

The Southeast Asia Climate Outlook: 2023 Survey Report is published by the Climate Change in Southeast Asia Programme at ISEAS - Yusof Ishak Institute and available electronically at www.iseas.edu.sg

If you have any comments or enquiries about the survey, please email us at climatechange@iseas.edu.sg

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ISEAS - Yusof Ishak Institute (formerly Institute of Southeast Asian Studies) is an autonomous organisation established in 1968. It is a regional centre dedicated to the study of socio-political, security, and economic trends and developments in Southeast Asia and its wider geostrategic and economic environment. The Institute's research programmes are grouped under Regional Economic Studies (RES), Regional Social and Cultural Studies (RSCS) and Regional Strategic and Political Studies (RSPS). The Institute is also home to the ASEAN Studies Centre (ASC), the Temasek History Research Centre (THRC) and the Singapore APEC Study Centre.

The Climate Change in Southeast Asia Programme (CCSEAP) was established in 2020 to examine the phenomenon of climate change, its impact, and policy responses across the regions. The Programme hopes to cultivate a network of scholars at the forefront of climate change research and build on ISEAS' thought leadership to advance climate discourse and knowledge in Southeast Asia through a series of publications and seminars.

The Programme conducts an annual Southeast Asia Climate Outlook survey. Inaugurated in 2020, the survey probes the attitudes and concerns of Southeast Asian citizens towards climate change, governmental actions, and the role of different stakeholders in climate action. It aims to obtain views on climate change impacts, mitigation, adaptation, food security, agricultural production, city-level climate measures, renewable energy and the transition to low-carbon economies.

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ABOUT THE SURVEY

June 2023 saw global records set for the highest temperatures and lowest sea ice coverage observed in any June in 174 years. Closer to home, the highest ever temperatures were recorded in Vietnam and Laos in May, and Thailand in April (Bangkok Post, 2023b) when mercury levels exceeded 44 degrees Celsius. As the climate crisis grows more serious, the only certainty the region has is that these temperature records will continue to reach new highs. With the region expecting to enter an El Niño season, warmer weather, heatwaves and drought will exacerbate forest fires and haze pollution across Indonesia, Malaysia and Singapore (Maulia et al., 2023) and introduce new economic shocks to the region's agriculture-dependent countries (The Economist Intelligence Unit, 2023). It is hardly a future the region is prepared for.

Since 2020, the annual *Southeast Asia Climate Outlook Survey Report* has been tracking the region's public perceptions on pertinent issues as the climate crisis develops. The survey covers topics ranging across impacts, solutions and policy strategies. Its findings provide policymakers, businesses and other stakeholders with a barometer of region and country-specific sentiment towards climate action.

The Survey is divided into four sections:

Section I presents the respondents' profile including nationality, age, gender, education, affiliation, country and city of residence and source of climate news.

Section II compares the current climate realities as experienced by respondents and the expectations they hold of different stakeholders in climate action. This section also examines the challenges of Southeast Asia's climate future and what respondents are willing to do at the individual level for the sake of the climate.

Section III discusses climate transition issues facing the region including fears of what a transition might bring, the use of coal, support for reduction of fossil fuel subsidies, support for a national carbon tax, potential renewable energy sources, and what ASEAN as a grouping can do to accelerate the transition.

Section IV explores issues of climate leadership and cooperation in the region, including which country had the best potential to be the region's climate leader and which countries were deemed more helpful to Southeast Asia's climate transition.

Climate ambition in the region has grown since the first edition of this Survey in 2020. All ASEAN countries have now communicated their updated Nationally Determined Contributions (NDCs or better known as climate pledges) while eight have set net zero targets. Of these, four countries have communicated what is called Long-Term Low Emissions Development Strategies to the United Nations Framework Convention on Climate Change to outline their plans to mid-century. But Southeast Asia can scarcely wait for climate policy and cooperation to inch forward as this survey's results reveal the public's pragmatic concerns about climate threats as experienced.

METHODOLOGY

The Survey was conducted online over a period of four weeks from 10 July to 7 August 2023. The survey comprised 39 questions in total and was completed in a median time of 12.5 minutes. A total of 2,225 Southeast Asian respondents from ten ASEAN member states completed the online survey which drew from eight categories of affiliation: (1) Academia, Think-tanks and Research institutions, (2) Private Sector, (3) Government, (4) Regional organisations, intergovernment and international organisations, (5) Civil society and non-government organisations (6) Media, (7) Students, (8) Retirees and Others.1 The survey was offered in English and translated into five languages - Bahasa Indonesia, Burmese, Khmer, Thai, and Vietnamese.

The data is weighted by population size and age demographics using the *World Population Prospects 2022* published by the United Nations (United Nations Department of Economic and Social Affairs & Population Division, 2022) and the *ASEAN Statistical Highlights 2022* (ASEAN Secretariat, 2022). Responses from countries who make up a larger share of the ASEAN

population, as well as larger age groups within each country, are given higher weights to reflect more accurately the population being studied. This is with the exception of Questions 30-36, for which regional averages are derived from a 10% equal weightage for each country to reflect regional political consensus, wherein each ASEAN country has an equal say in decisionmaking. Time series data from past Surveys have also been weighted accordingly and may differ from those reported in their respective Survey Reports (which were unweighted). These weightages only apply to region-wide numbers and do not affect breakdowns by country, affiliation, age or other groups. A strict set of criteria during the data cleaning process to maintain data quality and integrity was applied. All percentages in this report are rounded to one decimal place, and may not add up to exactly 100%.

The results of the survey are meant to present a general view of the prevailing climate attitudes in the region and are not predictive of future events.

¹ The category "Others" includes those who identify as freelance, gig-economy or unemployed persons.

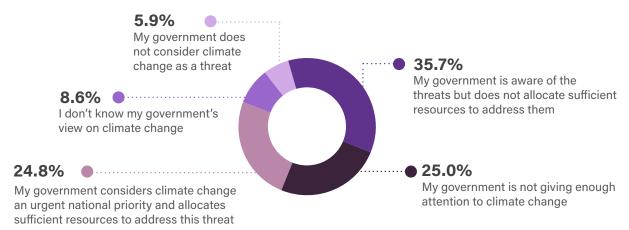
HIGHLIGHTS

01

GOVERNMENTS ARE NOT DOING ENOUGH TO ADDRESS CLIMATE CHANGE

Majority of regional respondents believe that their national government is aware of climate threats but does not have sufficient resources to address them (35.7%). About a quarter think that their government is not giving enough attention to climate change and another group believes their government considers climate change an urgent national priority and has allocated sufficient resources to address it (24.8%).

How would you rate your national government's policies and actions taken in support of climate change?



02

EXPECTATIONS OF STAKEHOLDERS IN CLIMATE ACTION

National governments are seen as having the greatest responsibility to tackle climate change and paying for it. Businesses and industries are second. However, businesses are seen to be falling short in taking climate action. The private sector is seen as the second most passive stakeholder whereas civil society is the most active. This needs to be reversed if Southeast Asia hopes to take greater strides towards climate action.

Top 3 in ASEAN Most Responsible for Should bear the greatest



taking climate change



cost for climate change



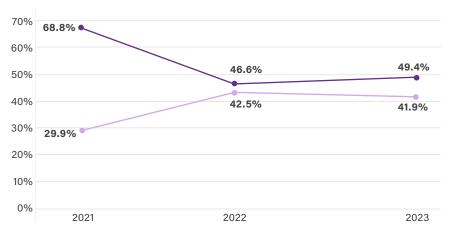
National government
 Businesses and industries
 Individuals
 Civil Society Organisations
 Multilateral Organisations



CLIMATE CHANGE URGENCY

The proportion of respondents expressing the highest level of urgency on climate has come down from 68.6% in 2021 to 49.4% in 2023. Yet there is an almost equal share of respondents (41.9%) who view the need to monitor climate change. This raises the question of whether the association of immediate problems such as energy shortages and insecurity are with climate impacts, geopolitical problems or domestic issues.

What is your view on climate change?



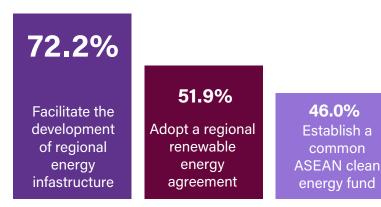
It is a serious and immediate threat to the well-being of my country
It is an important issue that deserves to be monitored



OPTIONS TO ACCELERATE A CLEAN ENERGY TRANSITION

The top three priorities for ASEAN to accelerate clean energy transition are the development of regional energy infrastructure (72.2%), the adoption of a regional renewable energy agreement (51.9%) and the establishment of a common ASEAN clean energy fund (46.0%). The development of energy infrastructure receives the most support from Indonesia respondents (83.5%). Cambodia respondents (62.7%) express the strongest support for adopting a renewable energy agreement, while Vietnam respondents (58.7%) are the region's strongest advocates for the establishment of a common fund.

What should ASEAN do to accelerate a clean energy transition? (Top 3)

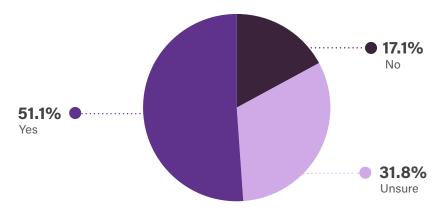




FOSSIL FUEL SUBSIDIES

Around half of the respondents from the region (51.1) believe that fossil fuel subsidies should be cut in their country, while 31.8% are unsure and 17.1% disagree.

Fossil fuel subsidies can hinder clean energy transition. Should fossil fuel subsidies be cut in your country?

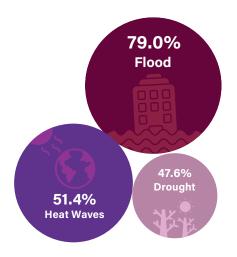


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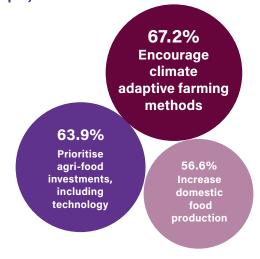
CONCERNS ABOUT CLIMATE CHANGE IMPACTS ON FOOD SECURITY

Floods, droughts, and heat waves were identified as the most pressing climate impacts on agriculture for Southeast Asia. Southeast Asians hoped to see increased focus on climate adaptive farming methods, agri-food technology investment and increased domestic production to improve its food resilience.

In your view, what are the three most serious climate change impacts that your country is currently exposed to? (Top 3)



Global food security is currently affected by climate change, geopolitical stress, and sustained inflation. What should be your governments priority in addressing this crisis? (Top 3)



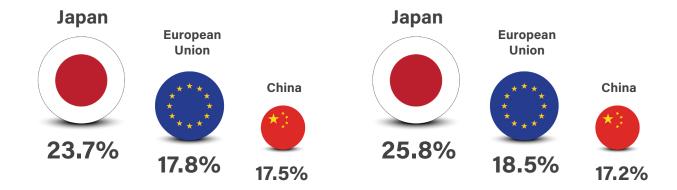


LEADERSHIP IN CLIMATE INNOVATION AND ASSISTANCE

Japan is viewed as the most influential international partner in leading global climate innovation (23.7%) and sharing their climate expertise, practical ability, and technical know-how (25.8%) by regional respondents. The European Union and China came in second and third place for both roles.

Which country is leading in global climate innovation? (Top 3)

Who could play a more proactive role in sharing their climate expertise, practical ability, and technical know-how in your country? (Top 3)

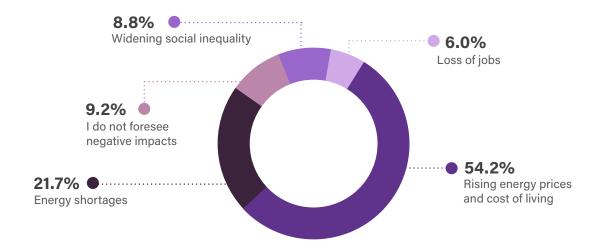


08

TOP TRANSITION CONCERNS

Rising energy prices and cost of living (54.2%) is the biggest concern related to energy transition, followed by energy shortages (21.7%). ASEAN respondents are less concerned about widening social inequality (8.8%) and loss of jobs (6.0%). Respondents from Singapore and Thailand are most worried about rising energy prices, while energy shortages are a key concern in Vietnam. Job losses are a bigger concern in Brunei and Cambodia than the rest of the region.

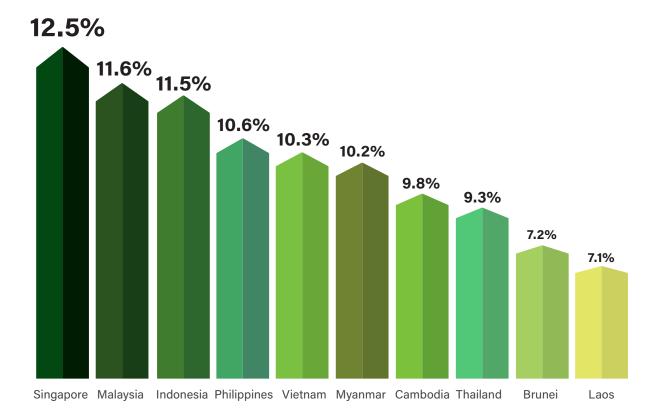
What is your top concern about the impact of transitioning to renewable energy/cutting fossil fuels?





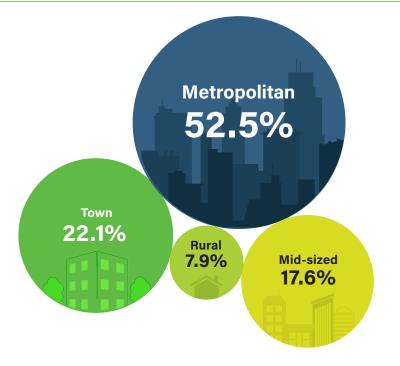
Nationality

A total of 2,225 respondents from across the ten ASEAN countries responded to the survey. This was an increase from 1,386 respondents last year. The greatest proportion of respondents came from Singapore (12.5%), followed by Malaysia (11.6%) and Indonesia (11.5%) and the lowest representations from Laos (7.1%) and Brunei (7.2%). In 2022, the Philippines (14.9%) led the group with the most respondents followed by Singapore (12.4%) and Malaysia (11.2%).



02 Type of City

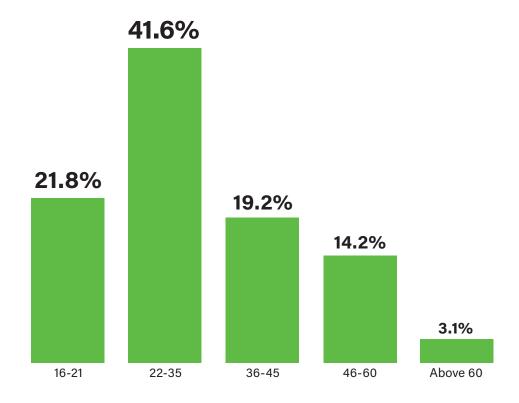
98.3% of respondents currently live in Southeast Asia. Among those residing in the region, 52.5% live in metropolitan cities such as the Jakarta Metropolitan Area, Metro Manila, Greater Kuala Lumpur, Singapore, Yangon, Hanoi and Phnom Penh. 39.7% live in small or mid-sized cities while 7.9% live in rural areas.² The survey had respondents coming from lesser-known areas and cities in Southeast Asia such as Antipolo, Miri, Koh Kong, Sagaing, to name a few.



²The type of city is clustered by population size: metropolitan (>1 million), mid-sized (250,000-999,999), and towns (<250,000)

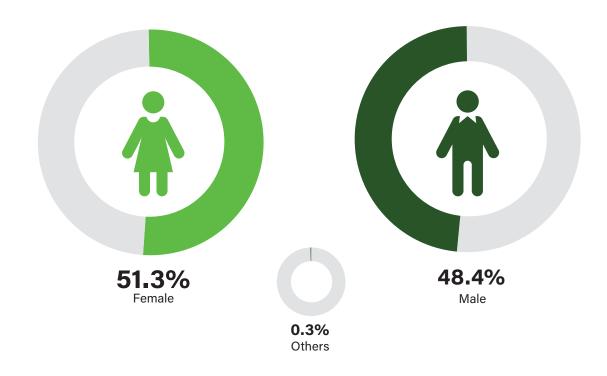
03 Age group

Similar to 2022, the biggest group of respondents was the 22 to 35 years old group (41.6%). Youths aged 16 to 21 years old overtook last year's second largest age group of 36 to 45 years old adults at 21.8%. The smallest age group, similar to 2022, was those above 60 years old (3.1%).



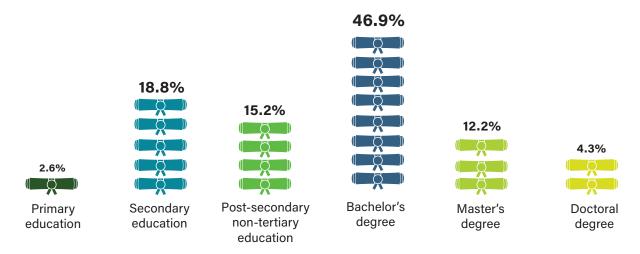
04 Gender

Of the 2,225 respondents, 51.3% were of the female gender and 48.4% were male. 0.3% identified as "others".



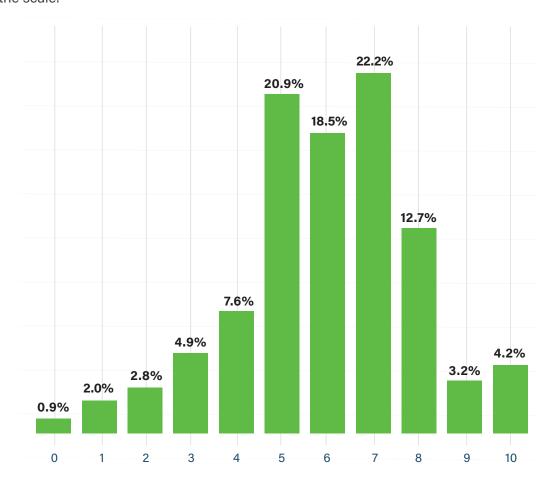
05 Education

In terms of education levels, 46.9% of respondents possessed a Bachelor's degree or equivalent followed by 21.4% who had primary/secondary education. The third largest group was those who had post-secondary education including vocational training, technical or trade training (15.2%). The smallest group was those who possessed a doctorate or equivalent (4.3%).



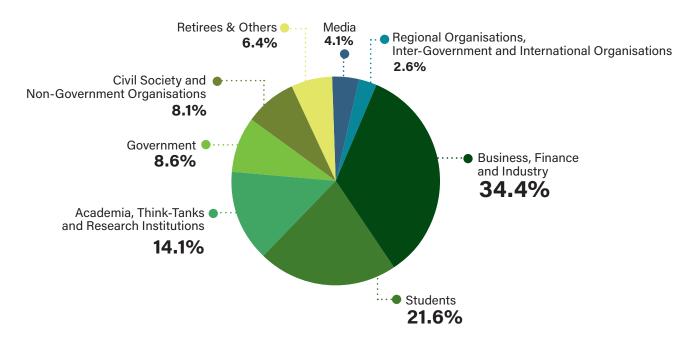
06 Socio-Economic Status

Respondents were asked to self-evaluate their social economic well-being on a scale of zero to ten. Majority of Southeast Asians (53.4%) rated themselves between six and eight. 39.1% of Southeast Asians rated their socio-economic well-being at five and below whereas 7.4% felt that they were at the upper end of the scale.



Affiliation

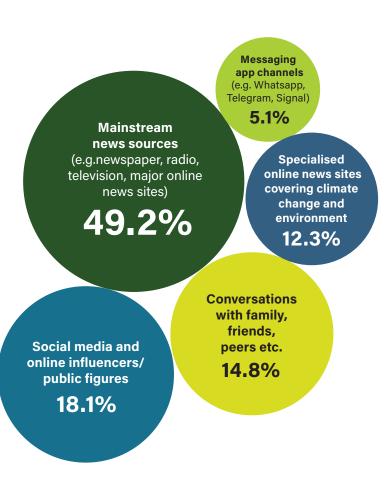
The largest affiliation group was those representing the private sector in business, finance or other industries at 34.4%, followed by students at 21.6%. The third largest group was those in academia, think-tanks and research institutes at 14.1%. The smallest group was persons affiliated with regional organisation, inter-government and international organisations at 2.6% and media at 4.1%.

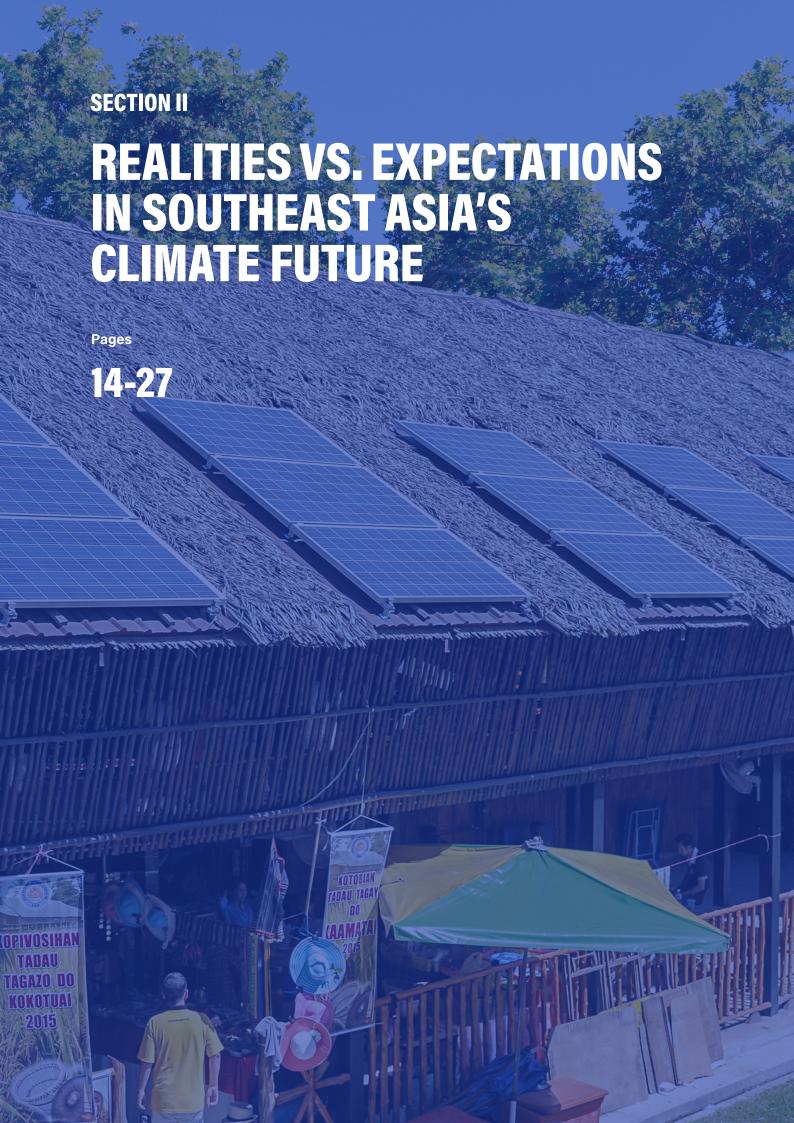


08 Top source of climate change news

Newspapers, broadsheets, radio, television and other mainstream major online news sites continued to be Southeast Asians' top go-to source of climate news at 49.2%. This is followed by social media and online influencers or public figures at 18.1%. Conversations with family, friends and peers were ranked third place at 14.6% whereas specialised climate or environmental news sites were the second last choice at 12.3%, just above messaging app channels (e.g. Whatsapp, Telegram, Line, Signal) at 5.1%.

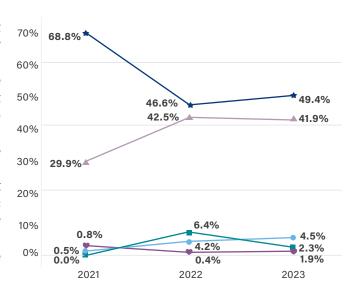






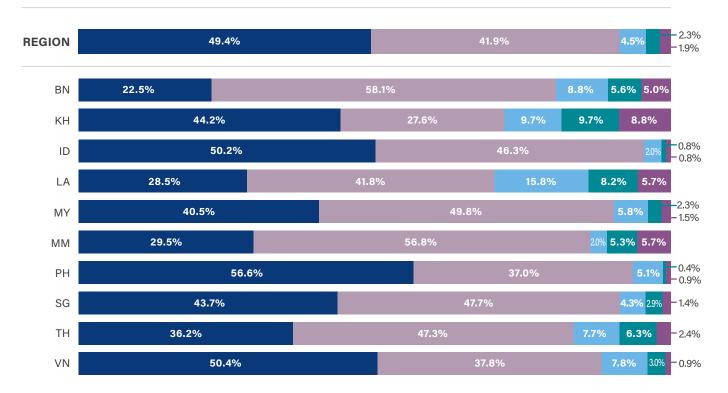
09 What is your view of climate change?

Majority of Southeast Asians either feel that climate change poses an immediate threat or that it is important and deserves to be monitored. The biggest group of Southeast Asians view the phenomenon with heightened concerns that climate change poses an immediate threat to the well-being of their country and themselves (49.4%). What is worrying is perhaps the level of climate threat urgency has dropped from 68.8% in 2021 to 49.4% in 2023. This may be tied to the current preoccupations of the region with a post-pandemic recovery fraught with dangers of rising inflationary pressures, increasing energy and food prices and threat of supply chain disruptions that may take away jobs.



The second largest group feels that the issue is not critical yet and deserves to be monitored (41.9%) which indicates that climate change is not a top-of-mind issue. This relatively more sanguine group of respondents is led by Myanmar (56.8%) which is currently preoccupied with its immediate political future, followed by Malaysia which has also been undergoing major political changes in the last year and finally by Indonesia (46.3%), a country that is preparing for major elections campaign in the coming months. The climate deniers are those who say there is no scientific basis for climate change (1.9%), or that it is not a threat (2.3%) or that it is a long-term threat but will not impact them in their lifetime (4.5%) form a very small group. 15.8% of Lao respondents say that it is a long-term threat that will not impact them in their lifetime whereas 8.8% of Cambodians think there is no scientific basis.





- Serious and immediate threat to the well-being of my country
 Important issue that deserves to be monitored
 - Long-term threat and will not impact me in my lifetime Not a threat to me or my country
- No scientific basis for climate change

In your view, what are the three most serious climate change impacts that your country is currently exposed to? (Select 3 choices)

Not dissimilar with previous years' results, floods (79.0%) and heat waves (51.4%) and droughts (47.6%) continue to dominate the lived climate experiences of Southeast Asians. Droughts replaced the fear of rainfall-induced landslides which was a top concern last year. Given the unique and diverse geography in the tropics, it is not surprising that one or a group of countries could experience extreme flooding while another could experience droughts and heatwaves.

For the Philippines, floods (81.3%) and tropical storms (77.4%) are the country's top concerns because the Philippines stands in the path of destructive tropical storms and typhoons whereas Singapore, a low-lying island at the Equator, is more worried about sea-level rise (86.0%) and heatwaves (85.3%). Similarly for Vietnam, floods (77.8%) are its biggest concern although heatwaves and droughts are ranked second and third. In June 2023, Vietnam recorded an unprecedented heatwave that reached an all-time high of 44.3 degrees Celsius (Robinson, 2023).

Neighbouring Thailand and Laos were also not spared from heatwaves but for Thailand, the threat of drought is more pronounced as the impact is on food security and power generation (The Straits Times, 2023). For Laos, the concern appeared to be with drought (58.2%) followed by floods (48.1%) as the country suffers intermittently from the two impacts. The two countries that were more likely to say that they are not exposed to climate impacts are Laos (21.5%) and Brunei (21.3%).

	Nationality
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	Floods	Heat waves	Drought	Tropical storms	Landslides triggered by heavy rain	Sea level rise	My country is not exposed to climate change impacts
REGION	79.0%	51.4%	47.6%	47.4%	39.5%	31.0%	1.4%
BN	60.0%	54.4%	27.5%	31.3%	39.4%	23.8%	21.3%
KH	69.1%	47.5%	50.2%	44.7%	14.3%	16.1%	19.4%
ID	78.4%	51.4%	51.4%	46.3%	41.2%	31.4%	0.0%
LA	48.1%	47.5%	58.2%	43.0%	24.7%	13.9%	21.5%
MY	88.8%	69.5%	30.1%	18.1%	60.6%	32.8%	0.0%
MM	65.2%	61.7%	32.2%	53.7%	35.7%	13.2%	12.8%
PH	81.3%	34.9%	33.2%	77.4%	46.8%	26.4%	0.0%
SG	65.6%	85.3%	22.2%	20.4%	20.4%	86.0%	0.0%
TH	78.7%	58.0%	78.7%	26.6%	21.7%	36.2%	0.0%
VN	77.8%	53.9%	52.2%	30.4%	40.4%	45.2%	0.0%



City Type

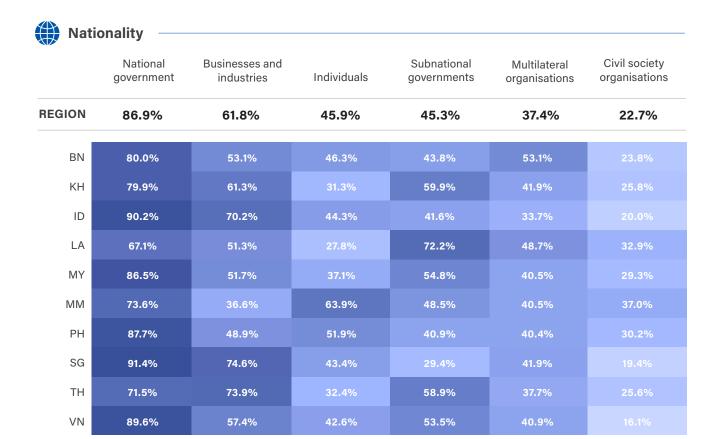
	Floods	Heat waves	Drought	Tropical storms	Landslides triggered by heavy rain	Sea level rise	My country is not exposed to climate change impacts
Metropolitan	74.1%	65.8%	38.8%	33.2%	34.2%	44.2%	3.2%
Mid-sized	69.2%	50.0%	46.6%	47.2%	40.7%	21.5%	8.3%
Town	70.9%	49.8%	47.5%	40.6%	33.9%	24.7%	10.9%
Rural	67.8%	46.8%	48.0%	45.0%	35.1%	22.2%	11.7%



In your opinion, who are the top three groups responsible for tackling climate change in your country? (Select three choices)

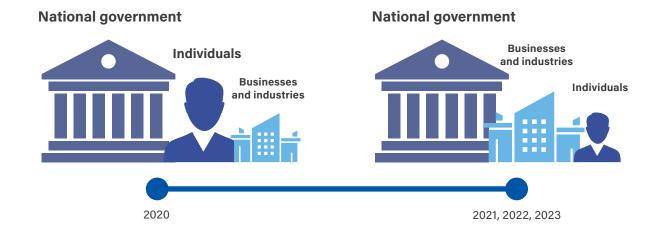
National governments (86.9%), businesses and industries (61.8%), and individuals (45.9%) are perceived as the top three stakeholders responsible for tackling climate change. These top three choices are similar in 2021 and 2022. Brunei respondents include multilateral organisations in their top three choices, meanwhile Vietnam respondents put subnational governments among their top three choices.

The largest attribution of responsibility for climate change is still skewed towards national governments, suggesting that ASEAN citizens strongly expect their national governments to be at the forefront in articulating clearer climate visions and regulations for their economies. Businesses and individuals also rank highly for responsibility for climate action.





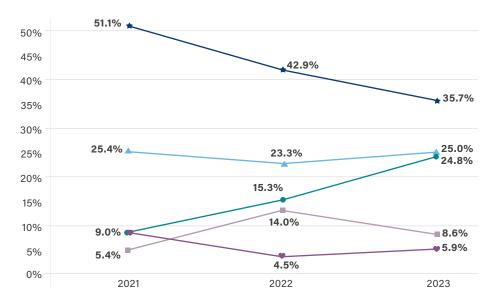
Top 3 in the Region



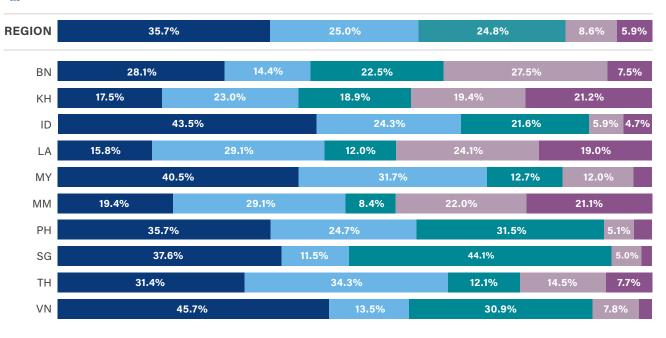
12 Hov

How would you rate your national government's policies and actions taken in support of climate change?

The largest proportion of Southeast Asian respondents (35.7%) think that their government is aware of climate threats but does not allocate sufficient resources to address them. This view is stronger in Vietnam (45.7%), Indonesia (43.5%), and Malaysia (40.5%). Meanwhile, only 24.8% of Southeast Asian respondents agree that their government considers climate change an urgent national priority and allocates sufficient resources to address this threat. This positive view resonates with Singapore respondents (44.1%). Overall, the sceptical view that governments are aware of climate threats but have not allocated resources to address them has declined from 51.1% in 2021 to 35.7% this year. Meanwhile, the views that governments have allocated resources to address climate change or have not given attention to climate change saw an increase from 15.3% in 2022 to 24.8% and 23.3% in 2022 to 25.0% respectively.







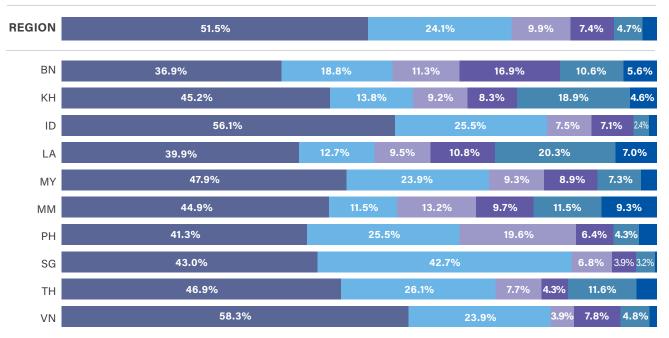
- My government is aware of the threats but does not allocate sufficient resources to address them
- My government is not giving enough attention to climate change
- My government considers climate change an urgent national priority and allocates sufficient resources to address this threat
- I don't know my government's view on climate change
- My government does not consider climate change as a threat

In your opinion, who should pay the greatest costs of climate change measures in your country?

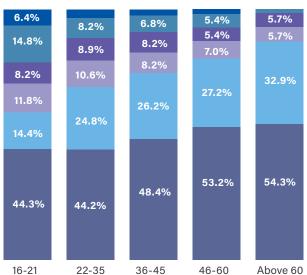
National governments (51.5%) are seen as the main stakeholder who should bear the cost of climate change measures, followed by business and industries (24.1%) and individuals (9.9%). These three choices are consistent with last year's results. Indeed, many studies have pointed out that governments have the power to increase their budgets, redistribute tax revenues collected from the public, and impose carbon taxes for climate measures (Morris, 2013). Southeast Asian respondents expect their national governments to take more of these policy actions.

Interestingly, the results also show that the older the respondents, the more likely they are to choose business and industries to be responsible for climate costs.









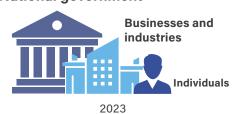
National government Businesses and industries Multilateral organisations (e.g. ASEAN, UN, multilateral development banks) Subnational governments Civil society organisations

Top 3 in the Region

National government



National government



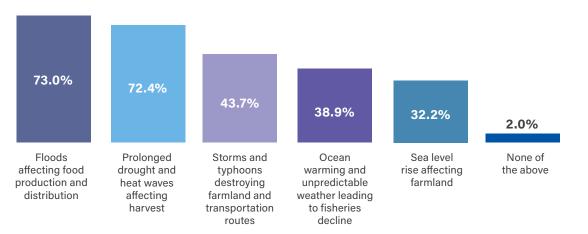
Which climate impacts are affecting your country's food availability? (Check all that apply)

Across Southeast Asia, residents highlight floods and droughts/heat waves as the main climate impacts affecting food availability.

Philippines respondents' biggest concern is storms and typhoons (81.3%). More than half of Vietnam respondents (51.3%) also highlighted concerns over sea level rise affecting farmland. Respondents from Singapore (47.1%), Malaysia (43.2%), Indonesia (42.4%) and the Philippines (42.1%) are also concerned about fishery decline due to ocean warming and unpredictable weather. This is also consistent with the Intergovernmental Panel on Climate Change (IPCC) findings that there will be a "decrease in total productive fisheries potential" due to sea level rise, salinisation of freshwater reservoirs, and ocean warming (IPCC, 2023).

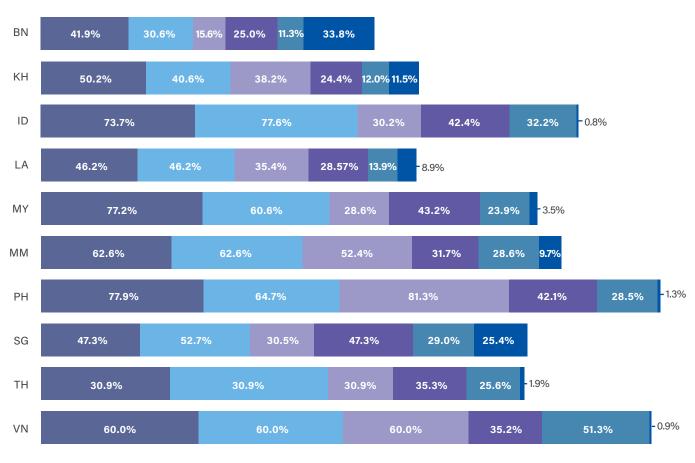


Region



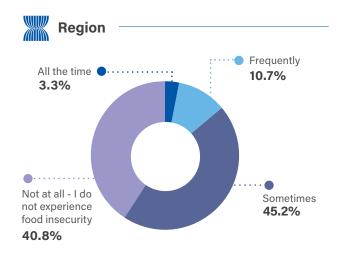


Nationality

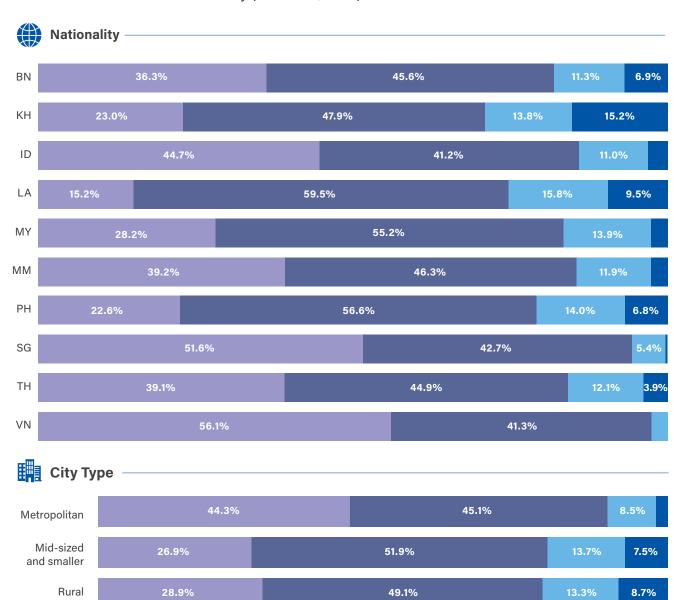


15 Which statement below best describes your experience with food insecurity?

Approximately 14.0% of Southeast Asia respondents say they experience food insecurity either "all the time" or "frequently". This is consistent with the United Nations Food and Agriculture Programme's (FAO) findings that approximately 16.4% of Southeast Asians experience moderate or severe food insecurity (FAO et al., 2023). Cambodia, Laos, Brunei and the Philippines have indicated the highest levels of experiencing food insecurity "all the time". Vietnam, Singapore and Indonesia participants indicated the lowest food insecurity levels.



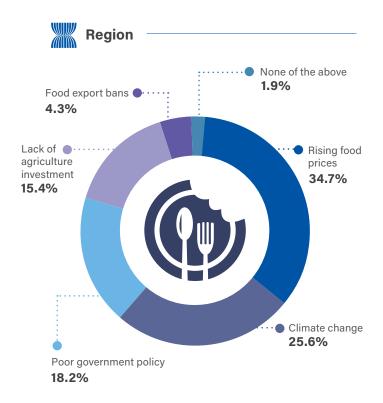
Less urbanised areas (rural, towns or mid-sized cities) experience greater food insecurity than those in metropolitan cities. This is also consistent with the findings by the FAO that cities have better access to affordable diets and food security (FAO et al., 2023).



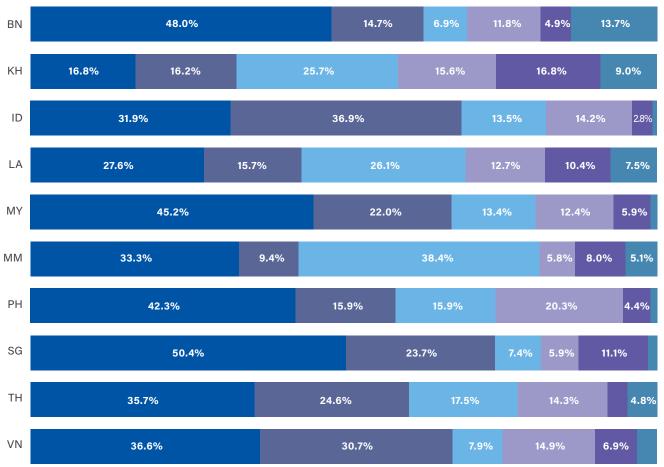
What do you think is the main cause of your food insecurity experience?

34.7% of regional respondents attribute food insecurity to rising food prices, followed by climate change (25.6%) and poor government policy (18.2%).

At the country level, approximately half of all respondents from import dependent Singapore and Brunei are concerned about rising prices as reasons for food insecurity. Indonesia and Vietnam respondents have relatively higher concerns about climate change at 36.9% and 30.7% respectively when compared to the region. Whereas the biggest concern in Myanmar is poor government policy which is unsurprising considering current civil strife, a quarter of respondents in Cambodia and Laos also highlighted poor government policy as reasons for food insecurity. Among the countries, Cambodia (16.8%) and Singapore (11.1%) are concerned about food insecurity caused by export bans.







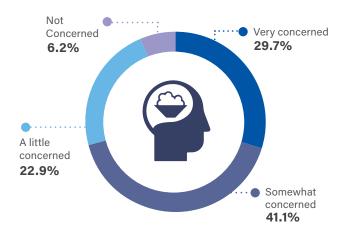
How concerned are you about climate change impacts on food availability and affordability in the next 3 years?

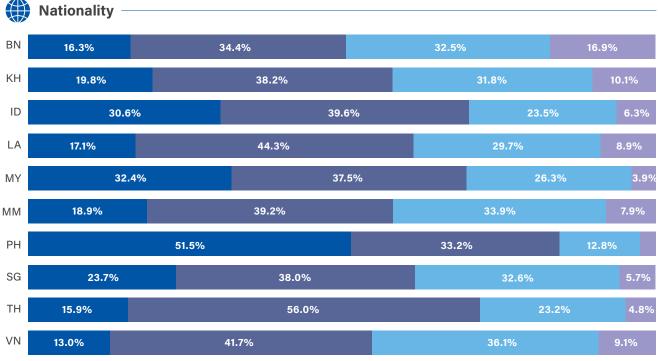
More than two-thirds of regional respondents indicated "somewhat" or "very concerned" about climate change impacts on food availability and affordability in the next three years. More than half of Philippines respondents are "very concerned". Seven in ten respondents in Malaysia (69.9%) and Indonesia (70.2%) are either "very concerned" or "somewhat concerned".

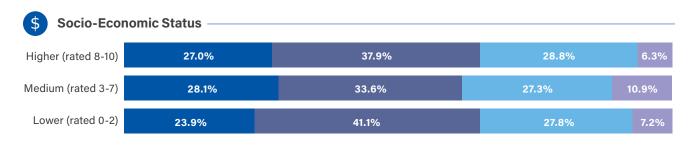
Counter-intuitively, concerns over climate change impacts on food availability and affordability seems to be even across all socio-economic groups- indicating food security is a concern irrespective of income level.



Region

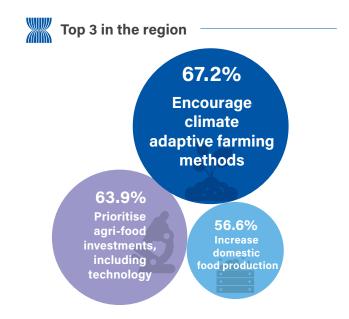






Global food security is currently affected by climate change, geopolitical stress, and sustained inflation. What should be your government's priority in addressing this crisis? (Choose three preferred options)

Majority of Southeast Asia respondents prioritise the need for climate adaptive farming methods, increase in domestic food production and agri-food investments. Most countries are resistant towards banning food exports, with exception of Cambodia (47.5%), Laos, (36.7%), and Myanmar (26.9%), possibly as these countries see their neighbouring countries with greater purchasing power buying their crops. Only a quarter of Southeast Asians consider food subsidies a priority. Reducing food loss and waste is important in Singapore, Malaysia, and Thailand. Vietnam, Thailand and the Philippines – countries with significant fishery industries – are also concerned about reducing ocean pollution to protect fisheries and expand aquaculture.





	Encourage climate adaptive farming methods	Prioritise agri-food investments, including technology	Increase domestic food production	Reduce food loss and waste, and encourage circular solutions	Reduce ocean pollution to protect fisheries, and expand aquaculture	Provide food subsidies	Keep trading channels and supply chains open	Ban exports of food to other countries
REGION	67.2%	63.9%	56.6%	37.6%	31.6%	19.4%	13.8%	10.0%
BN	52.5%	35.6%	56.9%	34.4%	31.9%	35.0%	26.9%	26.9%
КН	66.8%	39.2%	69.6%	14.3%	13.4%	24.4%	24.9%	47.5%
ID	63.5%	67.1%	69.0%	36.5%	27.8%	17.3%	7.8%	11.0%
LA	68.4%	38.6%	59.5%	16.5%	17.1%	24.1%	39.2%	36.7%
MY	51.7%	53.3%	51.7%	48.6%	30.9%	29.7%	16.6%	17.4%
ММ	60.8%	39.6%	61.7%	27.3%	14.5%	26.4%	42.7%	26.9%
PH	70.6%	67.7%	46.8%	40.4%	33.6%	24.3%	8.9%	7.7%
SG	36.2%	45.5%	50.5%	62.0%	26.9%	35.8%	37.6%	5.4%
ТН	73.4%	62.8%	30.0%	51.7%	41.5%	20.3%	10.6%	9.7%
VN	70.9%	58.3%	43.0%	40.4%	44.8%	14.8%	22.2%	5.7%

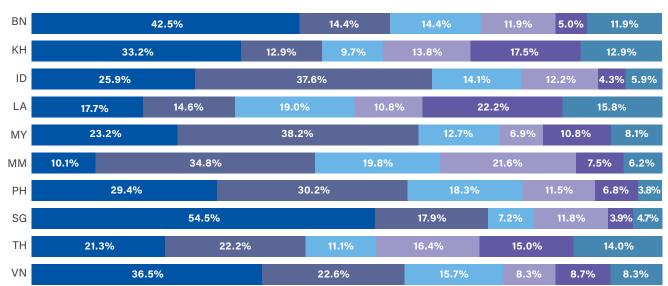
In your opinion, who has been the most active in tackling climate change in your country?

Although Southeast Asians believe that their national governments must be responsible for climate change, the majority of respondents argue that civil society organisations (30.2%) are the most active in tackling climate change in their country. This view is strongly shared by Malaysia (38.2%), Indonesia (37.6%), Myanmar (34.8%), and the Philippines (30.2%) respondents. Singapore, Brunei Darussalam, Cambodia, and Vietnam have the largest proportion of those who think their national governments are most active. Laos, on the other hand, claim that subnational governments are most active. Southeast Asia respondents also perceive that businesses are among the least active in climate action, even as they view businesses as being the second largest stakeholder group with the responsibility of tackling climate change.

The higher the educational attainment of the respondents, the more likely they are to think that civil society is the most active in taking steps for the climate.

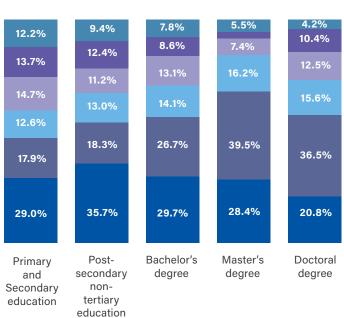


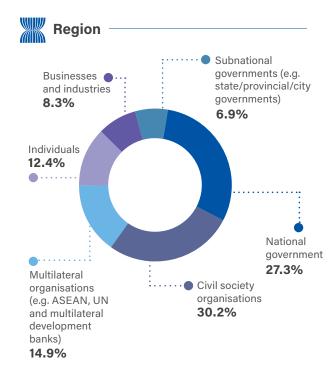
Nationality





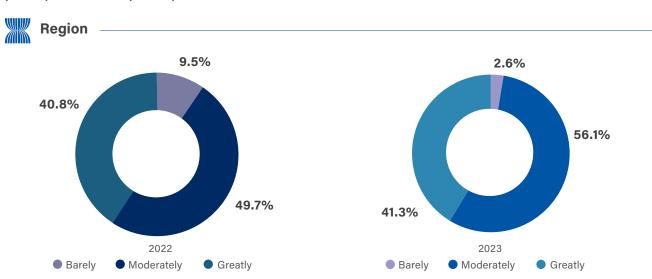
Education





On a scale of 0-10, to what extent do you think climate change impacts will negatively affect your life in 10 years' time (2033)?

56.1% of Southeast Asians say with moderate confidence that extreme weather events and climate impacts will affect them personally whereas 41.3% say with greater confidence that they will suffer impacts in ten years' time. Across the region, respondents from the Philippines (67.2%) are more likely to experience impacts first-hand which corroborates with current lived experiences. This is significantly higher compared to the regional average of 41.3%. At the regional average level, 2.6% believe that they are not likely to experience impacts in ten years with the largest proportion of them coming from Myanmar (21.6%) and Brunei (20.6%).



	Nationality —		
	Barely (0-2)	Moderately (3-7)	Greatly (8-10)
BN	20.6%	53.1%	26.3%
KH	16.6%	56.2%	27.2%
ID	0.8%	38.8%	60.4%
LA	13.3%	61.4%	25.3%
MY	0.4%	49.8%	49.8%
MM	21.6%	55.1%	23.3%
PH	0.4%	32.3%	67.2%
SG	2.2%	51.3%	46.6%
TH	3.9%	41.5%	54.6%
VN	0.4%	40.4%	59.1%

ii									
	Barely (0-2)	Moderately (3-7)	Greatly (8-10)						
16-21	12.6%	52.8%	34.6%						
21-35	7.7%	46.7%	45.7%						
36-45	3.3%	45.8%	50.9%						
46-60	3.8%	44.0%	52.2%						
Above 60	0.0%	45.7%	54.3%						

21

Which statement below best describes your level of participation in climate advocacy? (Check all that apply)

Majority of respondents across the region tend to be more passive in climate action by following news and sharing information about climate change (75.2%), followed by adopting more sustainable lifestyle options (49.9%). Brunei has the largest proportion of respondents who neither participates in, nor follows climate-related issues (30.6%).

Interestingly, older respondents, especially those above 46 years old tend to be more engaged in following news and sharing information about climate change and adopt more sustainable lifestyle. Similarly, those who are economically well-off are more likely to participate in these types of activities.

	(1) I follow news and share information about climate change	(2) I adopt more sustainable lifestyle options and encourage others to do so		(4) I join climate movement groups and attend seminars	(5) I sign petitions	(6) I lead a project and mobilise support on climate change awareness	(7) I don't participate in or follow climate change issues	(8) I contact my local political representatives	(9) I attend protests
REGION	75.2%	49.9%	22.0%	21.0%	18.2%	11.0%	5.9%	4.7%	4.3%
BN	53.8%	18.8%	5.6%	13.1%	8.1%	6.9%	30.6%	1.9%	1.3%
KH	61.3%	15.7%	11.5%	25.3%	18.9%	21.2%	6.0%	11.1%	5.5%
ID	78.0%	44.3%	19.2%	22.0%	16.5%	11.0%	4.7%	4.7%	4.3%
LA	58.9%	8.9%	11.4%	30.4%	3.8%	19.0%	10.8%	11.4%	4.4%
MY	71.4%	43.2%	24.7%	23.6%	27.0%	12.4%	10.4%	6.6%	5.4%
MM	59.0%	29.1%	26.4%	15.0%	14.5%	14.5%	10.1%	5.3%	6.2%
PH	81.7%	58.7%	19.6%	26.4%	18.7%	14.9%	4.7%	4.3%	3.0%
SG	57.7%	56.3%	14.3%	17.6%	17.6%	7.9%	16.1%	2.9%	3.2%
TH	71.0%	43.0%	21.7%	14.5%	12.1%	6.3%	14.5%	7.7%	3.9%
VN	77.8%	66.5%	33.5%	25.2%	17.8%	13.5%	1.7%	4.8%	11.3%
∔ Age	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16-21	60.2%	25.4%	18.1%	21.9%	15.9%	13.6%	13.8%	5.6%	5.4%
21-35	69.0%	41.1%	21.8%	23.7%	17.6%	13.5%	9.6%	6.7%	5.9%
36-45	69.4%	46.3%	16.8%	19.4%	14.7%	14.3%	8.9%	6.1%	4.2%
46-60	71.5%	50.3%	19.3%	17.1%	13.0%	7.9%	10.4%	4.7%	3.5%
bove 60	75.7%	64.3%	14.3%	17.1%	28.6%	5.7%	5.7%	1.4%	0.0%
\$ Soc	rio-Econor	mic Status							
000	2001101		(2) (3) (4)	(5)	(6)	(7)	(8)	(9)
Higher (rat	ed 8-10)	2.3% 42	2.9% 18.8	3% 27.9%	6 16.5%	6 14.1%	6.3%	8.9.%	7.4%
		_	_		_				
Lower (ra	ted 0-2)	51.6% 19).5% 16.4	!% 16.4%	6 10.9%	6 14.1%	20.3%	4.7%	6.3%

What changes have you made to your lifestyle for the sake of climate action? (Check all that apply)

83.7% of Southeast Asian respondents claim that they take climate action by reducing the use of singleuse plastics. This measure is shared widely in all ASEAN countries. More than half of the respondents also say they actively reduce their use of electricity (56.9%). Brunei has the highest proportion of respondents who did not choose any climate measures (11.9%) compared to other regional countries. Interestingly, Singapore has a significant proportion of respondents (65.9%) who use public transportation, walking, and cycling to reduce their carbon footprint.

Respondents who live in metropolitan cities tend to use public transport, walking and cycling as well as reduce their electricity consumption more than respondents who live in smaller cities.

Nat	ionality —	
	I reduce my use of plastics (e g disposable containers, plastic bags)	I actively reduce my electricity use (eg by not using air conditioning)
REGION	83.7%	56.9%
BN	66.3%	34.3%

I choose public transport, walking or cycling

43.8%

I purchase secondhand items

25.5%

I grow my own food because of concern of climate change impact on food availability

25.1%

I reduce or eliminate mv meat consumption

18.1%

None of the above

1.2%

	0011 70	001070	10.070	20.070	201170	101170	11270
BN	66.3%	34.3%	10.6%	24.4%	15.6%	8.1%	11.9%
KH	71.0%	33.2%	20.3%	11.5%	30.4%	9.7%	6.5%
ID	85.9%	59.6%	42.7%	23.1%	19.6%	13.7%	0.0%
LA	59.5%	27.2%	14.6%	12.7%	26.6%	14.6%	8.2%
MY	80.7%	51.7%	34.7%	28.6%	22.8%	20.8%	2.7%
MM	77.1%	35.7%	27.8%	21.1%	21.1%	12.8%	5.3%
PH	84.7%	48.9%	49.8%	29.8%	34.5%	17.9%	0.9%
SG	82.4%	62.0%	65.9%	29.7%	10.8%	26.5%	2.2%
TH	79.2%	44.0%	40.1%	24.2%	21.3%	10.6%	2.4%
VN	87.4%	68.3%	54.3%	39.6%	25.5%	21.3%	0.9%



City Type

	I reduce my use of plastics (e g disposable containers, plastic bags)	I actively reduce my electricity use (eg by not using air conditioning)	I choose public transport, walking or cycling	I purchase secondhand items	f grow my own food because of concern of climate change impact on food availability	I reduce or eliminate my meat consumption	None of the above
Metropolitan	82.3%	53.8%	47.7%	26.4%	19.9%	18.8%	1.9%
Mid-sized	74.6%	46.9%	29.5%	21.2%	25.9%	15.3%	3.9%
Town	74.5%	36.2%	23.8%	22.2%	25.3%	11.6%	6.8%
Rural	72.3%	43.9%	29.5%	27.7%	30.1%	12.1%	4.6%

SECTION III

CLIMATE TRANSITION ISSUES



Decarbonisation is understood as the process of reducing or removing greenhouse gas emissions from economic activities. The biggest obstacle to decarbonisation in my country is:

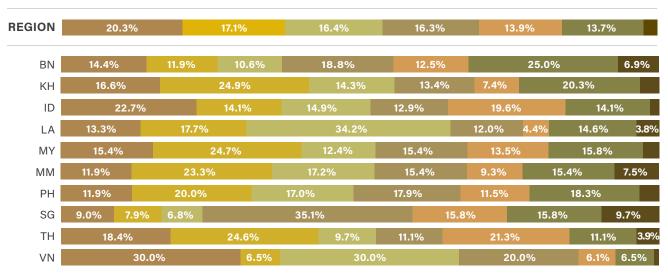
Regional respondents view the lack of R&D, technology and expertise as the largest obstacle to decarbonisation (20.3%), followed by the absence of political will (17.1%) and insufficient financial resources (16.4%). The relevance of these three challenges have been identified in literature on decarbonisation in ASEAN (Seah et al., 2023).

Another 16.3% of respondents believe that the biggest obstacle to decarbonisation is insufficient alternative energy sources. Yet, as highlighted in several studies (International Renewable Energy Agency & ASEAN Centre for Energy, 2022), ASEAN has enormous solar and wind potential, which can be harnessed to supply as much as two-thirds of the region's energy demand. Deeper analysis into respondent profiles show that those working in media are most likely to believe that ASEAN does not have enough alternative energy sources, which is particularly concerning given the important role media plays in shaping public opinion. This points towards the need for greater awareness about ASEAN's alternative energy sources among the region's media and wider citizenry. Respondents belonging to academia, think-tanks and research institutions see political will as the biggest obstacle, while those from business are most likely to identify the lack of R&D as a challenge to decarbonisation.

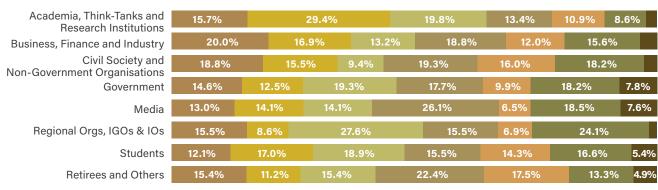
At the country level, Vietnam respondents give equal importance to the lack of R&D (30.0%) and insufficient financial resources (30.0%), while respondents from Cambodia (24.9%), Malaysia (24.7%) and Thailand (24.6%) give the most weight to the lack of political will as a barrier to decarbonisation.



Nationality



Affiliation



- Lack of R&D, technology and expertise
- Insufficient alternative energy resources
- Absence of political will Insufficient financial resources
- Other domestic priorities (e.g. right to development, economic recovery)
- Lack of public support Energy insecurity from geo-political events (e.g. war in Ukraine, US-China rivalry)

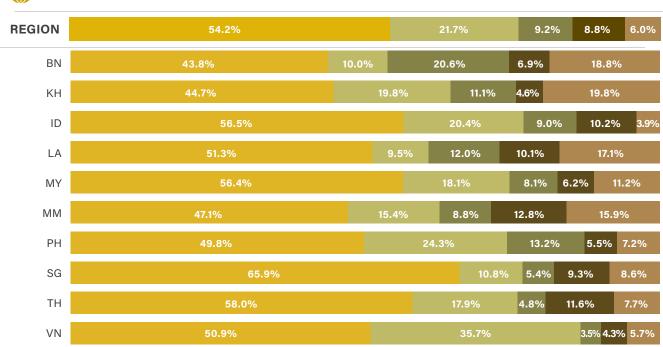
What is your top concern about the impact of transitioning to renewable energy/cutting fossil fuels?

The biggest concern regarding transitioning to renewables is rising energy prices and cost of living (54.2%), followed by energy shortages (21.7%). A little less than 10% of respondents do not foresee any negative impacts associated with transition. While international organisations and academics have argued that energy transition can widen inequality (Setyowati & Quist, 2022) and lead to redundancies in some industries (International Labour Organization, 2022), these issues were not seen as major concerns by regional respondents.

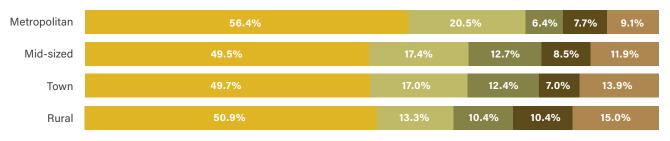
Respondents from Singapore and Thailand are most worried about rising energy prices. Relatively higher electricity prices in Singapore and recent increases in tariffs in Thailand (Bangkok Post, 2023a) may have influenced these perceptions. Energy shortages are a key concern in Vietnam, which experienced severe blackouts in June this year (Vu et al., 2023). Cambodia respondents are more worried about job losses than the rest of the region, while a significant number of respondents from Brunei do not foresee any negative impacts of transition.

Respondents from metropolitan cities are most concerned about rising energy prices and energy shortages. Those based in rural areas express the highest level of concern about loss of jobs and widening social inequality, issues that are given less prominence at the regional level.









Rising energy prices and cost of living
 I do not foresee negative impacts

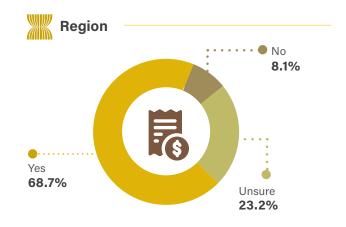
Energy shortagesWidening social inequality

Loss of jobs

Would you support a national carbon tax?

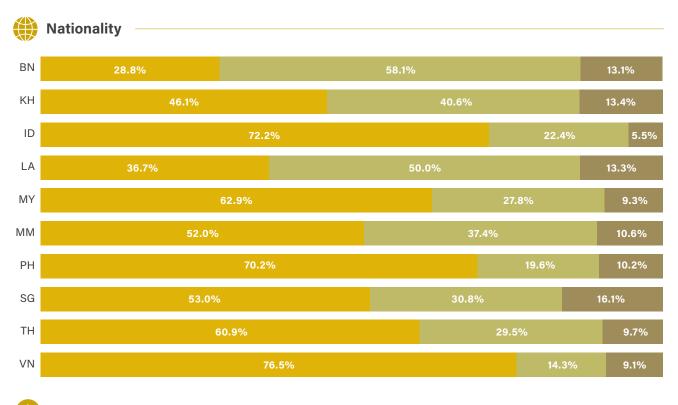
Respondents from Vietnam (76.5%), Indonesia (72.2%), and the Philippines (70.2%) are the most supportive of a national carbon tax compared to the 68.7% of regional respondents. Meanwhile, 58.1% of Brunei and 50.0% of Lao respondents are unsure about this policy.

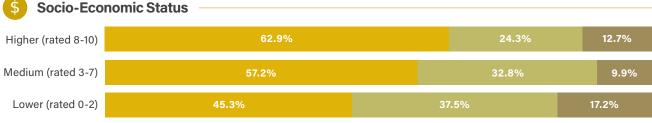
Currently, only two countries in the region have imposed a national carbon pricing policy. In 2019, Singapore set a carbon tax at S\$5/tCO₂e (US\$3.7) and is committed to raise it to S\$25/tCO₂e for 2024, and S\$45/tCO₂e by



2026, and possibly S\$80/tCO $_2$ e by 2030 (Thomas, 2023). Indonesia, one of the world's top coal producers, had set up a regulation to impose a carbon tax at US\$2/tCO $_2$ e on coal power plants. However, the implementation has been postponed likely until 2025 (International Carbon Action Partnership, 2023). Other countries such as Malaysia and Thailand are considering building emission trading systems and have launched voluntary carbon exchanges.

The higher the socio-economic status of respondents, the higher the acceptance of a carbon tax for climate, indicating that those who are in the lower end of socio-economic status are more concerned about bread-and-butter issues than climate challenges.

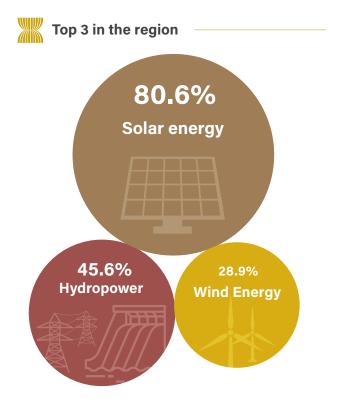




In your view, which sources of clean energy have the greatest potential in your country (Select your top two choices)?

Survey respondents show similar preferences for renewable energy sources as last year. Solar received the highest levels of approval (80.6%), followed by hydropower (45.6%) and wind (28.9%). Nuclear energy received the lowest levels of support (5.6%). Hydropower and geothermal energy have the strongest support from Indonesia respondents, while Singapore respondents have the most favourable perceptions about green hydrogen, biofuels and nuclear energy.

Respondents from Vietnam are the region's biggest supporters of wind energy. Vietnam has prioritised wind over solar energy in its latest Power Development Plan (Merdekawati et al., 2022). For most of these countries, perceptions favouring particular energy sources may reflect their availability as well as the number of projects which are proposed or under construction. However, for alternative-energy challenged Singapore, it may be the lack of resources within the country that make nuclear energy a more viable option.



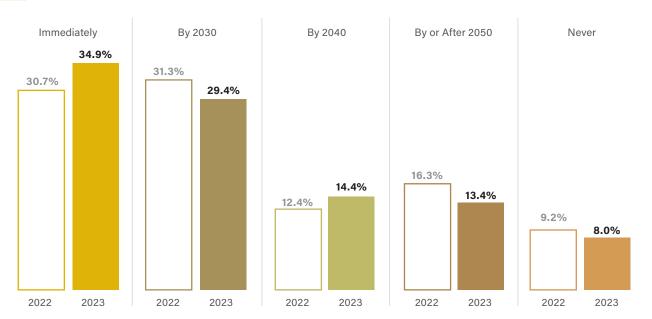
Nationality Tidal Geothermal Green Nuclear Biofuel Solar energy Hydropower Wind energy energy hydrogen energy energy 80.6% **REGION** 45.6% 28.9% 13.9% 11.1% 7.6% 6.6% 5.6% 85.0% 20.6% 30.6% 21.9% 4.4% ΒN 67.7% 31.3% 45.2% 20.3% 6.0% 5.5% KΗ ID 58.0% 3.5% 4.7% 76.1% 9.4% 7.8% LA 39.9% 71.5% 41.1% 6.3% 3.8% 19.0% 4.4% MY 90.3% 51.4% 5.8% 2.7% 5.0% MM 80.2% 55.1% 4.8% 1.8% 8.4% PH 78.7% 33.3% 37.9% 5.1% 6.8% 8.5% SG 22.9% 86.0% 19.7% 5.4% 26.9% 8.2% TH 85.0% 50.2% 26.6% 4.8% 5.3% 2.4% 7.2% VN 86.5% 5.2% 66.1% 5.2% 6.5% 5.7%

27 My country should phase out coal consumption by...

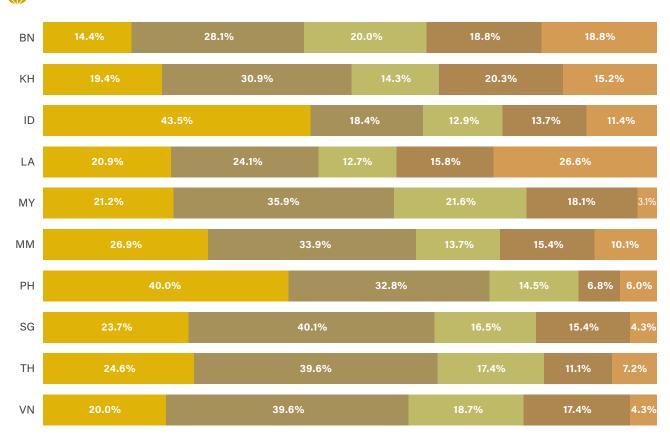
Southeast Asian respondents show strong support for phasing out coal, which includes those who want it done immediately (34.9%), and others who prefer a timeline of 2030 (29.4%) or 2040 (14.4%). 13.4% of respondents prefer coal to be phased out by or after 2050, while only 8.0% believe that coal should never be phased out. Respondents from Indonesia and the Philippines are most likely to support the immediate phasing out of coal, while respondents from Singapore, Thailand, and Vietnam prefer to wait until 2030.







Nationality



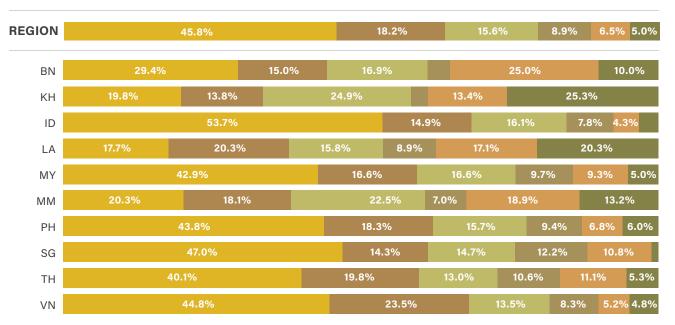
Natural gas is a fossil fuel which produces fewer greenhouse emissions than coal. Which statement best describes your view of natural gas?

The most popular opinion, held by 45.8% of the region's respondents is that while natural gas is a temporary replacement for coal, countries must strive towards developing renewable energy generation. 18.2% of respondents believe that natural gas is an ideal replacement for coal, while 15.6% want natural gas to be used along with coal. Indonesia respondents provide the highest support for using gas as a temporary fuel source. Respondents from Vietnam are the region's strongest advocates for replacing coal with gas. A significant number of respondents in Myanmar and Cambodia believe that both coal and gas should be part of their country's energy mix.

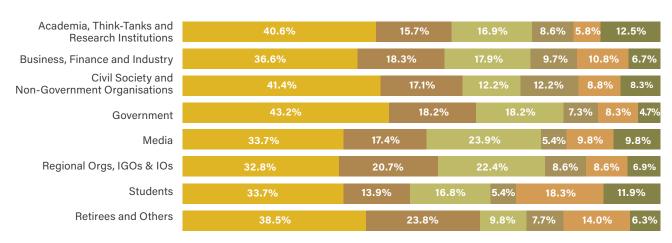
Respondents from government, civil society, and academia express the strongest support for using gas as a temporary replacement for coal, while retirees and regional organisations are most convinced about gas being an ideal replacement for coal. The biggest support for using both coal and gas comes from media respondents.



Nationality







- Natural gas is a good temporary replacement for coal, but my country should still work towards renewable energy
- Natural gas is an ideal fuel to replace coal
 Natural gas can be part of the energy mix for my country along with coal
- Coal should be replaced by renewable energy, not natural gas

 Not sure

 Natural gas should not replace coal

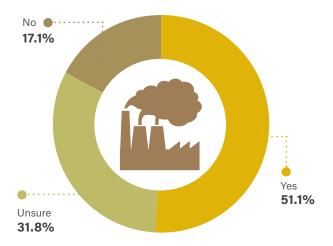
Fossil fuel subsidies can hinder clean energy transition. Should fossil fuel subsidies be cut in your country?

Around half of the respondents from the region (51.1%) believe that fossil fuel subsidies should be cut in their country, while 31.8% are unsure and 17.1% disagree. Respondents from Vietnam, Singapore and Thailand express the strongest support for cutting subsidies. The largest group of respondents who are unsure or do not want fossil fuel subsidies to be cut are from Brunei.

Predictably, socio-economic considerations play a role in perceptions towards subsidies. Those with more purchasing power are more open to cutting subsidies. Policies to reduce fossil fuel subsidies should thus account for impacts on vulnerable groups. In addition, many respondents at the medium and lower ranks of the socio-economic scale were unsure about the topic, signifying that the topic of fossil fuel subsidies remain obscure and greater public engagement may enable people to make more informed decisions about energy use.



Region





BN	22.5%	55.0%	55.0%				
KH	52.1%		37.3%	10.6%			
ID	45.1%	35.3°	35.3%				
LA	48.1%		38.0%		13.9%		
MY	49.8%	27.	27.8%				
MM	45.4%	4	40.1%				
PH	47.7%	34	34.9%				
SG	61.6%		27.6%	,	10.8%		
TH	57.0%		31.9%		11.1%		
VN	64.8%		23.5%				

\$

Socio-Economic Status

Higher (rated 8-10)	58.7%	26.8%	14.5%
Medium (rated 3-7)	48.6%	35.7%	15.7%
Lower (rated 0-2)	46.1%	40.6%	13.3%

Note: ASEAN values for Questions 30 - 36 are based on equal weightages by country.

30

What should ASEAN do to accelerate a clean energy transition? (Choose three options):

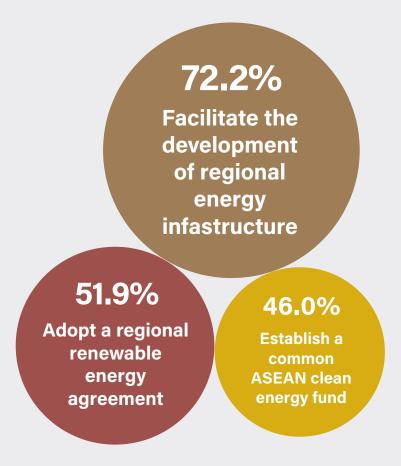
Discussions on accelerating ASEAN's clean energy transition have started but not in any manner that necessitates collective action as every country is more focused on meeting individual Paris Agreement goals. This question was meant to prompt respondents to think about the possibilities of what the region can do together. The results have been given equal weight as opposed to the other questions that were weighted by population and age.

In this question where respondents are asked to pick three choices out of seven, majority of Southeast Asians chose the facilitation of regional energy infrastructure (72.2%), the adoption of a regional renewable energy agreement (51.9%) and the establishment of a common ASEAN clean energy fund (46.0%) as their top three choices. The development of energy infrastructure is without exception the region's top choice with 83.5% of Indonesian respondents choosing this option over other options. The second-ranked option of adopting a renewable energy agreement across the region had its greatest support from Cambodia at 62.7% whereas the establishment of a common fund found most support from Vietnam at 58.7%. Interestingly, the idea of a regional carbon trading system is ranked last, perhaps due to the lack of knowledge of how such a trading system could work to facilitate clean energy adoption.

Retirees and those affiliated with academia, businesses and industries tend to be more supportive of facilitating the development of energy infrastructure compared to other groups. Adoption of a renewable energy agreement and establishment of a common ASEAN clean energy fund saw significant support from regional organisations, inter-government, and international organisations.



Top 3 in ASEAN





IVa	Facilitate the development of regional energy infastructures	Adopt a regional renewable energy agreement	Establish a common ASEAN clean energy fund	Harmonise energy efficiency standards	Facilitate training and education of energy officials	Facilitate cross-border electricity trade	Set up a regional carbon trading system
ASEAN	72.2%	51.9%	46.0%	37.9%	35.5%	31.7%	24.8%
BN	61.9%	50.6%	50.6%	35.0%	41.9%	34.4%	25.6%
KH	65.4%	62.7%	30.4%	43.8%	21.7%	47.0%	29.0%
ID	83.5%	45.9%	48.6%	45.1%	25.9%	23.9%	27.1%
LA	66.5%	53.8%	31.0%	52.5%	27.8%	48.7%	19.6%
MY	74.5%	49.8%	51.7%	33.6%	38.2%	29.0%	23.2%
ММ	71.8%	55.5%	37.9%	35.7%	43.2%	33.9%	22.0%
PH	74.5%	54.9%	54.5%	27.7%	46.4%	22.1%	20.0%
SG	69.9%	52.7%	41.9%	30.8%	33.0%	41.6%	30.1%
TH	75.4%	51.2%	55.6%	40.6%	28.0%	16.4%	32.9%
VN	77.8%	41.3%	58.7%	33.9%	50.0%	20.4%	17.8%

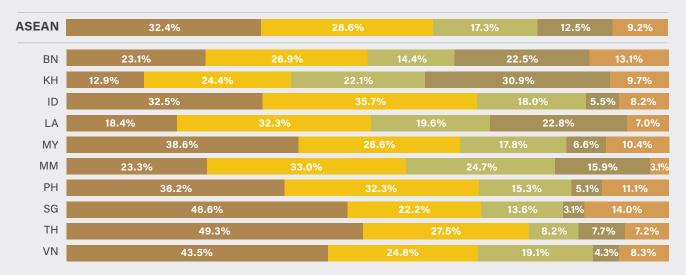
	of regional renewable col energy energy ASEA infastructures agreement ener		Establish a common ASEAN clean energy fund	Harmonise energy efficiency standards	Facilitate training and education of energy officials	Facilitate cross-border electricity trade	Set up a regional carbon trading system
Academia, Think-Tanks and Research Institutions	77.0%	53.0%	37.1%	35.5%	29.1%	40.6%	27.8%
Business, Finance and Industry	76.5%	49.2%	47.8%	39.5%	34.4%	30.3%	22.4%
Civil Society and Non- Government Organisations	68.5%	54.1%	53.0%	34.3%	40.9%	26.0%	23.2%
Government	60.4%	56.3%	45.8%	35.4%	38.5%	33.3%	30.2%
Media	70.7%	54.3%	44.6%	31.5%	25.0%	45.7%	28.3%
Regional Orgs, IGOs & IOs	72.4%	58.6%	56.9%	29.3%	27.6%	24.1%	31.0%
Students	69.9%	51.8%	45.7%	38.0%	41.0%	28.3%	25.4%
Retirees and Others	77.6%	49.0%	51.0%	40.6%	38.5%	22.4%	21.0%

Which statement best reflects your view of the use of coal power?

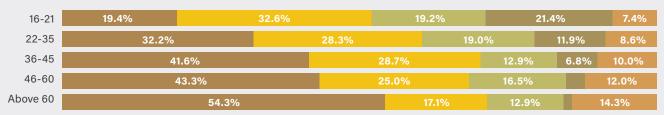
32.4% of the region's citizens support the closing of existing coal plants and the transition to another fuel source. This opinion was most popular in Thailand, Singapore and Vietnam. 28.5% of respondents believe that while coal is beneficial to economic development, the resulting emissions are a concern. This perception is most prevalent among respondents from Indonesia and Myanmar. The third most popular opinion (17.3%) is that coal use should be continued but no new plants should be commissioned. 9.2% of ASEAN citizens advocate the immediate closing of coal plants, while 12.5% support building new coal plants. While a majority of respondents express some level of concern regarding coal, as much as 15.0% of the global coal pipeline is located in ASEAN (Fuentes & Chapman, 2021). The region is expected to be a leader in coal expansion in the future, which will increase emissions and undermine energy security (Chen & Mauzerall, 2021).

Interestingly, the older a respondent is, the stronger the support for closing down coal plants and transitioning to another fuel source. Youths aged 16-21 are the largest supporters of building new coal power plants.

Nationality







\$

Socio-Economic Status

Higher (rated 8-10)	29.9%	32.4%		16.3%	ó	10.7%	10.7%
Medium (rated 3-7)	35.0%	27.5%	27.5%			11.0%	9.0%
Lower (rated 0-2)	26.6%	28.1%	18	3.0%		19.5%	7.8%

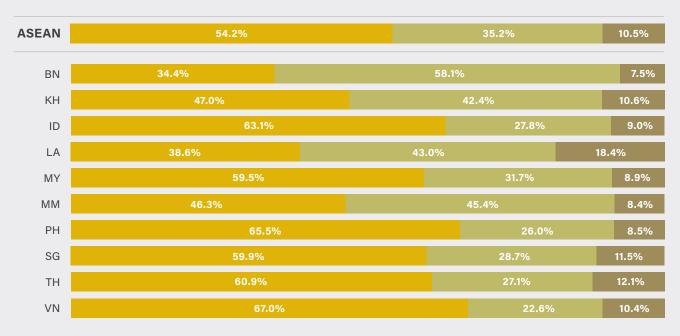
- Transition to another fuel source and close existing coal power plants
- Beneficial to economic development and should continue but emissions are a concern
- Keep using coal, but no more coal power plants should be built
- Beneficial to economic development and more coal power plants should be built
- Coal power should be stopped immediately

32 ASEAN countries should stop building new coal power plants immediately. Do you agree?

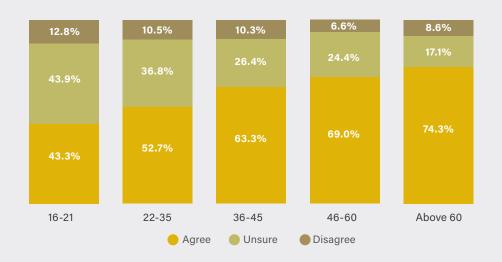
A majority of ASEAN citizens (54.2%) believe that their countries should stop building new coal power plants immediately, while a substantial number of respondents (35.2%) are unsure. Only 10.5% of respondents do not agree with ending coal plants immediately. On a positive note, citizens of countries that lead in the consumption and production of coal, such as Vietnam, the Philippines, and Indonesia are the strongest advocates of ending coal plants immediately. Some of these sentiments have been reflected in government policies. For example, in 2020, the Philippines announced a moratorium on new coal power plants, while Vietnam's Power Development Plan 8 envisions reducing coal's contribution to energy generation to 20% in 2030 and a complete phase-down by 2050 (Prime Minister of Vietnam, 2023). Laos respondents have the highest level of disagreement (18.4%) with ending coal plants, which may reflect the country's economic dependence on exporting coal-fired electricity to neighbouring countries (Mekong Eye, 2015).

Similar to the results of the previous question, there is a correlation between the age of a respondent and perceptions regarding coal, with older people opposing the development of new plants. A concerning finding is the high level of uncertainty among youths aged (16–21-year) regarding the issue, which shows that the younger generation is not informed about the environmental impact of coal plants.



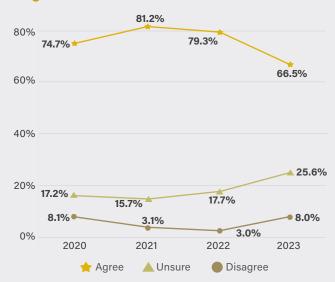






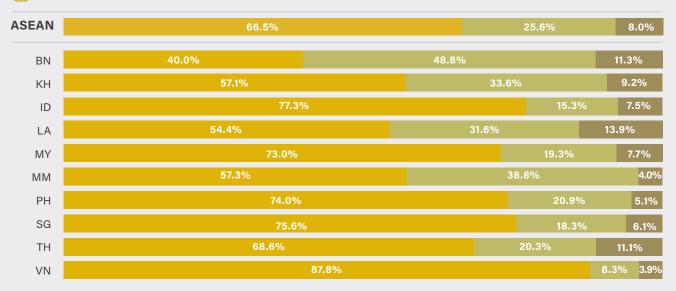
"Reduction of dependence on fossil fuels will be painful in the short term but beneficial to ASEAN economies in the long term." Do you agree?

A majority of ASEAN citizens (66.5%) believe that moving away from fossil fuels has long-term benefits, while only 8.0% disagree and 25.6% are unsure. This perception is the highest in Vietnam, followed by Indonesia and Singapore. Vietnam's contemporary success in increasing solar and wind generation (Do et al., 2021) and Indonesia's stated intention to capitalise on its critical mineral deposits (DW, 2023) may have driven positive perceptions of energy transition in these countries. Laos has the highest level of disagreement regarding the benefits of transition, while a significant number of respondents in Brunei and Myanmar are unsure about the issue.

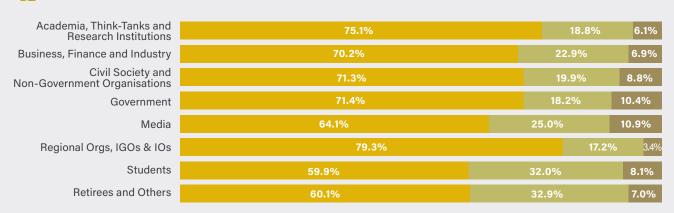


Analysis into the affiliations of the respondents reveal that regional, inter-governmental and international originations are the largest advocates of the benefits of moving away from fossil fuels, followed by academia, think-tanks and research institutions. The strongest levels of scepticism exist among respondents from media and the government, which is a cause of concern given that these two sectors play critical roles in raising awareness and implementing policies on transition.











Note: ASEAN values for Questions 30 - 36 are based on equal weightages by country.

34

Which ASEAN country has potential to be the region's climate leader?

38.7% of regional respondents believe that Singapore has the potential to be the region's climate leader with Indonesia as the second-ranked choice at 12.2%, followed by Thailand as the third choice at 11.6%. This is similar to the survey conducted last year.

Apart from 69.9% of Singapore respondents who chose their own country, Vietnam gave Singapore the second highest approval ratings at 50.4%, followed by 42.6% of Philippines respondents. Indonesia is the second choice preferred as a potential regional leader. Of those who chose Indonesia as the potential regional leader, the majority are Indonesia respondents at 58.0% followed by Cambodia at 13.4% and Singapore at 13.3%.

The perception that Singapore can be a climate leader in the region corresponds with Singapore's active efforts. In February 2021, the Singapore Parliament moved a motion to declare a climate emergency and called on the Government to take bolder action (Kurohi, 2021). To our knowledge, it is the only Southeast Asian Parliament to have done so. The Singapore Green Plan 2030 announced in 2022 outlined the national plan to step up Singapore's climate ambition. In addition, Singapore is also active in international climate cooperation having co-facilitated with Norway on the Article 6 negotiations for a new global carbon market mechanism (National Climate Change Secretariat Singapore, 2022).

Nat	ionality									
	(::				(*	*	*	A		*
ASEAN	38.7%	12.2%	11.6%	8.0%	6.5%	6.0%	5.9%	4.6%	3.8%	2.6%
BN	36.9%	5.6%	1.9%	37.5%	10.6%	1.9%	1.3%	1.3%	1.3%	1.9%
KH	18.4%	13.4%	4.1%	6.9%	5.1%	4.6%	2.8%	38.7%	2.3%	3.7%
ID	23.9%	58.0%	7.5%	2.7%	2.0%	1.2%	2.7%	1.2%	0.0%	0.8%
LA	25.9%	1.9%	22.8%	8.9%	2.5%	3.8%	3.2%	0.0%	30.4%	0.6%
MY	40.9%	11.2%	6.9%	6.9%	31.3%	0.8%	1.5%	0.0%	0.4%	0.0%
MM	39.6%	10.1%	12.3%	4.8%	2.6%	4.0%	4.4%	2.6%	1.3%	18.1%
PH	42.6%	3.0%	4.3%	3.8%	3.8%	36.6%	3.4%	2.1%	0.0%	0.4%
SG	69.9%	13.3%	3.6%	2.9%	3.6%	0.4%	6.1%	0.4%	0.0%	0.0%
TH	38.6%	2.4%	44.9%	3.9%	3.4%	3.4%	1.9%	0.0%	1.4%	0.0%
VN	50.4%	3.5%	7.8%	1.7%	0.4%	3.5%	31.7%	0.0%	0.4%	0.4%



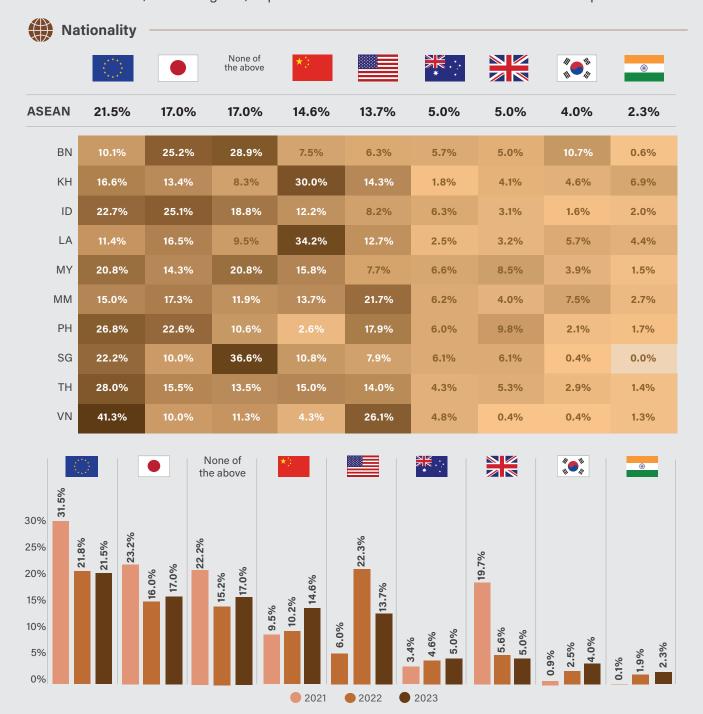
Top 3 in ASEAN



In your opinion, who has demonstrated climate leadership to help the world achieve Parisaligned goals?

The EU is ranked most favourably by 21.5% of regional respondents for demonstrating global climate leadership, overtaking the US last year², followed by Japan at 17.0%. Another 17.0% of respondents continue to believe that none of the countries have demonstrated leadership, tied at second place with Japan while China is ranked third by 14.6% of respondents.

The US, which was in the lead last year, dropped to second place by a near ten percentage point this year. Although the US purportedly passed the largest climate legislation in history last year, the Inflation Reduction Act (IRA) 2022 is not seen as helping the climate cause in Southeast Asia. On the contrary, the provisions of the IRA may be too onerous and tax credits questionable for Southeast Asia (Chen, 2023). The EU Green Deal that includes the EU Carbon Border Adjustment Mechanism (CBAM) may equally be viewed in less than favourable light but there is an implicit appreciation that companies and investments could, in the long-run, improve their standards and reduce their carbon footprint.



Which country is leading in global climate innovation (e.g. developing renewable energy technology, green buildings, nature-based solutions)?

23.7% regional respondents view that Japan is leading in global climate innovation, including developing renewable energy technology, green buildings, and nature-based solutions, followed by the EU in the second-rank choice at 17.8% and China in the third place at 17.5%.

The Philippines (33.6%), Indonesia (32.9%), Brunei (26.9%), and Myanmar (24.2%) respondents particularly gave the highest approval for Japan. Laos (29.1%), Cambodia (25.8%), Malaysia (22.0%) respondents gave China the highest approval. Meanwhile, the EU is the most popular choice among Vietnam (38.7%) and Thailand (21.7%) respondents. Interestingly, the majority of Singapore respondents chose none of the above at 24.0%.

Across affiliations, the views are rather split. Japan is top-of-mind for the media, government, businesses and industries, students, and retirees. The EU is popular among people from international organisations, civil society, and academia.

Nat	ionality								
			*;		None of the above	*	# * #		•
ASEAN	23.7%	17.8%	17.5%	14.1%	11.5%	4.7%	4.3%	4.2%	2.2%
BN	26.9%	8.8%	15.6%	8.8%	21.9%	1.9%	10.6%	4.4%	1.3%
KH	19.8%	14.7%	25.8%	14.3%	7.8%	4.6%	4.1%	1.8%	6.9%
ID	32.9%	21.2%	16.9%	8.2%	10.6%	4.7%	2.0%	3.5%	0.0%
LA	20.9%	5.7%	29.1%	15.8%	9.5%	2.5%	7.0%	3.8%	5.7%
MY	21.6%	20.5%	22.0%	8.9%	9.7%	6.2%	4.2%	5.4%	1.5%
MM	24.2%	9.7%	14.5%	25.6%	11.0%	3.5%	6.6%	1.3%	3.5%
PH	33.6%	17.9%	11.1%	13.6%	7.2%	6.4%	2.6%	6.8%	0.9%
SG	15.8%	19.4%	18.3%	10.8%	24.0%	3.6%	0.7%	6.5%	1.1%
TH	19.8%	21.7%	17.9%	16.9%	9.7%	8.2%	1.9%	2.9%	1.0%
VN	21.7%	38.7%	3.9%	17.8%	3.5%	5.7%	3.0%	5.2%	0.4%

Affiliation —									
			*)		None of the above	*	# * #		©
Academia, Think-Tanks and Research Institutions	18.8%	23.6%	22.7%	11.5%	11.2%	3.2%	1.6%	4.2%	3.2%
Business, Finance and Industry	24.6%	17.9%	19.6%	14.8%	9.3%	4.7%	2.7%	4.6%	1.8%
Civil Society and Non-Government Organisations	21.0%	24.3%	17.1%	12.2%	9.9%	5.5%	6.1%	3.3%	0.6%
Government	26.6%	16.7%	18.8%	10.4%	9.9%	3.1%	5.7%	5.2%	3.6%
Media	32.6%	13.0%	16.3%	12.0%	14.1%	4.3%	3.3%	3.3%	1.1%
Regional Orgs, IGOs & IOs	24.1%	25.9%	13.8%	13.8%	5.2%	8.6%	0.0%	6.9%	1.7%
Students	23.7%	15.8%	11.2%	16.2%	15.2%	5.4%	5.6%	4.4%	2.5%
Retirees and Others	22.4%	16.8%	12.6%	15.4%	16.8%	7.7%	6.3%	2.1%	0.0%

Which country or region is the most important in helping your country ensure its agricultural climate resilience? (For example, source of fertilisers and seeds, technological transfer)

33.7% of regional respondents believe that their neighbours will extend climate resilient agriculture technology assistance to them, indicating a perception of the regional community as a source of mutual support. More than 40.0% of respondents in Brunei, Malaysia and Indonesia respondents share this view. Laos (44.9%) and Cambodia (30.0%) respondents perceive assistance to come mainly from China. Meanwhile, Vietnam (21.3%) respondents think of Japan as the main partner in helping their country's agricultural resilience.

Interestingly, while the majority of respondents think their countries receive support from regional countries, people affiliated with regional organisations, inter-government, and international organisations tend to believe that China is most significant actor for their country's agricultural climate resilience. This is consistent with China's signing of more than 30 bilateral agricultural cooperation agreements and 200 technology exchange projects with Southeast Asian nations, and an announcement by President Xi Jinping about China committing to import US\$150 billion worth of agricultural products from Southeast Asia between 2022 to 2026 (Global Times, 2021).

Na	tionality	/										
	Another ASEAN country		*)		N		* * * *			*	<u></u>	
REGION	33.7%	16.4%	15.9%	8.9%	7.9%	6.2%	3.1%	3.0%	1.8%	1.4%	1.1%	0.6%
BN	48.1%	7.5%	15.0%	0.6%	15.0%	3.1%	0.6%	1.3%	3.1%	0.6%	1.9%	3.1%
KH	12.9%	17.1%	30.0%	6.0%	15.2%	6.5%	0.9%	2.8%	0.9%	5.5%	1.4%	0.9%
ID	44.3%	14.1%	12.5%	3.1%	10.6%	4.3%	3.5%	3.5%	1.6%	1.6%	0.4%	0.4%
LA	17.7%	7.0%	44.9%	9.5%	5.1%	3.2%	1.9%	1.9%	3.2%	3.2%	2.5%	0.0%
MY	41.7%	11.2%	22.4%	2.7%	8.5%	1.9%	2.3%	1.5%	3.1%	0.0%	3.1%	1.5%
MM	22.9%	21.1%	18.1%	12.8%	5.3%	3.1%	2.6%	1.8%	7.0%	0.9%	4.0%	0.4%
PH	35.3%	18.3%	6.8%	17.0%	4.7%	4.7%	6.0%	0.4%	2.1%	2.6%	0.9%	1.3%
TH	23.2%	17.4%	21.7%	10.1%	2.4%	10.1%	4.8%	4.3%	1.9%	1.4%	0.5%	1.9%
VN	19.1%	21.3%	14.3%	12.2%	10.4%	10.9%	0.0%	9.1%	0.4%	0.4%	1.7%	0.0%

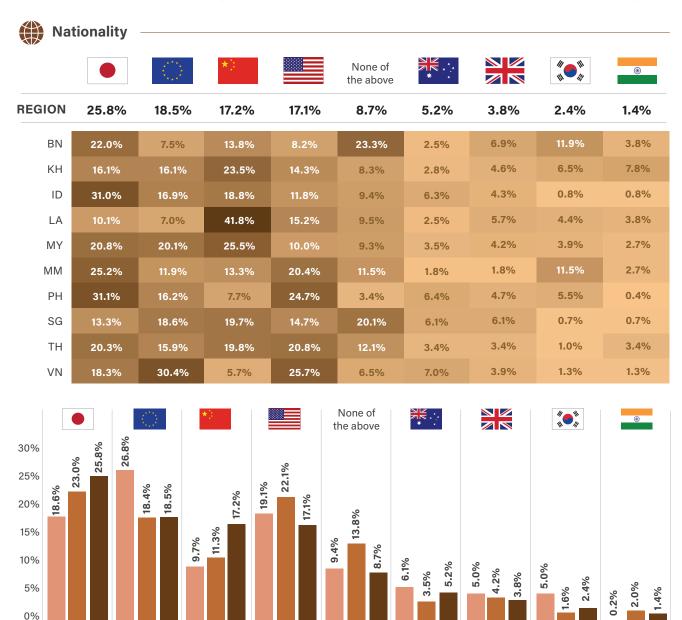
Affiliation ———	Another ASEAN country		*}		N		N		# * #	*	®	
Academia, Think-Tanks and Research Institutions	33.3%	11.8%	15.4%	8.6%	12.9%	7.5%	2.9%	2.5%	2.5%	1.1%	0.7%	0.7%
Business, Finance and Industry	28.7%	17.0%	21.1%	9.0%	7.7%	5.0%	1.8%	3.8%	2.5%	0.9%	1.8%	0.7%
Civil Society and Non-Government Organisations	27.8%	17.4%	13.9%	8.3%	8.3%	7.6%	2.8%	1.4%	2.8%	2.8%	5.6%	1.4%
Government	29.4%	15.0%	15.6%	5.6%	13.8%	6.9%	4.4%	1.9%	2.5%	3.1%	1.3%	0.6%
Media	29.9%	15.6%	26.0%	6.5%	10.4%	2.6%	3.9%	2.6%	0.0%	1.3%	1.3%	0.0%
Regional Orgs, IGOs & IOs	20.4%	12.2%	28.6%	10.2%	8.2%	4.1%	4.1%	4.1%	6.1%	0.0%	2.0%	0.0%
Students	27.5%	16.5%	22.9%	8.5%	6.0%	3.7%	2.3%	3.0%	2.8%	3.4%	1.6%	1.8%
Retirees and Others	41.9%	11.3%	16.1%	7.3%	4.8%	5.6%	4.0%	3.2%	2.4%	0.0%	1.6%	1.6%

Who could play a more proactive role in sharing their climate expertise, practical ability, and technical know-how in your country?

Seven out of ten ASEAN countries, with the exception of Brunei, Malaysia, and Singapore, have set more ambitious carbon emission reduction targets upon receiving international assistance from advanced economies (Martinus & Qiu, 2022). Therefore, assistance on climate expertise, practical ability, and technical know-how from international partners are still needed by the region.

25.8% of respondents believe that Japan can play a more proactive role in assisting their country, similar to the findings last year. The Philippines (31.1%), Indonesia (31.0%), Myanmar (25.2%), Brunei (22.0%), and Thailand (20.3%) respondents particularly share the view that they expect Japan to play a greater role in giving assistance to their countries. China is the top of choice among respondents from Laos (41.8%), Malaysia (25.5%), and Cambodia (23.5%). Meanwhile, the EU is the most popular choice in Vietnam (30.4%). Interestingly, only Singapore respondents (25.8%) think than none of the major countries mentioned in the survey can share their climate expertise, indicating that Singapore is confident to step up its climate role without international assistance.

Compared to last year's survey, the proportion of respondents choosing China rose by 6.1%, putting China as the third most trusted country to give assistance. Meanwhile, the EU rose to second place this year.



2021

2022

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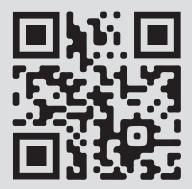
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Thank you

We would like to extend our sincere appreciation to all our respondents for taking the time to complete this Survey. Your participation lends an indispensable voice to the opinions of Southeast Asians and allows the region to be heard and be involved in the global discussion on climate change as an ASEAN collective.

We are also grateful to all our readers for their support and feedback as we continuously work to improve the Survey. If you wish to stay updated on the Programme's activities, do sign up for our newsletter at bit.ly/ccseapmail or by scanning the QR code provided. You may email any comments and questions about the Survey to climatechange@iseas.edu.sg.



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