



CLIMATE CHANGE COMBAT RADAR

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Pros and cons: How climate change attitudes shifted in 2022

Roland Berger's third annual Climate Change Combat Radar measured diminishing attitudes but improved action on climate change this year as the world confronted several new, if not more immediate, uncertainties. Here's everything we learned and what decision-makers can do about it:

- **Google trend data revealed that peoples' curiosity for climate change decreased significantly in 2022.**
- **An analysis of recent UN General Assembly speeches showed that climate change was much less addressed than before.**
- **In addition to a sharp decrease of public interest, people in the US and in Canada demonstrated a lower willingness to act on climate change.**
- **On the positive side, lower attitude scores did not translate into lower action scores, which clearly improved over the past year.**
- **Our latest assessment of European policies showed significant improvement in clean energy initiatives across all countries, especially in Sweden, Denmark, and France, which bolstered their already leading policies last year.**
- **People in China and India showed the highest individual propensity to act on climate change across all 31 countries.**
- **Stronger media coverage on climate change can be observed in countries such as Indonesia and China.**
- **A recent survey by Yale & Meta shows that the importance of climate change for individuals is higher in the Middle East than in Europe, and their willingness to act surpasses that of individuals in both Europe and the Americas.**

In February 2022, the Intergovernmental Panel on Climate Change (IPCC) published its sixth assessment report, revealing that global warming risks are even higher and more complex than originally anticipated. Days later, Russia's invasion of Ukraine averted global attention away from climate change and put it directly on regaining world peace, reducing rising inflation (including energy costs), and assuring consumers and investors alike that a global recession might be avoided.

In other words, society lost momentum in the fight against climate change in 2022, according to our third annual Climate Change Combat Radar. Due to what could be perceived as more pressing uncertainties, climate change attitudes noticeably dropped in developed countries this year. At the same time, attitudes rose in the Middle East, and meaningful legislative action was passed in both the US and Europe this year. So, it wasn't all bad news for climate change activists.

Furthermore, the majority of governments, companies, and consumers now seem to agree that society needs to be on a path towards collectively combating climate change. We may not all agree on country-specific ways to accomplish this, but decarbonization, renewable energy, and their corresponding incentives are viewed as the leading approach to overcoming global warming. Despite the more immediate threats now taking place, there is long-term hope on climate change.

But the modest gains and incremental action taken this year did not improve climate mitigation. Worse still, in some countries, action is even stalling, if not reversing. To meet the goal of limiting global warming to 1.5°C by 2030, society and governments alike must make climate change a top priority again.

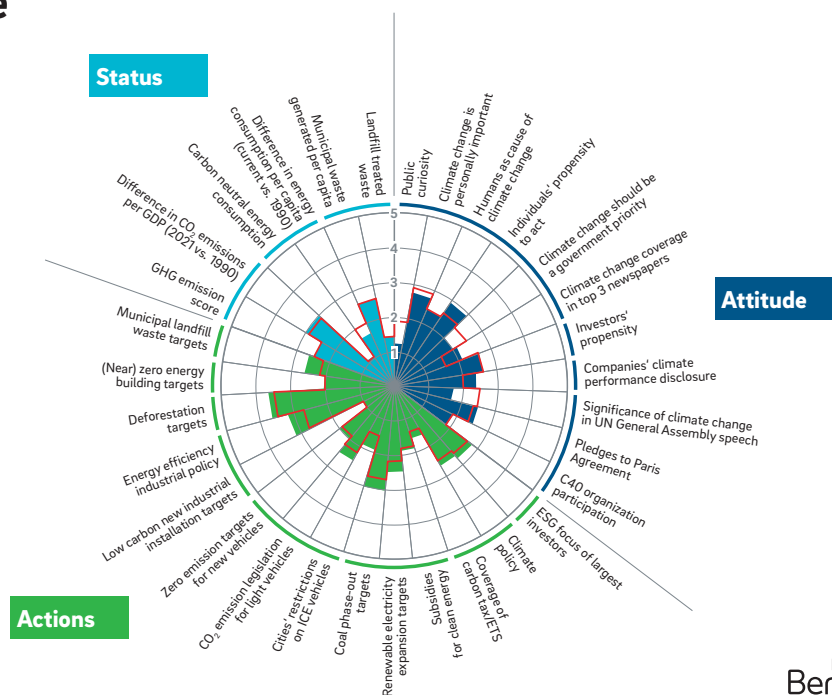
That's where our Climate Change Combat Radar comes in. The radar measures 31 indicators in 31 countries across a range of dimensions. These include attitudes,

Climate Change Combat Radar world average

Country scoring

█ Edition 2 (Q3 2021)
█ Edition 3 (Q3 2022)

Source Roland Berger



expectations, actions, policies, and effectiveness. By quantifying indicators over time, we believe attitudes can be measured and ultimately improved, which leads to greater action.

Additionally, our research empowers decision-makers with clarifying insights, meaningful evaluation, and forward-thinking strategies to combat climate change on multiple levels of society. In turn, this allows decision-makers to identify the most appropriate points for action while avoiding the most wasteful or counterproductive efforts.

To that end, here is what we learned this year:

• **Europe still leads, Middle East making gains, others slacken**

In this year's radar, overall attitude of society, investors, companies, and politics towards climate change remain high. Despite growing concerns over global security, energy prices, and recession, more countries are increasingly taking greater action on climate change. But the level of action, however, is still unequal around the world. And the radar score shows slow progress on climate mitigation with clearly differentiable developments across the three dimensions and regions. With few exceptions, status scores have significant room for improvement across all regions as the push for decarbonization gains steam.

Like last year, Europe remains the clear leader on climate action. With an average overall score of 2.77 (out of 5), European countries scored higher than American (2.15), Asian (2.12), and Middle Eastern (1.43) countries. Although the Middle East remains the lowest scoring region, it was the only region who saw its scores significantly improve by 0.35 over last year's radar. In fact, a closer look at the data revealed declining attitudes towards climate change in all countries studied but the Middle East, especially in developed countries.

This decline in attitude can in all likelihood be attributed to the war in Ukraine, which has shaken consumer confidence, led to rising energy prices, and added to already rising inflation and financing costs. These fears have taken a dominant role in public discourse this year. In fact, a recent survey by Yale & Meta showed that people in more developed countries do not see climate change as a top priority for their governments right now. Nevertheless, significant improvements in climate action in all regions resulted in a more balanced overall result.

To gain a better understanding of how climate attitudes and action differ, consider our regional and country-specific analysis.

Europe

Despite Europe's leading position in ambitious climate pledges, company climate performance disclosures, and investor propensity to act, climate change lost some of its momentum here too. Google trend data shows that peoples' curiosity for climate change decreased significantly. Lowered public interest was especially observed in Norway, France, Germany, and the Netherlands.

To corroborate the region's diminishing interest, an analysis of recent UN General Assembly speeches showed that climate change was much less addressed than before. Although media coverage for climate change actually increased in countries such as France, Switzerland, and Spain, overall European media scores were lower than any other region.

On the positive side, lower attitude scores did not translate into lower action scores in Europe, which clearly improved over the past year. With the binding European Green Deal, European countries have raised their climate ambitions to meet the rigorous targets set by the European Union. For example, Europe is considered the global leader for their net zero deforestation target. In addition, several countries adopted plans to phase-out combustion passenger cars by as early as 2035 in Denmark and 2040 in both France and Spain.

Furthermore, 18 EU countries defined coal phase-out dates, while Belgium, Sweden, and Austria have already discontinued coal production entirely. In short, our latest assessment of European policies showed significant improvement in clean energy initiatives across all countries, especially in Sweden, Denmark, and France, which bolstered their already leading policies last year.

Under the new REPowerEU plan, the European Union now targets a share of 45% renewable energy by 2030. While Germany (80% by 2030) and Italy (70% by 2030) increased their renewable energy expansion plans, the EU now has several countries like Portugal, the Netherlands, Austria and Denmark that are aiming for almost 100% renewable energy by 2030.

Asia

Attitude scores in Asia remained on a comparable level with Europe, according to our latest radar results. People in China and India, however, showed the highest individual propensity to act on climate change across all 31 countries.

Furthermore, stronger media coverage on climate change can be observed in countries such as Indonesia and China. Amid the worst heat waves and record droughts in decades, the local population perceives climate change as a high priority. In contrast to this development, Asian governments sharply pivoted away from climate change in their UN General Assembly speeches, however. This was a stark reminder of how political attention can quickly change when more seemingly urgent topics come into play.

Asia countries also continues to follow Europe's lead in climate action through further legislation for industrial energy transition. For instance, Japan announced the shutdown of inefficient coal plants by 2030, although Singapore (by 2050) and Indonesia (by 2056) both fall significantly behind European targets. While China continues to increase their renewable energy installations, the prioritization of energy security led to the highest ever annual coal production in 2021. What's more, China has not communicated an end date for coal plants but did announce the beginning of a phase-out by 2026.

In terms of investor focus on environmental policies, Asia fell further behind the Americas and Europe. A more detailed analysis on the coverage of the Principles of Responsible Investment (PRI) initiative showed that investors in India (SBI fund),

Indonesia (Batavia asset) and Singapore (Eastspring Investment) incorporate ESG into few managed asset classes.

Advances in vehicle emissions legislation stalled last year as well, which can be observed across most Asian countries. India's new target for 30% share of electrical vehicles by 2030 was the lone positive exception. Along with Japan, India also set new emission reduction targets between 36-50% by 2030. And Singapore hopes to have 80% of its buildings running on green energy that same year.

As an emitter of more than half of current global emissions, the region plays a pivotal role for climate action. Asian countries continue to increase their energy consumption when compared to 1990 levels but their energy consumption per capita is much lower than in the Americas and Europe. Nonetheless the world needs Asia to contribute significantly more in future to limit global warming to 1.5°C by 2030. While the future could bring encouraging improvements, Asian countries are crucial to climate change success.

Americas

This year, the Americas had the highest attitude scores among all regions. Like Europe and Asia, however, recent Google trend data and surveys showed overall lower attitude scores when compared to our previous radar. In addition to a sharp decrease of public interest in all observed countries, people in the US and in Canada demonstrated a lower willingness to act on climate change, and recent survey results in Canada further revealed that people currently place a lower priority on combating climate change. While Canada, Mexico and the US continued to put emphasis on climate change in their UN General Assembly speeches, Brazil's government sharply reduced it, indicating a decreasing priority on climate change.

The Americas action score slightly improved but remains behind Europe and Asia. Overall, the Americas are frontrunners in terms of renewable electricity expansion targets, however. Canada and the US committed to 100% renewable electricity by 2035. Brazil (85% by 2030) and Mexico (35% by 2024) lag with less ambitious commitments.

But the strongest signal for climate action in the Americas came from the US. The landmark Inflation Reduction Act marks a historical change in climate policy and underlines the Biden administration's commitment to the Paris Agreement. It will put the US on a path to reduce emissions by approximately 40% by 2030, compared to 2005 levels.

In fact, the Americas is the only region that achieved an improved status score, largely driven by stronger decreases of GHG emissions per GDP in Mexico and the US compared to 1990 levels. Despite this progress, America's overall status scores remain low. The fossil fuel and gas industry in Canada and Mexico are still vital parts of their respective economies. For instance, Mexico's current government continues to limit advanced climate legislation in favor of fossil fuel friendly policies which demonstrates backward development of climate policy in the country.

Middle East

The Middle East showed overall the strongest improvement in this year's radar. While all scores remain comparably low, several developments clearly signal that the region's climate attitude and actions are catching up with the rest of the world. A recent survey by Yale & Meta shows that the importance of climate change for individuals is higher in the Middle East than in Europe, and their willingness to act surpasses that of individuals in both Europe and the Americas. Ahead of COP 27 in Sharm El Sheikh, media coverage across most countries increased and helped to elevate the attitude score. The UAE, Qatar, and Saudi Arabia, however, strongly decreased their emphasis on climate change during their recent UN General Assembly speeches.

Middle Eastern countries also showed strong commitment through more ambitious vehicle emissions targets, including minor restrictions in some cities. Saudi Arabia announced their target to increase its share of electrical vehicles to 30% by 2030. Similar targets are proposed in Qatar (10% by 2030) and UAE (30% of government vehicles procured are electric by 2030). Other strong actions include Egypt's shutdown of one coal factory and further coal reduction plans, Saudi Arabia's green initiative to increase its share of renewables to 50% by 2030, and the implementation of municipal waste targets in Israel, Egypt, Kuwait, and Oman, who plans by 2030 to reduce solid waste by 80%.

Recent progress in the Middle East is a promising signal for further improvement in the coming years. In 2022, no less than 46 green hydrogen projects are already underway in the Middle East and Africa, with Oman (11 projects), the United Arab Emirates (9) and Egypt (7) leading the way. These developments show clear commitment that the region is determined to transform its energy policy.

Right after Egypt, UAE will become the second country in the Middle East to host a COP event. This, too, can be seen as recognition for the progress on climate action in the Middle East. COP 28 in Dubai hopes to find real solutions for climate change and become the most important event since Paris 2015.

• **New uncertainties complicate positive developments**

Moving forward, where, when, and how should decision-makers act? While the overall results show a decline in attitudes, climate actions continue to rise across almost all 14 action indicators. This positive trend underscores that the world might be on a path for systemic change. Nevertheless, the task remains daunting. The global temperature has already reached an increase of 1.1°C. If we hope to meet the critical threshold of 1.5°C by 2030, we will seriously need to improve our actions. To hit this target, we will need to cut our current global emissions in half within just eight years.

In other words, decisive and fast implementation is required now, especially by G20 countries, which are emitting 80% of global emissions. Europe's "Fit for 55" policy and the US "Inflation Reduction Act" can be seen as a response to that. But the current reality is that no country is on track to be compatible with the 1.5°C target.

While the path towards a green economy is already laid out, newfound economic fears and continued fossil fuel dependency are slowing the necessary advance. In this regard, the CCCR reveals some sobering facts. The ongoing war in the Ukraine, the ensuing energy crisis, and the bleak economic outlook for 2023 are clearly reflected in waning attitudes.

But people in developed countries are now experiencing what other regions have for many years, including heatwaves, wildfires, and floods. Several attitude indicators show that climate change becomes extremely important for consumers and that they are more likely to change their behavior within the next year. This development could encourage corporate decision makers to double down on climate action.

Over the next year, where should our focus be? Our climate emergency must be at the forefront of country policy and company strategy. Thankfully the latest CCCR shows that climate action is rising. Investors are increasingly willing to direct financial flows towards sustainable projects. This availability of sustainable financing has set the stage for decision makers to drive the green transformation with bold new projects.

To manifest this course, the US is going to invest billions to accelerate the growth of their green economy, which sends a strong signal to the world that implementation is already taking place. But the extent and pace that cities, countries, and companies are implementing action remains insufficient. Thus, the increasing cost of inaction must be made more transparent to decision makers and consumers alike. For example, ten climate-change related events in 2021 alone cost their respective economies a total of US \$170 billion in damages.

Furthermore, the ongoing rise of inflation put a higher price on energy that was previously unheard of. This too could have a serious impact on climate attitudes and individual energy consumption. Although difficult, it could expedite changing attitudes and improved action for example by reducing energy consumption.

In our view, an accelerated expansion of renewable energy might be the single most important action. China and Saudi Arabia are investing boldly in renewable energy capacity and their energy sector. Other countries in these regions, especially Asia as one of largest emitters of greenhouse gas emissions, must follow, to reduce the impacts and risks of climate change and protect the planet for future generations.

This renewable energy expansion requires the full mobilization of industry players and massive investments. Coincidentally, the "glocalization" movement will be vital to accelerate this process. And tools like the CCCR can generate necessary country-specific recommendations and valuable insights. Local and country-specific implementation can then be accelerated with smart strategies, support mechanisms, and partners to overcome investment hurdles. It is this combination of insights, proven concepts, and global coalitions that will ultimately drive the world towards not just a decarbonized and more sustainable climate, but a more livable future.



DAVID FRANS
Senior Partner

"Climate change interest is waning in some parts of the world and growing in others. That said, modest gains in action this year did not improve climate mitigation. Our progress still seems incremental and, in some countries, even stalling. To have a measurable impact, society and governments alike must make climate change a top priority again."

• **Moving forward with greater momentum**

As with past Climate Change Combat Radars, this year's edition was a mix of pros and cons. On one hand, an increasing number of individuals are willing to act on climate change and attitude scores in Asia and Middle East show promise of more climate action in the years to come. More company climate disclosures are being made across the globe. Energy emissions per GDP (2021 compared to 1990) continue to decrease in most countries and energy consumption in most countries is still below pre-pandemic levels. These positive developments give us hope that society is finally on the right path.

On the other hand, climate change attitudes lost some momentum last year, attitudes which inevitably influence real change. As war, inflation, and recession fears grip the world, how much longer must climate change wait? While most of the world has reduced its energy consumption, China, India, and Singapore continue to increase their energy consumption above 2019. Furthermore, most policies outside of the EU and US are not ambitious enough to meet our crucial targets. And any progress we have achieved seems incremental at best, if not stalling in some countries, which limits our ability to improve our climate status.

If the world hopes to meet its global warming goals by 2030, it must regain the momentum lost in 2022. That's the biggest takeaway from this year's radar. Although we believe the majority of governments and consumers are getting on the right path towards systemic change, the task remains daunting. After all, there are just eight years and 0.4°C remaining to meet our targets.

Moving forward, increasing the cost (or penalty) of inaction and accelerating the expansion of renewable energy are arguably the most realistic ways of hitting global climate change targets. While there is a way forward, we need more participation from a greater number of people, institutions, and governments. We must turn our gaze back to combating climate change over the next year to get back on track.

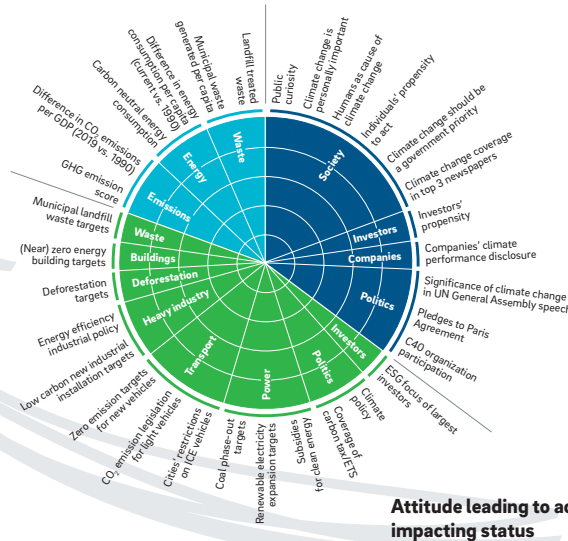
The Climate Change Combat Radar gives decision makers early insights on when and how their activities are impacted

Introducing the Climate Change Combat Radar

3 Status of climate action effectiveness
How successful are the measures taken?

2 Actions and policies around climate change incl. preparation and implementation
What measures are being taken on all stakeholder levels?

1 Attitude and expectations toward climate change
How good is the awareness and the attitude of society, businesses, investors and politicians?



Source Roland Berger



METHODOLOGY: Like last year, this year's Climate Change Combat Radar by Roland Berger measured country specific sentiment from 31 countries on 31 indicators. These include attitudes, expectations, actions, policies, and perceived effectiveness towards climate change and its combating measures.

For each indicator measured, a context-specific scoring logic was established. For example, one attitude indicator was people's propensity to act on climate change within the next year. It is measured using values derived from the IPSOS Earth Day survey. Scores were defined on a scale of 0 to 5. Values smaller than 5% received a score of 0; values between 6 and 21% received a score of 1; values between 21 and 41% received a score of 2; values between 41 and 61% received a score of 3; values between 61 and 81% received a score of 4; values above 81% received a score of 5.

By quantifying these indicators by country over time on a context-dependent and quantitatively thorough basis, factors like absolute and relative change in individuals' propensity can be measured. These factors drive changing attitudes toward climate action and inform the future effectiveness of measures to combat climate change by way of forward-looking political changes. This year's version includes similar analysis across 31 indicators in 31 countries and follows the simple logic that attitude generates actions that ultimately affect status.

Further reading

- ➔ **CLIMATE CHANGE COMBAT RADAR**
- ➔ **SUSTAINABILITY & CLIMATE ACTION**
- ➔ **ACCELERATING DECARBONIZATION**

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