Cedar Blasek: One of my favorite parts about working in sustainability is everyone wants to work together because we're all working towards one end goal or one cause, right? And I don't think you'll see that necessarily in a lot of other industries. I think there can be sort of a lot of competition, a lot of trade secrets, and especially when it comes to better energy management, when it comes to saving money, everyone wants to learn from each other and most people are willing to share. And so when we work with federal agencies, we found that to be the case. We get to highlight the great work that they're doing, they're willing to connect. We'll connect the Department of Homeland Services with the National Park Service and see how they might be able to learn from each other because they both have a lot of sites in rural areas, for example.

Speaker 1: This is the Orise Featurecast. Join host Michael Holtz for conversations with Orise experts on STEM workforce development, scientific and technical reviews, and the evaluation of radiation exposure and environmental contamination. You'll also hear from Orise research program participants and their mentors as they talk about their experiences and how they are helping shape the future of science. Welcome to the Orise Featurecast.

Michael Holtz: Welcome to another episode of the Orise Featurecast. As ever, I'm your host, Michael Holtz, from the Communications and Marketing Department at the Oak Ridge Institute for Science and Education. And I'm thrilled today to be doing a take two conversation, that's a little backstage joke for me and Cedar, but Cedar Blazek. Welcome to the Orise Featurecast. I'm so glad to have you here today.

Cedar Blasek: Oh, thank you so much for having me, Michael.

Michael Holtz: So Cedar, tell me for our listeners, who are you and what do you do?

Cedar Blasek: Well, my name is Cedar Blazek. I work at the US Department of Energy in the Federal Energy Management Program. What we do at FEMP is we are here to help other agencies meet their energy, water, and emissions management goals. So we really sort of act as an in-house consulting firm to all of the rest of the federal government on energy efficiency, water efficiency, emissions management, sustainability, and all of the tasks and activities that come along with that. I manage the training program, and so one of the core things that we do, we'll develop things like tools and resources for the rest of the federal government, but we also offer training. Our training is accredited through a company that allows us to offer continuing education credits, continuing education units for folks to build up their capacity and further their professional development based on whatever certification they have. So we offer dozens and dozens of training courses virtually, in person, and we have on demand courses as well. And most of them are free and available to anyone even though they're geared towards the federal government.

Michael Holtz: Awesome. And so the goal ultimately, as you you've mentioned, is to help government agencies and others, it sounds like, beyond even the federal government reduce their environmental impact, be more environmentally friendly, which is a huge role, particularly today as we talk about the impact of climate change and wanting to reduce our carbon footprint and get to carbon net-zero by 2050 and all of those huge aspirational and very important goals.

Cedar Blasek: That's exactly right. Right now is a critical time in our human history to slow the damaging effects of climate change. We've been able to figure out and acknowledge that burning fossil fuels has rapidly accelerated changes in our climate, and we have a lot of really good and powerful solutions to stop that. That's what we're doing and investing here at the Department of Energy, both in early stage technologies, but also on my end, which is we have technologies and strategies that we can be implementing right now in buildings for our vehicles. And a lot of that focuses on electrification and decarbonization, which are really getting off of fossil fuels, moving to electricity and getting that to be clean electricity, coming from renewable energy sources like solar, wind, and geothermal.

If we don't start acting now and we don't start implementing these changes, we're going to see really aggressive and rapid changes to our climate, and that's going to affect each of us individually, but it also is going to have a huge impact on the federal government and our ability to operate as a government. We talk a lot about resilience here at FEMP and thinking about how the energy and cost savings investments that we make are also going to be able to strengthen our ability to provide the critical services that our federal government does.

Michael Holtz: So really important, big job. You talked about technologies, things that can be implemented right now, for folks who are listening, are there things we can be doing as individuals that would be beneficial in terms of reducing our energy consumption, carbon footprint, all of those things?

Cedar Blasek: Absolutely. There are so many options and so many steps you can take to not feel powerless in this big change, right? I like to start with the things that I call low or no cost options. Those tend to be sort of behavioral strategies. You can start to make changes in your day-to-day life. A lot of you probably know to turn the lights off when you're not in a room, but also turning the heat down at night or when you leave the house. There's really incredible smart thermostats that can do this for you now. It can be going for a walk or riding your bike instead of taking a vehicle or using public transit. So these are sort of the behavioral changes that you can integrate.

But what's really exciting is over the last two years, our government has passed a lot of very, very large investment bills to infuse dollars into the economy, and those are directly accessible by individuals and not just businesses. So the Inflation Reduction Act offers a lot of tax credits you can get for investing in clean energy and energy efficiency and electrification options. So switching over your gas or oiled fired furnace to a heat pump which is electrically infused. And then same thing with electric vehicles. If you want to invest in an electric vehicle, there's a lot of tax credits and there's also going to be rebates coming from your state. So taking a look around your home, getting an energy audit done is a great way to be introduced to all of the things in your house, whether you own or you rent, to help you save energy.

Michael Holtz: Awesome. And I know you talk about this at a much larger scale from a government agency perspective, you are a researcher, you do training now, but you are a researcher and a scientist by training. How did your career evolve to being in, I guess, the position that you're in today talking about how other government agencies can be more energy efficient, reduce their carbon footprint, et cetera?

Cedar Blasek: Sure. I think the way that I came around to science is maybe a little bit unique. I actually studied environmental policy in college, which had a lot of the science and research courses, but applied in a policy context. But after I graduated, I ended up getting hired at a company that did building energy auditing and one of the core things they really focused on was building science and really understanding how a building operates, how energy flows in a building, how air pressure functions in a building, and really understanding how the changes that you're going to make for efficiency are impacting sort of the health and resiliency of the building as well. And so I got a lot of on-the-job training early on in my career before I pursued one of the Orise fellowships that I ultimately ended up working on at the Department of Energy.

Michael Holtz: Awesome. Well, since you opened that door, let's talk about that Orise Fellowship. Talk about what you did as an Orise fellow.

Cedar Blasek: Sure. So I was hired on, or I was granted an Orise fellowship at the US Department of Energy Building Technologies office, and that sits in the office of Energy Efficiency and Renewable Energy. So that office focuses on funding research, demonstration, development and deployment projects related to green buildings and building technologies. So you look around your house, you got windows, you got walls with insulation in them, you have your heating system, your cooling system, all those things impact the energy, your lighting. We do research on all of those technologies.

I was focused on the Commercial Buildings Integration Program and one of the most exciting programs I got to work on was called the Better Buildings Initiative. This is a massive no-cost public private partnership where we the government get to work with private companies, get them to set energy and emissions goals and help get them there by giving them technical assistance, connecting them to technical experts, subject matter experts, researchers that are DOE's national laboratories, and then writing case studies, sharing information and best practices between those organizations. So I worked with a number of retail partners, the big box name retailers that you probably got your coffee from this morning and probably got your toilet paper from this afternoon. And being able to connect and talk to those actual implementers in the field, the people who are out there making a difference, fine-tuning their buildings, finding ways to save energy every day was really, really incredible and gave me a lot of connections and resources as part of my fellowship.

Michael Holtz: Awesome. That sounds really amazing and very impactful. From your perspective, how does it feel to be in a role that... I mean the impact may be intangible, but you know you're doing something that is good and good for people, for the planet. I guess, what is that feeling for you? What is that vibe for you?

Cedar Blasek: Absolutely. I mean, to me there's no better feeling. I am someone who works towards a mission, I'm very mission driven and that's why I ended up working in the government because I recognize the value that we have when we sort of collectively put together our resources and try to implement a positive change for all of society. So that's a lot of what drives me and recognizing that climate change is a huge, huge problem facing all of us today across the globe.

When I first started out my career and I was doing energy auditing, I was working at the hyper-local scale. I was going into individual people's houses, helping them save money, helping them save energy, and then being able to see that as part of a bigger impact. And so to me, we really need both and there's value in both, the super, super small and local scale and making small changes in your community and then also understanding that sometimes you need those bigger structural changes and approaches where you can have a much wider impact.

And so one of the things that I do now as the training program manager here at FEMP is we put out these free trainings so that we can educate lots and lots of people at once. They're free, they're online, you can go and watch them at any time, you don't have to be in the federal government to look at them. And so that impact is multiplied because if someone learns one thing from that and then they go and tell someone else and they apply it and they tell someone else to go take this training, we're going to make things happen much more quickly than just working at that individual level.

Michael Holtz: That's really cool. I love the sort of, they told two friends and they told two friends, and everyone's sort of using and then dispersing the knowledge that they're getting from the training programs that you offer. And I think it may be surprising for people who aren't connected to the government to know that there's an agency like FEMP that is intergovernmental and that agencies truly do work together to solve these problems, right? I mean, I know for us, we were either in the government or sort of government adjacent as a contractor, that's not really a surprise, but folks outside the walls of government may not get that that really happens all the time.

Cedar Blasek: Yeah, we love working with other government agencies and I think one of the things you'll see a lot is there are a lot of agencies that need to care about energy as part of their mission, and the Department of Energy is just one of them, but every single federal agency uses energy, right? And so we all need to work together and when we save energy, typically we're saving money and we're reducing emissions and slowing the effects of climate change. And so there's generally not much of a negative associated with it. Sometimes there can be a little bit of an upfront cost, but for the most part, everyone wants to do this and learn from each other.

One of my favorite parts about working in sustainability is everyone wants to work together because we're all working towards one end goal or one cause, right? And I don't think you'll see that necessarily in a lot of other industries. I think there can be a lot of cop competition, a lot of trade secrets, and especially when it comes to better energy management, when it comes to saving money, everyone wants to learn from each other and most people are willing to share. And so when we work with federal agencies, we found that to be the case. We get to highlight the great work that they're doing, they're willing to connect, we'll connect the Department of Homeland Services with the National Park Service and see how they might be able to learn from each other because they both have a lot of sites in rural areas, for example.

Michael Holtz: Right, right. That's amazing. I know as an Orise participant, Orise research participation programs and fellowships are mentored experiences. Can you talk about, one, what it was like working with a mentor as a mentee? And then in your role now, do you have the opportunity to mentor others and what is that experience like?

Cedar Blasek: Yeah, I was really, really fortunate to have a mentor that I got along with really well, and that was really, really invested in my professional and my personal development. And so she wanted me to learn as much as I could, experience as much as I could. She really encouraged me to make professional connections. So I talked a bit about the Better Buildings Initiative and all the connections I made with private companies, but we also work a lot with nonprofits and other industry organizations that have similar goals that we're working towards, and just being encouraged to go out and network and talk to people and meet with people felt really supportive, right? I think a lot of times if you're working in something that's more of a traditional job, it's a little nerve-wracking to go out and maybe think about your next professional steps or your career moves, but to be in the fellowship and to acknowledge, "Hey, this is term-limited, I'm here to learn and I am looking for the next opportunity," being in a supportive environment for that was really helpful.

But I was also given a lot of responsibility as a fellow too. When you are a fellow, there are certain things that are governmental functions that you cannot do, but in our office, my mentor really trusted myself and the other fellows to go out and to talk to folks and to really work on some high level and high impact projects and programs that were seen at the executive levels or even up to the secretary level. So that was really exciting for me.

As a mentor now, I try and embody that. I really try and empower my mentees to seek out their own passions and interests, to really invest in those, to find creative solutions, to think differently than the way that others might be thinking within the government, right? I think we want fellows to come in and really bring new ideas and perspectives and feel empowered to be able to share those or ask the right questions or the wrong questions. And so the more that I can leave space for that and provide the fuel to build up someone's fire, to really push their career forward, that's how I know that I am sort of doing my job as a mentor.

Michael Holtz: Awesome. And it sounds like your advice to an up-and-coming scientist, up-and-coming researcher, even an up-and-coming trainer might be to pursue those passions, do the networking, put yourself out there?

Cedar Blasek: Absolutely. I do have one other word of advice too, which is you don't have to pigeonhole yourself into what you think you wanted to do before. Continue to explore, continue to learn. Just because you got a PhD in a topic does not mean you have to study that topic for the rest of your life. There are lots of other applications that you can take that sort of science and research mindset and apply to different fields of science and research, or into a policy context or into a totally different role. And I think the fellowship, or different types of fellowships and some of the Orise programs, open up scientists and researchers to the vast variety of options that are available to them. So if you're thinking about going into the program or you're nervous that you have a very specific field of study, please don't be, most places would love to have you.

Michael Holtz: I love that. Be open-minded, keep yourself open to opportunities. Cedar, your passion and your exuberance for what you do clearly comes through. It's obvious you love the work that you do. One last question for you, what brings you joy?

Cedar Blasek: What brings me joy? Fighting climate change, helping others. Seeing early career folks come into the world of employment or fellowships and really learn and excel and absorb knowledge and grow and move on to a incredible position, right? To see someone maybe that you mentored move on to a really important job high up at some federal agency or at some organization. That really brings me a lot of joy. But I also have two little dogs, they bring me a lot of joy too, so my family and my little pets.

Michael Holtz: Great. Cedar, is there anything that I haven't asked you or that you want to make sure that you say before we end our conversation?

Cedar Blasek: I just want to say thank you so much for having me. I cannot speak more highly of the Orise programs. There's so many of them. I was one type of Orise science and technology policy fellow, but there are so many other programs out there. I've mentored AAAS fellows, I've mentored science and technology policy fellows, I am about to mentor my second minority educational institution student partnership intern for the summer. There's tons of opportunities and ways to get involved, and they're all so, so valuable both to the participant, but also to offices like mine at the Department of Energy.

Michael Holtz: Perfect. That is a perfect way to end this conversation. Cedar, thank you so much for taking the time to speak with me about the work that you're doing about just your enthusiasm for mentoring and mentorship and Orise participation programs. And for folks who are listening, absolutely, find those opportunities. There are plenty of them out there and folks like Cedar would love to work with you, so seize the opportunity. Thank you so much for your time today, I really appreciate it.

Cedar Blasek: It's been delightful. Thank you, Michael.

Michael Holtz: Thank you.

Speaker 1: Thank you for listening to the Orise Featurecast. To learn more about the Oak Ridge Institute for Science and Education, visit orise.oau.gov or find us on Facebook, Twitter, and Instagram at OriseConnect. If you like the Orise Featurecast, give us a review wherever you listen to podcasts. The Oak Ridge Institute for Science and Education is managed by ORAU for the US Department of Energy.