

Kathryn Kynett

Climate Policy Analyst at the California Air Resources Board



What is your current occupation?

I work in state government as a climate policy analyst. I work for the California Air Resources Board which is part of the California Environmental Protection Agency. In my current role, I evaluate the impacts of legislation related to climate change and develop policy recommendations. My work supports California Climate Investments which includes over 70 different programs across 20 state agencies that receive funding from the state's Cap-and-Trade Program. California Climate Investments programs put about \$2 billion to work each year reducing greenhouse gas emissions while providing other benefits to the environment, public health and the economy. Examples include incentives and grant programs related to zero-emission vehicles, public transportation, housing, healthy forests, climate smart agriculture, and urban greening. I track and analyze new bills through the legislative cycle that, if enacted, would impact these programs or propose new uses for funds generated from the Cap-and-Trade Program. In a previous role with the California Air Resources Board, I developed new regulations to reduce emissions of hydrofluorocarbons, which are powerful greenhouse gases. My responsibilities in this position included estimating emissions under various policy scenarios, developing our economic impact analysis, meeting with stakeholders, and presenting our policies in public meetings.

What is your educational background?

My academic background includes a B.S. in Earth Sciences from UC Santa Cruz and an M.S. in geosciences from San Francisco State University where I studied paleoclimatology/paleoceanography.

A key message for students is that the geoscience workforce is dynamic, and boundaries between sectors and occupations are fluid. How has this been true in your career?

This has been very true in my career. I was motivated to pursue a career in the environmental field after learning about climate change in an AP Environmental Science class. I choose to pursue a B.S. in Earth Sciences because with that qualification, I would have a wide range of options for career paths. As I heard the Earth and Planetary Sciences Department announced my graduating class and what we were all doing after graduation, I heard a wide range of occupations and careers fields. I went to San Francisco State where I worked in the paleoclimatology lab using ocean sediment cores to study climate change in the geologic record. I did not know exactly career I would pursue, but I knew that a master's degree in climate science would open more doors in a direction I wanted to go. After graduating, I moved to Washington D.C. for a geoscience policy internship with the American Geosciences Institute (AGI). I spent much of my time on Capitol Hill listening to hearings and writing summaries of policy developments of interest for AGI's geoscience members. During this internship, I discovered there are many people with a background in science that work with both scientists and policymakers, and I really enjoyed working in this space.

I returned to California to pursue employment and took a position as an environmental scientist with the Delta Conservancy, which is a state agency. At the Delta Conservancy, I helped convene workgroups regarding water quality, ecosystem restoration and agriculture. I listened to scientists present their work on a range of topics from the impacts of climate change on our water supply to how wetland restoration helps flood control. I adapted by going from working on a specific research topic where I had my own data to learning about the state of the science and policies spanning a wide range of issues. I also went from studying Earth's climate system on a global scale to learning about how climate change is affecting Californians. I read reports summarizing the state of the science on California's natural resource issues as well as documents outlining the actions the state will take in response. I also worked with scientists and community-based organizations to apply for grants and helped the Delta Conservancy develop their own grant program. I met people with geoscience backgrounds in a wide variety of work. For example, I worked with scientists studying how wetlands can be used to sequester carbon along with professionals with science backgrounds working in carbon markets. I've met people with geoscience backgrounds doing fieldwork, measuring snowpack, working in labs, taking water quality samples, designing flood control projects, and using science to inform policies in the Delta. I learned that the California Air Resources Board plays a lead role in developing and implementing the strategies to reduce greenhouse gas emissions in California and decided to pursue employment there.

I spent my first four years at the California Air Resources Board working on strategies to reduce emissions of hydrofluorocarbons which are short-lived climate pollutants. I learned about the state's efforts to model greenhouse gas emissions and worked on estimating hydrofluorocarbon emissions under various policy scenarios. In 2016, I helped California adopt key prohibitions on the most climate-damaging hydrofluorocarbons after they were rolled back at the federal level. So far, 15 other states and counting in the U.S. Climate Alliance have adopted similar regulations

and legislation. Since then, I lead our team in developing a new regulation to limit the use of hydrofluorocarbons used as refrigerants in new air conditioners. A normal day for me often involved speaking with air conditioner manufacturers about our regulatory proposals and working on quantifying the emissions and the economic impacts of our proposed policies. The biggest adaptation for me was learning about how regulations are developed and how the public is involved in that process, and how regulations relate to legislation. I took on the role of emissions modeler and public speaker and learned how to analyze economic impacts of policies.

My current position with the California Air Resources Board is in the California Climate Investments policy team where I provide analysis of bills which include fiscal impacts and policy comments to our Office of Legislative Affairs. I also provide updates to the Climate Investments Branch my team works in regarding budget and policy developments related to the programs our staff oversee. The legislation and budget items that come across my desk cover all aspects of climate action from electric vehicles to wildfire prevention. I also support our team in developing guidance for the Legislature regarding investment priorities and reporting on investment outcomes. This role has overlap with what you might expect to do as a legislative analyst with a political science degree, but my scientific background helps with the subject matter I work in.

There has been a common thread in each role—using science while focusing on solutions to climate change. However, my day-to-day tasks have required me to take on different tasks and learn on-the-job. When I embarked on my education in geosciences, I'm not sure I would have imagined using ocean cores to study climate change, attending hearings on Capitol Hill, touring wetland restoration projects, talking to air conditioning manufacturers about refrigerants or looking through line items in a budget bill. My career path has taken me on a journey that has been unexpected in some ways and also exactly what I hoped for, to be part of enacting solutions to climate change. Along the way, I've met people doing really interesting work on a wide variety of topics and I continue to learn how dynamic the geoscience career field is.

Where do you see your sector moving in future years? How would you advise students to prepare to be competitive job applicants and successful employees?

I see my career field expanding as the climate crises becomes more urgent and we set ambitious and transformational goals like achieving carbon neutrality and transitioning to zero-emission technologies. There are many career options in this arena for people with a background in geosciences. For any direction you go, the ability to clearly and concisely communicate complex issues is important. If you can do that in writing and through presentations, then you will stand out and be successful. If you can pursue coursework in science communication to help you as a writer and presenter, I highly recommend it. It is also helpful to have people in your network who can help you give you feedback and people you can learn from as effective communicators.

What is the role of networking in your sector? Do you have advice for a student who is just beginning to build their network? What is the best way for students to get their foot in the door?

Networking is invaluable. First, building a network of your peers is important. It makes working more fun and your peers are an important part of your support network. Just starting with making an effort to get coffee or carve out time to talk with people you work with is a really good idea. If you are in school, get to know your classmates. I've learned so much from the people around me at every step of the way. For example, I took a volunteer position which turned into a paid position with the California Academy of Sciences after learning how to volunteer there from a classmate. There have been so many times something positive has come out of reaching out to someone or getting to know someone in my network better. A lot of what I have learned on the job as well as about what career opportunities are out there has come from my professional network. I also think it's important to see other people in your network succeeding and doing different jobs. A big part of arriving where I am in my career has come from seeing other people do work I'm interested in with similar qualifications that has led me to think, "I can do that too." There have been times where that inspired me to go further than I thought for myself.

It is also important to have people who mentor you. I participated in a leadership program where I was paired with a mentor and that was one of the best parts of the program. There have been times where I have reached out for advice to people further along in their career path that has really made an impact for me. Many people are very willing to talk about their experience and help someone just getting their foot in the door if you reach out.

What does a "typical" day of work look like for you?

A typical day will likely include looking at proposed legislation. At the beginning of the legislative cycle, my coworkers and I will look through a number of bills and identify which bills we need to track that are relevant to our programs. As the bills move through committees, we need to complete an analysis of the impacts and provide our policy recommendations. We follow activities on the bills such as hearings and amendments and if the bill is signed into law. I spend part of my day talking with staff in our branch that are experts the bill's topic and can help inform the analysis and recommendations.

In my role on the hydrofluorocarbon team, I was most recently working on bringing a proposed regulation before our Board for adoption. A typical day in my day often involved identifying policy options under various scenarios and quantifying emissions impacts. I might have to figure out, for example, how to model emissions reductions associated with encouraging the use of recycled refrigerant and then brief our team later that week. I often had meetings with stakeholders interested in the regulation, which could be air conditioning manufactures, environmental organizations, or organizations from outside the country or in other states that were interested in our policies. I worked with an economist on our economic impact analysis and routinely had to prepare presentations and speaking notes for public presentations. A typical workday was often quite busy.

In each of my roles, a typical workday usually involved tasks that might be new or different than what I've done before and challenge me in a new way.

What is the best part of your job?

The best part of my job is feeling that the work I'm doing has a positive impact on the world. I get to engage in subject matter that really interests me and that I have a direct role in doing something about climate change. I've met a lot of people in government who feel passionate about their work and say something similar. One of the regulations I worked on will have the emission impact of taking half a million cars off the road and I know I played a direct role in successfully delivering that regulation for adoption. It is really rewarding to go from studying climate science to being part of the solution. I've also seen how a small team of people can make a big difference. When the federal hydrofluorocarbon rules were rolled back, it was so discouraging. But, when our team helped to adopt those rules into state law, it was incredibly moving to see so many other states then adopt the rules because our team had paved the way. Similarly, after our Board adopted the air conditioning regulation, we saw legislation move forward in other states. Picking up the phone and talking to people from other states or other countries who are taking action on climate change, and they are looking to the team you are working on as an example, is a really good feeling. A major highlight of this experience was presenting California's hydrofluorocarbon policies at a United Nations Meeting of the Parties on the Montreal Protocol event.

With the California Climate Investments team, I really enjoy getting to learn about a wide range of topics related to climate change and that there is a whole branch of people I can connect with that are just as excited to be working on these issues as I am.

Do you have any other comments or advice for students looking to enter your sector of the geoscience workforce?

Take advantage of the opportunities out there for students. There are so many different internships for students where you can gain so much in a short period of time. Internships are also a great way to round out your education. If you are interested in policy but you don't have room in your coursework to take another class, go for a science policy internship. I've found that science majors do not have a lot of room in their course load to take a class outside their program area, but it's generally expected that students will take on internships. Using internships to build on what you are learning and explore what is out there is a really good idea. You might discover something you really love doing or learn what you absolutely do not want to do for a job, and both are equally valuable.

Finally, you do not have to have every step of your career path completely mapped out. It is enough to prepare for the next step in front of you while working to figure out what you might want to do in the future and how to get there.

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