

ACS Climate Change Advocacy Workshop

Audio Transcript: (3) Module 3: Climate change and the government

3.1 ACS global climate change policy statement

3.1.1 ACS stance on climate change

The second half of this module will cover the policy and U.S. government efforts around climate change starting with the American Chemical Society's own global climate change policy statement.

The policy statement determines ACS' stance on climate change to the public and policymakers. It does three specific things: defines climate change; outlines its causes; and provides policy and legislation recommendations to combat climate change. Like all ACS public policy statements, this one also stipulates when and how ACS can respond to world issues. The next few slides break it down further.

3.1.2 ACS acknowledges the facts

Within the climate change statement, ACS acknowledges: One, that climate change is real, a serious risk for civil society and business, and the primary cause is human activity. And two, carbon dioxide concentrations in the atmosphere are increasing at a rate never seen before and it is primarily due to emissions from fossil fuel burning.

These acknowledgements are important to make because of the continued debate surrounding climate change, its authenticity, and its causes. ACS acknowledges that these statements are based on peer reviewed scientific evidence.

3.1.3 ACS climate change statement

Within the statement, ACS also anticipates that: One, the world population will experience more extreme weather events that will threaten physical, social, and economic well-being. And two, the effects of climate change on human health are a serious threat that will lead to increased illness and mortality rates, the spread of vector-borne diseases and epidemics, and the decreased efficiency of labor work forces, among other impacts.

These anticipations are again based on scientific evidence and important to acknowledge as they underlie the severity of climate change and its significant threat to American and global society.

3.1.4 ACS' policy recommendations

ACS' policy statement also recommends several policy solutions for the U.S. government: one, lead efforts to combat climate change; two, take meaningful steps to reduce GHG emissions and deploy advanced and sustainable energy technologies; three, prioritize scientific research on climate change and its consequences; and four, address the impacts of climate change by planning and taking action to minimize societal upheaval, loss of life, and destruction of property.

These recommendations – and the policy statement as a whole – form the foundation for how ACS engages Congress and the executive branch on legislation and regulations on climate change issues and solutions.

3.1.5 ACS' policy statement and members

This is a reminder for any climate change advocacy efforts you might make. If you identify yourself as an ACS member to a member of Congress or their staff, in advocacy activities, you *must* align your positions with ACS' policy statement.

If you wish to advocate on issues outside of ACS' purview, you must identify as a private citizen. If you're unsure about whether something is covered under ACS' statements, it's best to identify as a private citizen. Like in many scenarios, we often wear multiple hats and it is important to keep track of what role requires what.

3.1.6 Transition

In the next section you will learn about climate change policy within Congress.

3.2 Congress and climate change

3.2.1 The role of Congress

Congress is vested with the powers to make laws AND fund the U.S. government. Its role and responsibilities in this arena are key to combating, adapting, and mitigating climate change by creating new opportunities such as laws and funding. More importantly, the work done by Congress is one of the ways to signal to industry, academia, and American citizens what is important. This section will detail where and how climate change work is done in Congress and provide some examples. The image on the right is of Representative Kathy Castor who is holding the symbolic sign for the Select Committee on the Climate Crisis, which she chairs. The image is from her Twitter account.

3.2.2 Climate change actors in Congress

Aside from specific Senators and Representatives who may be engaged in climate change policy, Congressional Committees often engage with scientific issues through the lens of regulation, finances, science, and more. The next few slides will detail some of these committees and how they relate to climate change policy. Bear in mind the specific powers that each committee member has in terms of their party, role, and seniority, on a committee or for a given piece of legislation.

3.2.3 Regulatory committees

The first Congressional Committees addressed here are the regulatory committees. These are the House Energy and Commerce, and Senate Environment and Public Works Committees. These bodies can introduce specific pieces of legislation regarding climate change, schedule hearings on the same topics, and have broad oversight relating to matters of environmental health and resource utilization, in addition to a number of other charges. Lastly, these regulatory committees influence the Federal budget and have oversight over Federal agencies, such as the Department of Energy and the Environmental Protection Agency and are therefore key in approving funds for environmental programs and initiatives.

3.2.4 Appropriations committees

The official federal budget is set by the House and Senate Appropriations Committees. Recall that the budget process involves thirteen separate appropriations bills from each chamber *every year* and together it makes up proposed budgets. The numbers rarely match between these bills and must be consolidated into one final version that is approved in both chambers and by the president. Because of this, advocates often support funding levels from one chamber over another if they are seen as more favorable. The Appropriations Committees are relevant to climate change as they are crucial to the allocation of funds for research, programs, studies, and technology that will allow us to learn more about climate change, its impacts, and solutions to combat it.

3.2.5 Taxation committees

The House Ways and Means and Senate Finance committees cover taxation, tariffs, and other revenue-raising measures which are necessary to fund the government. Because of this, they are considered to be among the most powerful and prestigious committees in Congress. They have broad jurisdiction over diverse legislative areas and extensive oversight powers which give them the authority to investigate, review, and evaluate both existing laws and the agencies that implement them. In relation to climate change policy, these committees are vital and influential in setting tax policies that could ultimately support or hinder climate change efforts.

3.2.6 Taxation committees

A couple of fun facts about the Taxation committees are that the House committee members are not allowed to serve on any other committee unless granted a waiver. Also, all revenue raising measures must originate in the House and therefore the Ways and Means committee is slightly more influential.

3.2.7 Science committees

The Senate Commerce, Science, and Transportation Committee has jurisdiction over matters concerning interstate commerce, science and technology policy, and transportation; while the House Science, Space, and Technology Committee has jurisdiction and oversight over non-defense federal scientific research and development. They also have the power to introduce legislation on science and technology matters. These two committees play an incredibly important role in climate change policy and are key partners in creating legislation and funding necessary to tackle climate change and minimize its impacts on U.S. society.

3.2.8 Select or special committees

While Congress operates mainly through standing committees, it does have the ability to create select or special committees. This body is appointed to perform a special function that is beyond the authority or capacity of a standing committee. It is usually created by a resolution that outlines its duties and powers, and the procedures for appointing members. Typically, they are investigative in nature, rather than legislative, though some do have the authority to draft and report legislation. A select committee generally expires on completion of its designated duties though it can be renewed.

While several select committees currently exist, the focus of this module will be on the House Select Committee on the Climate Crisis. It was established in 2019 and is authorized to investigate, study, make findings, and develop recommendations on policies, strategies, and

innovations to solve the climate crisis. The body can hold public hearings but has no mandate or subpoena power to compel witnesses to testify. The icon on the bottom right links to the committee's 2020 report: Solving the Climate Crisis: The Congressional Action Plan for a Clean Energy Economy and a Healthy, Resilient, and Just America.

3.2.9 Transition

In the next section you will learn about climate change policy within the executive branch.

3.3 Executive branch and climate change

3.3.1 The role of the executive branch

The executive branch is charged with implementing existing law through regulation and programs. It also advises on matters of state. In recent years, presidencies have increasingly exercised additional power through executive orders to alter policies and actions on issues such as energy, the environment, and climate change that curves the legislative process. Equally with Congress, the executive branch holds important roles and responsibilities to drive policy that is needed to combat climate change domestically and internationally. This section will highlight a sample of executive branch bodies and how climate change forms part of their mission. The icon on the bottom right provides you with a link to an executive order that provides a roadmap to build a climate-resilient economy.

3.3.2 Guess the climate change activities

Start by testing your knowledge of the executive branch and their activities. These 6 federal departments administer rules, regulations, and programs on behalf of the president for issues of defense, justice, commerce, housing and urban development, health and human services, and the interior. The icons at the bottom represent the following U.S. government activities: monitoring and predicting climate sensitive diseases; investigating and prosecuting environmental crimes; management of ocean and marine resources; funding disaster recovery; ensuring healthy watersheds and water supplies; and addressing health impacts from climate change. Drag the icons below to the drop zone under the seal of the department you think it is attributed to as related to climate change.

3.3.3 National Aeronautics and Space Administration (NASA)

The National Aeronautics and Space Administration carries out more functions than those commonly known such as the civilian space program, aeronautics, and space research. It has one of the largest concentrations of climate scientists and is responsible for: building global and regional climate models, sharing climate data with policymakers and the public, and monitoring atmospheric conditions, global temperatures, land cover and vegetation, ice extent, ocean productivity, and other planetary vital signs. It does all this via space-based sensors! NASA has and continues to be key to our understanding of our planet's past, present, and future climates, and will be crucial in building efforts to combat climate change!

3.3.4 U.S. Environmental Protection Agency (EPA)

The Environmental Protection Agency is responsible for environmental protection matters as a result of public concern about the impact of human activity on the environment. In climate change efforts the EPA: One, plays a large role in conducting research and reporting on climate change, including the environmental and health impacts. Second, measuring GHG emissions and

communicating the information to policymakers and the public. Third, reducing GHG emissions through regulatory initiatives and partnership programs such as energy efficient cars, phase down of HFCs, and reduction of methane emissions. Fourth, supporting governments (federal, state, local levels and tribal nations) in their efforts to tackle climate change effectively, equitably, and sustainably. Like NASA, the EPA is crucial to our understanding of climate and its impacts, but also for the efforts needed to reduce emissions.

3.3.5 U.S. Department of Energy (DOE)

The Department of Energy is tasked with “ensuring America’s security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.” In climate change efforts, it supports making fossil energy technologies cleaner and less harmful to the people and the environment through research and innovation. It works to cut carbon pollution and to develop domestic renewable energy production. It encourages clean energy innovation and works to increase the efficiency of appliances, buildings, and vehicles. In summary, DOE will be key to combatting climate change, primarily through reductions of emissions and more importantly through the development of new technologies in renewable energy and carbon capture.

3.3.6 Department of Defense (DoD)

For another example of how climate change is relevant to the federal government, you can look at the Department of Defense. Climate change has massive implications for national security, including food availability, impacts to fisheries and marine ecosystems, new and broader ranges of vector-borne diseases, unpredictable extreme weather events, and more. All these threats can impact defense readiness and the United States’ ability to ensure its national security against global threats.

3.3.7 Department of State (DoS)

The State Department’s role in climate change is a bit diverse from other departments illustrated here. Its role folds under its wider responsibility of representing the United States in its engagements with other countries and international foreign policy activities. For climate change specifically, it is involved both domestically and internationally. The activities live within the Office of Global Change – or OGC. OGC leads U.S. efforts during yearly negotiations of the Conference of Parties to the United Nations Framework Convention on Climate Change, or UNFCCC. More on this will come in the next section.

3.3.8 U.S. Government climate adaptation plans

Another way the U.S. government addresses climate change is through the development of climate adaptation plans. These plans are designed specifically for each Department and Independent Agency and focus on the challenges that climate change poses to their missions, programs, operations, and personnel. The plans also address each department’s and agency’s efforts to adapt to and mitigate climate change impacts on its resources. Below are front pages for two reports: U.S. Department of the Interior and U.S. Department of Defense.

3.3.9 How does the U.S. government work together?

You now have a sense of climate change work in a handful of departments and agencies that specialize in specific areas and pursue specific programs. But how do they work together to

avoid duplication and increase collaboration? One example is the U.S. Global Change Research Program – or USGCRP. The program facilitates collaboration to advance understanding of Earth and maximize efficiencies in global change research. USGCRP provides a gateway to resources for helping organizations manage risks and respond to changing environments. The next slide outlines more about USGCRP and the icon on the bottom right takes you to the USGCRP website for more information.

3.3.10 How the USGCRP functions

The chart in this slide digs deeper into how the USGCRP functions. It shows four government bodies – the Department of Energy, NASA, the National Oceanic and Atmospheric Administration, and the National Science Foundation – all of which have roles within the climate change realm. Each has questions it aims to answer.

The DOE for example is trying to understand how climate changes affect energy production, distribution, and supply. It seeks to answer this question through earth system and integrated assessment models; long-term field experiments and atmospheric observations; and with study time periods ranging from 2 to 40 years.

NASA for example is looking at how the Earth system is changing based on satellite observations. It seeks answers through satellite-based observations of the atmosphere, oceans, and land surface; and through fundamental research on remote sensing.

NOAA looks at how we can improve weather and climate predictions for public safety and commerce. It seeks to answer this question through atmospheric and ocean monitoring and modelling; and with study time periods of hours to one year for weather.

Lastly, NSF looks at how we can improve fundamental understanding of historical climate systems. It does so by supporting university capacity across a broad range of geosciences.

The four government bodies – while narrowed in their mission or objectives – work through programs like USGCRP to communicate about their programs, new findings, or discoveries that can help each other and ultimately U.S. government-wide goals for climate change.

3.3.11 White House support bodies

In addition to formal teams within the White House, the president is also supported by specialized groups that advise them on specific issues within their charter. For climate change specifically, there's the President's Council of Advisors on Science and Technology – or PCAST. This body consists of distinguished experts outside of the U.S. government and advises the president on policy matters where the understanding of science, technology, and innovation are key. The current PCAST body is looking at lessons from the pandemic, scientific solutions to address climate change, maintaining U.S. leadership in science and technology, and ensuring equal benefits for all Americans from science and technology. By clicking on the icon at the bottom right of your screen, you can visit PCAST's website for more information.

3.3.12 Office of Domestic Climate Policy

President Biden established the White House Office of Domestic Climate Policy in 2021. The Climate Policy Office implements and coordinates the President's climate agenda across the U.S. government to tackle the climate crisis. It convenes the National Climate Task Force which is composed of Cabinet-level leaders across the government, and convenes working groups to assist the Task Force on actions related to: reducing climate pollution throughout the economy, increasing resilience to climate change effects, protecting public health, conserving lands, waters, and biodiversity, and delivering environmental justice, and more.

3.3.13 Transition

In the next section you will learn about specific domestic climate change policies and technology solutions being considered within the U.S. government.

3.4 U.S. government climate change action

3.4.1 Domestic climate change policy examples

To read more about some examples of domestic climate change policy, read the front of the card on the right side of the screen, and then flip it over using the blue 'Turn' button. When you're ready, click on the blue arrow icon to move to the next card. For a screen reader friendly version, click on the accessibility icon in the bottom right corner.

3.4.2 Transition

In the next section, you will see a timeline activity that allows you to review international efforts to combat, mitigate, and adapt to climate change.

3.5 Global efforts to combat climate change

Efforts to combat climate change cannot be implemented only by the United States. While it is one of the largest contributors, it is by no means alone. It is important to understand what is occurring at the international level as well. International efforts fall under the treaty titled: the United Nations Framework Convention on Climate Change – or the UNFCCC.

The goal of the UNFCCC is to avoid dangerous human impacts to Earth's climate long-term. It commits all nations to take steps to mitigate greenhouse gas emissions, and recognizes that countries' obligations will vary due to their unique emissions contributions to climate change and resources available to address it. It also commits developed countries to assist developing countries in reducing emissions and coping with climate impacts. UNFCCC is governed by the Conference of Parties – or COP – which meets annually.

The most important international body overseeing efforts on climate change is the Intergovernmental Panel on Climate Change – or IPCC. It was created to provide policymakers with regular scientific assessments on climate change, its implications, and potential future risks.

Click on the different chronological events outlined in the timeline below or use the black arrow on the right of your screen to navigate. The timeline will highlight key events associated with global diplomatic efforts to combat climate change.