

# 2021 WORLD ENERGY ISSUES SURVEY

As an energy leader, you are invited to participate in this year’s World Energy Issues Monitor.

The [World Energy Issues Monitor](#) is a World Energy Council insights tool which identifies crucial energy issues in your country and across the globe. This is done by asking energy decision-makers to assess the impact and uncertainty perceived around 25 energy issues. As well as providing common definitions for these issues, the results of the annual survey identify action priorities and critical uncertainties, to help you develop strategies and plan for the future of the energy sector. Energy transition pathways can be explored further using our [Energy Transition Toolkit](#).

The **25 energy issues** cover five key areas:

1. Global Trends and Macroeconomics
2. Environment
3. Energy Technologies
4. Policy and Business
5. Social Dynamics



## RESPONDENT DETAILS

What is your name?

What is your age group?  
*(please select one)*

<30

30-45

46-60

>60

Which country do you work in?

Which sector(s) do you work in?

Academia/Think Tank

Engineering

Finance

Government

Hydrogen

Legal and Advisory

Mining

Non-Profit

Nuclear

Oil and Gas

Power and Utility

Regulator

Renewables

Other .....

What level is your current role?

Executive

Senior Manager

Middle Manager

General Staff

What is your affiliation with the World Energy Council?

Officer/Standing Committee Member

National Member Committee

Partner/Patron

Future Energy Leader (FEL100 or alumni)

Start-up Energy Transition (SET100 or alumni)

Other .....

All information will be treated anonymously, on a confidential basis.



**IMPACT:** When you consider the critical choices you face in adapting the energy system to the evolving needs of your country, **how impactful is this issue on a scale of very low to very high?**

**UNCERTAINTY:** Based on your perception of where your country’s energy system might be in 2040, **how would you rate the level of uncertainty around this issue on a scale of very low to very high?**

GLOBAL TRENDS AND MACROECONOMICS	Very low   low   medium   high   Very high   Don't know   Not Applicable	Very low   low   medium   high   Very high   Don't know   Not Applicable
1. <b>Geopolitics:</b> <i>The influence of regional and/or international affairs on the country’s ability to coordinate regional and global energy action</i>		
2. <b>Economic Growth:</b> <i>The effects of changes in economic growth levels on the country’s energy market</i>		
3. <b>Regional Integration:</b> <i>Collaboration between national and regional energy policy makers to implement energy policies, interconnection and trade</i>		
4. <b>Commodity Prices:</b> <i>The effects of commodity price changes on the country's energy market. Specifically:</i> a) Oil and Gas		
b) Coal		
c) Non-fuel raw materials (e.g., rare earth metals, cobalt, lithium, steel, aluminium, copper, iron)		
ENVIRONMENT	Very low   low   medium   high   Very high   Don't know   Not Applicable	Very low   low   medium   high   Very high   Don't know   Not Applicable
5. <b>Climate Change Management:</b> <i>Adaptation and mitigation measures to manage the impacts of climate change. These typically include:</i>		
a) Climate Adaptation (e.g., make better use of scarce water resources, build coastal dams and flood defences, switch to drought-tolerant crops, reforestation and afforestation, etc.)		
b) Carbon Abatement or Removal (e.g., industry fuel switching, electrification, use of carbon capture technologies, etc.)		
c) Climate policy (e.g., net zero targets, carbon pricing, emission trading schemes)		
6. <b>Energy Efficiency:</b> <i>Measures (rules/operations/technologies) to optimise energy consumption</i>		
7. <b>Land and Water Availability:</b> <i>The access to and availability of land and water for the supply, transport, and distribution of energy</i>		
8. <b>Urban Design:</b> <i>Management of waste, water, energy, and transportation to deliver resource-efficient urbanisation at scale</i>		
9. <b>Innovative Transport:</b> <i>Integration of more environment-friendly transportation options (e.g.: green aviation, green shipping, electric vehicles, natural gas and fuel cell vehicles, self-driving vehicles, car sharing, bike lanes, etc.)</i>		



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ENERGY TECHNOLOGIES	Very low	low	medium	high	Very high	Don't know	Not Applicable	Very low	low	medium	high	Very high	Don't know	Not Applicable
10. <b>Hydrogen:</b> <i>Its potential to play a role in the country’s energy system</i>														
11. <b>Renewable Energies:</b> <i>Potential growth of renewable energy sources, especially solar PV, wind and biofuels</i>														
12. <b>Nuclear:</b> <i>The outlook for nuclear as part of the country’s energy mix</i>														
13. <b>Electric Storage Innovation:</b> <i>Progress on electricity storage solutions to support a diversified energy system, including flexibility, grid services, integration of renewables, sector coupling, etc.</i>														
14. <b>Digitalisation:</b> <i>The integration of disruptive digital technology to improve energy security, equity, and environmental sustainability. These include:</i> a) Big data, cloud computing, machine learning and artificial intelligence														
b) The Internet-of-Things, smart grids and blockchains														
15. <b>Cyber Security Risks:</b> <i>Cyber threats to energy operating systems and networks</i>														
POLICY AND BUSINESS	Very low	low	medium	high	Very high	Don't know	Not Applicable	Very low	low	medium	high	Very high	Don't know	Not Applicable
16. <b>Market Design and Regulations:</b> <i>Frameworks and rules for the participation of public and private actors in the country’s energy value chain</i>														
17. <b>Cross-Border Trade:</b> <i>The trade framework between countries and the policy context for foreign investment</i>														
18. <b>Support Mechanisms:</b> <i>Measures that keep prices for customers below market levels, or for suppliers above market levels, or reduce costs for customers and suppliers</i>														
19. <b>Investor Environment:</b> <i>The influence of conditions such as access to capital, interest rates, exchange rates, currency stability and competition on investors’ willingness to operate in the country</i>														



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SOCIAL DYNAMICS	IMPACT							UNCERTAINTY						
	Very low	low	medium	high	Very high	Don't know	Not Applicable	Very low	low	medium	high	Very high	Don't know	Not Applicable
<b>20. Demand Pull:</b> <i>The role of consumers’ choices or preferences in shaping demand, driving technology developments and stimulating innovation</i>														
<b>21. Demographic Patterns:</b> <i>The influence of demographic changes (e.g., population growth rate, migration, urbanisation, etc.) on energy consumption and quality of energy access</i>														
<b>22. Decentralised Systems:</b> <i>Distributed Energy Resources (DER) that deliver energy to local customers (e.g., microgrids, energy communities)</i>														
<b>23. Future of Work:</b> <i>Availability of skilled workforce in relation to new business practices (e.g., remote working, four-day week, automation)</i>														
<b>24. Quality Energy Access:</b> <i>Availability of sufficient, safe and reliable energy supply which can enable prosperous modern livelihoods (e.g., use of modern electrical appliances, use of energy for revenue generation)</i>														
<b>25. Affordability:</b> <i>The proportion of household income spent on electricity, heating/cooling, cooking and road fuels</i>														
<b>Are there any other action priorities in your country not covered in this survey?</b> ..... .....	<b>Are there any other critical uncertainties in your country not covered?</b> ..... .....													

**Thank you for taking part in the World Energy Issues Survey!** *The global Issues Monitor results will be released in January 2022.*

Please get in touch with your Country Member Committee for regional and country-level results and for more detailed information on the Council’s Energy Transition Insights Tools. You can find out more about your Member Committee at <https://www.worldenergy.org/impact-communities/members>.

I want to receive the World Energy Issues Monitor 2022 Global Insights when released (January 2022)

I would like to be informed about the Council’s Energy Transition Toolkit, activities and events.

**Please provide your email address if you have selected any of the boxes above:**