31	19	21	23	11	25	20	26	16	17	8	25	22	20
Knowledge of sustainability issues, ESG principles, and sustainable design criteria	30	31	27	35	33	33	18	34	37	24	32	26	32	31
Knowledge of techn. issues related to recycling and circular economy	23	33	27	33	30	40	39	36	35	31	25	26	28	27
Manage the economic sustainability of projects	22	27	24	31	33	23	24	25	26	24	26	25	22	29
Manage economic resources in a fair and inclusive manner	22	16	31	28	35	25	29	23	22	28	27	25	24	25
Sensitivity to social issues and the ability to analyse and assess their impact on society	21	22	27	22	19	25	18	19	30	22	13	27	18	22

Environmental issues stand out as the key technical competence critical to the energy transition (Table 23). This ability is not only prioritized in the USA, where 41% acknowledge it as crucial but is also at the forefront in European countries such as UK and Italy. Similarly, in the Middle East, countries like Qatar (41%) stress its importance, a sentiment echoed by the UAE (41%), Azerbaijan (53%), Azerbaijan (54%) and Kazakhstan (44%).

Understanding various renewable energy sources is highlighted as another top priority across countries, with Argentina ranking it first, the USA (39%), and Chile (35%) all emphasizing the importance of this technical expertise. Gaining proficiency in this area is similarly significant across Gulf nations like Qatar, Saudi Arabia, and the UAE, and extends to various Asian economies including Turkey, India, and Azerbaijan and Algeria.

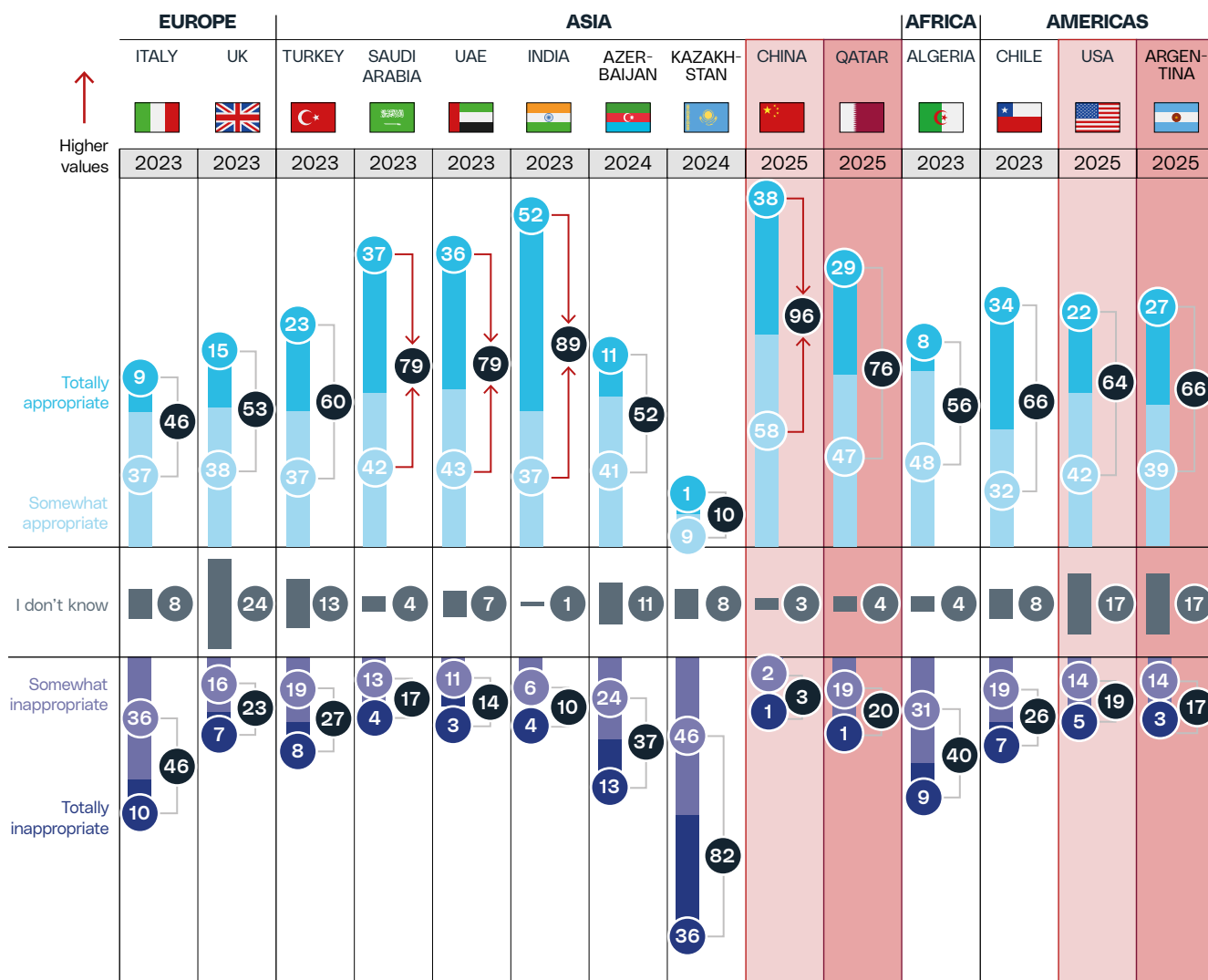
I think that firstly there is the need to have a knowledge of the different types of renewable energies available in each country. I live in a huge country, and we have very different conditions in the south, in the north and in the centre of the country. In the north we have very good sun conditions, so photovoltaic energy.

Top Manager, Argentina

Expertise in renewable raw materials and recycled materials is also highly valued in the USA (42%), and this is reflected similarly in Argentina (37%) and neighboring Chile. In China, this technical knowledge is also a top priority (42%), closely followed by an understanding of sustainability issues (37%) and knowledge of technology related to recycling and the circular economy (35%).

Table 24 Availability of energy transition professionals**Q10.** How would you rate the **availability of technical professionals with skills for energy transition** in your country?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025


Upon examining the data on the availability of specialists in the energy transition sector, there's an acknowledgment of the room for growth across various regions.

Western economies face challenges in evaluating whether they have enough qualified professionals for the energy transition. Italy shows particular concern, indicating an urgent need to train more experts. In the UK (24%), the USA (17%), and Argentina (17%), many people are not sure about the current level of expertise available, while about 20% in the USA and Argentina perceive a deficiency in the availability of skilled professionals in this field. In Chile, this situation is even more critical, with about a quarter of those surveyed believing they lack the necessary skilled workforce.

“ [the availability of technical professionals is] Somewhat appropriate. We make a lot of efforts, but they are isolated efforts.

Top Manager, Argentina

Asia shows a variety of assessments of professionals' readiness for the energy transition. India and China view their situations positively, with 96% feeling their readiness levels are adequate. Qatar differs slightly within the Gulf context, as 20% worry about insufficient professional availability, while 29% see it as totally fitting. Conversely, Turkey, Azerbaijan, and Kazakhstan face greater challenges, with many concerned about whether their professionals are sufficiently prepared, highlighting a need for more concentrated professional development efforts.

Table 25 Key players in training of those involved in energy transition**Q9.2.** Who should be responsible for training those involved in energy transition?

Base: Total Sample - % Values

■ Countries updated in 2025
 ■ Countries surveyed in 2025

	EUROPE		ASIA							AFRICA		AMERICAS		
	ITALY	UK	TURKEY	SAUDI ARABIA	UAE	INDIA	AZERBAIJAN	KAZAKHSTAN	CHINA	QATAR	ALGERIA	CHILE	USA	ARGENTINA
Ranked on Italy														
Surveyed in	2023	2023	2023	2023	2023	2023	2024	2024	2025	2025	2023	2023	2025	2025
Public research and development centers	53	57	46	58	66	66	67	37	46	63	75	48	57	42
Government responsible for energy policies	52	67	53	56	58	71	63	67	68	80	56	60	64	63
Private energy sector companies	43	49	17	49	39	61	33	17	33	36	26	45	49	37
Universities	42	44	49	49	47	46	32	43	33	50	71	50	49	53
Private company research and development centers	32	46	30	42	46	61	30	19	34	37	36	42	58	49
Professional sector associations	15	35	26	25	19	42	20	32	53	29	21	24	37	18
Foundations	3	10	6	13	11	17	7	5	2	18	12	8	15	7

Governments, along with public research and development institutions, are often seen as the main providers of training for those involved in the energy transition. Universities are equally important, offering structured education that prepares individuals with up-to-date practices in sustainable energy. In countries such as Turkey, Azerbaijan, China, Qatar, and Algeria, it's mainly public institutions that are expected to spearhead the energy transition. In China, not only are government and public research pivotal, but professional sector associations also play a clear role (53%) among respondents acknowledging their importance.

Private sector companies, including energy firms and R&D centers, are acknowledged as crucial for delivering industry-specific training that supplements academic knowledge with practical experience. In countries like India (61%), the UAE (46%), the USA (58%), Argentina (49%), and the UK (46%), the role of businesses in providing on-the-job training and spearheading educational initiatives is recognized as essential for the comprehensive development of professionals in the energy field.

“To be successful in this matter, I think that government participation is very important. Firstly, the State government, as the government established the rules and the goals and then can come the academy, the university, the NGO and the companies. I think that this is the normal situation. I would accept initiatives coming from the NGOs or companies, but government support is needed.”

Institution, Argentina

“I think that you need international collaboration for funding these [educational] programs]. If you want to leverage education, you should make sure that in those countries where this topic is not so relevant you somehow fund the education and provide a leverage to put it on top of the agenda otherwise in many places it's not going to arrive on top of the agenda alone.”

Institution, Argentina

3 FOCUS: TRENDS IN CHINA

TARGET POPULATION	METHODOLOGY	NUMBER OF INTERVIEW		PERIOD OF FIELDWORK
Population with a high level of education, employed, concerned and engaged with the environnement*	Online quantitative survey (CAWI)	200 interviews per wave		22 September – 9 October 2023 7 May - 20 May 2025
		2023	2025	
		200	150	

* People who feel the urgency to combat climate change and have already adopted virtuous behaviours (IPSOS cluster)

3.1 Executive Summary China

The evaluation of China's energy transition in the 2025 edition builds upon insights from the 2023 report, offering a comparative analysis of developments over the years.

The study targeted highly educated, employed individuals actively engaged with environmental issues, revealing how this informed group understands and interacts with energy transition concepts, and showcasing China's progress.

The evaluation of China's energy transition in the 2025 edition builds upon insights from the 2023 report, offering a comparative analysis of developments over the years. The study targeted highly educated, employed individuals actively engaged with environmental issues, revealing how this informed group understands and interacts with energy transition concepts, and showcasing China's progress. Awareness among this group has increased, demonstrating not only

a widespread recognition of the energy transition but also a deepening familiarity with the topic (+7 p.p. since 2023). This trend reflects China's success in leveraging education to enhance public understanding, positioning itself as a leader in sustainable energy practices in Asia. China's leadership in this domain enables it to drive both regional and potentially global environmental strategies.

However, within this broader understanding, there has been a shift in perceptions among the Chinese informed population regarding the urgency of this issue. While its importance is acknowledged, it is increasingly balanced with other critical issues. Fewer individuals view it as the single most important priority (2%), with more considering it equally important alongside other pressing concerns (+5 p.p. since 2023).

While the perceived urgency of the energy transition among individuals may have slightly diminished, China's overall progress in this area remains notable (52% consider China “ahead of other countries” in the energy transition process). The country's elevated and growing status in the Energy Transition Index (ETI, 12° in 2025 vs 17° in 2023) reflects a coherent alignment between perceived national advancement and actual strides made towards sustainability.

This consistent governmental engagement ensures that, even amidst shifting individual priorities, China maintains its national focus on sustainable practices and the transition to cleaner energy sources.

Despite these positive indicators, challenges persist, particularly in expanding public awareness of energy and environmental issues. Although there has been marked progress, further efforts are required to deepen public engagement comprehensively. Additionally, the need for increased stakeholder involvement and the development of robust energy and environmental policies is underscored. Ensuring active participation by both the government and private entities is crucial for overcoming these hurdles. Over the past years, there has been an increase in the commitment of private companies to the energy transition (88% consider strategies and efforts of private companies “adequate”, +9 p.p. since 2023), sometimes surpassing governmental efforts. This acknowledgment, along with heightened public anticipation for meaningful progress, suggests that private companies may encounter intensified pressure to showcase effective strategies. Consequently, innovation in products, services, and new processes is prioritized to drive the transition, and there is a growing recognition of the need for education and training to equip the workforce with the necessary skills for sustainable practices (+7 p.p. since 2023).

To fully capitalize on the opportunities presented by the energy transition, China must maintain its strategic focus on adopting renewable energy sources and transforming traditional infrastructures, such as vehicle mobility, into more sustainable models. This emphasis is essential for achieving China's environmental stewardship goals and reducing its reliance on fossil fuels. These actions promise valuable benefits, including combating global warming. Additionally, the transition offers significant health and environmental benefits, illustrating a growing understanding of the interconnectedness of sustainability initiatives. This approach will also generate new job opportunities, particularly enhancing women's participation in the workforce.








There is a widespread consensus on the urgent need to enhance skills and provide education to meet the requirements of the expanding renewable energy sector. This consensus emphasises the need for an educational response that addresses immediate energy transition demands while strategically preparing the workforce. Although educational programs are still highly valued, there has been a shift in perception, with fewer people now seeing these programs as essential (-6 p.p. since 2023), while more regard them as important (+6 p.p. since 2023). This shift indicates a slight rebalancing of priorities among the public, suggesting that educational initiatives might be competing with other pressing issues, despite their acknowledged importance.

China's focus on both technical skills and personal competencies reflects its holistic approach to workforce development. Skills relating to renewable raw and recycled materials remain crucial, alongside a recognized need for creativity and problem-solving ability within the energy sector. Encouraging education that focuses on multidisciplinary approaches and holistic/broad skill sets will undoubtedly support China in maintaining its trajectory towards sustainable development.

China's progress on the energy transition underscores the nation's potential to lead in Asia and beyond, balancing multiple priorities while steadily advancing its sustainability agenda. Strategic partnerships among governments, educational institutions, the private sector, and the scientific community will be essential in amplifying training efforts, ensuring alignment with current and future industry requirements. Such collaborative approaches are integral to accelerating China's transition to sustainable energy, supporting broader economic resilience while addressing environmental challenges. The country stands poised to influence regional policies and shape a global framework for energy transformation, maximizing the benefits for its population and setting an example for others to follow.

Table 1.1 Awareness of the energy transition process

Q1A. Have you ever heard of energy transition?
Base: Total Sample - % Values







	ASIA	
	CHINA	
		
Surveyed in	2023	2025
TOTAL AWARENESS	97	98
I am very familiar with it	 37	 44
I have heard of it, but I only have a vague idea	 60	 55
I have never heard of it	 3	 2

The data from Table 1.1 reflect China's increasing awareness of the energy transition process among informed people, with awareness rising slightly from 97% in 2023 to 98% in 2025. This indicates not only a widespread understanding but also a growing level of familiarity with the subject within this niche of the population.

A significant number of informed individuals in China are now "very familiar" with the energy transition (+7 p.p. since 2023), suggesting an in-depth comprehension of the topic. This trend underscores China's successful efforts to inform its population and positions China as a potential leader in Asia for energy sustainability, with the power to shape regional, and possibly global, environmental strategies.

Table 2.1 Perceived importance of the energy transition process

Q2_2. In your opinion, how important is energy transition?
Base: Total Sample - % Values

	ASIA	
	CHINA	
		
Surveyed in	2023	2025
It's a priority	 65	 58
It is important, but on par with other areas of commitment	 35	 40
It is of secondary importance		 2

However, China's perception of the energy transition suggests a re-prioritization, where the urgency of the energy transition remains recognized but is balanced with other significant areas of concern (Table 2.1).

Observing the data, there is a decrease in those who view the energy transition as an absolute priority (-7 p.p. since 2023), along with a corresponding increase in informed individuals who consider it important but equally important to other priorities (+5 p.p. since 2023).

Table 3.1 The energy transition perception across countries


Q3A. To what extent do you agree or disagree with each of the following statements? Energy transition...

Base: Total Sample - % Values

Higher values in bold

↑↓ Significantly different vs previous wave (95%)

% Scores 10-9
Ranked on Italy

Surveyed in	ASIA	
	CHINA	
		
2023	2025	
It is crucial for combating climate change and global warming	53	68 ↑
It creates new job opportunities in renewable energy and clean techn. sectors	48	61 ↑
It reduces dependence on imported energy sources and the risk of supply disruptions	45	61 ↑
It significantly benefits human health and the environment by reducing greenhouse gas emissions and air pollution	54	66 ↑
It leads to better energy efficiency , reducing long-term costs	45	61 ↑
Investment in energy transition is a priority over other areas	45	53
It represents an opportunity for more female participation and provides new employment opportunities for women	24	48 ↑

Combating global warming emerges as a key issue of the energy transition process with 68% of respondents identifying it as a key topic. Similarly, the benefits to human health and the environment have seen a rise in importance, acknowledged by 66% (Table 3.1).

The creation of new job opportunities, the reduction of dependence on imported energy sources and the advancement towards better energy efficiency come in equal second place, with 61% of respondents acknowledging it. There has been a remarkable increase (+24 p.p. since 2023) in the recognition of the energy transition as a gateway for greater female participation in the workforce, with half of the surveyed individuals in agreement.

Table 4.1 Countries' commitment to the energy transition

Q2_1. Which of the following statements best describes the level of commitment in your country?

Base: Total Sample - % Values

ENERGY TRANSITION is the shift from traditional fossil-based energy sources and raw materials to renewable, recycled, and sustainable energy sources and raw materials to reduce greenhouse gas emissions and address climate change





Surveyed in	ASIA	
	CHINA	
		
2023	2025	
It's a priority	 59	57
It is important, but on par with other areas of commitment	 41	41
It is of secondary importance		 2

Table 5.1 Country positioning on the energy transition**Q13.** In your opinion, how would you rank **your country** compared to others in the energy transition process?

Base: Total Sample - % Values

↑↓ Significantly different
vs previous wave (95%)

ASIA

CHINA



Surveyed in	2023	2025
Ahead of other countries	49	52
On par with other countries	41	44
Behind other countries	10	4 ↓
RANK BY ETI SCORE**		
2023	17°	
2024	17°	
2025	12°	

**Source: WEF, Fostering Effective Energy Transition 2025 Edition

Perceived importance vs Country positioning on the energy transition process

Q2_2. In **your opinion**, how important is energy transition?**Q2_1.** Which of the following statements best describes the level of commitment in your country?**Q13.** In your opinion, how would you rank **your country's level in the energy transition process**?

Base: Total Sample - % Values

↑↓ Significantly different
vs previous wave (95%)

ASIA

CHINA



Surveyed in	2023	2025
Priority for ME	65	58
Priority for COUNTRY	59	57
Country's level in the energy transition process: BEHIND other countries	10	4 ↓
RANK BY ETI SCORE**		
2023	17°	
2024	17°	
2025	12°	

**Source: WEF, Fostering Effective Energy Transition 2025 Edition

When examining perceptions and positioning in the energy transition process for China, there is a shift in respondent opinions. While the percentage of those who prioritize the energy transition as crucial for themselves slightly decreases, the conviction about its importance from a national perspective endures.

Despite a shift in personal urgency, there's still a solid agreement on China's strategic path in the energy transition, confirmed by China's recognition of its progress, as shown by its high ETI ranking.

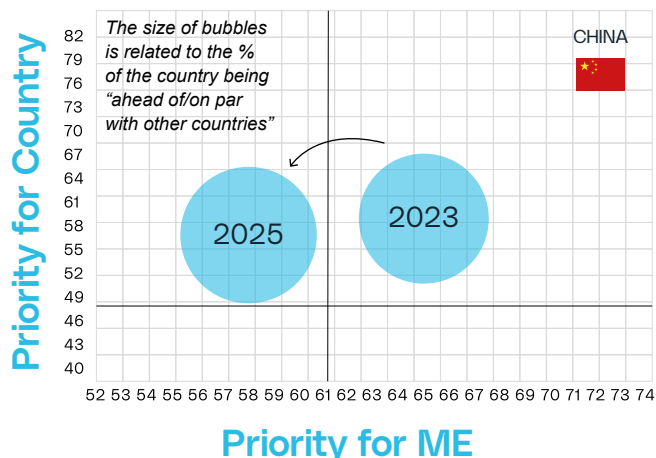
Table 6.1 Positioning map

Q2_2. In your opinion, how important is energy transition?

Q2_1. Which of the following statements best describes the level of commitment in your country?

Q13. In your opinion, how would you rank your country compared to others in the energy transition process?

Base: Total Sample - % Values



In China, the perceived personal importance of the energy transition within the population has experienced a dip, while the government's engagement remains constant and above average (Table 6.1). This change indicates a possible reassessment of the significance of the energy transition among individuals, even as China persistently pushes forward with its sustainability agenda.

Table 7.1 Main opportunities and benefits of the energy transition

Q5_1. Which are main opportunities and benefits of energy transition?

Base: Total Sample - % Values

The most mentioned options are highlighted

% Scores 10-9
Ranked on Italy

ASIA

CHINA



Surveyed in	2023	2025
Ensuring the active involvement of all stakeholders in energy transition process	26	27
Creation of new jobs in sectors focused on sustainability and climate solutions	43	43
Development of energy and environ. policies by the government	24	27
Engagement of private companies to adopt renewable energy	13	14
Development and implementation of new infrastructures	27	24
International collaboration for sharing knowledge, resources, and experiences	27	23
Training of professionals in the energy transition process	9	15
Raising public awareness about energy and environmental issues	31	27
None of these	1	-

The main opportunities and benefits of the energy transition remain consistent with those identified in 2023 (Table 7.1). The emphasis on creating new jobs in sustainable sectors (43%) and increasing public awareness (27%) persists as key benefits of the energy transition. Added to these in 2025 are the aspects of ensuring the active involvement of all stakeholders (27%) and the development of energy and environmental policies by the government (27%), reflecting integrated, wide-ranging societal participation and governmental strategies as part of China's approach to the energy transition.

Table 8.1 Main challenges of the energy transition**Q5_2.** In your opinion, what are the main challenges with the energy transition process?

Base: Total Sample - % Values

 The most mentioned options are highlighted	ASIA	
	CHINA	
% Scores 10-9 Ranked on Italy		
Surveyed in	2023	2025
Raising public awareness about energy and environmental issues	35	37
Engagement of private companies to adopt renewable energy	19	20
Ensuring the active involvement of all stakeholders in energy transition process	30	35
Development and implementation of new infrastructures	25	19
International collaboration for sharing knowledge, resources, and experiences	23	21
Training of professionals in the energy transition process	17	17
Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate	18	18
Development of energy and environ. policies by the government	30	28
<i>None of these</i>	2	1

On the other hand, the main challenge (Table 8.1) remains public awareness about energy and environmental issues (37%). Furthermore, ensuring the active involvement of all stakeholders in the energy transition process is emphasized, marking a moderate increase to 35% (+5 p.p. since 2023). Additionally, the focus on developing energy and environmental policies by the government holds steady, with 28% underscoring the necessity for strategic and supportive legislation to facilitate China's energy transition ambitions.

Table 9.1 Opportunities vs challenges of the energy transition**Q5_1.** What are main opportunities and benefits of energy transition?**Q5_2.** In your opinion, what are the main challenges with energy transition process?

Base: Total Sample - % Values

  Negative/ positive differences are highlighted	ASIA	
	CHINA	
Difference % of total mention Q5_1 vs Q5_2		
Surveyed in	2023	2025
Development of energy and environmental policies by the government	-6	-1
Development and implementation of new infrastructures	2	5
International collaboration for sharing knowledge, resources, and experiences	4	2
Engagement of private companies to adopt renewable energy	-6	-6
Raising public awareness about energy and environmental issues	-4	-10
Training of professionals in the energy transition process	-8	-2
Job creation in traditional sectors that do not embrace sustainable solutions for the environment and climate**	25	25
Ensuring the active involvement of all stakeholders in energy transition process	-4	-8

Analysing the Trend in China from Table 9.1, which compares the opportunities and challenges of the energy transition, it becomes clear that the main areas of concern for Chinese respondents remain consistent with the previous survey. Job creation in sustainable sectors (+25) continues to be viewed as one of the most significant advantages of the energy transition. However, the most considerable challenge lies in raising public awareness about energy and environmental issues (-10).

**Change in wording for Q5_2 "Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate"

Table 10.1 Key players in the energy transition

Q7. In your opinion, who are the key players in the energy transition in your country?

Base: Total Sample - % Values

The most/least mentioned options are highlighted

Significantly different vs previous wave (95%)

Ranked on Italy

		ASIA	
		CHINA	
	Surveyed in	2023	2025
Public entities/government		65	55↓
Private companies		41	42
Citizens		23	28
Scientists and experts		41	36
Politicians from your country		30	27
Engineers and technicians		29	31
International organizations		16	16
Politicians from other countries		8	6
NGOs, non-profit organizations		6	9
Journalists		5	5
Climate change activists		15	14
Celebrities and influencers		13	17

The government, despite experiencing a decrease compared to 2023 (-10 p.p.), along with private companies (42%), continues to hold the top influential position in the energy transition process (Table 10.1). The role of scientists and experts is emphasized as well, with 36% of respondents acknowledging their critical contribution, even though this marks a slight decline from the previous survey data (-5 p.p. since 2023). This underlines an ongoing recognition of the vital input from both policymakers and the scientific community in shaping China's path towards sustainable energy.

Table 11.1 Evaluation of strategies and efforts

Q15. Thinking about the energy transition challenges in your country, how would you rate the strategies and efforts of...

Base: Total Sample - % Values




Strategies and efforts undertaken by both companies and politicians are appropriate (Table 11.1). This outlook is consistent through 2025, and there's a notable increase in the perceived commitment of private companies towards the energy transition (88%). By 2025, these entities have reached and slightly surpassed the acknowledged efforts of the government in this arena, suggesting an improved performance in the effectiveness of private initiatives.

Table 12 Most important actions to ensure a successful transition process


Q6. What are most important actions to ensure the energy transition process is a success in your country?

Base: Total Sample - % Values

 The most mentioned options are highlighted

ASIA

CHINA



Ranked on Italy

Surveyed in	2023	2025
Reduction waste by companies and individuals	34	34
Engagement of local communities in energy transition process	30	35
Adoption of renewable energy sources	37	36
Improvement of energy efficiency in industrial and transp. sectors	18	16
Facilitation of investments into renewable energies (public policies and regulations)	20	19
Development of smart energy grids for efficient energy manag.	18	16
Improvement to comp.' production processes	23	24
Improvement energy efficiency in resid. build.	11	10
Transition of traditional vehicles to sustainable mobility	37	37
Energy technologies innovation	33	27
Low-carbon industrial technologies innovation	25	30


To ensure a successful energy transition, China's respondents underline the adoption of renewable energy sources (noted at 36% in 2025) showcasing a continued push to shift away from fossil fuel reliance. Moreover, the focus on transitioning traditional vehicles to sustainable mobility reflects a significant area of investment and innovation (37%). The sustained priority placed on these areas underscores China's strategic aim to address the use of energy in its comprehensive approach to the environment.

Table 13.1 Cost-benefit analysis of the energy transition process

Q14_1. Over the **short-term** (1-3 years), what would you say regarding energy transition in your country?


Q14_2. Over the **medium- to long-term** (more than 3 years), what would you say regarding energy transition in your country?

Base: Total Sample - % Values

 Diff. ≤ - 5 vs 2023

ASIA

CHINA



Ranked on Italy

Surveyed in	2023	2025
OVER THE SHORT-TERM		
The benefits will outweigh the costs	26	28
The costs and benefits will balance out	52	55
The costs will outweigh the benefits	22	17
OVER THE MEDIUM/LONG-TERM		
The benefits will outweigh the costs	60	53
The costs and benefits will balance out	35	42
The costs will outweigh the benefits	5	5

People who believe the costs of the energy transition will outweigh the benefits in the short term slightly decrease, indicative of a growing confidence in the returns from sustainable actions. This optimism continues in the medium-to-long-term view, where despite a decrease in those who think benefits will exceed costs (-7 p.p. since 2023), there is a belief among people that at least the benefits will even out the costs of the transition.

Such a sentiment suggests that the Chinese population is recognizing the potential long-term economic, environmental, and health rewards that the energy transition promises (Table 13.1).

Table 14.1 Attention to the energy transition issue

Q16. Thinking about 2-3 years ago, do the following pay more/less attention to energy transition today?

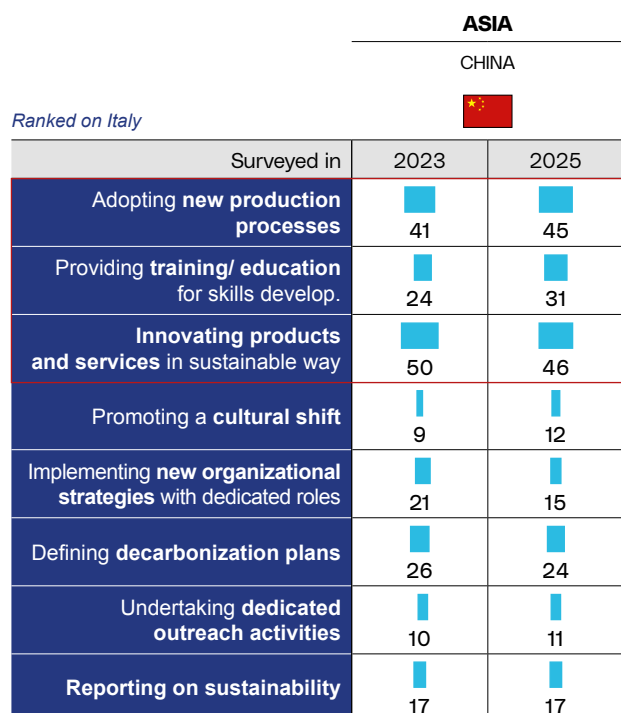
Base: Total Sample - % Values



Table 15.1 Companies commitment to the energy transition

Q17. Which of the following actions should companies focus on most for energy transition?

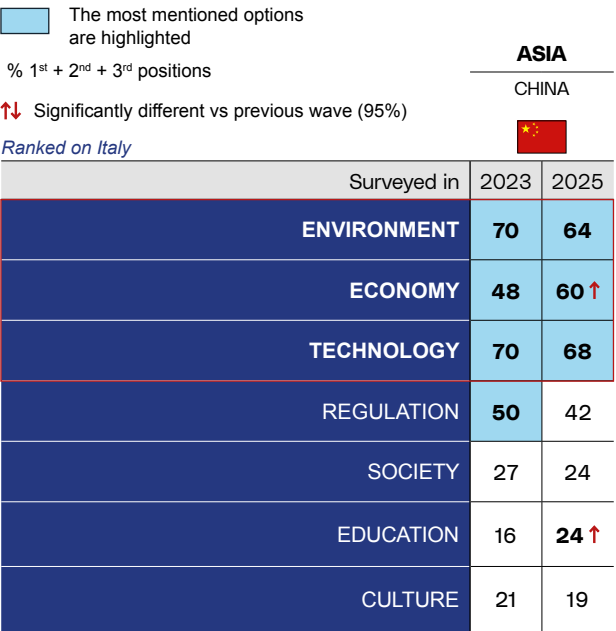
Base: Total Sample - % Values



Innovation in products and services (46%) and the adoption of new production processes (45%) are top priorities that companies are focusing on to drive the energy transition process (Table 15.1). Additionally, there's a growing recognition (+7 p.p. since 2023) of the importance of providing training and education to develop the necessary skills, with one-third of respondents emphasizing this area as crucial for the successful shift towards sustainable practices.

Table 16.1 Perceived importance of the areas of energy transition

Q4. Which of the following aspects do you consider most important for energy transition? RANKING
Base: Total Sample - % Values

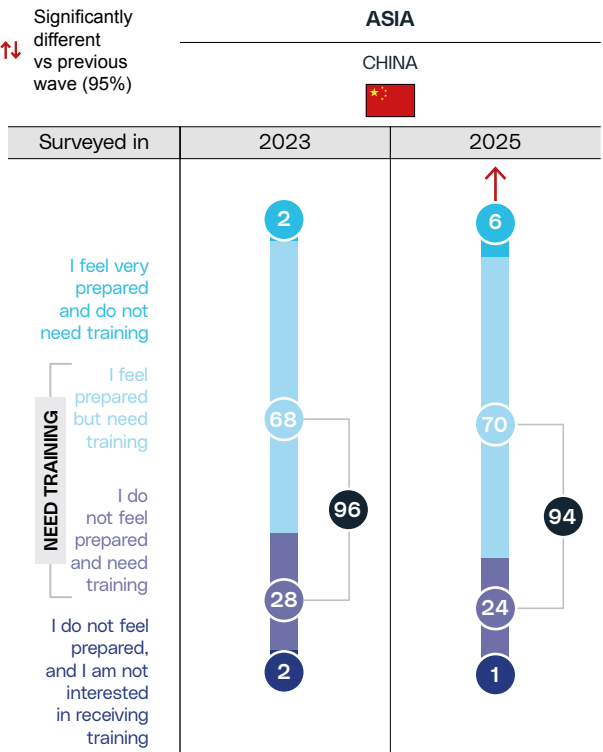


Overall, the trend from China confirms the prioritization of technology (68%) and the environment (64%) as key areas (Table 16.1).

In addition, there is a higher awareness of the economic advantages of the energy transition, with a significant +12 p.p. rise in this perception since 2023. Additionally, education has increased in focus (+8 p.p. since 2023), highlighting the intertwining of ecological sustainability with economic and educational advancement.

Table 17.1 Need for training on the energy transition

Q11. How prepared do you feel on the topic of energy transition?
Base: Total Sample - % Values

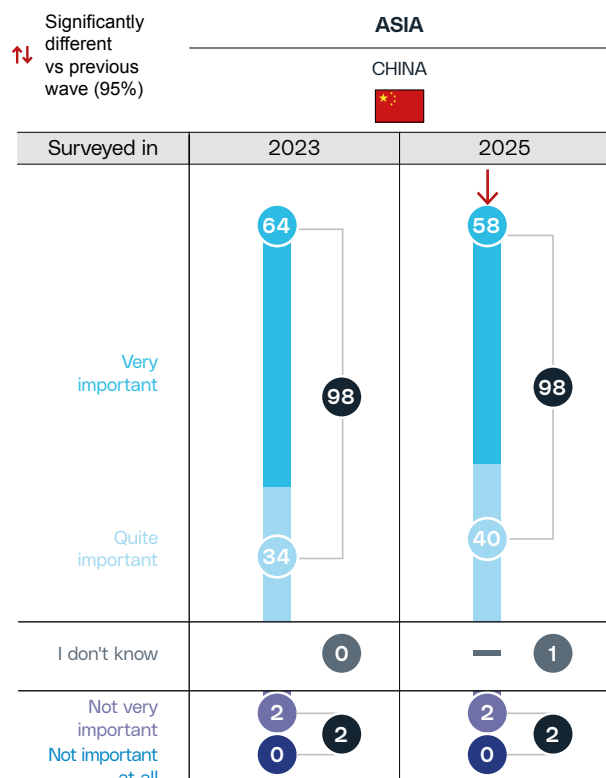


Data in Table 17.1 shows that there is a slight increase in the percentage of respondents in China who feel adequately prepared and do not see a need for further training (6%). Concurrently, the quota of individuals who recognize the need for additional training remains constant, with 94% in 2025 versus 96% in 2023, suggesting a recognition of the ongoing requirement for education and skill development to meet the challenges of the energy transition.

Table 18.1 Importance of developing educational programs on the energy transition

Q12. In your opinion, how important is developing educational and training programs for energy transition?

Base: Total Sample - % Values



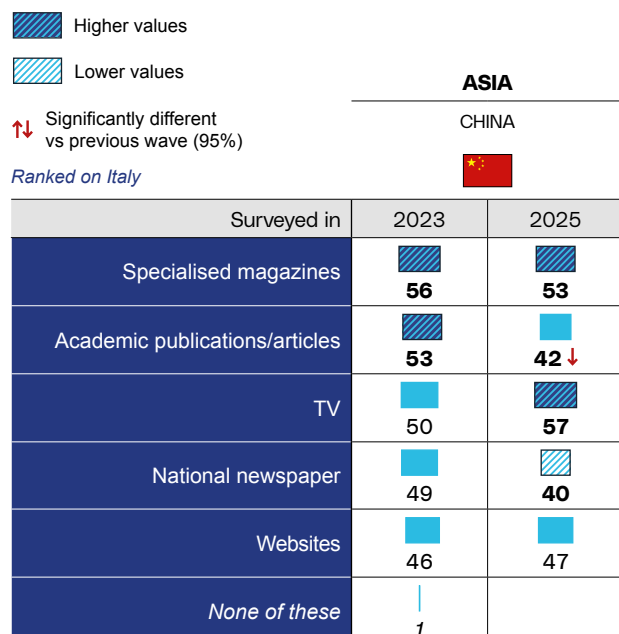
While the total percentage of respondents acknowledging the importance of educational programs for the energy transition remains high at 98%, there's a decrease in those who view it as very important, from 64% to 58% (Table 18.1).

Simultaneously, there's an increase in respondents who find educational programs to be quite important, rising from 34% to 40%. This points to a subtle re-prioritization among the Chinese public, where educational programs possibly compete with other pressing priorities, despite the overall agreement on their significance.

Table 19.1 Reliable sources on the energy transition

P0. Which sources do you consider reliable for information on energy transition?

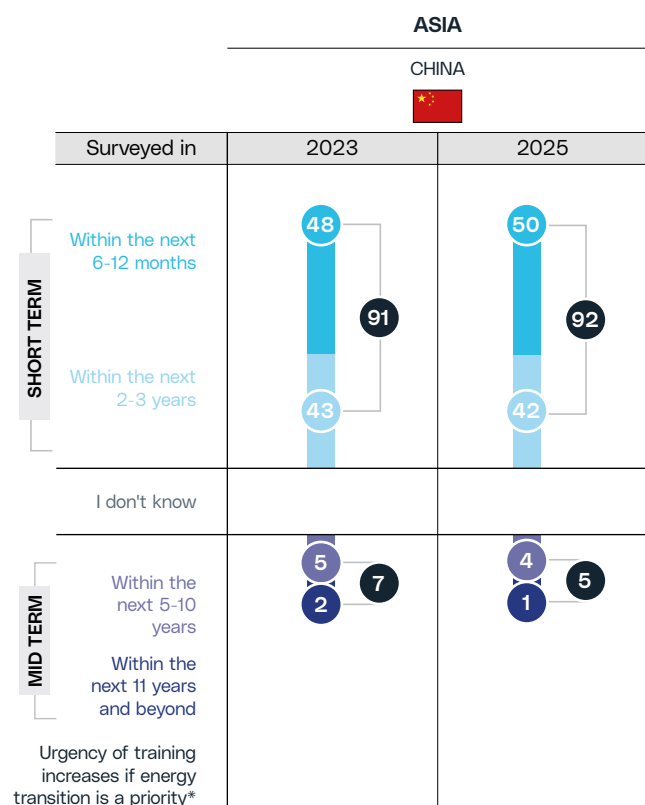
Base: Total Sample - % Values



Television (57 %) and specialized magazines (53%) remain the most reliable channels for seeking information on the energy transition (Table 19.1). Compared to the past, there is a significant decline in the trust placed in academic publications, while confidence in national newspapers drops to 40%, and the reliance on internet sites holds steady at 47%.

Table 20.1 Timing of training in the energy transition

Q12_1. Considering the current situation in your country, when do you think training for those involved in energy transition should take place?
Base: Total Sample - % Values

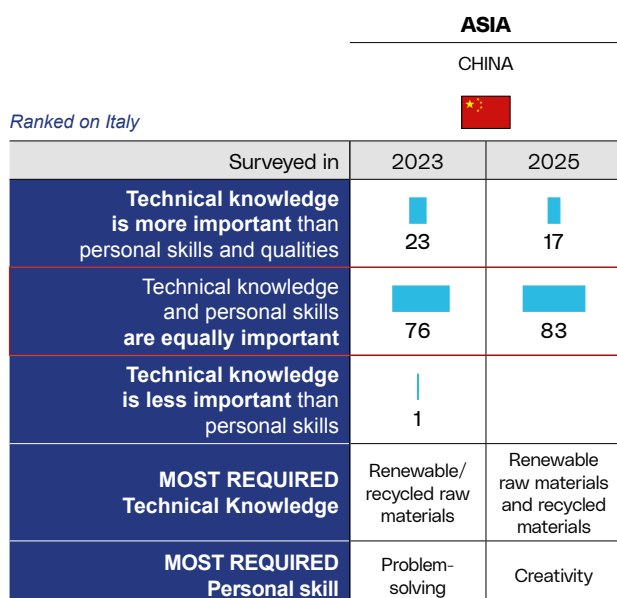


The consensus on the importance of the immediate need for education on the energy transition is stable. The 92% of respondent believe that training should happen soon (within the next 3 years), with half (50%) stating that it should be provided within the next year. This agreement points to a recognition of the need for education that responds quickly to the energy transition's demands while also taking a strategic view toward developing the workforce for the expanding renewable energy sector (Table 20.1).

*Energy Transition is considered a priority in public's opinion

Table 21.1 Competence requirements for the energy transition

Q8_1. In your opinion, when it comes to training those involved in energy transition...
Base: Total Sample - % Values





When it comes to training those involved in the energy transition process, technical knowledge and personal skills are both regarded as essential by 83% of respondents (+7 p.p. since 2023).

Among technical competencies, understanding renewable raw materials and recycled materials stands out, maintaining a leading position. On the soft skills front, creativity takes the forefront, overtaking problem-solving skills (Table 21.1).


Table 22.1 Soft skills for the energy transition

Q9_1. What are the most important personal skills for those involved in energy transition?


Base: Total Sample - % Values

  The most/least mentioned options are highlighted

% 1°+2°+3° positions -

Positioning 

Ranked on Italy



	ASIA	
	CHINA	
		
Surveyed in	2023	2025
Problem-solving skills	56	52
A multidisciplinary approach	45	49
Critical thinking and analytical skills	33	30
Creativity and innovation	54	60
Flexibility and adaptability	37	34
Teamwork skills	37	34
Emotional intelligence	7	9
Communication and networking skills	23	24
Fluency in the English language	10	10

Thinking about the most important soft skills for the energy transition, creativity and innovation are identified as increasingly crucial for professionals (60%). They are now considered more essential than problem-solving, which remains a significant competence at 52%. A multidisciplinary approach holds steady in third place at 49%, followed by flexibility and adaptability, and teamwork skills, both at 34%. Emotional intelligence is seen as less critical, mentioned by only 9% of respondents (Table 22.1).


Table 23.1 Technical knowledge requirements for the energy transition

Q8_1. What are main technical knowledge requirements for those involved in energy transition?

Base: Total Sample - % Values


  The most/least mentioned options are highlighted

% 1°+2°+3° positions -

Positioning 

↑↓ Significantly different vs previous wave (95%)

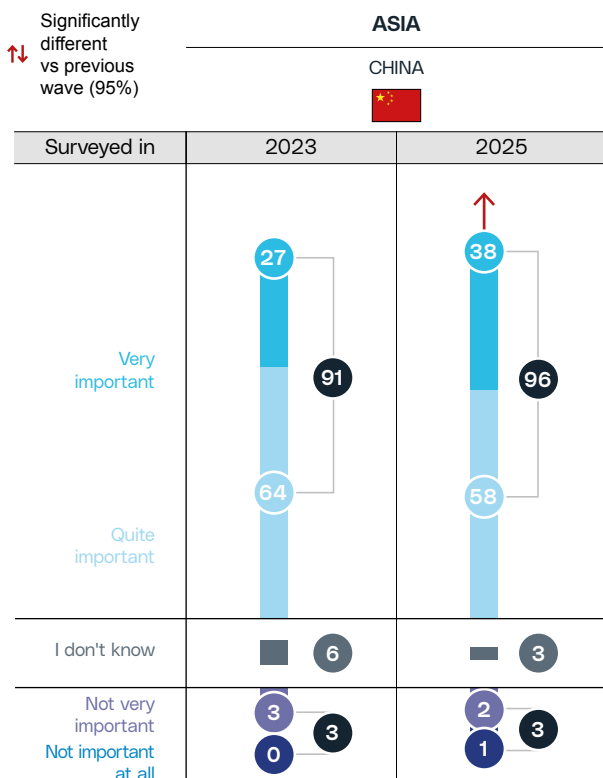
Ranked on Italy

	ASIA	
	CHINA	
		
Surveyed in	2023	2025
Analyse and assess impact on the region	26	29
Understanding environ. issues and analyse and assess their environmental impact	39	31
Knowledge of various renewable energy sources	32	34
Knowledge of alternative renewable raw materials and recycled materials to substitute traditional materials	48	42
Knowledge of regulatory frameworks	14	16
Knowledge of sustainability issues , ESG principles, and sustainable design criteria	36	37
Knowledge of techn. issues related to recycling and circular economy	39	35
Manage economic sustainability of projects	26	26
Manage economic resources in a fair and inclusive manner	25	22
Sensitivity to social issues and the ability to analyse and assess their impact on society	17	30 ↑

Alongside soft skills, there is a recognized need for expertise in renewable raw materials and recycled materials, which tops the list at 42%. Knowledge of sustainability issues, at 37%, along with skills related to recycling and the circular economy, at 35%, are also highly prioritized. Furthermore, over one in three emphasizes the knowledge of various renewable energy sources (34%). An increased focus on social issues is evident, with a +13 p.p. rise since 2023 in prioritizing the analysis and assessment of their societal impact (Table 23.1).

Table 24.1 Availability of energy transition professionals**Q10.** How would you rate the **availability of technical professionals with skills for energy transition** in your country?

Base: Total Sample - % Values



Regarding the availability of energy transition professionals, China shows an optimistic outlook on the readiness of the workforce. The data suggests an increase in confidence among respondents about having a pool of skilled professionals equipped for the energy transition, rising from 27% in 2023 to 38% in 2025. This positive trend in China demonstrates growing assurance in the country's efforts to prepare individuals for the emerging challenges and opportunities within the sustainable energy sector (Table 24.1).

Table 25.1 Key players for the training of those involved in the energy transition**Q9_2.** Who should be responsible for training those involved in energy transition?

Base: Total Sample - % Values

Higher values in bold

↑↓ Significantly different vs previous wave (95%)

Ranked on Italy

Surveyed in	ASIA	
	CHINA	
	CHINA	
	CHINA	
2023	2025	
Public research and development centers	49	46
Government responsible for energy policies	79	68 ↓
Private energy sector companies	34	33
Universities	42	33
Private company research and development centers	30	34
Professional sector associations	50	53
Foundations	5	2

There's a noticeable high value placed on the government's involvement in energy transition education, despite a decrease over time (-10 p.p. since 2023). Public research centers also maintain a significant role (46%). With a shift, China may be moving towards a broader approach to training, involving more sectors in the educational process. Professional sector associations maintain a steady presence, indicating that industry experts could play a crucial role in China's energy sector development (Table 25.1).

4 FOCUS: TRENDS IN THE USA

TARGET POPULATION	METHODOLOGY	NUMBER OF INTERVIEW	PERIOD OF FIELDWORK
Population with a high level of education, employed, concerned and engaged for environnement*	Online quantitative survey (CAWI)	200 interviews per wave	22 September – 9 October 2023 7 May - 20 May 2025
		20232025	
		200150	

* People who feel the urgency to combat climate change and have already adopted virtuous behaviours (IPSOS cluster)

4.1 Executive Summary USA

The 2025 report on energy transition in the USA offers a detailed examination of the nation's current status and future outlook in transitioning to sustainable energy systems.

Drawing from consistent findings in past research from 2023, the report focuses on key trends in awareness, the role of governmental actions, and the engagement of the private sector among a well-educated, employed, and environmentally concerned population.

Awareness of the energy transition remains notably high; however, a decline in the number of individuals who are “very familiar” (-5 p.p. since 2023) with the topic highlights the need for enhanced educational efforts to deepen understanding and foster comprehensive community engagement. While the energy transition is acknowledged as a critical issue among people (60%), it is now increasingly viewed as one of several national priorities rather than as the pri-

mary focus. Policies under the Trump administration have been seen as inadequate in meeting international climate commitments, contributing to a perception of reduced governmental urgency (-6 p.p. since 2024). This perception persists despite the USA's high global rankings in sustainability efforts (17° in ETI ranking score), suggesting an evolved perspective that necessitates the robust integration of energy policy within broader national agendas. Furthermore, while corporate commitment is perceived as stable (63% consider them “appropriate”), declining public approval of governmental policies (47% consider them “appropriate”, -5p.p. since 2023) indicates a need for better alignment between policy outcomes and public expectations.

Despite remarkable growth in renewable energy and significant economic benefits, the transition remains intertwined with complex socio-economic processes, highlighting the necessity for effectively integrating energy policy within the broader framework. The analysis of the cost-benefit aspect of the energy transition in the USA reveals a consistently optimistic perspective among Americans, acknowledging that the long-term benefits (52%) outweigh the initial costs. This view highlights a broad recognition of the economic potential inherent in transitioning to renewable energy.

Among the significant benefits identified are substantial job creation within renewable energy sectors, which is seen as a driving force for economic growth and enhanced energy efficiency. Furthermore, the emphasis on raising public awareness about energy and environmental issues is considered crucial, as it supports the broader understanding and engagement necessary for an effective transition (+9 p.p. vs 2023). Although there is a noted decrease in stakeholder involvement (-9 p.p. since 2023), this is somewhat balanced by increased engagement from private companies in adopting renewable energy solutions (+5 p.p. since 2023), as well as international cooperation for knowledge-sharing (+3 p.p. since 2023).

The main challenges in this process are equally significant and require careful consideration. The development and implementation of new infrastructures stand out as a primary concern, necessitating focused efforts to upgrade and expand energy systems. Closely following is the necessity for the development of robust energy and environmental policies, underlining the importance of supportive legislation and strategic governmental action to facilitate transition efforts. Lastly, the imperative of engaging private companies in the adoption of renewable energy emerges as crucial, highlighting the need to align corporate strategies with sustainable practices. Addressing these challenges through integrated and collaborative approaches will be essential to maximizing the benefits and ensuring the success of the energy transition.

Enhanced collaboration between public and private sectors is crucial to align educational programs with industry needs, facilitating the integration of academic outcomes with real-world applications. Such an integrated approach is essential to maximize the benefits and ensure the success of the energy transition. While governmental bodies and public research institutions remain pivotal in address-

ing training needs, there is a growing trend of private sector research and energy companies (+15 p.p. since 2023) playing increasingly significant roles in educational and training initiatives. The significance of educational programs in the energy transition is broadly acknowledged, with the majority viewing them as important. Although the urgency for immediate training (next 12 months) has lessened compared to past years (-8 p.p. since 2023), there remains robust support for implementing training initiatives within the next three years (78%). Despite this shift, the demand for prompt professional development persists, with only a minority emphasizing the importance of long-term training requirements.








Professionals working in the field of energy transition need a strong blend of technical and soft skills to effectively drive innovation and efficiency. Technical expertise, particularly in areas like renewable and recycled materials and environmental impact assessment, is crucial for advancing sustainable energy technologies. Equally important are soft skills such as problem-solving and adaptability, which enable individuals to navigate the dynamic challenges of the energy transition. This integrated approach ensures that professionals are not only well-versed in the necessary technical knowledge but also equipped to employ creative and critical thinking in tackling complex issues, thereby contributing significantly to global sustainability efforts.

The USA's progress in energy transition, while significant, highlights the need for continued innovation in strategies and stronger alignment between governmental policies and public expectations. Embracing international and local partnerships will be crucial in setting examples for global counterparts, while enhanced strategic dialogue will ensure alignment with public priorities and support sustainable energy objectives moving forward.

Table 1.2 Awareness on the energy transition process

Q1A. Have you ever heard of *energy transition*?

Base: Total Sample - % Values

AMERICAS		
USA		
		
Surveyed in	2023	2025
TOTAL AWARENESS	96	96
I am very familiar with it	 63	 58
I have heard of it , but I only have a vague idea	 33	 38
I have never heard of it	 4	 4








In the USA, awareness of the energy transition process is notably high. Table 1.2 shows that 96% of informed respondents recognized the concept in both 2023 and 2025, indicating that the topic is well-established within this specific target.

However, when delving into the depth of this awareness, a decrease in the proportion of these individuals who are "very familiar" with the topic is evident, dipping from 63% in 2023 to 58% in 2025. This dip, while not undermining the overall high level of awareness, may signal a need for renewed efforts to deepen the public's understanding of the energy transition to ensure full engagement of the population.

Table 2.2 Perceived importance of the energy transition process

Q2_2. In *your opinion*, how important is energy transition?

Base: Total Sample - % Values

AMERICAS		
USA		
		
Surveyed in	2023	2025
It's a priority	 59	 60
It is important, but on par with other areas of commitment	 34	 37
It is of secondary importance	 7	 3

The perceived importance of the energy transition process (Table 2.2) highlights a stable situation from 2023 to 2025. Most respondents continue to view the energy transition as a primary concern. There is a slight increase in the number of highly educated and informed individuals who rate the energy transition as "important but equal to other areas." This shift suggests an evolving perspective among this group, where the energy transition is seen as one of several key priorities rather than the sole focus. Concurrently, there is a further decrease in the already small fraction of those who find it less important, reinforcing the widespread acceptance of the energy transition's significance in public opinion.


Table 3.2 The energy transition perception across countries

Q3A. To what extent do you agree or disagree with each of the following statements? Energy transition...
Base: Total Sample - % Values

Higher values in bold

↑↓ Significantly different vs previous wave (95%)

% Scores 10-9
Ranked on Italy

AMERICAS		
USA		
		
Surveyed in	2023	2025
It is crucial for combating climate change and global warming	50	49
It creates new job opportunities in renewable energy and clean techn. sectors	41	43
It reduces dependence on imported energy sources and the risk of supply disruptions	44	35
It significantly benefits human health and the environment by reducing greenhouse gas emissions and air pollution	47	49
It leads to better energy efficiency , reducing long-term costs	44	41
Investment in energy transition is a priority over other areas	32	28
It represents an opportunity for more female participation and provides new employment opportunities for women	31	21 ↓

Reflecting on the USA's perception of the energy transition as presented in Table 3.2, there is a consistently high recognition of the importance of combating climate change (49%) and promoting health and environmental benefits (49%). The perception that the energy transition both offers a chance to create new job opportunities in renewable energy (43%) and leads to improved energy efficiency (41%) continues to rank highly.

Furthermore, the data shows a decreased perception of the energy transition as an opportunity for female participation (-10 p.p. vs 2023), denoting areas where continued advocacy and educational efforts could further enhance inclusivity in the emerging green job market.

Table 4.2 Countries' commitment to the energy transition

Q2_1. Which of the following statements best describes the level of commitment in your country?
Base: Total Sample - % Values

ENERGY TRANSITION is the shift from traditional fossil-based energy sources and raw materials to renewable, recycled, and sustainable energy sources and raw materials to reduce greenhouse gas emissions and address climate change








AMERICAS		
USA		
		
Surveyed in	2023	2025
It's a priority	 54	 48
It is important, but on par with other areas of commitment	 33	 38
It is of secondary importance	 13	 14

Table 5.2 Country positioning on the energy transition


Q13. In your opinion, how would you rank your country compared to others in the energy transition process?







Base: Total Sample - % Values

↑↓ Significantly different vs previous wave (95%)

AMERICAS

USA



Surveyed in	2023	2025
Ahead of other countries	 38	 33
On par with other countries	 37	 32
Behind other countries	 25	 35 ↑
RANK BY ETI SCORE**		
2023	12°	
2024	19°	
2025	17°	

**Source: WEF, Fostering Effective Energy Transition 2025 Edition

Perceived importance vs Country positioning on the energy transition process

Q2_2. In your opinion, how important is energy transition?

Q2_1. Which of the following statements best describes the level of commitment in your country?


Q13. In your opinion, how would you rank your country compared to others in the energy transition process?


Base: Total Sample - % Values







↑↓ Significantly different vs previous wave (95%)

AMERICAS

USA



 Lower values

Surveyed in	2023	2025
Priority for ME	 59	 60
Priority for COUNTRY	 54	 48
Country's level in the energy transition process: BEHIND other countries	 25	 35 ↑
RANK BY ETI SCORE**		
2023	12°	
2024	19°	
2025	17°	

**Source: WEF, Fostering Effective Energy Transition 2025 Edition

Analysing the data of perceived importance versus the actual country positioning on the energy transition, there is an interesting development over time. While respondents' perception of the topic as a critical priority is stable, the overall belief in the transition's national importance declines despite the data reveals that while the USA has a high ranking for energy transition progress (ETI).

Table 6.2 Positioning map

Q2_2. In your opinion, how important is energy transition?

Q2_1. Which of the following statements best describes the level of commitment in your country?

Q13. In your opinion, how would you rank your country compared to others in the energy transition process?

Base: Total Sample - % Values

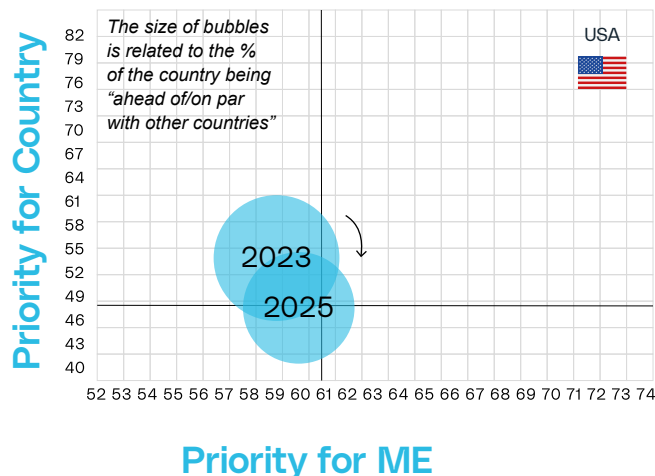


Table 6.2 shows the trend in the Positioning Map related to the energy transition priority. The personal priority given to the energy transition remains stable. However, there is a slight decline in the priority level attributed to the government. This suggests that while the American public's concern for energy sustainability remains steady, there may be a perceived reduction in the urgency with which the government is addressing this issue. Despite the USA's high ranking in global sustainability efforts, this shift could indicate a need to reassess governmental strategies to better align with citizens' commitment to the energy transition.

Table 7.2 Main opportunities and benefits of the energy transition

Q5_1. What are main opportunities and benefits of energy transition?

Base: Total Sample - % Values

The most mentioned options are highlighted			AMERICAS	
			USA	
			2023	2025
Ensuring the active involvement of all stakeholders in energy transition process			21	12 ↓
Creation of new jobs in sectors focused on sustainability and climate solutions			38	34
Development of energy and environ. policies by the government			23	23
Engagement of private companies to adopt renewable energy			21	26
Development and implementation of new infrastructures			29	26
International collaboration for sharing knowledge, resources, and experiences			21	24
Training of professionals in the energy transition process			14	16
Raising public awareness about energy and environmental issues			21	30 ↑
None of these			5	4

Focusing on the benefits associated with the energy transition (Table 7.2), there is a clear indication that new jobs in renewable energy are confirmed as a positive factor (34%). Raising public awareness regarding energy and environmental issues also emerges as a crucial objective (30%). The American viewpoint shows an acknowledgment of the relationship between the energy transition and economic growth, as well as the importance of an informed community.

It is worth noting a decrease in the involvement of stakeholders (12%), which is balanced by a minor increase in the engagement of private companies in adopting renewable energy (26%) and in international cooperation for sharing knowledge and experiences (24%).

Table 8.2 Main challenges of the energy transition

Q5_2. In your opinion, what are the main challenges with energy transition process?

Base: Total Sample - % Values

 The most mentioned options are highlighted

% Scores 10-9
Ranked on Italy

AMERICAS
USA


Surveyed in	2023	2025
Raising public awareness about energy and environmental issues	24	23
Engagement of private companies to adopt renewable energy	29	30
Ensuring the active involvement of all stakeholders in energy transition process	19	22
Development and implementation of new infrastructures	34	35
International collaboration for sharing knowledge, resources, and experiences	20	18
Training of professionals in the energy transition process	18	15
Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate	15	15
Development of energy and environ. policies by the government	27	32
None of these	4	3

The main challenges of the energy transition (Table 8.2) highlight three key areas of focus: the development and implementation of new infrastructures, which 35% of respondents point to as a key issue. Following closely is the development of energy and environmental policies by the government (32%), which emphasizes the critical role of supportive legislation and strategic governmental action.

Lastly, engaging private companies in the adoption of renewable energy (30%) underscores the growing imperative to align corporate strategies with environmentally friendly practices.

Table 9.2 Opportunities vs challenges of the energy transition

Q5_1. What are main opportunities and benefits of energy transition?

Q5_2. In your opinion, what are the main challenges with energy transition process?

Base: Total Sample - % Values

  The most/least mentioned options are highlighted

 Diff. $\geq +5$ vs 2023

Difference % of total mention Q5_1 vs Q5_2

AMERICAS
USA


Surveyed in	2023	2025
Development of energy and environmental policies by the government	-4	-9
Development and implementation of new infrastructures	-5	-9
International collaboration for sharing knowledge, resources, and experiences	1	6
Engagement of private companies to adopt renewable energy	-8	-4
Raising public awareness about energy and environmental issues	-3	7
Training of professionals in the energy transition process	-4	1
Job creation in traditional sectors that do not embrace sustainable solutions for the environment and climate**	23	19
Ensuring the active involvement of all stakeholders in energy transition process	2	-10

Reviewing the Trends in the USA in Table 9.2 on the opportunities versus challenges of the energy transition, job creation within the renewable energy sector (+19) stands as a notable positive topic.

The training of professionals for the energy transition, along with increasing the public's awareness of environmental issues, has transitioned from being viewed predominantly as challenges to being considered potential opportunities.

However, to face the main challenges, it will be crucial to implement targeted strategies for developing infrastructures, creating comprehensive environmental and energy policies, and ensuring the active involvement of stakeholders.

**Change in wording for Q5_2 "Job losses in traditional sectors that do not embrace sustainable solutions for the environment and climate"

Table 10.2 Key players in the energy transition

Q7. In your opinion, who are the key players in the energy transition in your country?
Base: Total Sample - % Values

The most/least mentioned options are highlighted

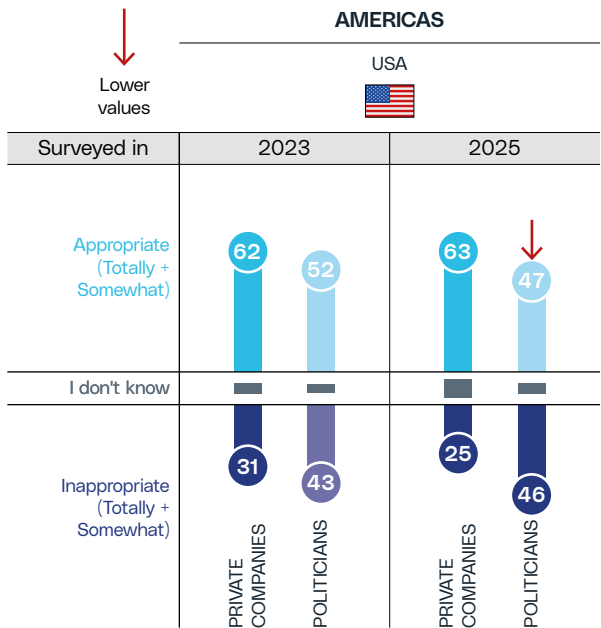
AMERICAS			
USA			
Ranked on Italy			
Surveyed in	2023	2025	
Public entities/government	37	36	
Private companies	47	42	
Citizens	37	38	
Scientists and experts	33	32	
Politicians from your country	30	37	
Engineers and technicians	28	23	
International organizations	13	15	
Politicians from other countries	11	9	
NGOs, non-profit organizations	9	12	
Journalists	7	6	
Climate change activists	22	15	
Celebrities and influencers	9	7	

The recognition of different key players for the energy transition reflects an inclusive perception of the entities involved (Table 10.2).

Private companies (42%) emerge as significant catalysts, as there's a growing acknowledgment of their impact and responsibility in adopting and advancing sustainable energy practices. The Government plays a vital role (36%), mirroring the understanding of the crucial alliance between government initiatives and the innovation capacity of the private sector. Citizens (38%) are also crucial, reinforcing the concept that successful transition strategies require support and direct public action.

Table 11.2 Evaluation of strategies and efforts

Q15. Thinking about the energy transition challenges in your country, how would you rate the strategies and efforts of...
Base: Total Sample - % Values





The overall assessment of political and private company strategies for the energy transition remains stable, as shown in Table 11.2. However, there is a decline in public approval of the government's energy and environmental policies, suggesting a need to better align policy effectiveness with public expectations. While the USA maintains a strong position in sustainable energy practices, public sentiment indicates a desire for more innovative and impactful political strategies in the energy transition.

Table 12.2 Most important actions to ensure a successful transition process


Q6. What are most important actions to ensure the energy transition process is a success in your country?

Base: Total Sample - % Values

 The most mentioned options are highlighted

 Significantly different vs previous wave (95%)

Ranked on Italy

AMERICAS		
USA		
		
Surveyed in	2023	2025
Reduction waste by companies and individuals	31	38
Engagement of local communities in energy transition process	30	32
Adoption of renewable energy sources	34	37
Improvement of energy efficiency in industrial and transp. sectors	26	28
Facilitation of investments into renewable energies (public policies and regulations)	28	23
Development of smart energy grids for efficient energy manag.	27	18 ↓
Improvement to comp.' production processes	25	24
Improvement energy efficiency in resid. build.	18	19
Transition of traditional vehicles to sustainable mobility	20	18
Energy technologies innovation	25	21
Low-carbon industrial technologies innovation	14	17


To ensure a successful energy transition, the reduction of waste by companies and individuals is recognized as a key action, with a positive shift in perception (+7 p.p. since 2023). The adoption of renewable energy sources also remains a significant topic (37%), demonstrating the country's enduring dedication to green energy solutions. However, some actions have become less pronounced over time, pointing to an area where renewed attention and development are necessary to meet the demands of ongoing energy advancements.

Table 13.2 Cost-benefit analysis of the energy transition process

Q14_1. Over the short-term (1-3 years), what would you say regarding energy transition in your country?


Q14_2. Over the medium- to long-term (more than 3 years), what would you say regarding energy transition in your country?

Base: Total Sample - % Values


 Diff. ≤ - 5 vs 2023

AMERICAS

USA



Ranked on Italy

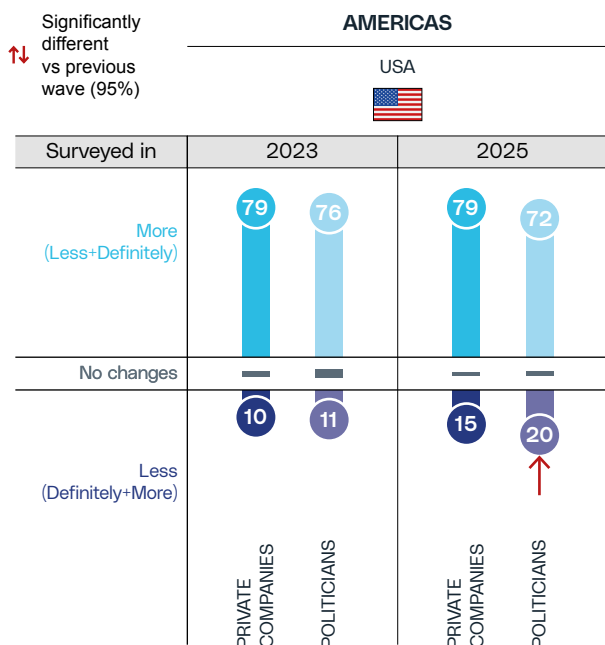
Surveyed in	2023	2025
OVER THE SHORT-TERM		
The benefits will outweigh the costs	43	44
The costs and benefits will balance out	37	37
The costs will outweigh the benefits	20	19
OVER THE MEDIUM/LONG-TERM		
The benefits will outweigh the costs	55	52
The costs and benefits will balance out	32	40
The costs will outweigh the benefits	13	 8

The cost-benefit analysis of the energy transition process (Table 13.2) shows a stable acknowledgment of the benefits over costs both in the short term and in the medium to long term. This position reflects an optimistic approach among Americans, who recognize that while initial investments may not bring instant returns, the long-term advantages justify the efforts.

Table 14.2 Attention to the energy transition issue

Q16. Thinking about 2-3 years ago, do the following pay more/less attention to energy transition today?

Base: Total Sample - % Values

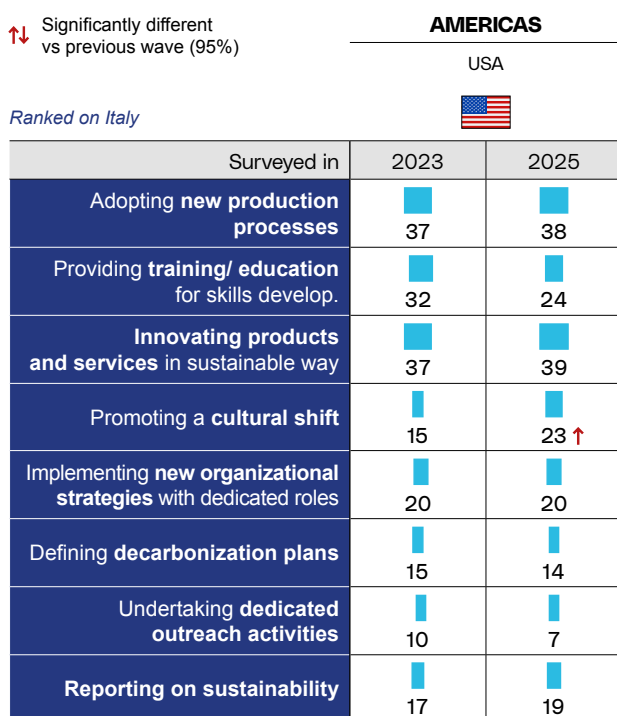


Reviewing the Trends in the USA from Table 14.2 regarding the focus on the energy transition issue, the data reflects a stable public perception of commitment from both the corporate sector and the governments. Even with a slight dip in the perceived dedication from the government, there remains a broad agreement that the energy transition is being sufficiently prioritized in the USA.

Table 15.2 Companies commitment to the energy transition

Q17. Which of the following **actions** should companies focus on most for energy transition?

Base: Total Sample - % Values



For a successful energy transition, companies should primarily focus on two key actions. These are adopting new production processes (38%) and committing to the sustainable innovation of products and services (39%), as highlighted in Table 15.2.

Moreover, while there is a decline in the emphasis on providing training and education for skills development, dropping to 24%, this figure still underscores the enduring importance of education in this area. Conversely, there is a significant increase in the focus on promoting a cultural shift, rising to 23%, highlighting the growing importance of fostering societal and behavioral changes to support the energy transition.

Table 16 Perceived importance of the energy transition areas

Q4. Which of the following aspects do you consider most important for energy transition? RANKING

Base: Total Sample - % Values

The most mentioned options are highlighted

% 1°+2nd+3rd positions
Ranked on Italy

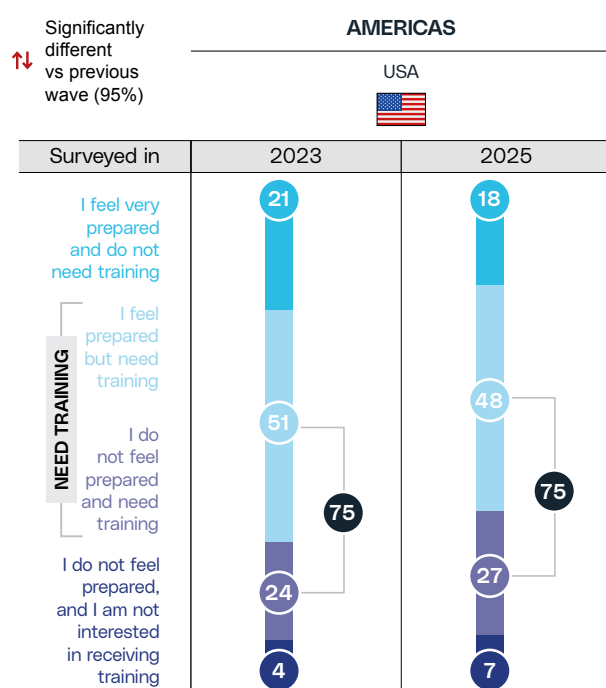
AMERICAS		
USA		
USA		
Surveyed in	2023	2025
ENVIRONMENT	61	65
ECONOMY	58	51
TECHNOLOGY	58	55
REGULATION	40	34
SOCIETY	30	37
EDUCATION	31	31
CULTURE	25	28

The previously identified priority areas for the energy transition, highlighted in 2023, remain consistent. These areas continue to be perceived as important, as indicated by the trend analysis. The environment remains a pivotal focus (65%), followed by the significance of technology (55%), and then economic considerations (51%). There's an increase in the societal domain, with growing attention to achieving equitable access to energy and improving the quality of life for all (+7 p.p. since 2023), indicating a deeper integration of social aspects into energy policies.

Table 17 Need for training on the energy transition

Q11. How prepared do you feel on the topic of energy transition?

Base: Total Sample - % Values

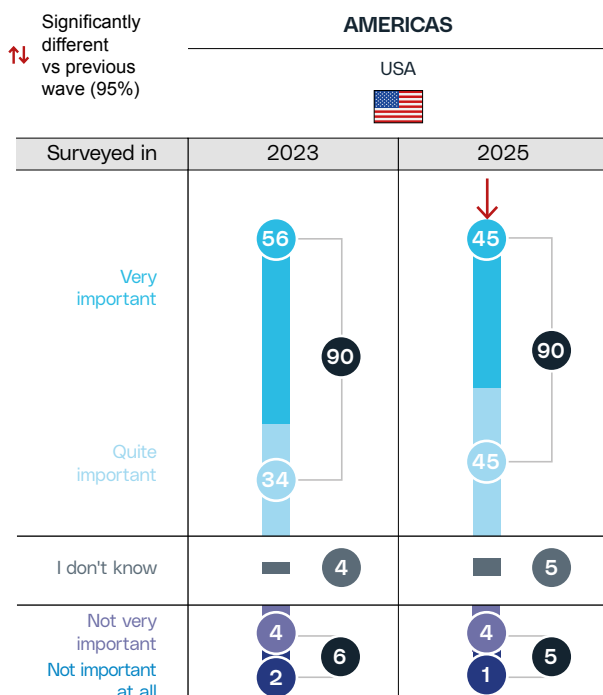


In the USA, there is a significant acknowledgment of the need for further education and training to support the energy transition. The trend indicates that by 2025, the perception of this need has remained steady, as shown in Table 17. This points to an understanding among Americans that even as the country is well-engaged in the energy transition, there is still a pressing need for continuous learning. It highlights an ongoing commitment to ensuring the workforce is equipped with the knowledge and capabilities necessary to succeed in the changing energy sector.

Table 18 Importance of developing educational programs on the energy transition

Q12. In your opinion, how important is developing educational and training programs for energy transition?

Base: Total Sample - % Values

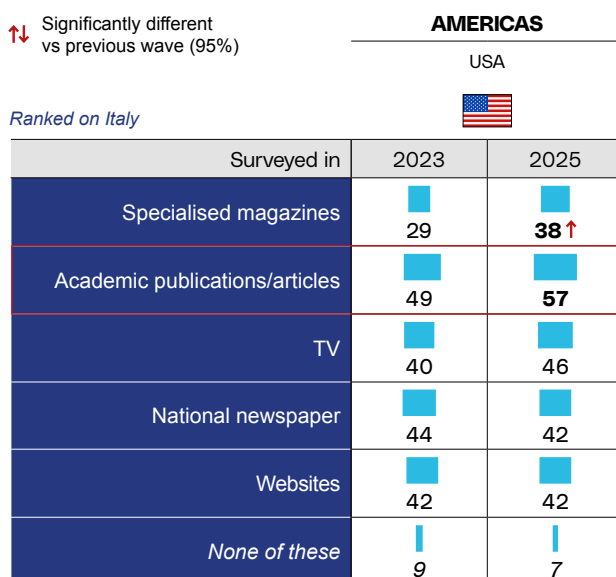


The overall recognition of the importance of educational programs is significant, with a strong majority (90%) viewing them as vital. By 2025, there's a slight shift: those rating their importance as "very high" decrease to 45%. Conversely, the number of people who rate these programs as quite important increase, from 34% to 45%. The USA data indicates stability with a slight redistribution in how critical education is perceived by the public, with its necessity undisputed even as other significant factors come to the forefront of the national discourse on energy transition.

Table 19.2 Reliable sources on the energy transition

P0. Which sources do you consider reliable for information on energy transition?

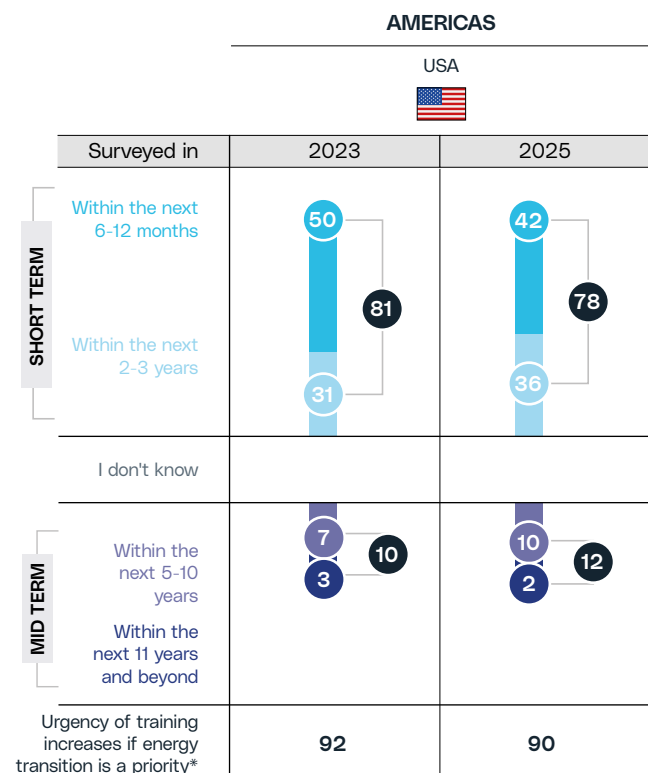
Base: Total Sample - % Values



Public opinion confirms confidence in academic publications as a reliable channel of information (57%, Table 19.2). Television, national newspapers, and websites are still important, highlighting a landscape where traditional media may be facing competition from digital media. The data shows a significant increase in the reliance on specialized magazines (38%), reflecting the American's interest more towards sector-specific channels for trusted, expert commentary and deep dives into matters concerning the energy transition.

Table 20.2 Timing of training in the energy transition

Q12_1. Considering the current situation in your country, when do you think training for those involved in energy transition should take place?
Base: Total Sample - % Values



When looking at the USA trend from Table 20 assessing the need for training in the energy transition, there's a decrease in the sense of urgency for training within the next 12 months, with an -8 p.p. drop compared to 2023. However, a consensus remains, with 78% of respondents recognizing the importance of receiving training in the short term (within the next three years) despite a slight -3 p.p. decrease from 2023.

Furthermore, only 12% of respondents agree on the necessity of long-term training, confirming a continued but slightly lessened perception of the immediacy of professional development to address the energy transition.

*Source: WEF, Fostering Effective Energy Transition 2025 Edition

Table 21.2 Competence requirements for the energy transition

Q8_1. In your opinion, when it comes to training those involved in energy transition...
Base: Total Sample - % Values

AMERICAS

USA




Ranked on Italy


Surveyed in	2023	2025
Technical knowledge is more important than personal skills and qualities	33	29
Technical knowledge and personal skills are equally important	62	69
Technical knowledge is less important than personal skills	5	3
MOST REQUIRED Technical Knowledge	Renewable/recycled raw materials	Renewable raw materials and recycled materials
MOST REQUIRED Personal skill	Problem-solving	Creativity

69% of respondents acknowledge the necessity of both technical knowledge and personal skills for the energy transition process. In the USA, these two aspects are equally recognized as crucial. Emphasis is placed on understanding alternative renewable and recycled materials, and their environmental impact, as key technical competencies. For personal skills, problem-solving stands out.

Table 22.2 Soft skills for the energy transition**Q9_1.** What are the most important personal skills for those involved in energy transition?

Base: Total Sample - % Values




  The most/least mentioned options are highlighted
 % 1°+2nd+3rd positions -
 Positioning 
 Ranked on Italy


AMERICAS			
USA			
			
Surveyed in	2023	2025	
Problem-solving skills	52	55	
A multidisciplinary approach	35	33	
Critical thinking and analytical skills	40	43	
Creativity and innovation	42	42	
Flexibility and adaptability	40	44	
Teamwork skills	30	28	
Emotional intelligence	16	19	
Communication and networking skills	32	27	
Fluency in the English language	16	10	

Among the soft skills, problem-solving continues to rank first (55%) in importance. This is followed by skills such as flexibility and adaptability (44%), critical thinking and analytical skills (43%), and creativity and innovation (42%). Emotional intelligence (19%) and fluency in the English language (10%) are perceived as less important, potentially reflecting a greater emphasis on skills that have direct, outcome-driven applications in the context of the energy transformation (Table 22.2).

Table 23.2 Technical knowledge requirements for the energy transition**Q8_1.** What are main technical knowledge requirements for those involved in energy transition?

Base: Total Sample - % Values

  The most/least mentioned options are highlighted
 % 1°+2nd+3rd positions -
 Positioning 
 Ranked on Italy

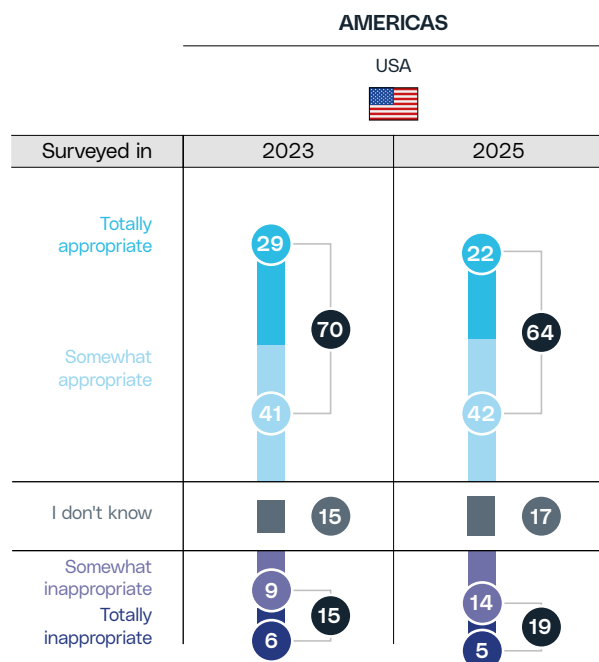
AMERICAS			
USA			
			
Surveyed in	2023	2025	
Analyse and assess impact on the region	33	32	
Understanding environ. issues and analyse and assess their environmental impact	46	41	
Knowledge of various renewable energy sources	33	39	
Knowledge of alternative renewable raw materials and recycled materials to substitute traditional materials	37	42	
Knowledge of regulatory frameworks	19	22	
Knowledge of sustainability issues , ESG principles, and sustainable design criteria	29	32	
Knowledge of techn. issues related to recycling and circular economy	35	28	
Manage economic sustainability of projects	24	22	
Manage economic resources in a fair and inclusive manner	26	24	
Sensitivity to social issues and the ability to analyse and assess their impact on society	22	18	

Building on the acknowledged importance of technical knowledge, consistent emphasis is placed on the use of renewable and recycled materials (42%) and environmental impact analysis (41%). However, there is a decline in focus on recycling and the circular economy (-7 p.p. since 2023), highlighting a strategic adjustment in the technical competencies considered as a key to advancing the energy transition.

Table 24.2 Availability of energy transition professionals

Q10. How would you rate the **availability of technical professionals with skills for energy transition** in your country?

Base: Total Sample - % Values



The data on the availability of energy transition professionals indicates an ongoing need for a workforce skilled in sustainable energy practices (Table 24.2). While there is generally a positive view of the availability of such professionals, this perception has experienced a slight decrease (-6 p.p. since 2023).

Table 25.2 Key players for the training of those involved in the energy transition

Q9_2. Who should be responsible for training those involved in energy transition?


Base: Total Sample - % Values

Higher values in bold

↑↓ Significantly different vs previous wave (95%)

Ranked on Italy

AMERICAS

USA


Surveyed in	2023	2025
Public research and development centers	54	57
Government responsible for energy policies	60	64
Private energy sector companies	41	49
Universities	41	49
Private company research and development centers	43	58 ↑
Professional sector associations	31	37
Foundations	11	15

Government bodies (64%) and public research institutions (57%) remain crucial for providing necessary training on the energy transition in the USA (Table 25.2). However, there has been a notable shift over time, with a growing acknowledgment of the role of private company research centers, now believed by 58% of respondents to be central, marking a significant +15 p.p. increase since 2023. Similarly, private energy sector companies show an expanded role at 49% (+8 p.p. since 2023), and professional sector associations move up to 37% (+6 p.p. since 2023), suggesting that a broader and more inclusive approach to training in the energy sector is taking shape.

5 METHODOLOGICAL NOTE

5.1 Questionnaire structure and flow

To achieve the research objectives, a structured questionnaire consisting of closed and pre-coded questions was prepared. The questions are formulated clearly and unambiguously to allow respondents to answer easily. They have been ordered in a way that does not influence the responses, with rotations between question items provided to avoid response bias.

The flow of the interview can be summarized as follows:

- » Collection of socio-demographic data to ensure proper sample selection;
- » Assessment of perception of the energy transition to define the context and measure the levels of knowledge and perceived importance of the concept;
- » Identification of the critical success factors of the energy transition, to introduce and measure the level of importance of training and education, understand the skills required for future industry operators, and realize the urgency of dedicated training programs;
- » Evaluation of the commitment of governments and companies to the energy transition process;
- » Collection of additional information useful for final profiling.





5.2 Sample and methodology 2025: target population

During wave 3, a total of 700 interviews were conducted across 4 countries: the USA, China, Argentina and Qatar.

The target population was chosen based on socio-demographic characteristics, with a focus on those employed and having a high level of education. In addition, attitudinal characteristics were also considered. The aim is to identify individuals who were the most active and aware of environmental sustainability issues. This was done through profiling

questions related to sustainability clusters (see the following paragraph). The sampling was carried out based on quotas for gender, age groups, geographical macro-areas, education levels, and employment status. The interviews were conducted using the online CAWI (Computer Assisted Web Interviewing) methodology via Ipsos' proprietary panel, IIS (Ipsos Interactive Services). The average length of an interview was approximately 15 minutes. The interviews were conducted in May 2025 (see Table 1).

Table 1 Population target, sample, methodology and period of fieldwork



TARGET POPULATION	METHODOLOGY	NUMBER OF INTERVIEW	PERIOD OF FIELDWORK
Population with a high level of education, employed, concerned and engaged for environment*	Online quantitative survey (CAWI)	4 countries, 700 interviews  CHINA  QATAR  USA  ARGENTINA	7-20 May 2025

5.3 Sample and methodology 2025: target opinion leaders

Alongside the quantitative phase (involving 700 interviews with a highly educated population), 2 individual interviews were conducted in Argentina with Key Opinion Leaders among sustainability and energy transition experts, selected from different targets: academics, institutions, and top man-

agers of private companies. The interviews were conducted via telephone and the online platform Teams by qualified psychologists. The average duration of the interviews was approximately 60 minutes, and they took place in May and June 2025 (see Table 3).

Table 3 KOL target, sample, methodology and period of fieldwork 2025

TARGET POPULATION	METHODOLOGY	NUMBER OF INTERVIEW	PERIOD OF FIELDWORK
Private companies specialized on topics related to energy transition and Institutions and Academics	Telephone qualitative interviews (CATI)	2 countries 3 in depth interviews  QATAR  ARGENTINA	May - October 2025

6 CLOSING REMARKS

Fondazione MAIRE – ETS will increase the perimeter and view of the research every year, including in the panel new countries in different continents. Countries are being monitored with sample-proof surveys, to observe and measure the change in attitudes and opinions over time.

Year by year we will extend our global reach and the comparison among countries and geographical areas.

This effort will bring consistency to the commitment of Fondazione MAIRE – ETS in promoting initiatives to support the creation of skills and competence in the energy transition worldwide. As suggested by SDG17, these will be promoted both directly and through partnerships with universities, schools, institutions and specialized NGOs.

We believe that a stronger effort needs to be made at an international level to promote new courses on these themes in schools and universities, to increase opportunities for scholarships for students, to develop initiatives that involve younger students on this topic starting from high schools, and strive to attract more and more women into the energy sector.

Fondazione MAIRE – ETS is supporting several projects in the area of education, including a particular focus on educational poverty and gender inclusion.

We can help the countries where we operate to train and build those skills that the countries themselves are requiring, such as problem solving and creative thinking. We can solve

problems that have not yet been solved; to create economically feasible engineering solutions to environmental issues; to anticipate issues that are not yet so clear; we can deal with complexity, are all aspects that we can help develop, in partnership with universities and through cooperation with local energy and chemical companies.

New professional profiles - such as hydrogen industries architect and production engineers, material recycling and circular economy engineers, carbon capture and utilization engineers, data analyst and financial modeling engineers, regulatory and international sustainability engineers - are required by the market to help energy transition develop. Competences and skills that make it possible to "engineer ideas" for a sustainable future are what we at Fondazione MAIRE – ETS and MAIRE Group are advocating and helping to create.

The view deriving from this research will also support the MAIRE Group's worldwide commitment to raise awareness and promote the diffusion of sustainable technology solutions for decarbonization and circularity, increasing the penetration of enabling technologies for the manufacture of low carbon and circular products in the sectors of agriculture, mobility and plastics, in an increasing number of geographies.

Helping the growth of a skilled portion of industry and society on the themes related to the energy transition and promoting the growth of the number, scale and effectiveness of enabling technologies available for the reduction of GHG emissions and mitigation of climate change and for the switch from a linear to a circular economy: this is what the Fondazione MAIRE – ETS, together with the MAIRE Group believe being a concrete way to give a solid contribution to this enormous challenge.

Let's make climate goals happen!



Fondazione MAIRE is the corporate foundation of MAIRE Group. Established in 2021 as a non-profit organization, it was registered within RUNTS in 2024, acquiring the additional qualification of "Ente del Terzo Settore". The Fondazione MAIRE – ETS has defined as its own mission to foster the training of tomorrow's "*humanist engineers*", individuals capable of contributing to the evolution of humanity by providing economically sustainable technological solutions of excellence and able to interpret social, ethical, and environmental needs in the era of energy transition. The Foundation carries out projects to combat educational poverty, to ensure equal access to education opportunities, with particular attention to contexts of social marginalization and female inclusion in STEM sectors. It promotes awareness of issues related to sustainability, including through the promotion of studies and research. The Foundation manages the MAIRE Group's historical archives, a valuable documentary heritage of Italian engineering and architecture projects, ensuring their preservation and promoting their awareness and use by an increasingly wider audience.

For further information: www.fondazionemaire.com



MAIRE is a leading technology and engineering group focused on advancing the energy transition. Thanks to its extensive know-how in technologies, the Group implements solutions giving new life to waste and developing new processes from non-fossil feedstocks. In particular, *NEXTCHEM* has adopted a new organization featuring three business lines, designed to address energy transition challenges: *Sustainable Fertilizers* leverages global leadership in urea technologies to advance nitrogen-based solutions; *Low Carbon Energy Vectors* builds on NEXTCHEM's expertise in hydrogen production and sulfur recovery, focusing on developing technologies to produce low-emissions clean fuels and chemicals; *Circular Solutions* focuses on advancing circularity by providing technological solutions transforming waste into valuable chemical resources. The *IE&C* business unit, led by TECNIMONT, provides cutting-edge solutions for complex natural resource processing plants, from the early stages of project development to Engineering, Procurement and Construction, leveraging the business synergies of Group companies and the know-how of its engineering centers in Milan, Rome, Sittard (Netherlands), Houston (USA), Mumbai (India) and Braunschweig (Germany).

With operations across 50 countries, MAIRE employs nearly 10,500 people, supported by almost 50,000 professionals involved in its projects worldwide. MAIRE is listed on the Milan Stock Exchange (ticker "MAIRE").

For further information: www.groupmaire.com



Discover more about *Climate goals* researches

Climate goals: Winning the challenge of climate goals through the creation of skills and competences worldwide

This is our multi-year research project, which every year investigates new countries around the world in order to examine the global scenario regarding the perception of the importance of implementing the energy transition and the training of new professional skills.

In 2023, 10 countries were surveyed: Italy, United Kingdom, Turkey, Saudi Arabia, United Arab Emirates, China, India, Algeria, United States and Chile;

in 2024, we added Azerbaijan and Kazakhstan;

in 2025, we added Argentina and Qatar, and we updated the data for China and USA.

Globally, we are investigating 14 countries on 4 continents with a total of 2,300 interviews.

To browse all the papers and read our insights, visit the studies page of the Foundation's website:





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