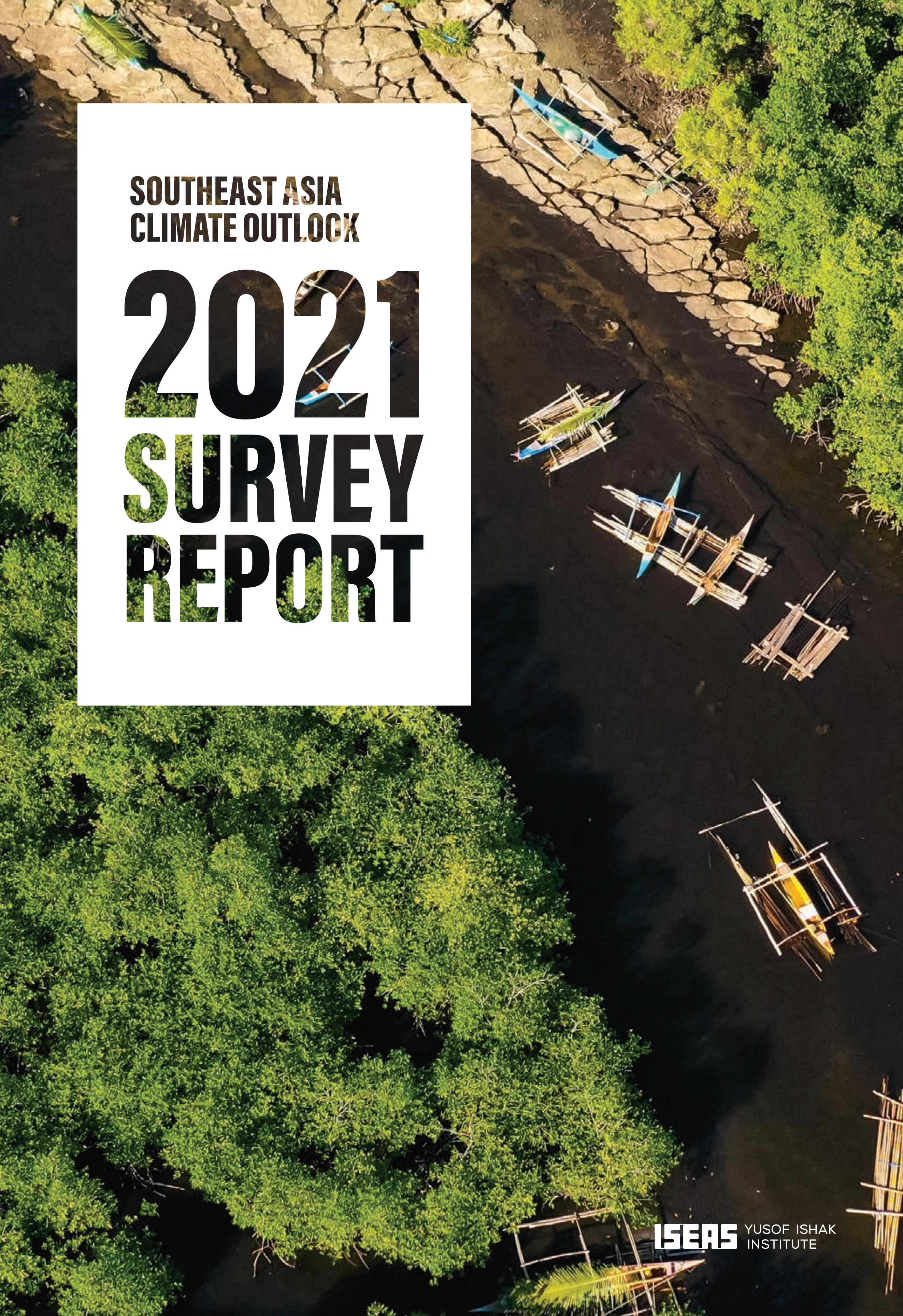
SOUTHEAST ASIA CLIMATE OUTLOOK

2021 SURVEY REPORT



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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.

The report can be cited as: Seah, S. et al., Southeast Asia Climate Outlook: 2021 Survey Report
(Singapore: ISEAS - Yusof Ishak Institute, 2021)

CONTENTS

ABOUT THE SURVEY

The Southeast Asian region is frequently cited as being one of the most threatened by and vulnerable regions to climate change. Climate change ranked among Southeast Asia's top three security concerns in the annual State of Southeast Asia survey in 2019 and 2020 conducted by the ASEAN Studies Centre at the ISEAS - Yusof Ishak institute. For two consecutive years, ASEAN citizens placed climate change above terrorism, the region's traditional security threat. This was impetus to start a new survey to obtain a sense of prevailing attitudes and concerns of Southeast Asians towards climate change.

The Southeast Asia Climate Outlook 2021 Survey Report is the second survey of climate change attitudes and perspectives of the Southeast Asian Region. Conducted annually by the Climate Change in Southeast Asia Programme at the ISEAS Yusof-Ishak Institute, this survey was designed to analyse the attitudes and concerns of Southeast Asian citizens towards climate change, governmental policies and actions and the role of different stakeholders in climate action.

The Survey is divided into five sections. The first section presents the profile of the respondents including nationality, age, gender, education and affiliation. Section II explores the attitudes of respondents towards current climate change issues, government policies and actions taken. Section III delves into perceptions of energy and food security issues as well as perceptions of adequacy of mitigation and adaptation measures taken at the cities' level. Section IV examines the issues of individual countries' and regional climate governance, climate responses and possibility of a green recovery. The last section concludes with perceptions of global climate leadership and international climate cooperation prospects.

At the time of publication, the Sixth Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR6) has just been released. The global reception to the report shows a heightened sense of concern about the problems of climate change. The prognosis is dire but the world still has an opportunity to act decisively and quickly.

Methodology

The Southeast Asia Climate Outlook Survey was conducted online from 11 June to 2 August 2021. The survey comprised 32 questions in total. A total of 610 self-identified 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) Business, Finance and Industry (3) Civil Society and NGOs, (4) Government, (5) Media (6) Regional Organisations, Inter-Government and International Organisations, (7) Students, and (8) Others; Retirees and Persons without Affiliation. The Survey was offered in English and translated into four languages - Bahasa Indonesia, Laos, Khmer and Vietnamese.

The Survey employs a purposive method of sampling. It was conducted online through direct electronic mailer to the ASEAN Studies Centre's database and the distribution of a web link on ISEAS' social media platforms for the first three weeks of July 2021. A limited Facebook advertisement campaign was utilised to target respondents located in Brunei Darussalam, Cambodia, Laos, Myanmar, Thailand and Vietnam in order to improve sample representation from these countries in the final week (26 July to 1 August). No financial incentives were given to any respondents to encourage participation. The Facebook campaign resulted in an estimated 26 responses with a completion rate of 69.2%. Weighting was not applied to balance sample representation. Of the 817 individuals who participated in the Survey, 74.7% completed the whole Survey. Analysis was conducted on complete responses.

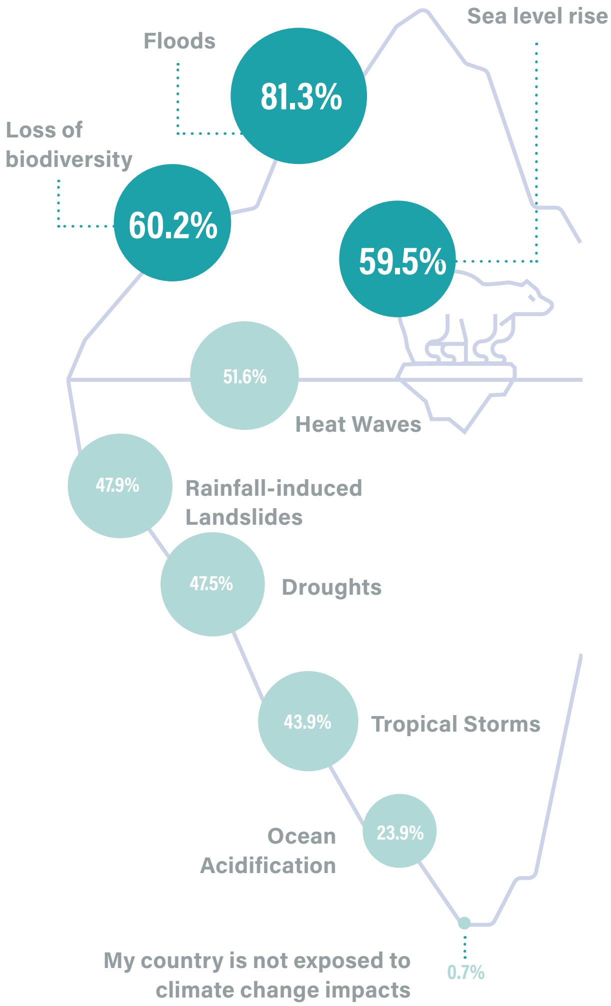
As such, the results of the survey are not meant to be representative. It presents a general view of climate attitudes in the region.

HIGHLIGHTS AT A GLANCE

01 IMPACTS ON CLIMATE CHANGE

Floods, loss of biodiversity and sea level rise are the top three perceived climate change impacts in ASEAN. These climate change impacts were also picked as top three concerns in 2020.

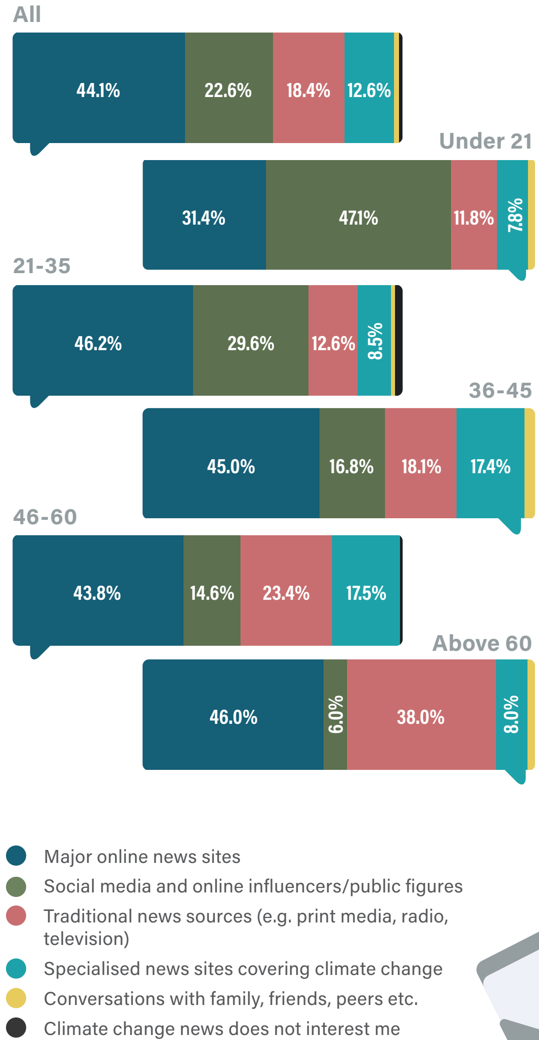
Figure 1: In your view, what are the most serious climate impacts that your country is currently exposed to?



02 SOURCE OF CLIMATE CHANGE NEWS

Majority of respondents (44.1%) get news and information about climate change issues from major online news sites. A large majority (47.1%) of those under 21 years old, however, depend on social media and online influencers/public figures to get information on climate change issues.

Figure 2: Where do you get your news and information about climate change issues? (By age group)



03 ENERGY AND DECARBONISATION

The level of confidence in ASEAN renewable energy transition is low. Meanwhile, the level of confidence in economic competitiveness resulting from climate policies is relatively high. On a scale of 0 to 10, with 0 being not confident and 10 being extremely confident, ASEAN respondents only ranked their confidence at 4.6 for ASEAN to achieve its 23% target share of renewable energy by 2025. Conversely, they ranked their confidence at 6.6 for economic competitiveness resulting from better and innovative climate change policies.

Figure 3.1: On a scale of 0-10, how confident are you that ASEAN will achieve its 23% target share of renewable energy in the region's total primary energy supply by 2025?

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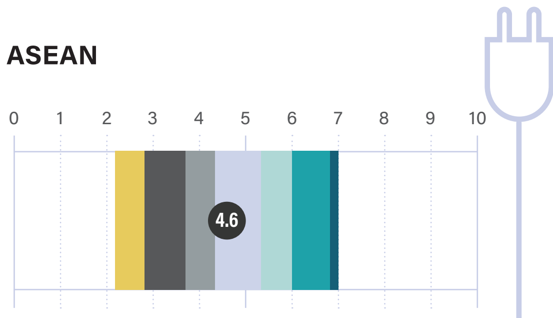
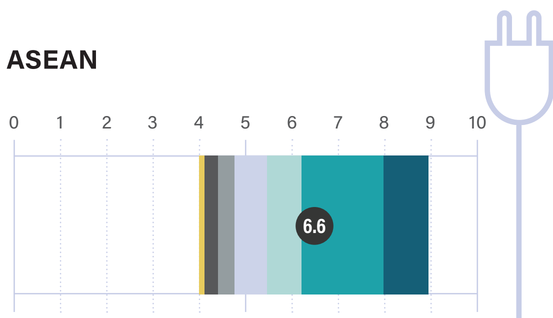


Figure 3.2: Innovation and Competiveness
On a scale of 0-10, how confident are you that adopting climate change measures and policies will drive the innovation and competitiveness of your economy?

ASEAN

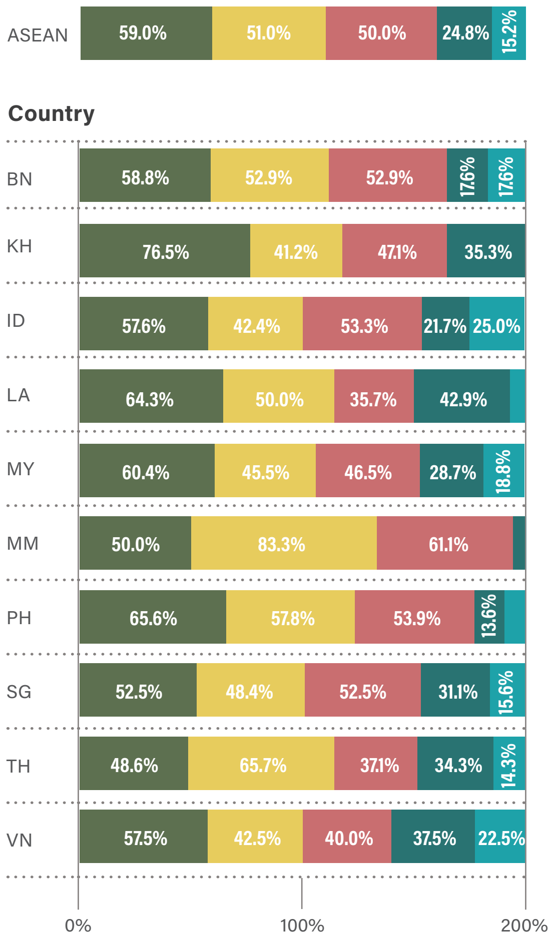


- Not confident at all
- Not confident
- Barely confident
- Neutral
- Slightly confident
- Confident
- Extremely confident

04 GOVERNMENT'S ROLE IN CLIMATE CHANGE

ASEAN respondents believe that governments must encourage businesses to adopt green practices, enact climate laws, and allocate more public financial support to low carbon solutions to reduce carbon emissions in their country.

Figure 4: What can governments do to reduce carbon emissions in your country? (Select 2 options of highest priority)

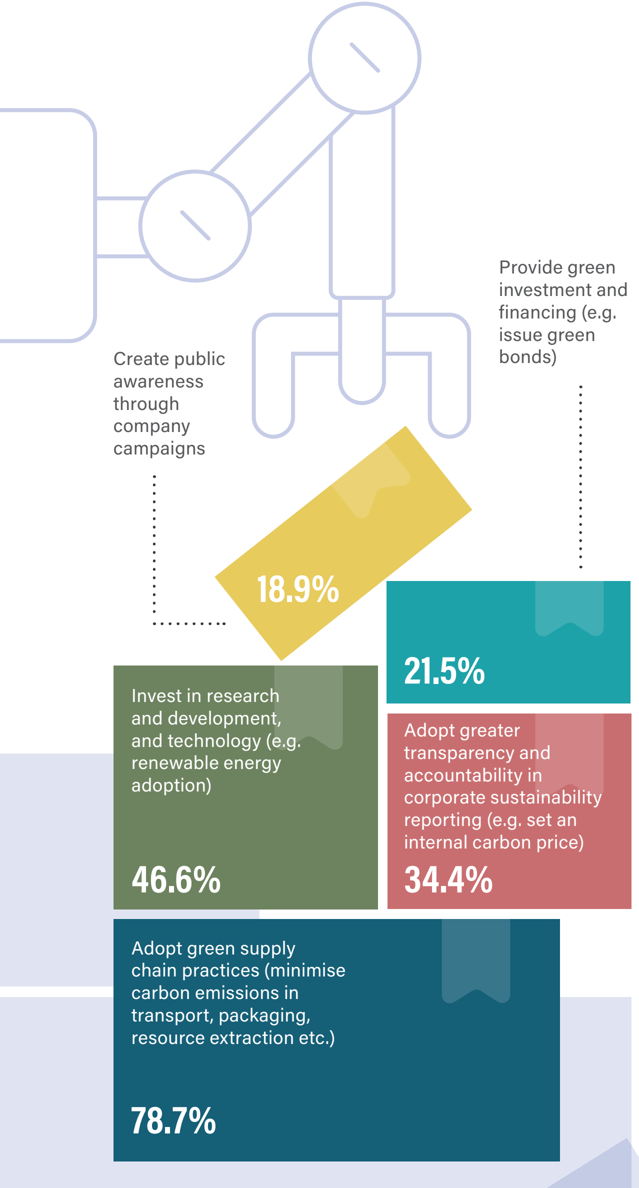


- Remove fossil fuel subsidies
- Set a carbon tax
- Allocate more public financial support to low-carbon solutions in our country
- Enact national climate laws
- Encourage businesses to adopt green practices

05 PRIVATE SECTOR'S ROLE IN CLIMATE CHANGE

ASEAN respondents believe that the private sector must adopt green supply chain practices, invest in research and development, and technology, and adopt greater transparency and accountability in corporate sustainability reporting.

Figure 5: What can the private sector do to reduce carbon emissions in your country? (Select 2 options of highest priority)



06 GREEN RECOVERY

Majority of respondents disagree (45.6%) or are unsure (38.7%) that their government's COVID-19 stimulus spending contributed to a green recovery.

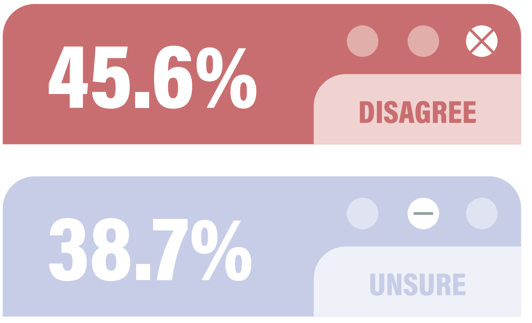
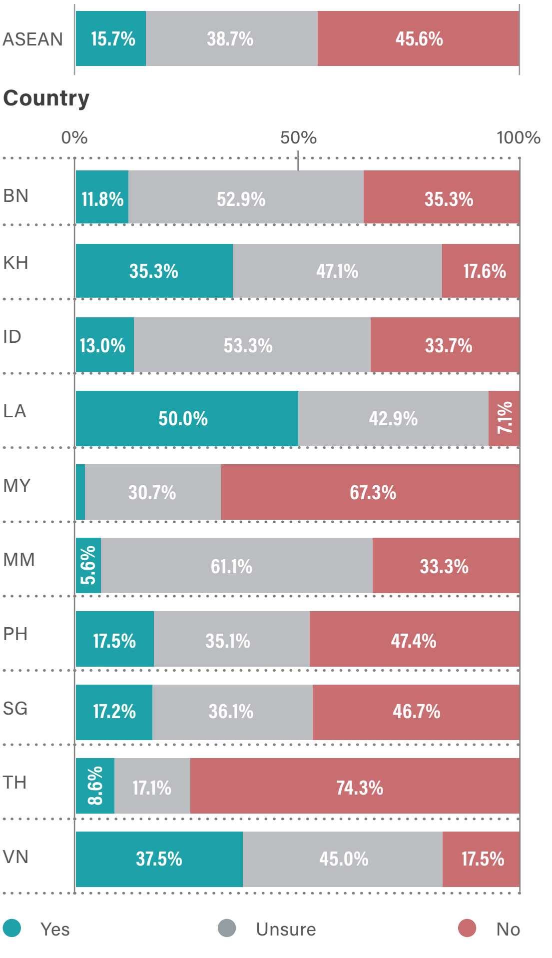


Figure 6: Do you think your government's stimulus spending contributed to a green recovery?



07 INTERNATIONAL COOPERATION

Majority of respondents think that the EU has demonstrated climate leadership to help the world achieve Paris-aligned goals and expect more of their proactive role in the region. Of note, a high proportion of ASEAN respondents are unable to attribute global climate leadership and role to any country, signifying pessimism on those countries mentioned.

Figure 7.1: In your opinion, which country has demonstrated climate leadership to help the world achieve Paris-aligned goals?

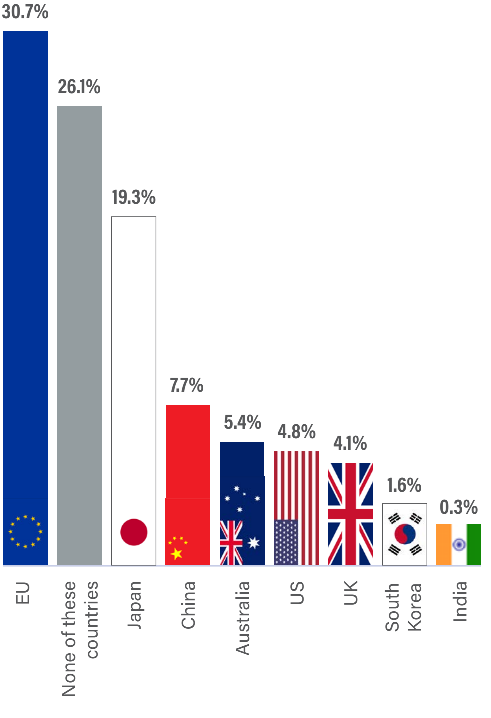
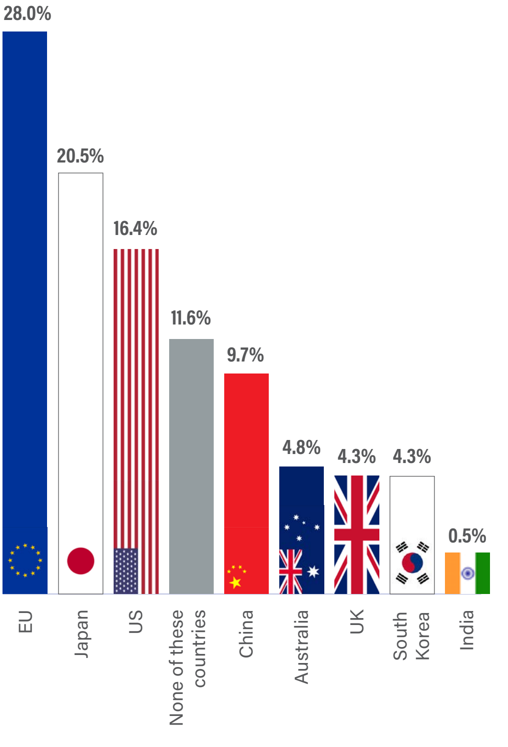


Figure 7.2: Which country could play a more proactive role in sharing their climate expertise, practical ability, and technical know-how in your country?

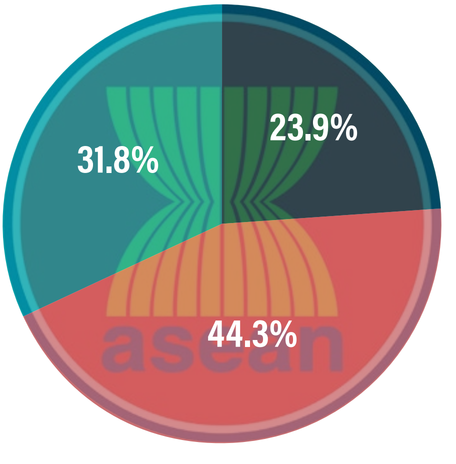


08 ASEAN

Respondents remain uncertain (44.3%) or otherwise divided (23.9%) over whether ASEAN is effective as a regional organisation in tackling climate change.

Figure 8: "ASEAN is working together effectively to tackle climate change (e.g. development of the ASEAN power grid)." Do you agree?

Agree Unsure Disagree

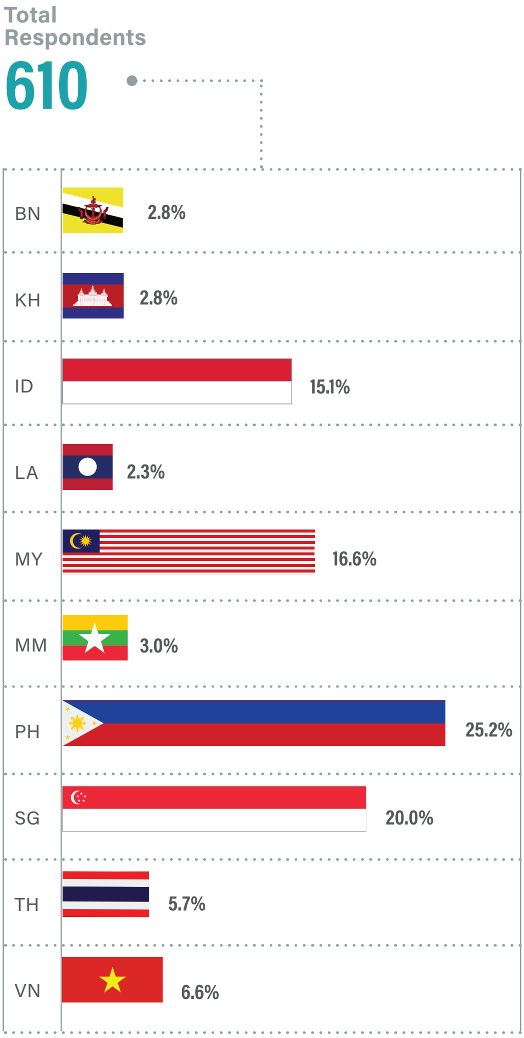


SECTION I

RESPONDENTS' PROFILE

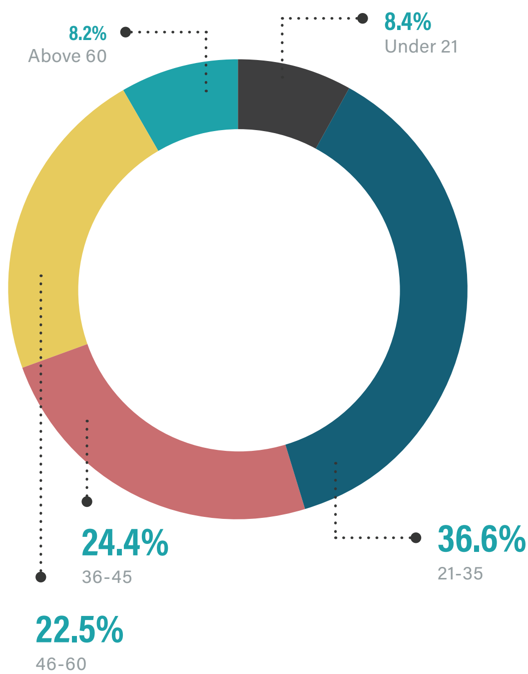
01 Nationality

The Philippines had the highest number of respondents (25.2%), followed by Singapore (20.0%), Malaysia (16.6%) and Indonesia (15.1%).



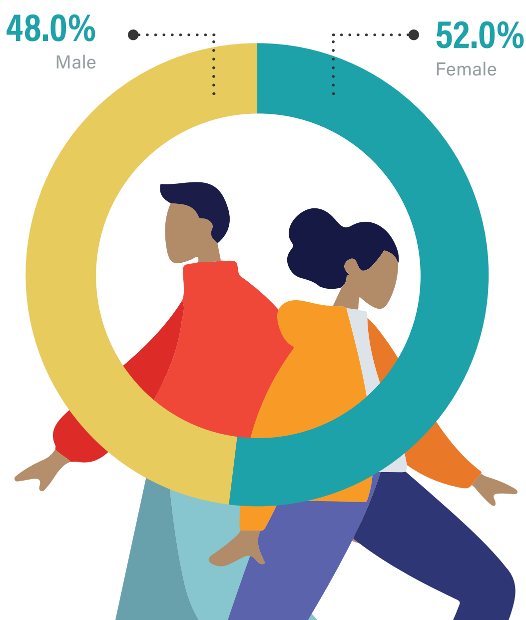
02 Age group

Among the five age groups surveyed, the majority of respondents were youths aged 21-35 years old (36.6%), followed by respondents aged 36-45 (24.4%), 46-60 (22.5%), under 21 (8.4%), and above 60 (8.2%).



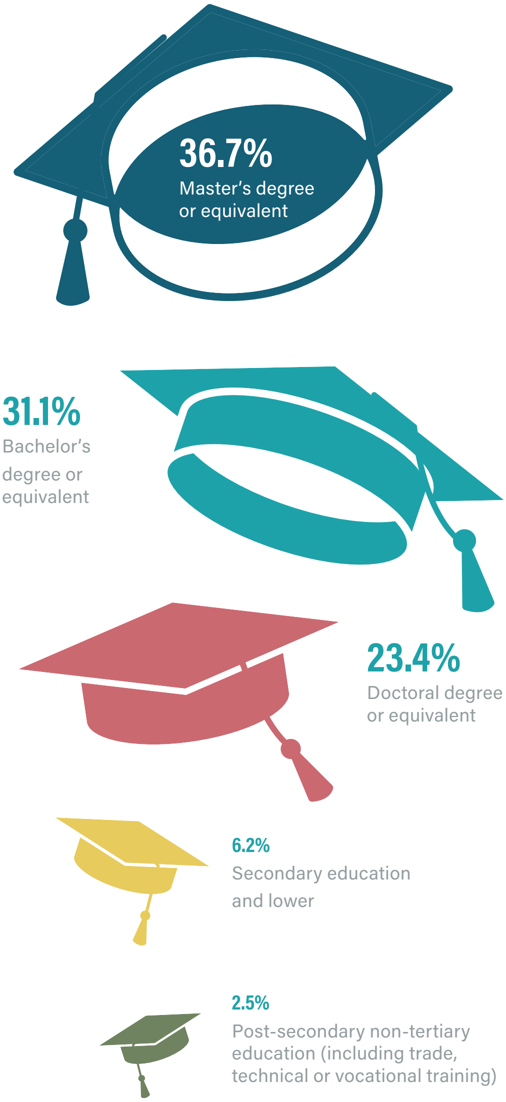
03 Gender

This survey saw a slightly greater response from women (52.0%) than men (48.0%), with a difference of 4.0% between the two genders.



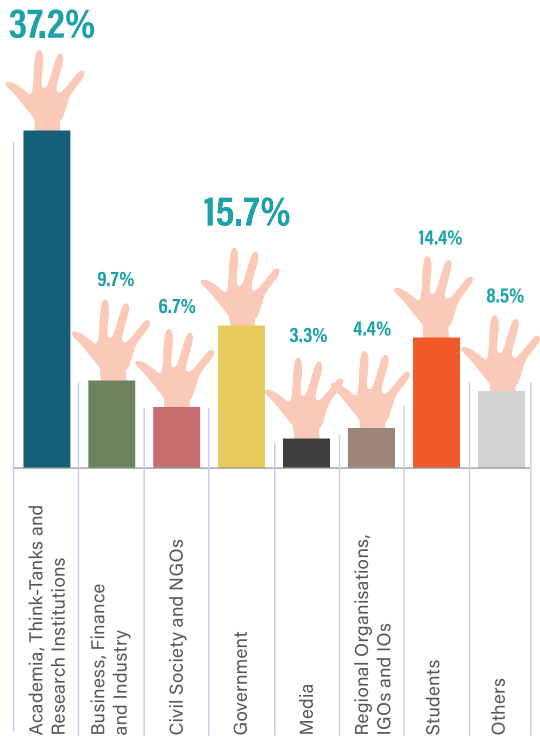
04 Education level

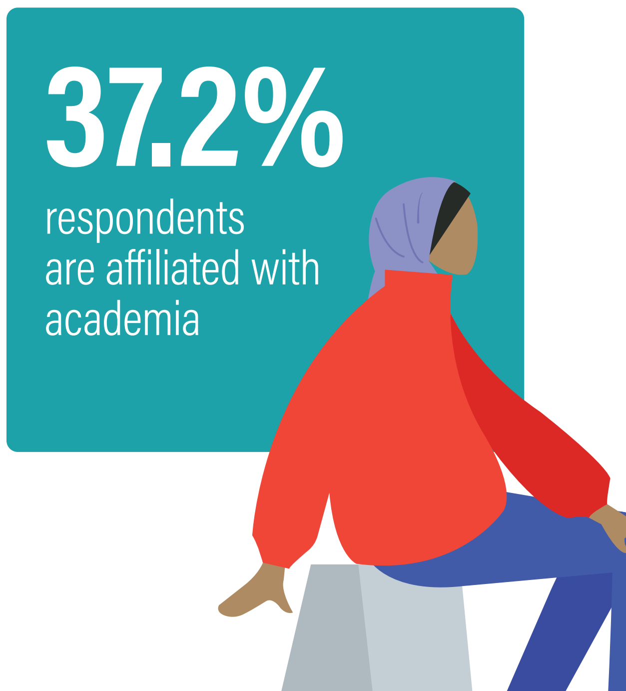
Majority of respondents (91.2%) have completed a Bachelor's degree or higher. Among this group, Master's degree holders were the most represented (36.7%). Those with post-secondary non-tertiary education and lower were the least represented (8.7%).



05 Affiliation

Most of the respondents are affiliated with academia (37.2%) and governments (15.7%). Students, business communities, civil society organisations and media made up the next largest groups comprising 14.4%, 9.7%, 6.7%, and 3.3% respectively.





06 Top source of climate change news

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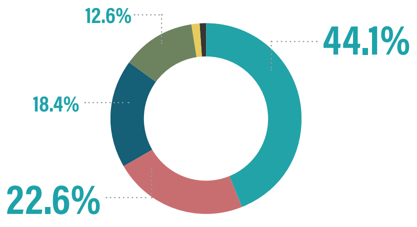
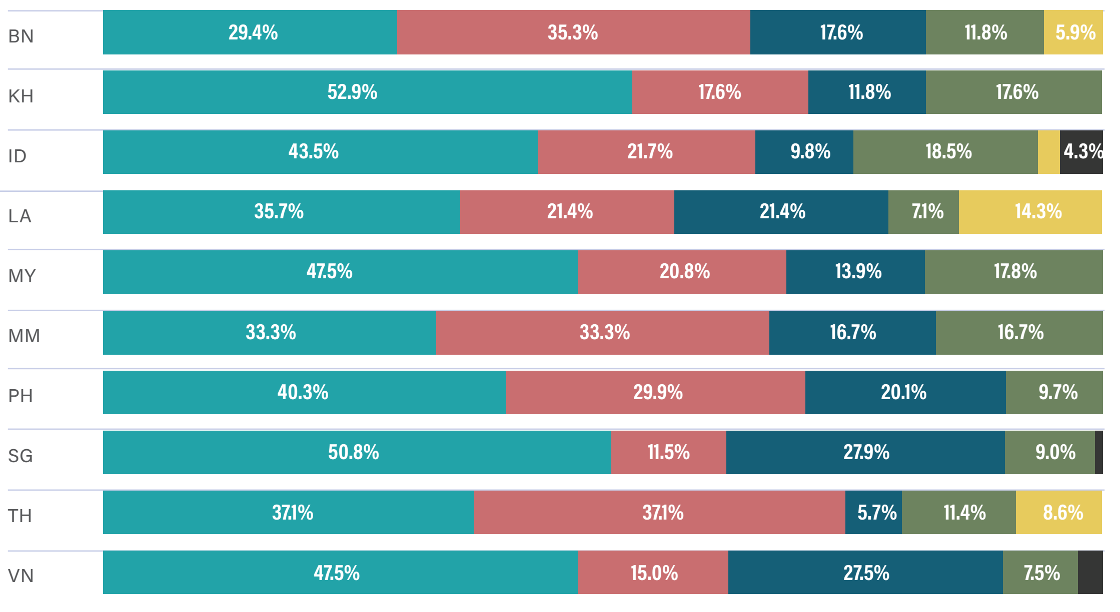


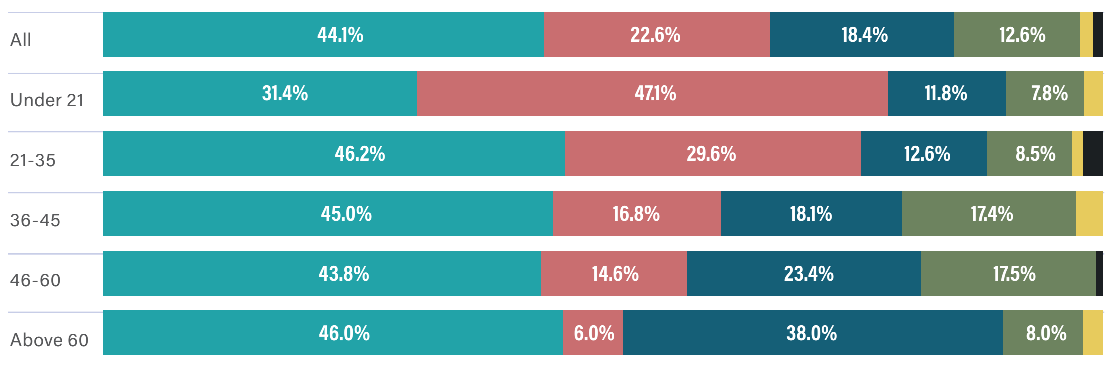
- Major online news sites
- Social media and online influencers/public figures
- Traditional news sources (e.g. print media, radio, television)
- Specialised news sites covering climate change
- Conversations with family, friends, peers etc.
- Climate change news does not interest me

Major online news sites were the most popular source of climate change information across all respondents, followed by social media and online influencers. However, there were some variations across countries and age groups — the majority of respondents under the age of 21 receive climate change news from social media and online influencers. Despite similarly low internet usage rates, online sources were the least popular among Lao respondents (64.2%) while they were the most popular among Cambodia respondents (88.1%). Overall, 79.3% of respondents used online sources. Interestingly, those under 21 years old (47.1%) significantly depend on social media and online influencers/public figures to get information about climate change issues.

Country



Age Group



SECTION II

PERCEPTIONS OF CLIMATE CHANGE ISSUES

Pages

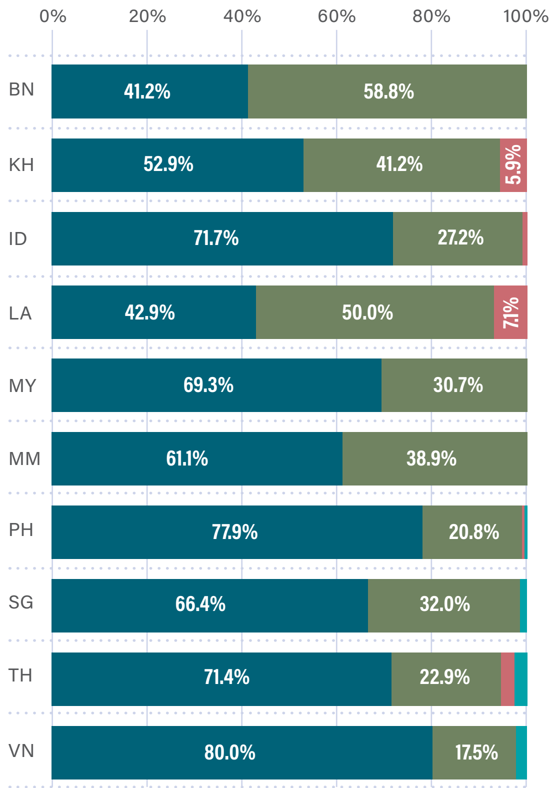
12-18

07 What is your view of climate change?

The vast majority of respondents recognise the importance of climate change, but Vietnam and Philippines respondents show the greatest urgency, with 80.0% and 77.9% finding it a "serious and immediate threat" to their countries. The *2018 IPCC Special Report* identified Vietnam as one of nine countries with over 50 million people exposed to sea level rise.[3] In *The Global Climate Risk Index 2021*, the Philippines and Vietnam ranked 4th and 13th among countries most affected by extreme weather events in 2000-2019.[4] Myanmar and Thailand ranked 2nd and 9th respectively, but show lower levels of urgency in this survey, with 61.1% and 71.4% of respondents selecting the same option of "serious and immediate threat".

Respondents choosing "...serious and immediate threat..." decline steadily across age groups, from 76.5% among those under 21, to only 62.0% of those above 60. Youths are often considered the generation who will experience the worst impacts of climate change, but current conditions are already severe. According to the Working Group I contribution to the IPCC AR6, extreme weather resulting from climate change is now affecting all inhabited regions of the globe, with significant increases in extreme heat within Southeast Asia.[5]

Country



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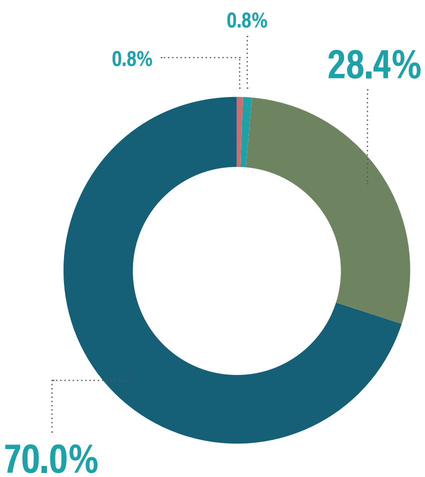

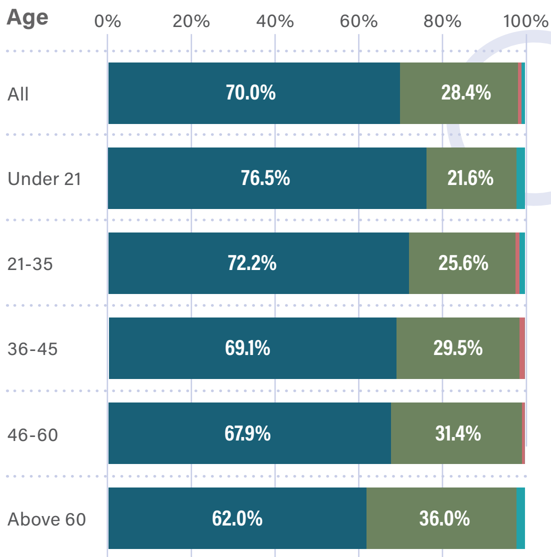

- It is a serious and immediate threat to the well-being of my country
- It is an important issue that deserves to be monitored
- There is no scientific basis for climate change
- It is a long-term threat and will not impact me in my lifetime

08 In your view, what are the most serious climate change impacts that your country is currently exposed to? (Check those that apply)

Across ASEAN, the top three perceived impacts of climate change have stayed consistent from 2020 to 2021: floods, loss of biodiversity and sea level rise. The top three impacts have also remained unchanged among Laos, Malaysia, Thailand and Vietnam respondents.

Compared to 2020, 13.0% more Indonesia respondents and 10.3% more Malaysia respondents are concerned about tropical storms. In Indonesia, the Philippines and Singapore, loss of biodiversity is no longer perceived as a top impact and was replaced with floods or rainfall-induced landslides. These changes may indicate growing anxiety over rainfall-related impacts of climate change.

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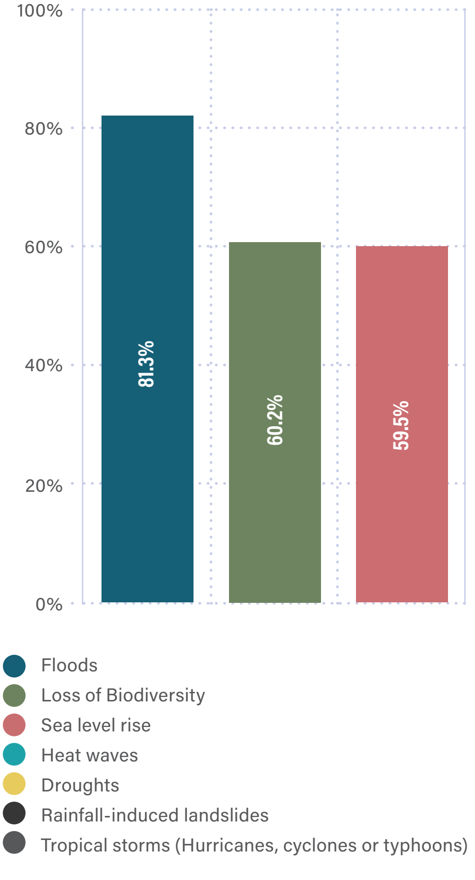
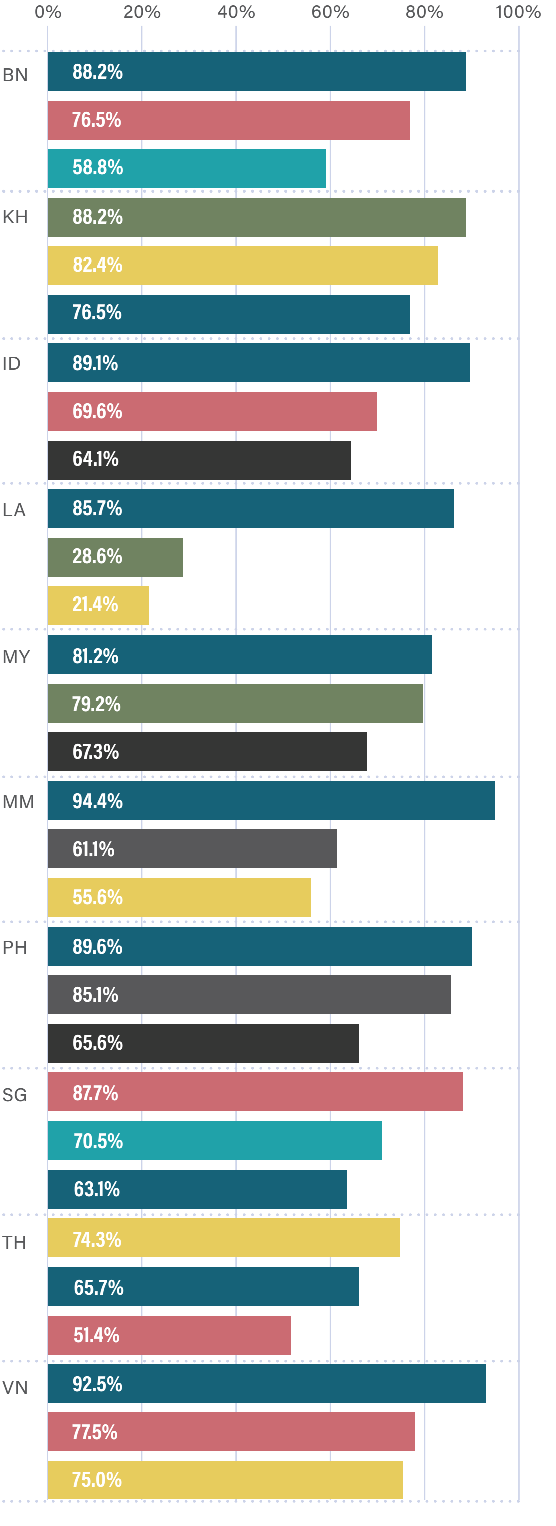


Country



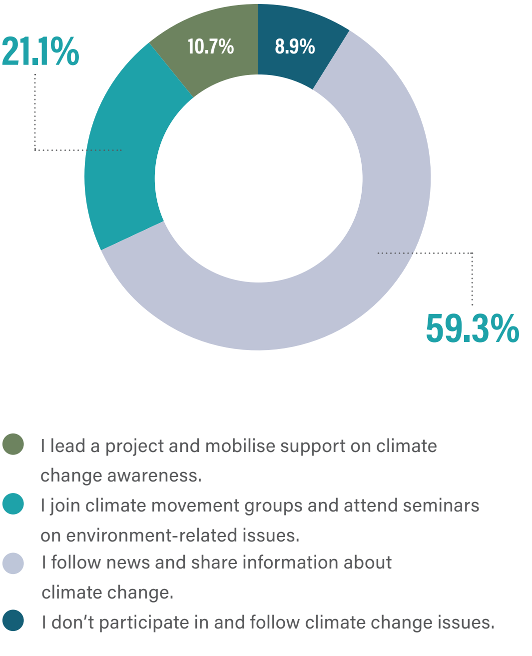
09 Which of the following statements best describes your level of participation in climate advocacy?

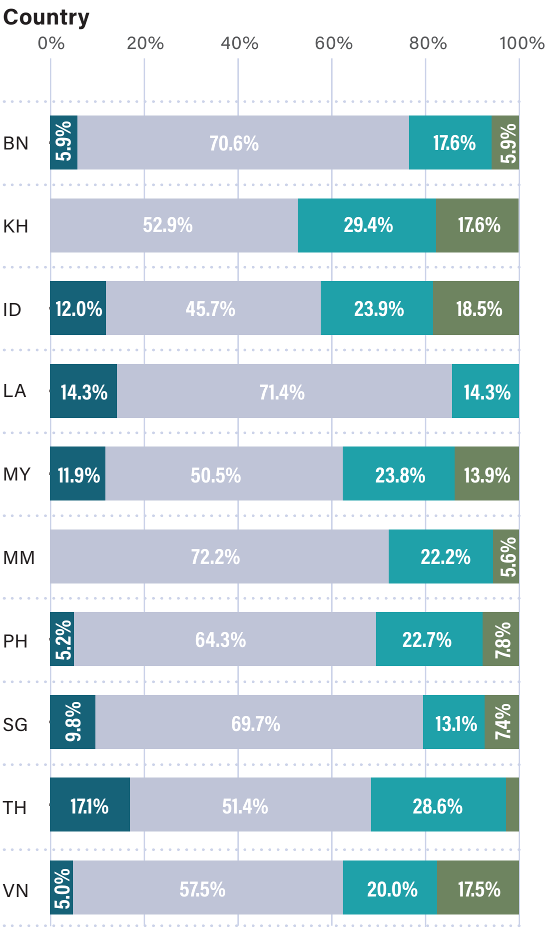
Out of all respondents, 31.8% participate actively in climate advocacy activities (in green), either by leading a project and mobilising support on climate change awareness, or joining movement groups and attending seminars on environmental related issues. The majority of respondents (68.2%) are more passive, either following news and sharing information about climate change (59.3%), or not participating in or following climate issues at all (8.9%).

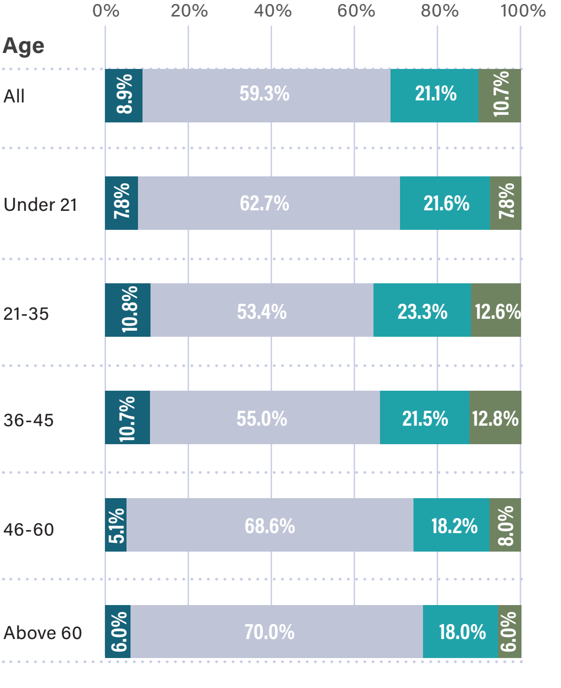
There are significant variations of note among respondents from different countries. Respondents from Cambodia have the highest levels of active participation, with 47.0% of them involved in climate advocacy movements. Following closely behind are Indonesia, Malaysia and Vietnam, at 42.4%, 37.7% and 37.5% respectively. Respondents from Thailand are the least active, with 17.1% not participating in or following climate change issues.

Slight variations can also be observed in climate advocacy across different age groups. In particular, respondents aged (21-35 years old) have the highest rates of active participation at 35.9%, but not by a wide margin, with 34.3% respondents (36-45 years old) showing active participation.

ASEAN

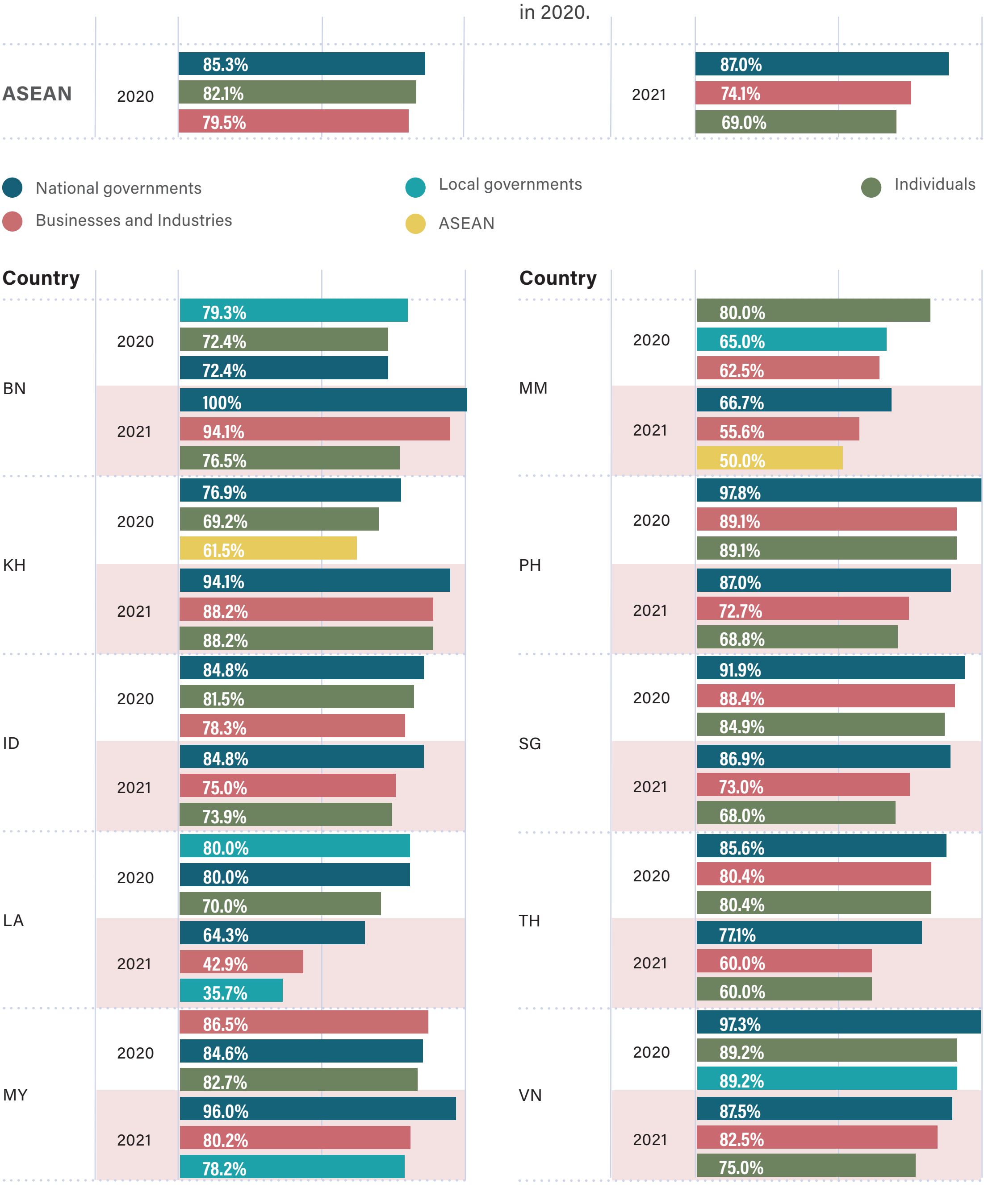






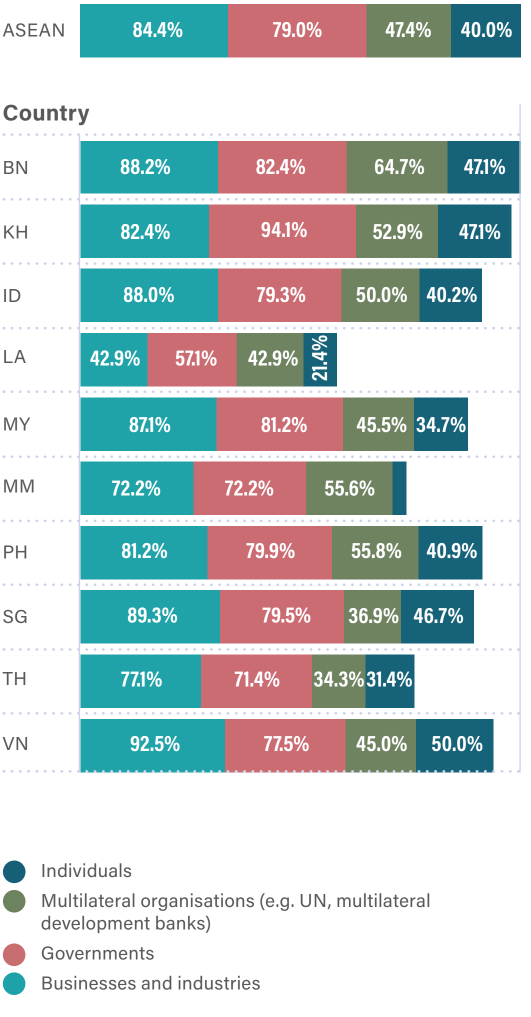
10 Who, in your opinion, is responsible for tackling climate change? (Check those that apply)

Overall, respondents identified national governments, individuals and businesses and industries as the top three stakeholders responsible for tackling climate change in both 2020 and 2021. This was more widely agreed upon across countries in 2021 — only Myanmar respondents differ by including ASEAN in their top three choices. Moreover, the majority of respondents in every country are unanimous that national governments should be responsible. In comparison, more respondents from Brunei Darussalam, Laos, Myanmar and Vietnam selected local governments in 2020.

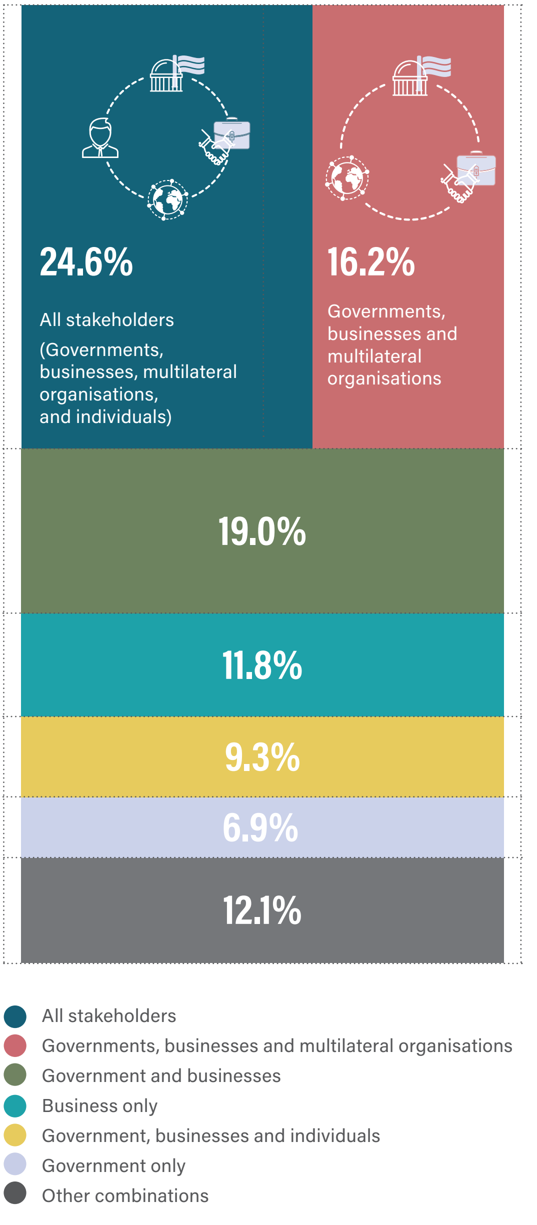


11 In your opinion, who should bear the costs of climate change measures? (Check those that apply)

84.4% of respondents feel that businesses and industries should bear the costs of climate change, followed closely by 79.0% who chose only governments; whereas a smaller proportion of respondents want multilateral organisations and individuals to bear the costs. This trend is generally consistent across countries, except for Laos, whose respondents lean more towards governments (57.1%) than businesses and industries, and Myanmar, where an equal proportion of respondents (72.2%) want governments and businesses and industries to bear the costs of climate change measures. Notably, while 69.0% of respondents feel that individuals are responsible for tackling climate change (Question 10), only 40.0% think they should bear the costs, possibly implying that climate change measures should not result in individual financial burden.

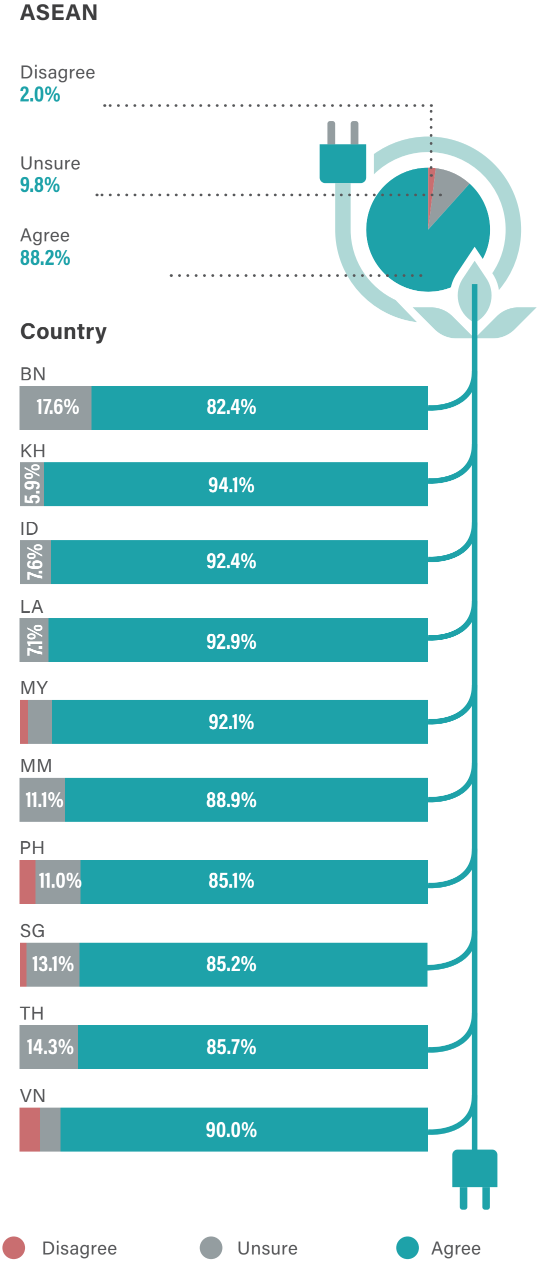


A significant proportion of respondents (24.6%) indicate that all stakeholders — be it businesses and industries, governments, multilateral organisations or individuals — should bear the costs of climate change measures. This could be an indicator of the understanding that climate change needs a whole-of-society approach. This is followed by 16.2% who think that all stakeholders except individuals should bear the costs, reflecting an unwillingness to bear individual responsibility. Another proportion of respondents (11.8%) are of the opinion that businesses and industry alone should bear all the costs. Otherwise, the majority favour a more collaborative approach, with 75.6% selecting at least two stakeholders.



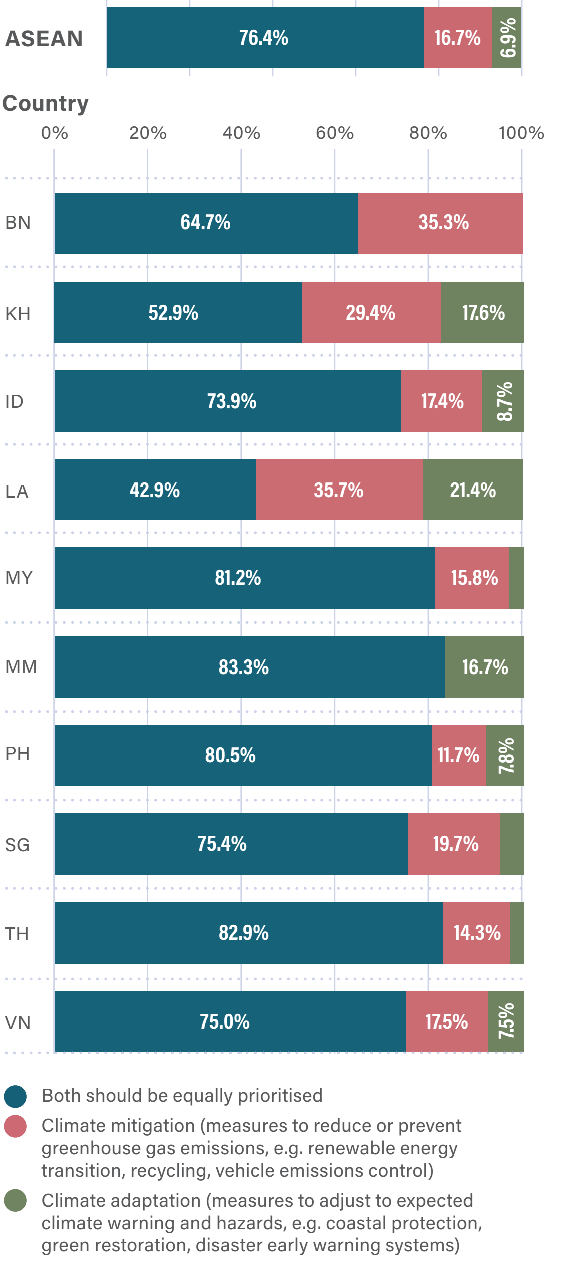
12 "More international public financial support should be allocated for developing countries to transition to low carbon economies." Do you agree?

88.2% of respondents are supportive of greater international finance allocation for decarbonisation in developing countries while 9.8% are unsure. The support varies somewhat between the ardent group (Cambodia, Laos, Indonesia, Malaysia, Vietnam, Myanmar) to the less enthusiastic group (Thailand, Singapore, the Philippines and Brunei).



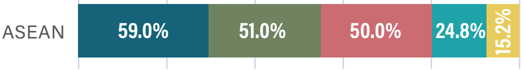
13 Which should governments prioritise: Adaptation or Mitigation?

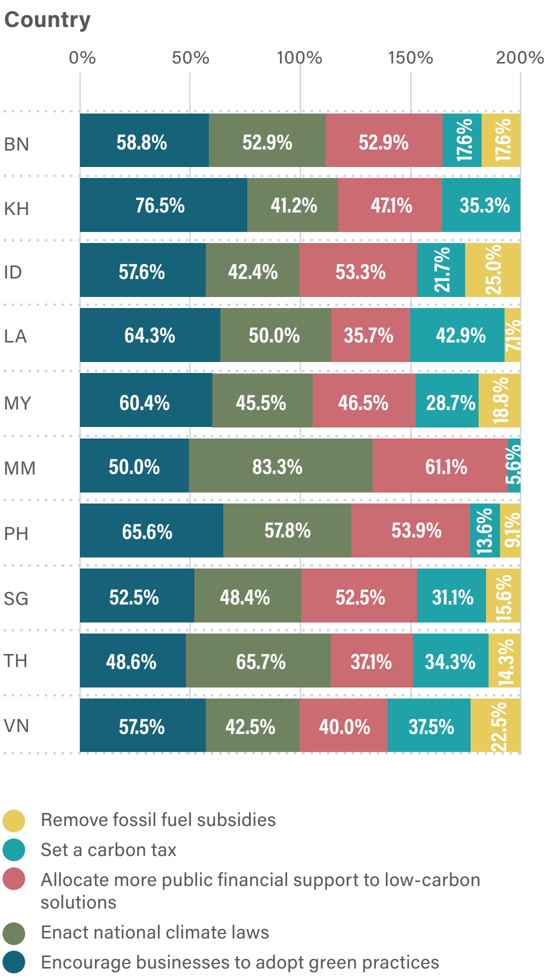
While the majority of respondents feel that governments should prioritise adaptation and mitigation equally, the strength of the opinion varies greatly across countries. For instance, respondents among Brunei Darussalam and Laos are more divided, with 35.3% and 35.7% respectively prioritising mitigation; whereas Malaysia, Myanmar, the Philippines, Singapore and Thailand have a general consensus (over 75.0%) on equal prioritisation.



14 What can governments do to reduce carbon emissions in your country? (Select 2 options of highest priority)

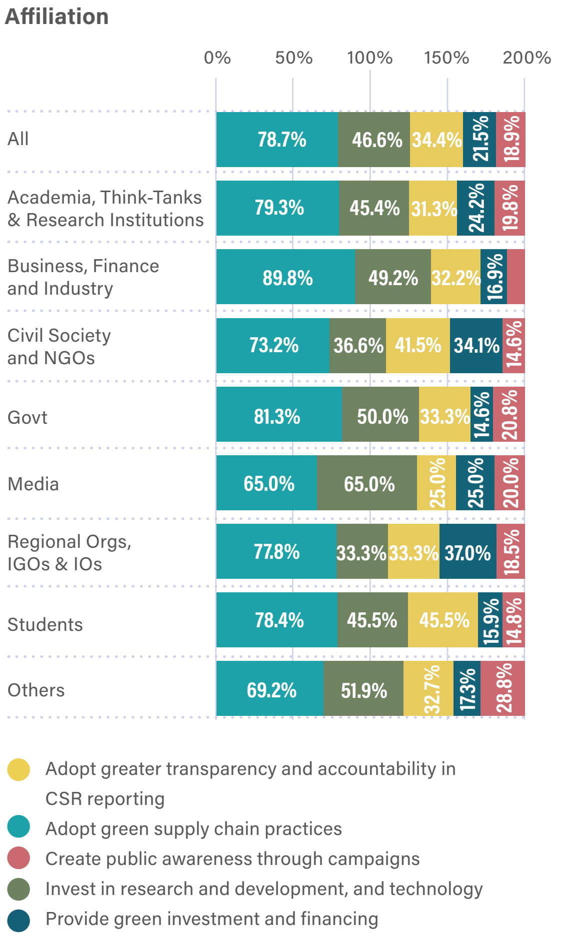
Respondents show almost equal support to the top three government actions for reducing emissions: 59.0% choose encouraging businesses to adopt green practices, 50.0% want to see more public financial support for low-carbon solutions and 51.0% are in favour of enacting and enforcing national climate laws. The least selected option overall is the removal of fossil fuel subsidies (15.2%). This option of removing fossil fuel subsidies is more popular among respondents affiliated with regional organisations, inter-government and international organisations (33.3%) and civil society and non-government organisations (29.3%) while only a mere 9.0% of respondents from governments consider it a priority.





15 What can the private sector do to reduce carbon emissions in your country? (Select 2 options of highest priority)

78.7% of respondents feel that adopting green supply chain practices should be prioritised in the private sector, making it the most popular option by far. 34.4% of respondents are also calling for greater transparency and accountability in corporate sustainability reporting. In contrast, only 18.9% of respondents give attention to company campaigns for raising awareness. These trends are consistent across all affiliations including business, finance and industry, indicating a general agreement on what the private sector should focus on. Notably, there is stronger support for green investment and financing from civil society and non-government organisations (34.1%) and regional organisations, inter-governmental and international organisations (37.0%) than from the business, finance and industry sector (16.9%).

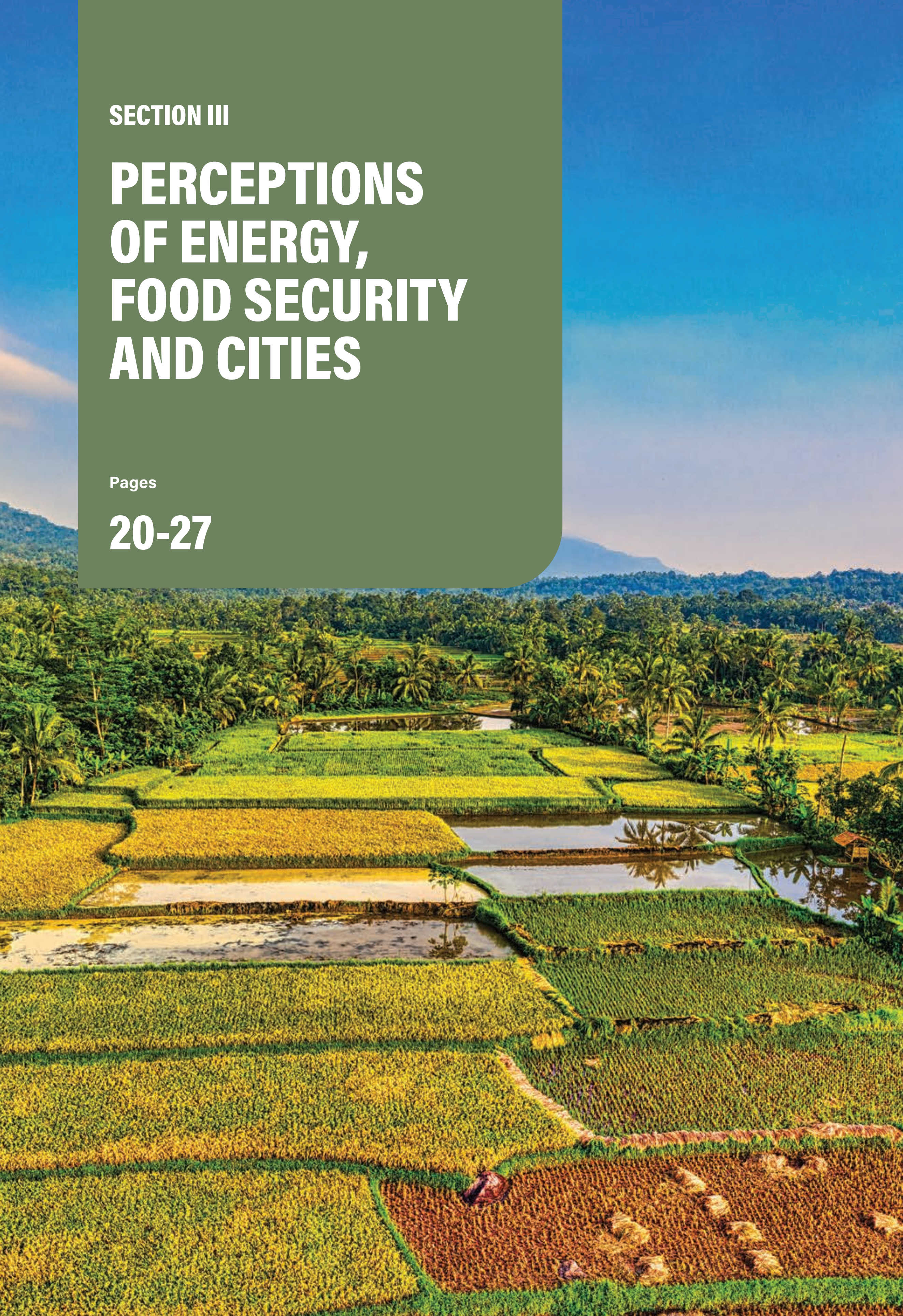


SECTION III

PERCEPTIONS OF ENERGY, FOOD SECURITY AND CITIES

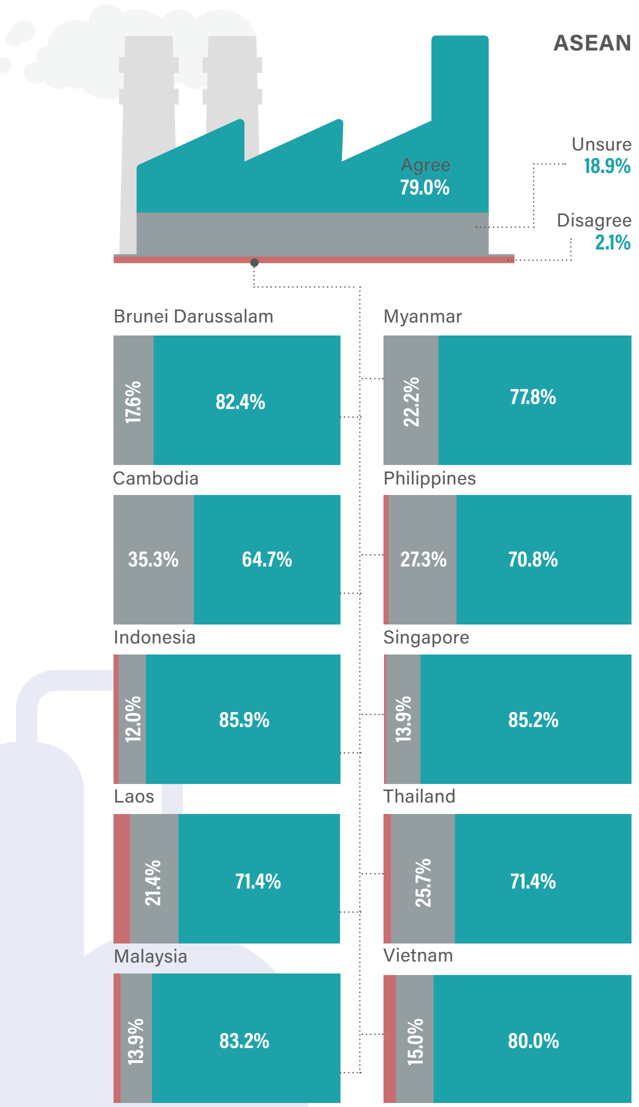
Pages

20-27



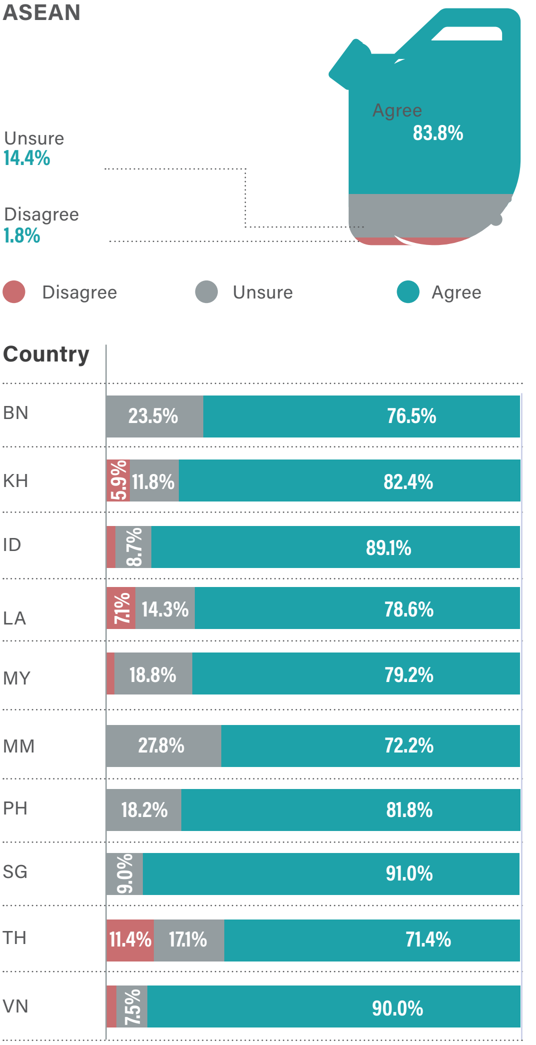
16 "ASEAN countries should cut their reliance on coal as soon as possible." Do you agree?

79.0% of Southeast Asians feel the urgency of cutting reliance on coal. Respondents from Indonesia (85.9%) and Singapore (85.2%) are most likely to demonstrate such an attitude, followed by Malaysia (83.2%) and Brunei Darussalam (82.4%). The strongest disagreement comes from Laos (7.1%) and Vietnam (5.0%) respondents. A significant proportion of respondents from Cambodia, the Philippines, Thailand, and Myanmar have not made up their minds on this issue.



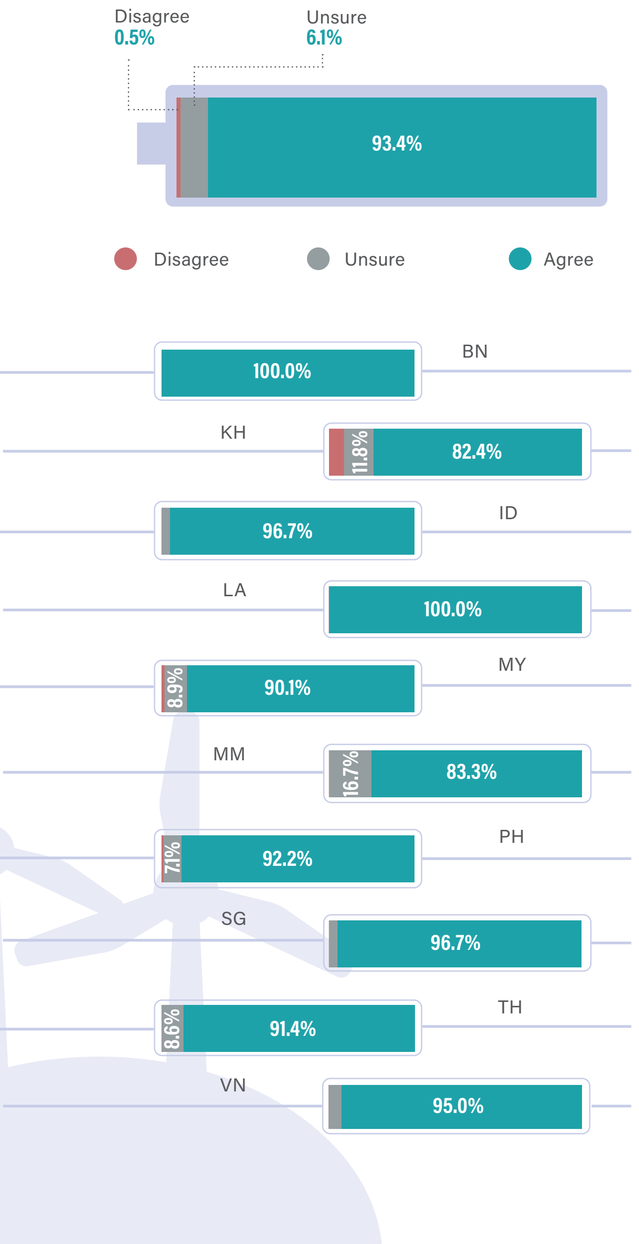
17 "Reduction of dependence on fossil fuels will be painful in the short term but beneficial to ASEAN economies in the long term." Do you agree?

Majority of Singapore, Vietnam and Indonesia respondents believe that reduction of dependence on fossil fuels will yield short-term pain but long-term gains. This is at least 1.23 times higher in proportion than Thailand (71.4%) and Myanmar (72.2%) respondents. While no Myanmar respondents disagree with the statement outright, 11.4% of Thailand respondents, 7.1% of Laos and 5.9% of Cambodia respondents disagree. Despite these, majority (83.8%) of Southeast Asians agree with this broad economic projection.



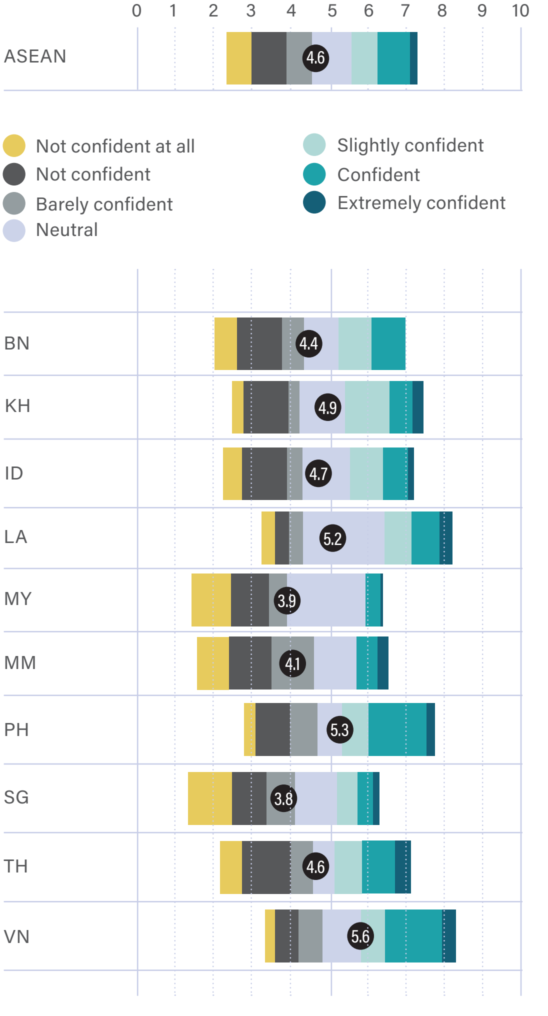
18 "There is potential for ASEAN to tap into the renewable energy sector." Do you agree?

A strong consensus on the potential of tapping into the regional renewable energy sector is emerging across the region. All the respondents from Brunei Darussalam and Laos agree with this statement, Indonesia (96.7%), Singapore (96.7%) and Vietnam (95.0%) respondents trailing closely behind. Cambodia (82.4%) and Myanmar (83.3%) respondents are less enthusiastic about the potential of renewable energy at the regional level. Compared to other countries, there is also a fair proportion of Cambodia respondents (5.8%) disagreeing with this statement.



19 On a scale of 0-10, how confident are you that ASEAN will achieve its 23% target share of renewable energy in the region's total primary energy supply by 2025?

Respondents from Vietnam (5.6), the Philippines (5.3) and Laos (5.2) are most confident about achieving the renewable target by 2025. Those from Cambodia (4.9) and Indonesia (4.7) are almost fairly confident. On average, Singapore respondents score a 3.8 and the Malaysia respondents a 3.9. While the proportion of respondents from these two countries who are neutral on this issue is fairly large, an even more significant proportion expressed their lack of confidence toward the goal. Thailand respondents scored a 4.6 which is the ASEAN average. While they may not have expressed the strongest negative attitude, a fairly significant proportion also indicated a lack of confidence. Respondents from Brunei Darussalam demonstrate a similar pattern.



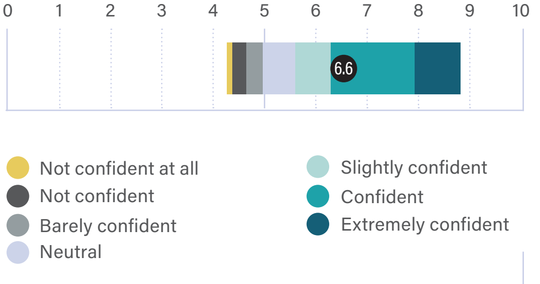
20 On a scale of 0-10, how confident are you that adopting climate change measures and policies will drive the innovation and competitiveness of your economy?

ASEAN respondents are generally confident that adopting climate change measures and policies will drive the innovation and competitiveness of their country's economy.

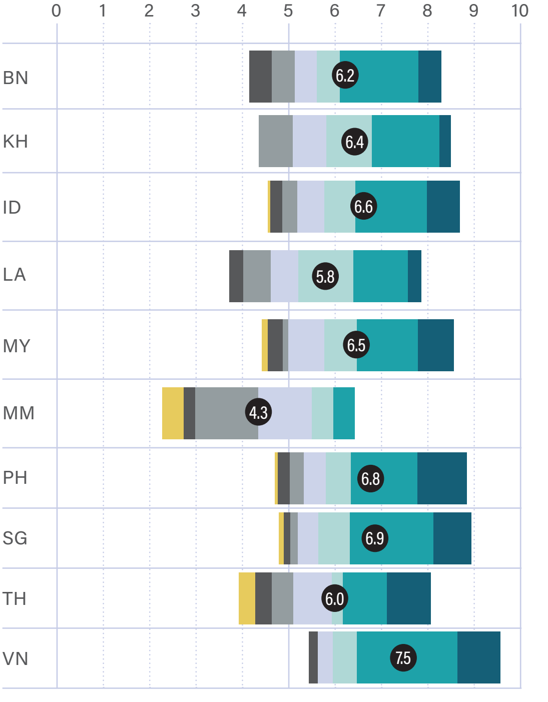
On a scale of 0 to 10, respondents rated their confidence at 6.6. The level of confidence is higher in countries such as Vietnam (7.5), Singapore (6.9), and the Philippines (6.8). Of note, the high optimism on climate transformation in Vietnam could be due to the country's big push into the renewable energy sector over the past few years.

Students, respondents from regional organisations, and the media are the top three groups among those who feel confident about economic competitiveness resulting from climate transformation with confidence levels of 7.4; 7.1; and 7.0 respectively.

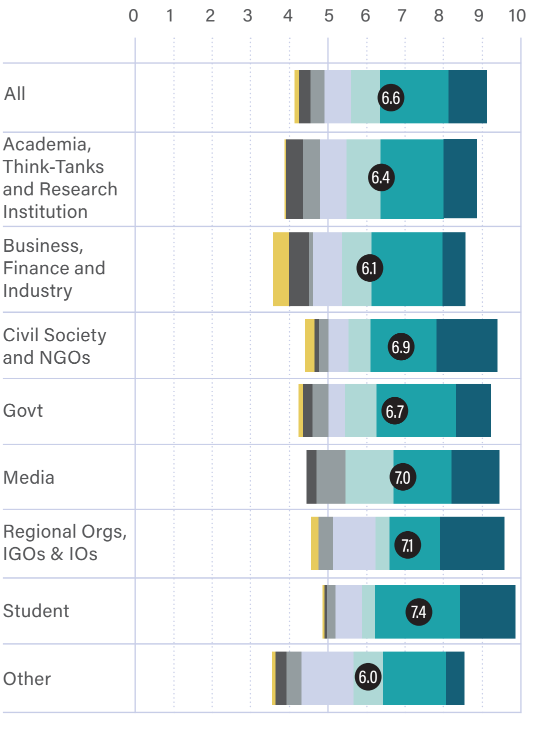
ASEAN



Country



Affiliation

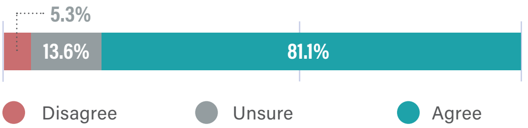


21 "My country's food supply is threatened by climate change (e.g. food imports, self-production yields)." Do you agree?

Majority of respondents agree (81.1%) that their countries' food supply is threatened by climate change. The rate of agreement is higher compared to last year's survey (72.3%). Among ASEAN respondents, those from the Philippines (90.3%), Vietnam (85.0%), Singapore (84.4%), Indonesia (83.7%), and Brunei Darussalam (82.4%) are the most concerned about their food security.

Meanwhile, Cambodia has the highest proportion of respondents who are not concerned about food security (23.5%). Across all countries, the proportion of respondents who are unsure about this issue is highest in Thailand (28.6%).

ASEAN



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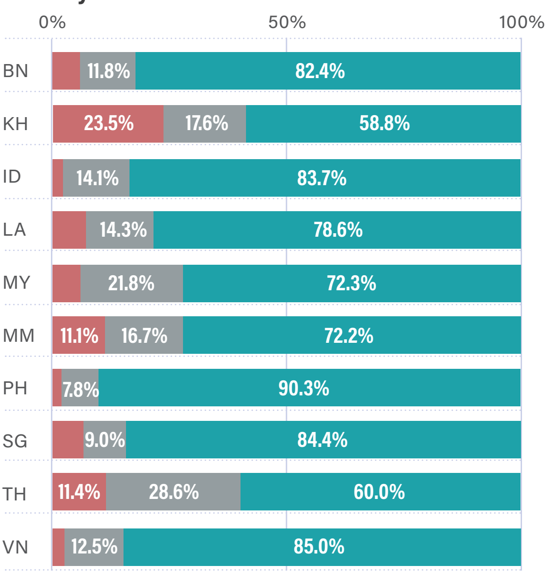
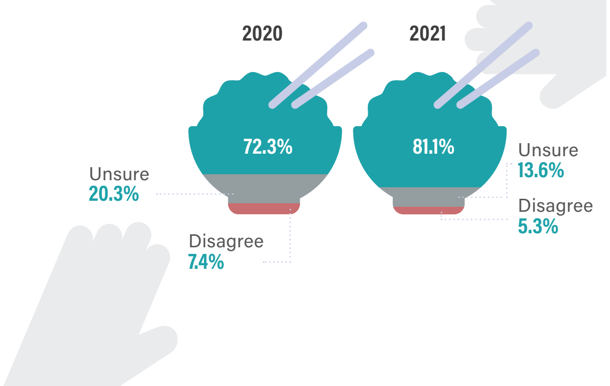


ASEAN



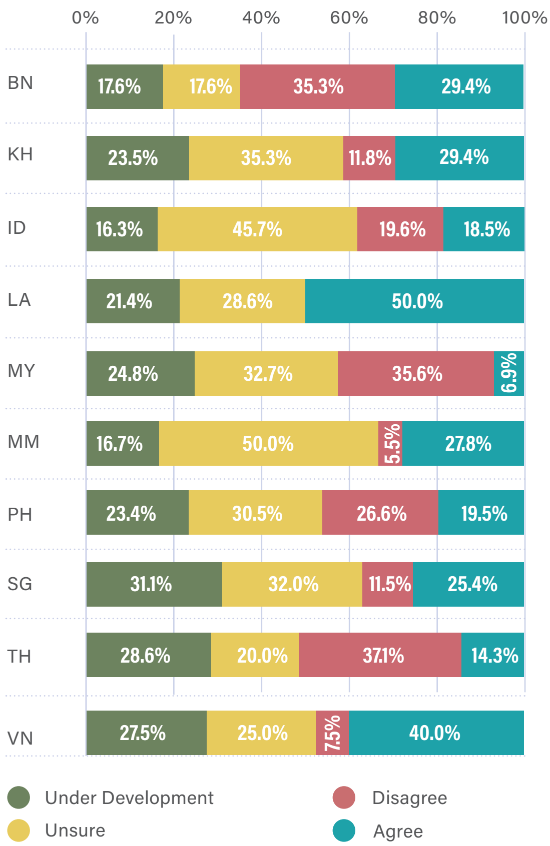
22 "My country has a policy and plan to safeguard agriculture against climate change." Do you agree?

This question saw a relatively high level of uncertainty among respondents. 32.8% of respondents are unsure whether their country has a policy and plan to protect agriculture against climate change whereas 24.3% and 22.0% of respondents say that climate sensitive policies on agriculture are currently under development or disagree with the statement respectively.

Only 21.0% of respondents agree that their country has a policy and plan to safeguard agriculture against climate change. The proportion of those who agree is higher in Laos (50.0%), Vietnam (40.0%), Brunei (29.4%), Cambodia (29.4%), Myanmar (27.8%) and Singapore (25.4%). On the other hand, Thailand respondents showed by far the most disagreement (37.1%), followed by Malaysia (35.6%), Brunei (35.3%), and the Philippines (26.6%).

ASEAN

Country



23 Which are the top three climate change mitigation measures your city of residence should prioritise?

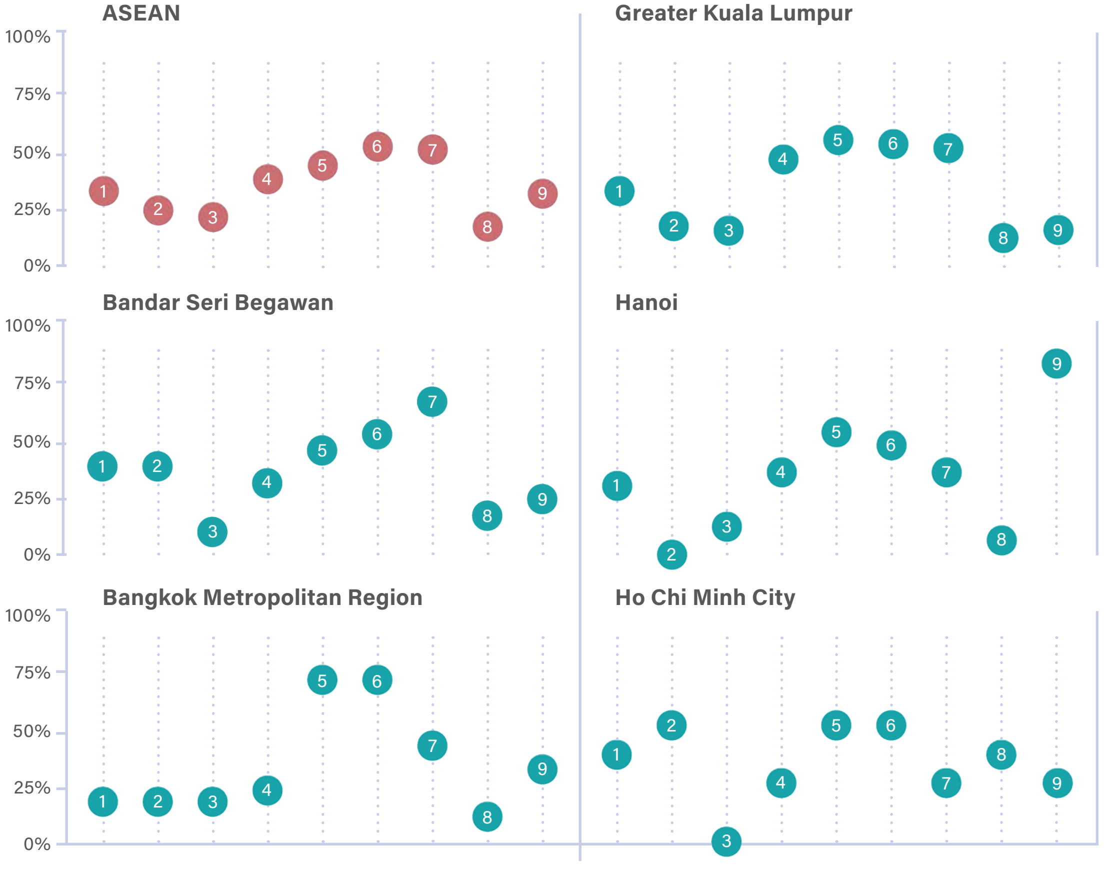
Of the 610 survey respondents, 544 are residents in Southeast Asia, with the majority concentrated in Southeast Asian capital cities. The most well represented cities are Singapore (140 respondents), Greater Kuala Lumpur (58 respondents), Metro Manila (51 respondents) and Jakarta Metropolitan Area (49 respondents).

1 : Energy efficiency measures
2 : Green building standardisation
3 : Installation of bike lanes
4 : Land-use/zoning regulations (including farmland protection and greening of cities)
5 : Promotion of public transport
6 : Recycling measures (including prohibition of single-use plastics)
7 : Renewable energy adoption
8 : Tax incentives on hybrid vehicles
9 : Vehicle emissions control

Focusing on political and economic capital cities (Singapore, Bangkok Metropolitan Region, Jakarta Metropolitan Area and Greater Kuala Lumpur, Yangon, Metro Manila, Ho Chi Minh City, Hanoi, Phnom Penh, Bandar Seri Begawan and Vientiane), there were variations regarding views on which top three climate change mitigation measures should be prioritised.

All respondents believe that their city government must prioritise recycling measures (50.9%), renewable energy adoption (49.6%), and promotion of public transport (42.6%).

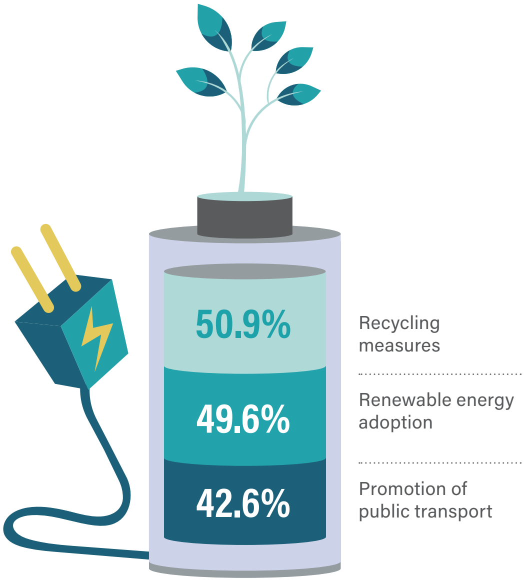
Recycling measures are particularly important for respondents from Yangon (81.8%), Phnom Penh (81.3%), Bangkok Metropolitan Region (73.7%), Metro Manila (56.9%), and Greater Kuala Lumpur (53.4%). and). Renewable energy adoption is most preferred in Singapore (65.0%), Bandar Seri Begawan (64.3%), Vientiane (57.1%), and Greater Kuala Lumpur (51.7%). Meanwhile, the promotion of public transport is popular among respondents from Bangkok

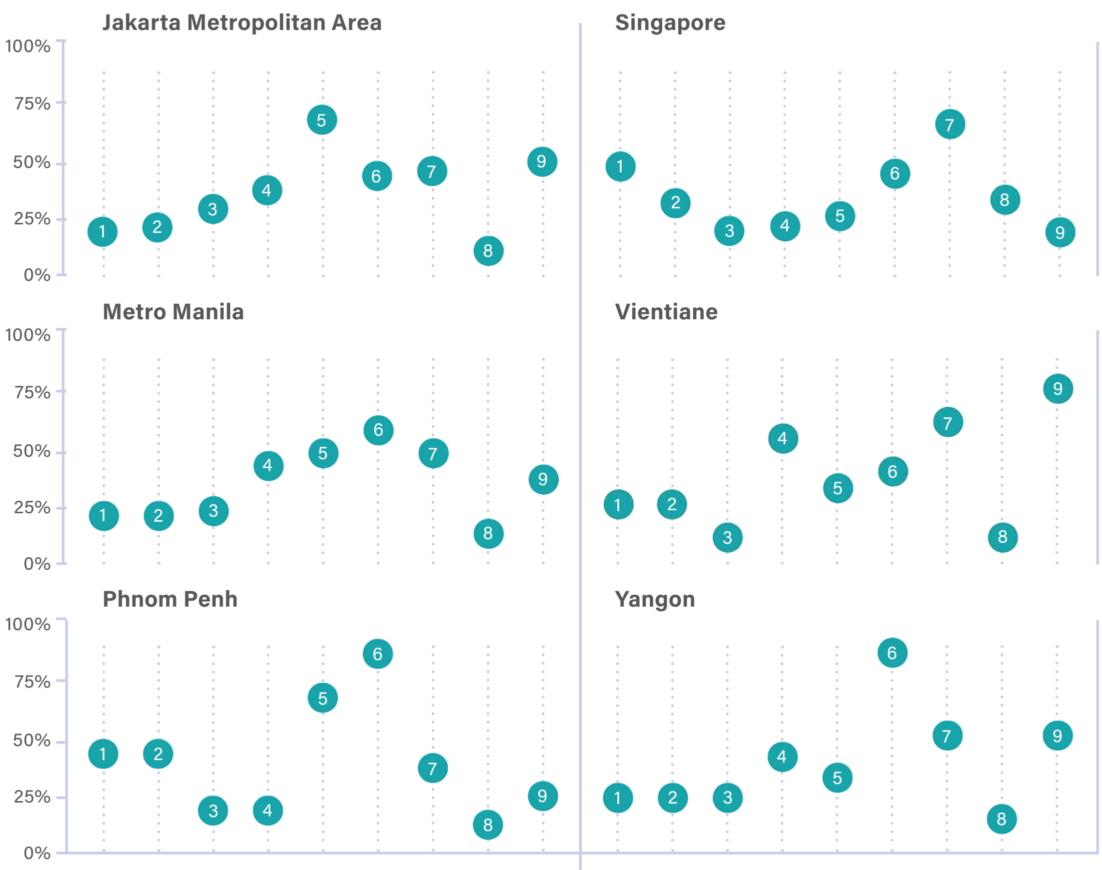


Metropolitan Region (73.7%), Jakarta Metropolitan Area (65.3%), and Phnom Penh (62.5%), Greater Kuala Lumpur (55.2%), Hanoi (52.9%). It should be noted that apart from the three most preferred interventions mentioned, 71.4% of respondents from Vientiane overwhelmingly agree that their city government must prioritise vehicle emissions control, perhaps reflecting concerns over air quality arising from emissions of older vehicles and diesel engines.

Among those climate mitigation measures, tax incentives on hybrid vehicles (15.8%), installation on bike lanes (20.0%), and green building standardisation (23%) were selected as the three least favourable measures among all ASEAN respondents. Although those measures are critical in helping cities to decarbonise, ASEAN respondents currently do not put those measures at the same level of urgency as recycling measures, renewable energy, or promotion of public transport. There are opportunities for policymakers to promote the benefits of these measures.

ASEAN's Top 3 Mitigation Measures



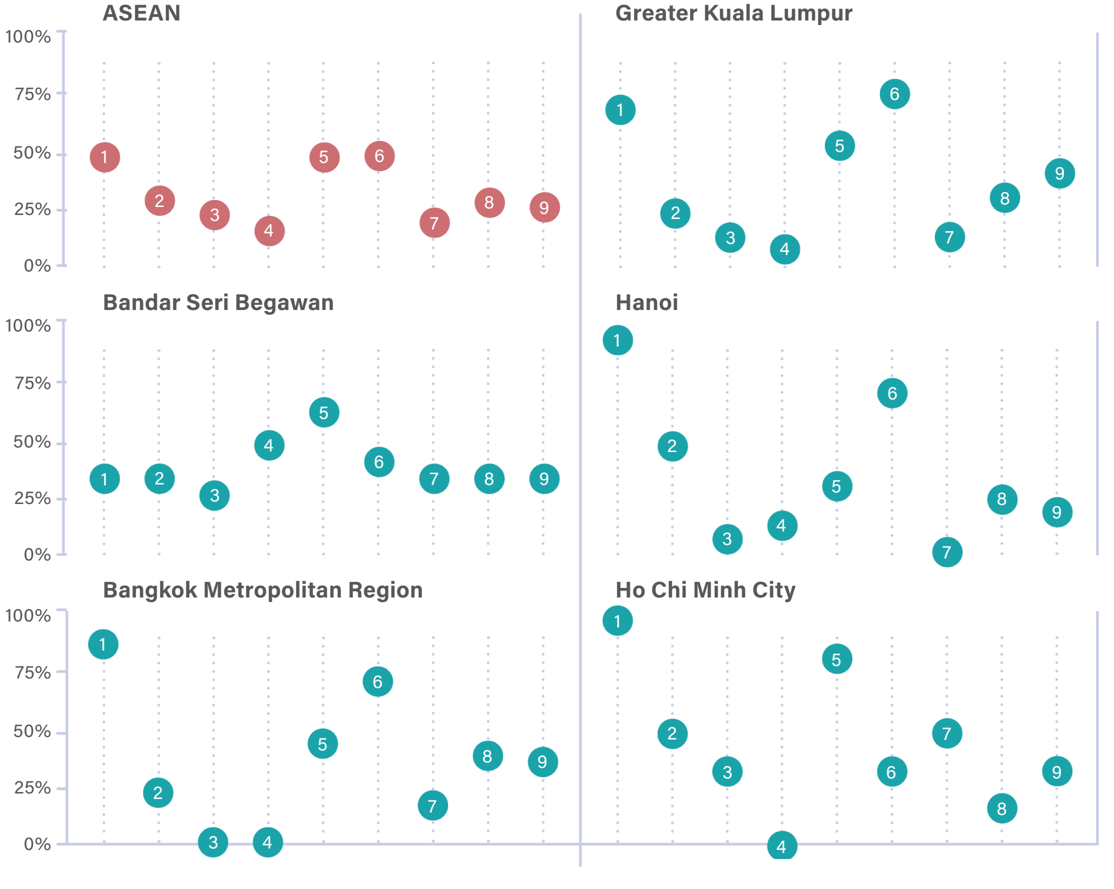


24 Which are the top three climate change adaptation measures your city of residence should prioritise?

1 : Air quality measures
2 : Climate proofing of infrastructure
3 : Coastal protection
4 : Disaster early warning system
5 : Flood protection
6 : Green restorations in public spaces
7 : Natural disaster evacuation/emergency plan
8 : Physical conservation measures (i.e. building restrictions in riverside and coastal areas)
9 : Water catchment measures

When asked about three climate adaptation measures that their city governments must prioritise, all respondents believe that they must prioritise green restoration of public spaces (50.0%), flood protection (49.4%), and air quality measures (49.3%).

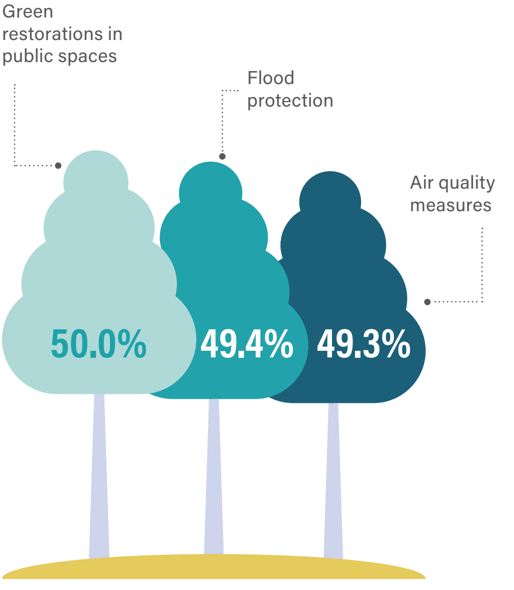
Green restoration of public spaces is overwhelmingly popular among respondents from Greater Kuala Lumpur (72.4%), Hanoi (70.6%), Phnom Penh (56.3%), Metro Manila (54.9%), and Jakarta Metropolitan Area (51.0%). Flood protection is most preferred in Jakarta Metropolitan Area (67.3%), Vientiane (64.3%), Ho Chi Minh City (62.5%), Bandar Seri Begawan (57.1%), Phnom Penh (56.3%), and Metro Manila (50.0%). Meanwhile, air quality measures are important among respondents from Hanoi (94.1%), Bangkok Metropolitan Region (84.2%), Ho Chi Minh City (75.0 %), Jakarta Metropolitan Area (71.4%), Phnom Penh (68.8%), and Metro Manila (51.0%).

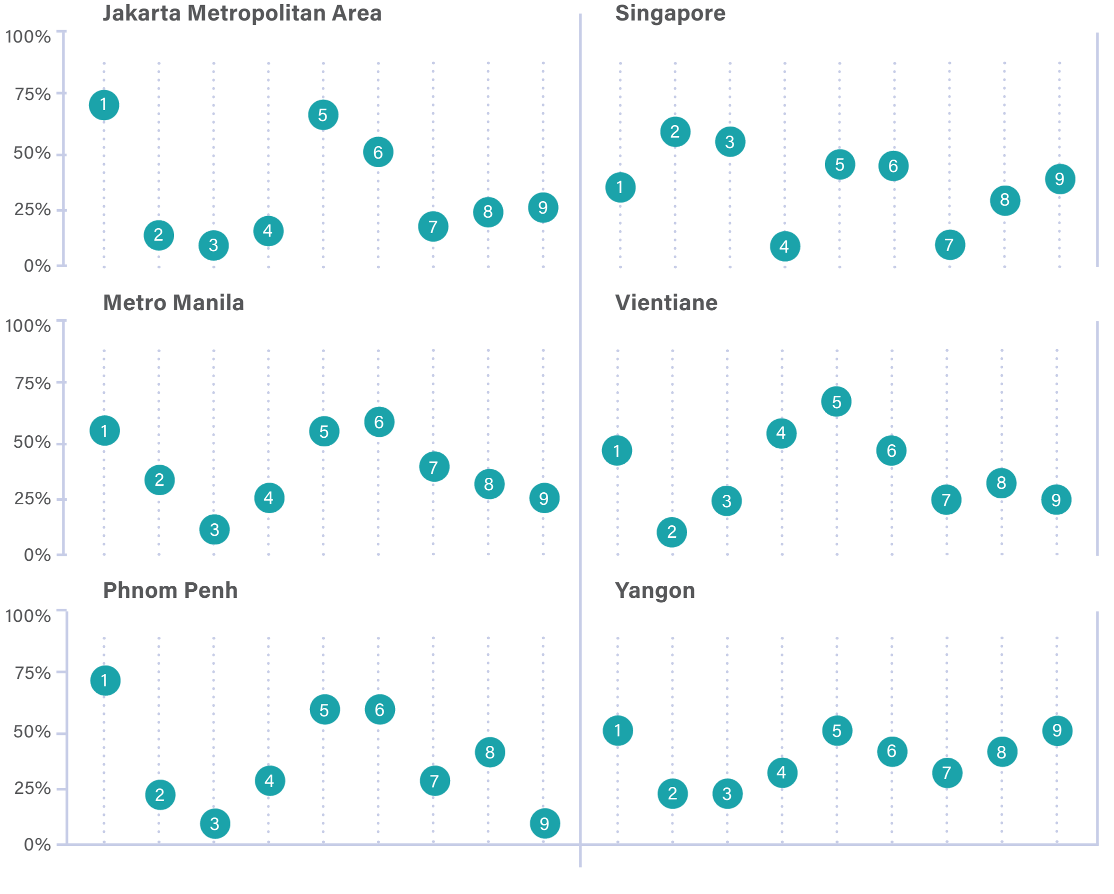


It should be noted Singapore respondents have slightly different priorities. In addition to flood protection, they believe that their city government must also prioritise climate proofing of infrastructure (56.4%) and coastal protection (52.1%). This corresponds with 87.7% of Singapore respondents' view that sea-level rise is the country's top climate impact (Question 8).

Among those climate adaptation measures, disaster early warning system (17.5%), natural disaster evacuation plan (21.1%), and coastal protection (24.4%) are selected as the three least favourable measures among ASEAN respondents. This view in general could be an indicator that not all ASEAN respondents are fully aware of the risks of climate disasters in the future and the need to improve preparedness. Local governments can help to raise awareness of the problems and promote the understanding of these least favourable measures to boost the buy-in of citizens.

ASEAN's Top 3 Adaptation Measures





SECTION IV

PERCEPTIONS OF CLIMATE GOVERNANCE AND GREEN RECOVERY

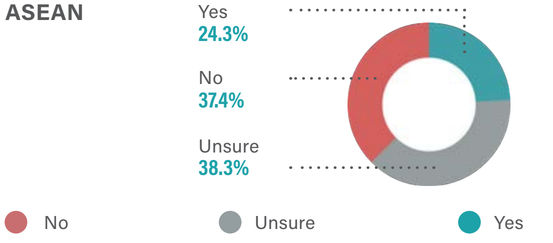
Pages

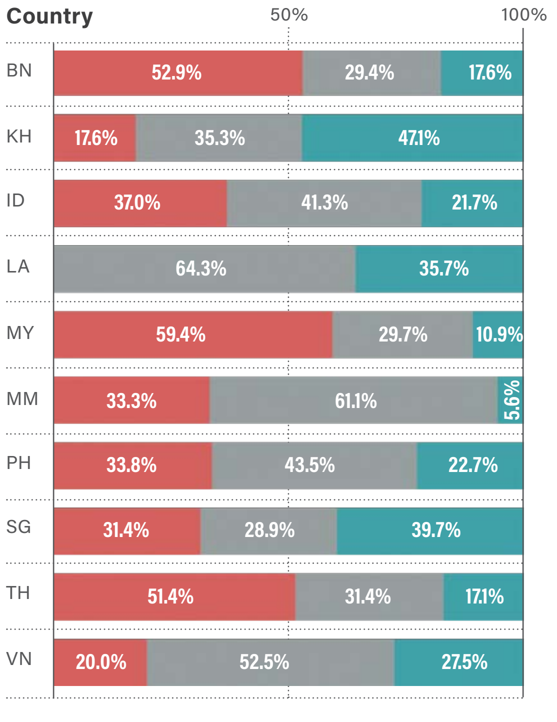
29-33

25 Do you think climate policies and laws in your country are aligned with the target to limit global warming to 1.5 degrees celsius?

All ten ASEAN countries submitted an intended Nationally Determined Contribution (NDC) under the Paris Agreement in 2015, and all except Myanmar have officially submitted their updated NDCs as of August 2021. However, respondents are almost evenly divided in their responses regarding their country's policies and laws to limit global warming to 1.5 degrees celsius.

Respondents from Malaysia (59.4%), Brunei (52.9%), and Thailand (51.4%) are among the top three groups who do not think their country's climate policies and laws are going to contribute to the Paris goals. Uncertainty is common among respondents from Laos (64.3%) and Myanmar (61.1%). Meanwhile, respondents from Cambodia (47.1%) and Singapore (39.7%) appear to have the highest certainty that their country has policies and laws aligned with the Paris goals.

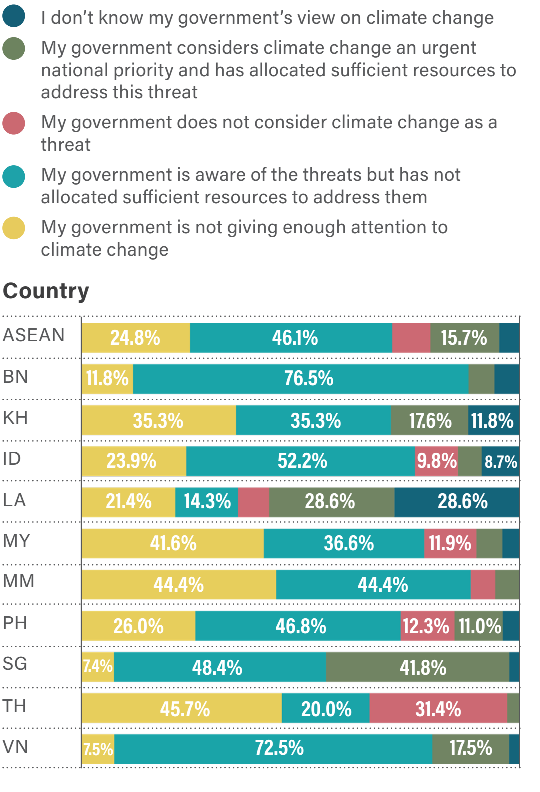




26 How would you rate your national government's policies and actions taken in support of climate change?

Climate change ranked among the top three concerns of the ASEAN region, according to the *State of Southeast Asia: 2020 Survey*. 53.7% of Southeast Asians view climate change as a "serious and immediate threat to the well-being of their country".[5] Although the level of concern is high among Southeast Asian citizens, 46.1% of respondents in this survey think that their government is aware of the threats of climate change but has not allocated sufficient resources to address them. This view is even more pronounced in Brunei (76.5%), Vietnam (72.5%), Indonesia (52.2%), Singapore (48.4%), and the Philippines (46.8%).

Of the respondents, Singapore respondents (41.8%) rank the highest in their views that their government considers climate change an urgent national priority and has allocated sufficient resources to address climate threats. Conversely, just 2.9% of Thailand respondents are of the view that their government had sufficiently prioritised climate action and allocated resources. Majority of Thailand respondents believe that their government is not giving enough attention to climate change (45.7%) and does not consider climate change as a threat (31.4%).

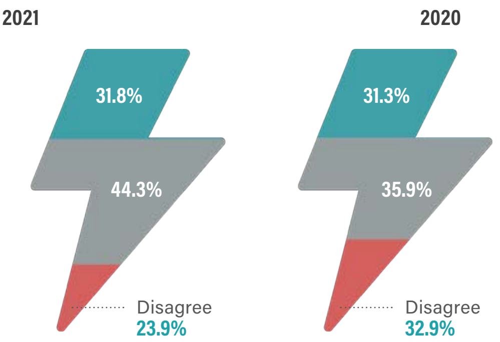


27 "ASEAN is working together effectively to tackle climate change (e.g. development of the ASEAN power grid)." Do you agree?

Respondents are almost evenly split in their response regarding ASEAN's role in climate change. This is similar to last year's result. In fact, the percentage of respondents that are unsure increased from 35.9% to 44.3% while the percentage of respondents that disagree that ASEAN is effective dropped from 32.9% to 23.9%. The disagreement is strong among media communities (60%), yet agreement is more common among regional organisations, intergovernmental and international organisations (48.1%). In addition, students are the most unsure of ASEAN's collective action on climate change (56.8%).

Overall, the level of uncertainty among respondents has increased up by 8.4% from 2020. ASEAN needs to advance its work, such as the development of the ASEAN power grid to help the region transition to more efficient and sustainable energy in the future.

ASEAN



Age

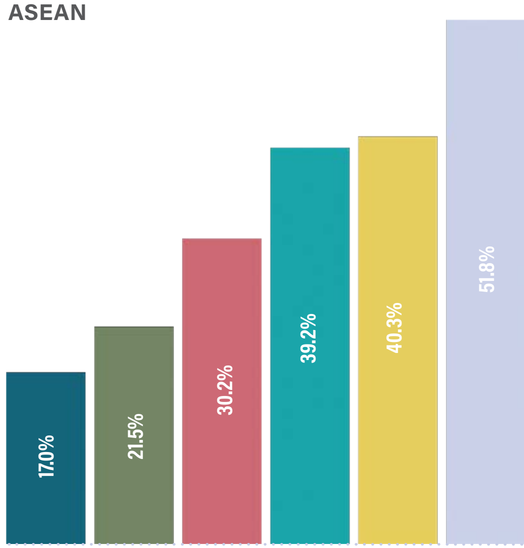
Age	Agree	Unsure	Disagree
All	31.8%	44.3%	23.9%
Under 21	31.4%	51.0%	17.6%
21-35	31.4%	43.0%	25.6%
36-45	36.2%	40.3%	23.5%
46-60	29.9%	45.3%	24.8%
Above 60	26.0%	52.0%	22.0%

Disagree Unsure Agree

28 How can ASEAN governments collectively combat climate change? (Select 2 options of highest priority)

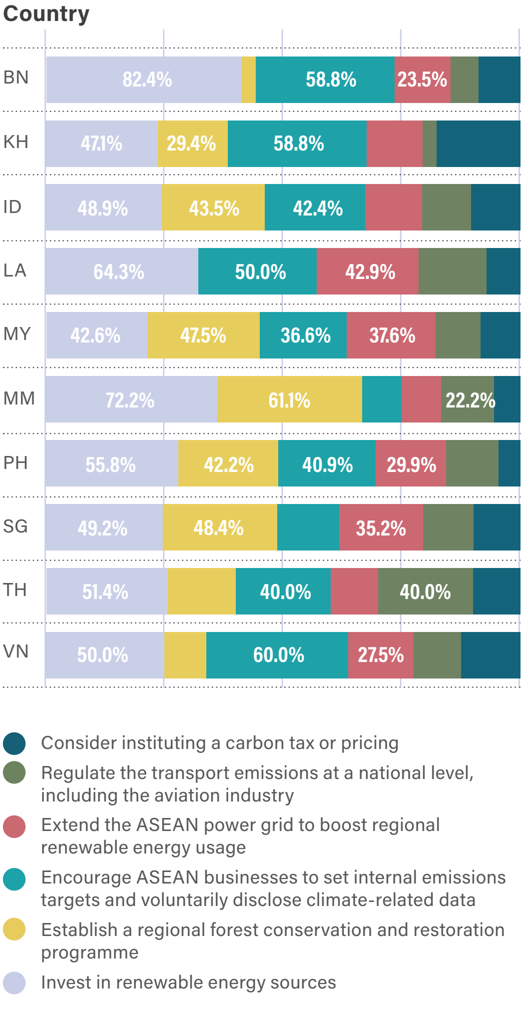
Respondents were generally supportive of all the listed actions that ASEAN governments need to collectively take. The three most popular options are investing in renewable energy sources (51.8%), establishing a regional forest and restoration programme (40.3%), and encouraging ASEAN businesses to set internal emissions targets and voluntarily disclose climate-related data (39.2%). The first option is popular among respondents from Brunei (82.4%), Myanmar (72.2%), and Laos (64.3%). The second option resonates well with respondents from Myanmar (61.1%), Singapore (48.4%) and Malaysia (47.5%). The option to institute a carbon price or tax has the least support overall (17.0%), but it is relatively popular among respondents from Cambodia (35.3%) and Vietnam (25.0%).

ASEAN



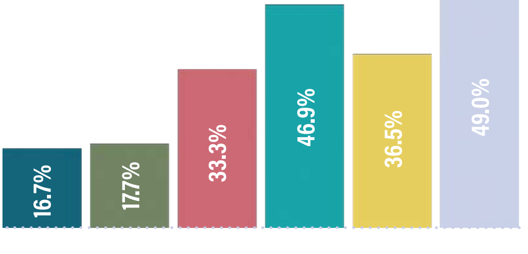
- Consider instituting a carbon tax or pricing
- Regulate the transport emissions at a national level, including the aviation industry
- Extend the ASEAN power grid to boost regional renewable energy usage
- Encourage ASEAN businesses to set internal emissions targets and voluntarily disclose climate-related data
- Establish a regional forest conservation and restoration programme
- Invest in renewable energy sources

28



Among the 96 respondents from the government sector, the most popular option is also to invest in renewable energy sources (49.0%), closely followed by encouraging ASEAN businesses to set internal emissions targets and voluntarily disclose climate-related data (46.9%). Again, carbon pricing has the least support (16.7%).

Respondents from Government only

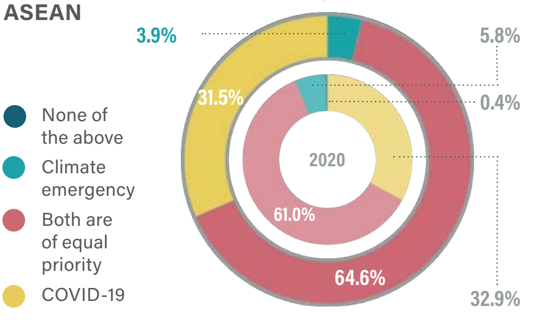


29 Which of the two crises – COVID-19 or the climate emergency – should governments prioritise?

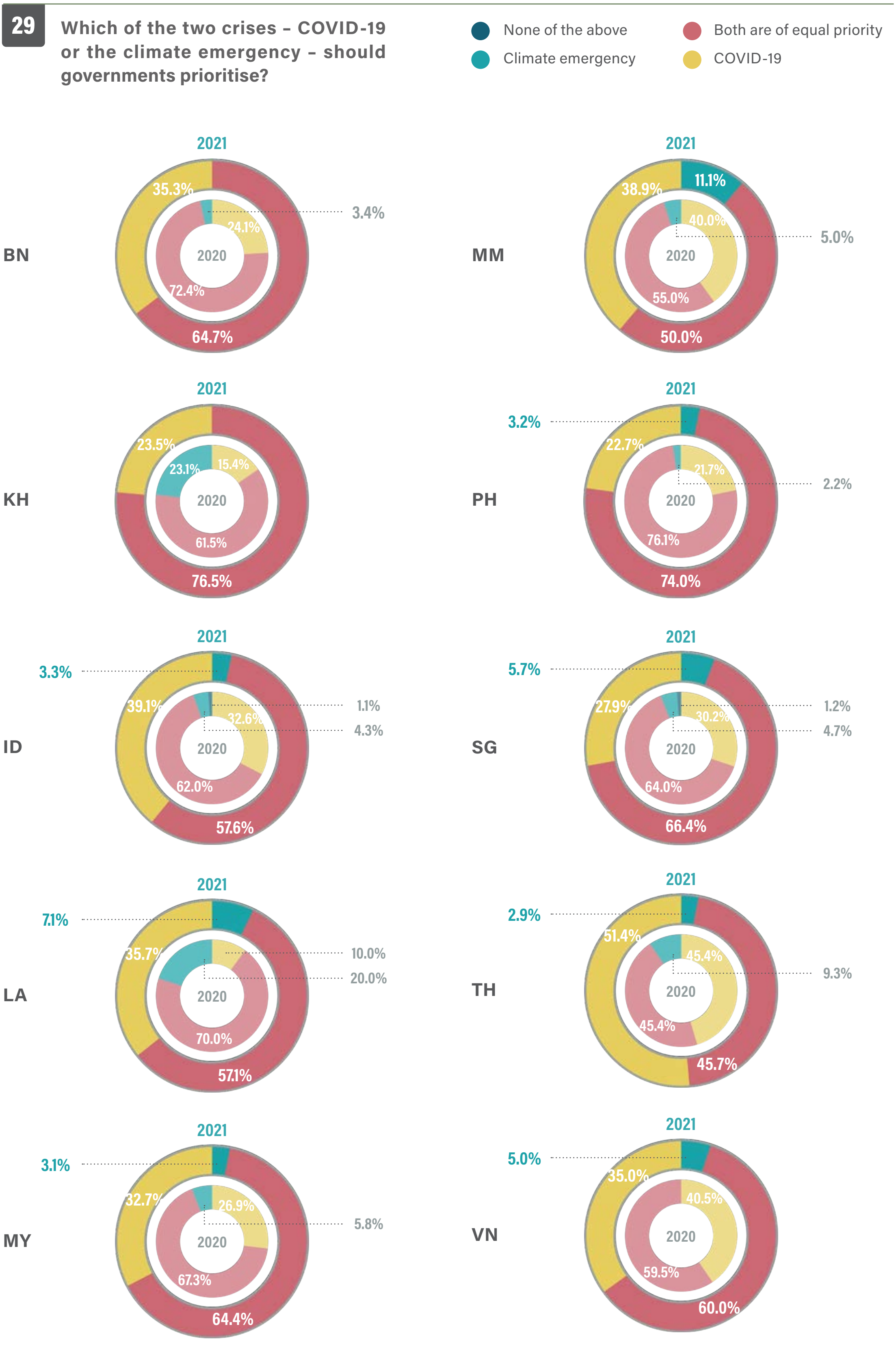
There is a consistent majority across all countries reaffirming that both COVID-19 and the climate emergency are of equal priority (64.6%). This view also resonates with the result of the 2020 survey (61.0%). Climate change is being acknowledged as an emergency despite its slow onset impacts, and COVID-19 wreaking havoc on people's lives and livelihoods.

The strength of this opinion varies. 76.5% of Cambodian respondents share this view — the strongest among all respondents. Cambodian respondents' agreement on this view also increases significantly from last year (61.5%). Also worth noting is Myanmar, whose respondents prioritise climate emergencies at much higher rates than other countries (11.1%).

However, bearing in mind the devastating impact of the Delta variant, Thailand, Indonesia, Brunei, Malaysia, the Philippines have seen an increase in the proportion of respondents who think that COVID-19 should be prioritised from the 2020 survey. This coincides with a stark increase in the proportion of Delta variant infections among COVID-19 cases analysed in Cambodia, Indonesia, Malaysia, Singapore, Thailand and Vietnam before and during the survey period.[7 8] At the same time, daily cases in the Philippines had reached over 5,000, much higher than in 2020.[9] 42.3% of Southeast Asian respondents aged 46-60 feel that COVID-19 should be prioritised over climate change, compared to 32.7% in 2020. This corresponds to the growing passivity of this age group in climate advocacy, with 11.1% more opting to follow news and share information rather than joining climate movements or leading projects (Question 9); making it the age group with the highest concern for COVID-19 over climate change, as well as the second least active participation in climate advocacy (after those above 60).



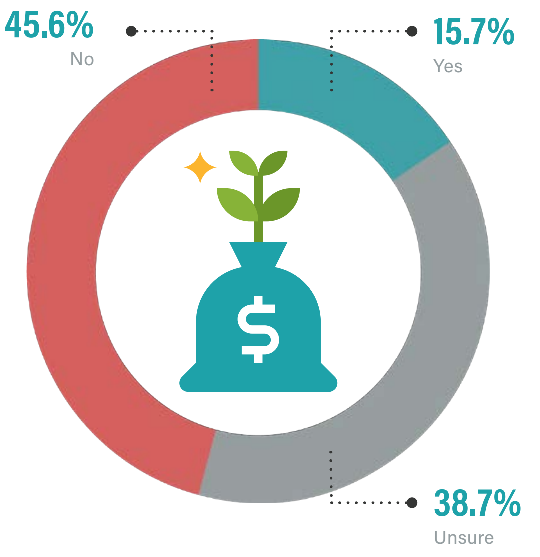
29 Which of the two crises – COVID-19 or the climate emergency – should governments prioritise?



30 Do you think your government's COVID-19 stimulus spending contributed to a green recovery?

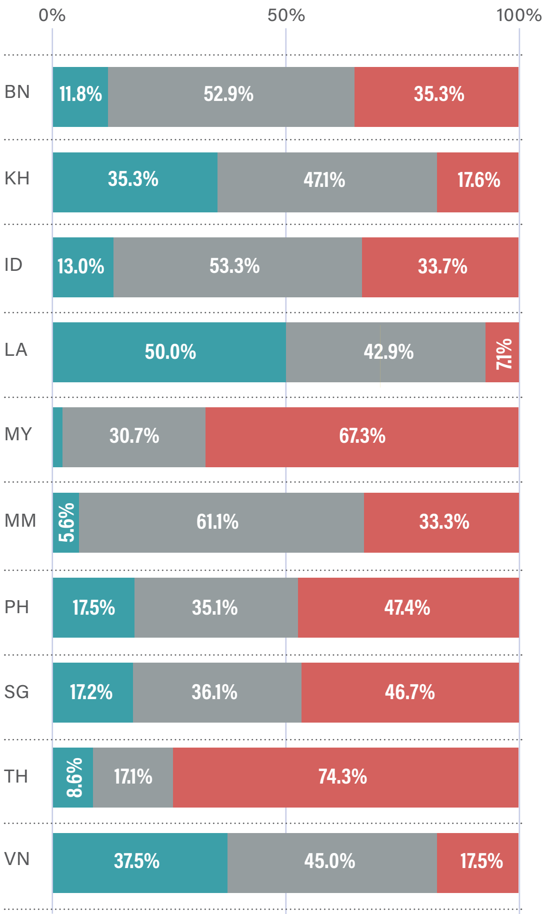
Respondents are generally split on the issue of their respective government's COVID-19 stimulus spending and green recovery. 45.6% of respondents believe that their governments' stimulus spending does not contribute to green recovery. Among those who disagreed, respondents from business, finance and industry indicated the highest disagreement (55.9%). However, this question also saw a relatively high level of uncertainty. Overall, 38.7% of respondents are unsure; this proportion is at 61.1% for Myanmar, 52.9% for Brunei, and 47.1% for Cambodia. Meanwhile, 50.0% of Laos respondents agree that their government's stimulus spending contributes to green recovery, followed by Vietnam (37.5%).

ASEAN

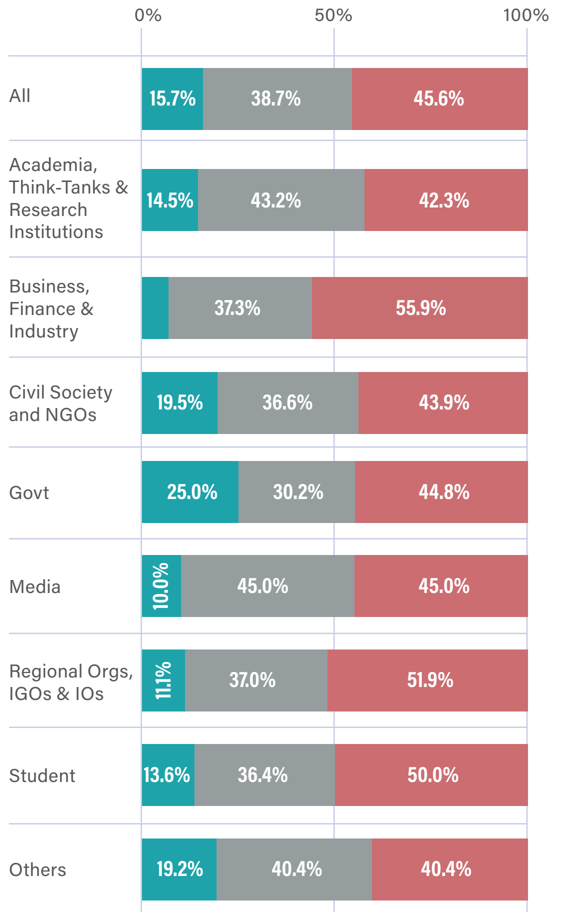


No Unsure Yes

Country



Affiliation



SECTION V

PERCEPTIONS OF INTERNATIONAL COOPERATION

Pages

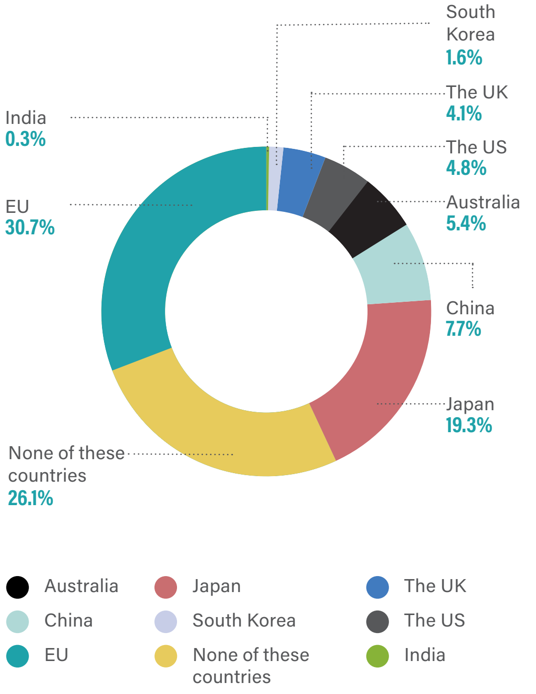
35-36

31 In your opinion, which country has demonstrated climate leadership to help the world achieve Paris-aligned goals?

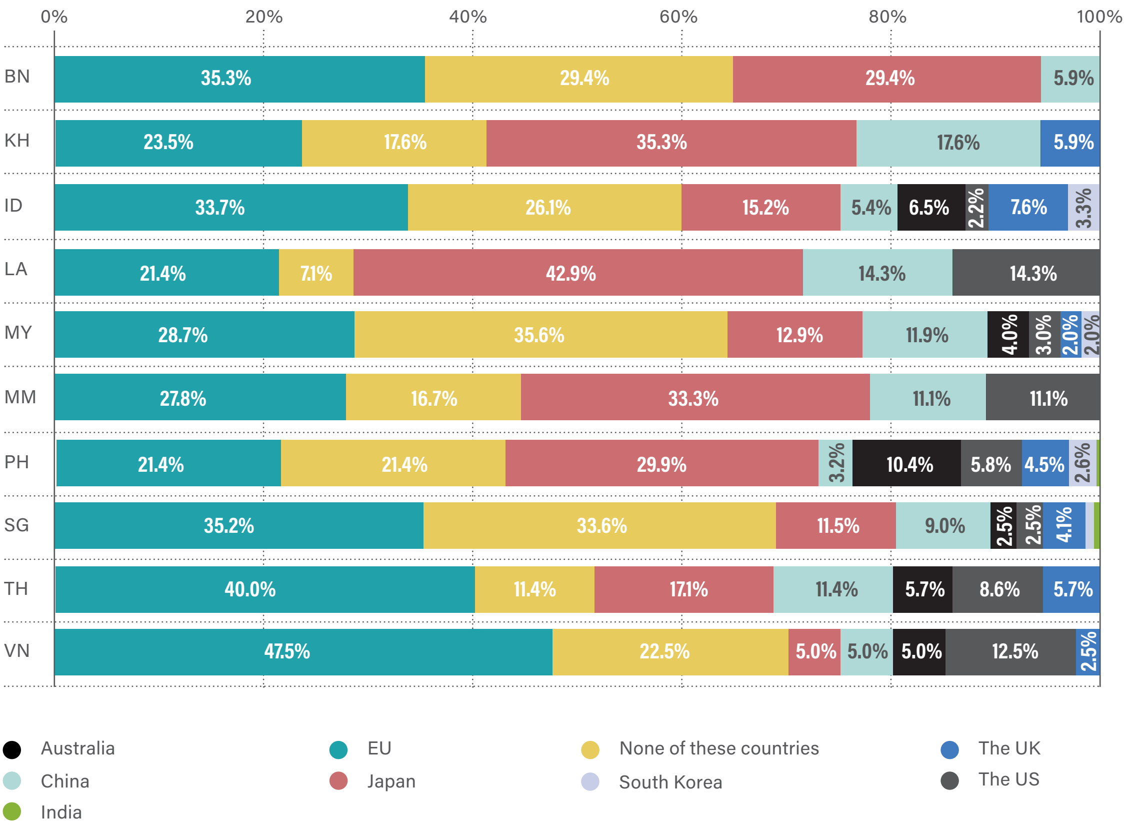
In the absence of global climate leadership over the last few years, 30.7% of ASEAN respondents believe that the EU has demonstrated strongest leadership. This view is shared mainly by Vietnam (47.5%), Thailand (40%), Brunei (35.3%), Singapore (35.2%), and Indonesia (33.7%).

Of note, an almost equal proportion of ASEAN respondents (26.1%) are unable to attribute any global climate leadership role to a country, revealing a group of skeptics who remain cynical about the state of climate leadership. This view is particularly strong in Malaysia (35.6%).

Meanwhile, Japan (19.3%) is the second front-runner in global climate leadership for ASEAN respondents. Interestingly, Japan appears as the first choice in the Mekong countries of Cambodia (35.3%), Laos (42.9%), and Myanmar (33.3%), as well as the Philippines (29.9%).



Country



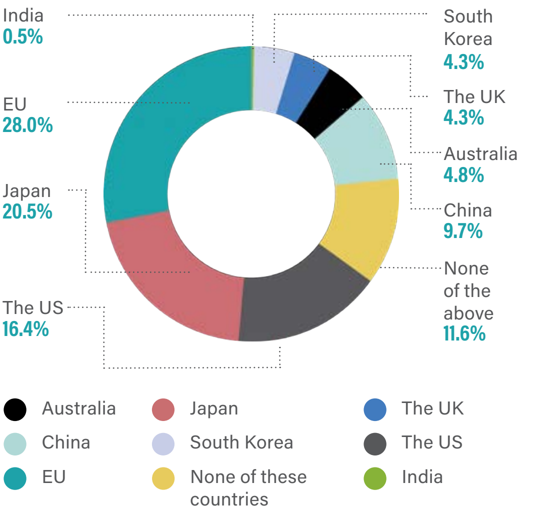
32 Which country could play a more proactive role in sharing their climate expertise, practical ability, and technical know-how in your country?

The majority of respondents (28.0%) feel that the EU is the most trusted partner in sharing climate expertise, practical capabilities, and technical know-how with their country. This view is most pronounced in Thailand (37.1%), Singapore (36.1%), Vietnam (35.0%), Indonesia (29.3%), and Malaysia (25.7%).

Japan (20.5%) is selected as the second most trusted partner in climate cooperation in the region. At the country level, Japan is the top choice for Cambodia (47.1%), Laos (35.7%), Brunei (35.3%), and the Philippines (31.8%).

Interestingly, the representation of skeptical cynics dropped by more than half in the previous question to 11.6% when asked which country could do more. Where the US was previously poorly ranked at only 4.8% (Question 32), we see the perception of the US' ability to do more rising more than three-fold, to 16.4%. This shows that there is still a residual reservoir of hope that US will take greater climate action, perhaps in large part due to the Biden Administration's focus on climate change as compared to the previous Administration.

ASEAN



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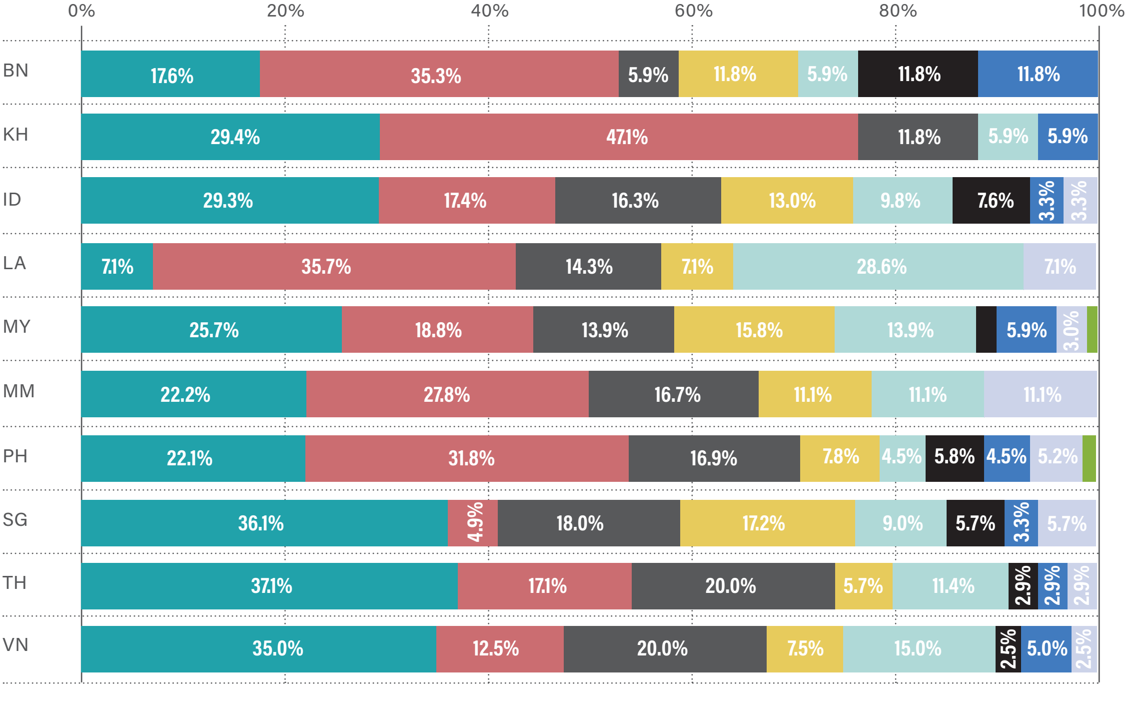

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Thank you

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.

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