

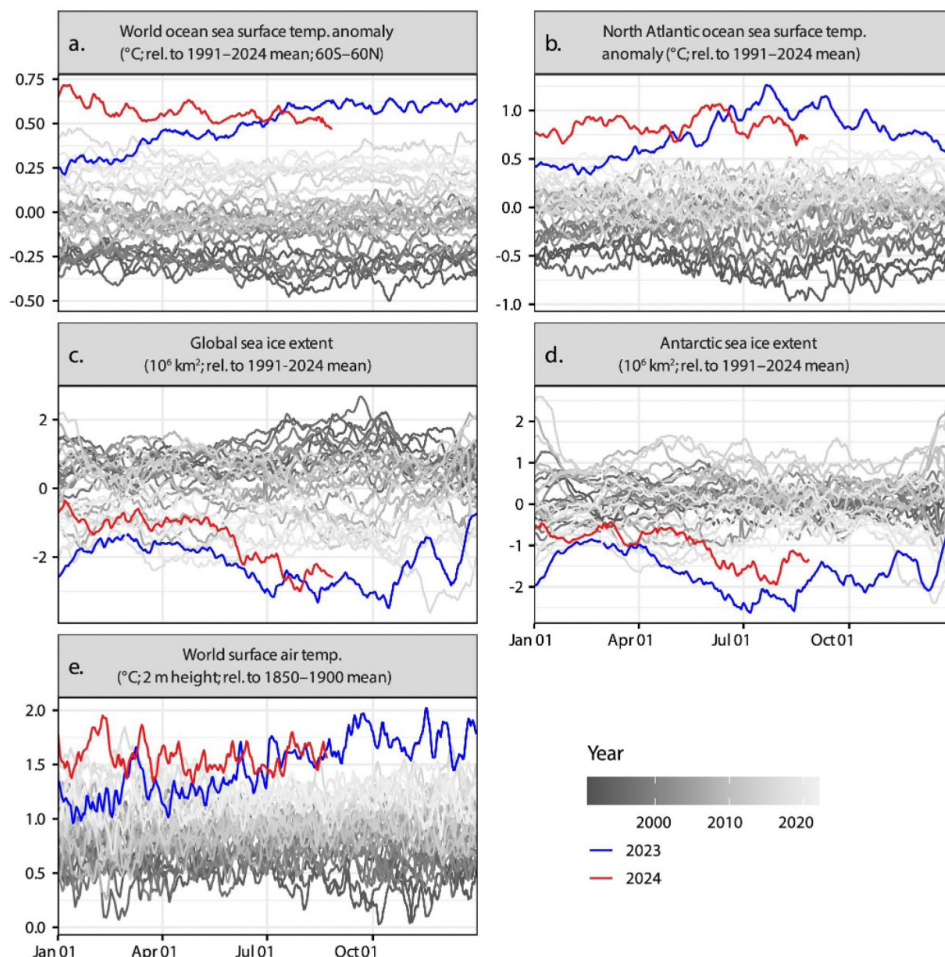
Recent Developments on the Urgency of Climate Change

Fall 2024

WHAT IS CLIMATE CHANGE AND WHY IS ADDRESSING IT AN URGENT MATTER?

In August of 2022, President Joe Biden signed the Inflation Reduction Act (IRA) into law. At the time, the bill was The science of climate change has evolved over the past several decades, but it all points to the reality that we need a rapid, effective transition away from fossil fuels and towards clean energy adoption. Scientists have stood firm since the 1970s that human-driven climate change posed a dire threat to the planet and the people who inhabit it. Recent analysis shows that the predictive models used back in those days have **remained remarkably accurate** to the warming and changing we're seeing in our current climate. However, we've only modestly begun addressing emissions reductions and clean energy deployment. The U.N. has made it clear in its latest Intergovernmental Panel on Climate Change (IPCC) that **humanity is rapidly approaching an era of climate catastrophe** that will push the climate past the point of human adaption capabilities, meaning humanity will not be able to simply change behaviors or innovate their way out of devastation. According to their analysis, "climate disasters will become so extreme that people will not be able to adapt. Basic components of the Earth system will be fundamentally, irrevocably altered. Heat waves, famines and infectious diseases could claim millions of additional lives by century's end."

Acadia Center has been, and remains, at the forefront of research, advocacy, and implementation of policies and solutions that reflect the latest scientific discoveries of climate change, always advocating for inclusive and effective clean energy policies that impact communities in the Northeast and beyond.



William J Ripple, Christopher Wolf, Jillian W Gregg, Johan Rockström, Michael E Mann, Naomi Oreskes, Timothy M Lenton, Stefan Rahmstorf, Thomas M Newsome, Chi Xu, Jens-Christian Svenning, Cássio Cardoso Pereira, Beverly E Law, Thomas W Crowther, The 2024 state of the climate report: Perilous times on planet Earth, *BioScience*, 2024;:, biae087, <https://doi.org/10.1093/biosci/biae087>

“Climate change is the biggest challenge that humanity faces. It is affecting all of us, especially the most vulnerable... We cannot afford to wait any longer. We are already taking action, but we have to do more, and we have to do it quickly. We must make drastic reductions in greenhouse gas emissions and accelerate the transition to renewable energy sources.”

- WMO Secretary-General Prof. Celeste Saulo



WHAT'S THE CHALLENGE WITH TACKLING CLIMATE CHANGE?

Public Engagement: Getting not only elected officials and policymakers onboard with clean energy implementation, but also the public. Public engagement around the siting and permitting of clean infrastructure projects has been a primary dimension of this challenge, exacerbated by a lack of trust, knock-on effects of bad actors, misinformation online, and inadequate emphasis on the benefits that communities desire and that infrastructure projects can help with.

Government Coordination: Coordinating clean energy projects that span across multiple states, even multiple countries, requires a great deal of negotiation and compromise to maximize efficiency and speed up clean energy adoption. Additionally, figuring out how the benefits of these new clean energy groups are divided up, as well as who shoulders the high cost of purchasing and installing new technologies, are difficult when multiple entities are involved.

Lack of Continuity: With federal elections taking place every four years, continuity of climate policy becomes incredibly difficult. How one administration feels towards reducing carbon emissions and ushering in clean energy policies may not be carried over to the next administration, meaning continuity is nearly impossible. This issue of continuity is compounded by the lack of meaningful federal adherence to internationally recognized climate goals, such as those laid out by the Paris Climate Agreement. This is why local and state-level policies matter, and why Acadia Center focuses its work on those levels, as opposed to the federal level.

Urgency, the Perception of Time, and the Pace of Change: Climate change suffers in some ways from the perception of being a long-term problem, even as the impacts of a changing climate are already observable across the world. This makes climate compete for emphasis with other pressing matters of the day and makes it challenging to inspire a true sense of urgency around addressing the issue. Furthermore, many of the solutions required to address climate change and reduce emissions can take an exceptionally long time to develop and implement, which underscores the urgency of getting those solutions moving as soon as possible.

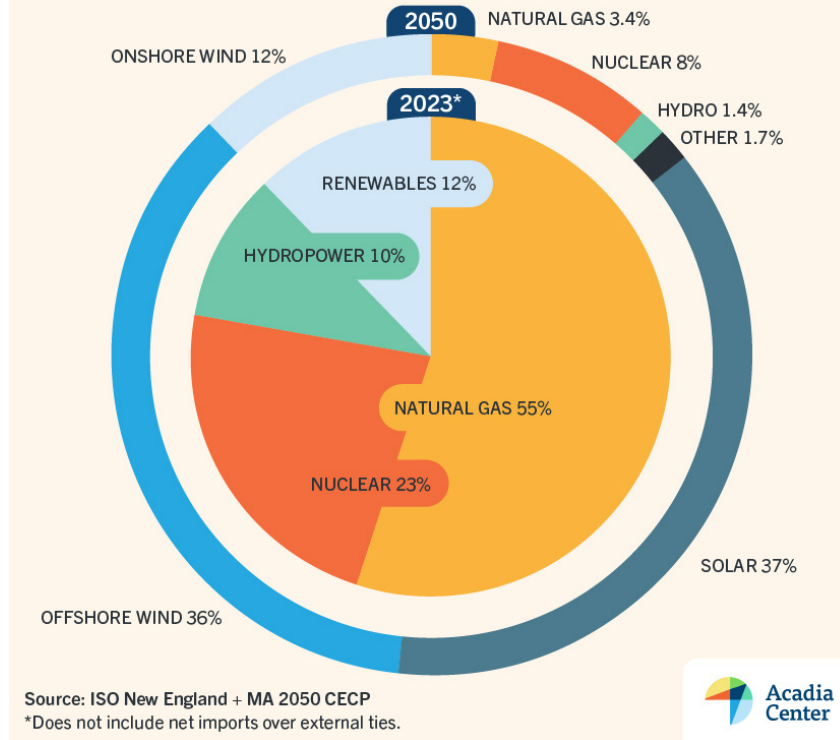


WHERE IS CLIMATE CHANGE CURRENTLY HAPPENING?

Climate change is happening everywhere on this planet. No part of the planet will go unchanged over the next several decades, which means we need to take meaningful action now – right now! Tragically, we are currently witnessing many of the consequences of unmitigated climate change with the unbelievable damage of another hurricane that has devastated many states, including areas once considered climate safe havens. Natural disasters like hurricanes, flood, droughts, and more will become stronger, more frequent, and increasingly devastating. However, the changing climate means more than just intense natural disasters – it also means increased infectious diseases and pandemics, and the collapse of marine ecosystems and agriculture. It is the responsibility of governments from the local to international level to take unprecedented climate action to stave off the worst of the climate effects to come.

Many states and provinces where Acadia Center is currently active have embraced the need to transition to clean energy by setting ambitious 2030 clean energy goals and implementing new climate laws according to those goals. With those goals in place, the challenge is now to build clean energy solutions like onshore and offshore wind, solar power, clean energy transmission, expansion of public transportation and EVs, heat pumps, energy efficiency, and other clean energy technologies that enhance grid capabilities while lowering energy demand.

Energy Generation Resource Mix (% of MWh)



WHAT IS ACADIA CENTER'S RECOMMENDATION FOR TACKLING CLIMATE CHANGE?

Acadia Center takes an innovative, big picture, and long-term view that looks to make connections between neighboring regions and communities to push the needle for better clean energy coordination. By encouraging collaborative grid coordination, Acadia Center aims to accelerate decarbonization of the neighboring power grids in the Northeast U.S. and Canada. Power generation used to be the highest emitting sector in the region, but through meaningful policies supported by Acadia Center and its coalition partners, it has dropped to third. Now, the focus must shift to transportation and buildings, which are now the two highest emitting sectors in need of innovative solutions and policies. This means changing the way governments regulate the energy industry to be more inclusive and take much larger steps towards clean energy implementation in much shorter time frames than were previously allowed.

Acadia Center believes in acting urgently, intentionally, and inclusively to shift away from fossil fuels and natural gas and moving towards a clean energy future that serves all. The organization adopts this approach across all its program areas, which range from policies affecting the grid and the electricity sector (such as the Regional Greenhouse Gas Initiative, RGGI) to efforts to make buildings energy efficient and electric and to reduce emissions from vehicles and the region's transportation networks, alongside work to reform utility regulation and promote equity and environmental justice as co-equal outcomes to emissions reductions. In all these efforts, Acadia Center advances solutions to reduce emissions in this region, demonstrate scalable and replicable policy/program models for other jurisdictions to adopt, bring technologies down the learning/cost-curve more swiftly, and push the Overton window of what is feasible and imaginable for a cleaner, more equitable future.

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