



# “BUILDING A HIGH-QUALITY STEM WORKFORCE IS CRITICAL TO THE US DEPARTMENT OF ENERGY’S MISSION SUCCESS, AS WELL AS TO THE NATION”

THE US DEPARTMENT OF ENERGY IS ON A MISSION TO INSPIRE YOUNG PEOPLE INTO STEM CAREERS AND TO SOLVE CHALLENGES RELATING TO ENERGY AND THE ENVIRONMENT. ANNEMARIE HOROWITZ, DIRECTOR OF STEM RISING TELLS US ABOUT THE EXTENSIVE RESOURCES THE AGENCY HAS TO OFFER

**As Director of the STEM Rising initiative in the Department of Energy’s (DOE) Office of Public Affairs,** I get to spend my time broadcasting all the impressive and important work our agency is doing to get students of all ages interested in STEM learning and energy careers. There are literally hundreds of ways the DOE supports STEM learning and professions, from kindergarten to the workforce. I also run a website, blog and newsletter, as well as develop social media content and other creative ways to help generate conversations about STEM fields.

**Following an eighth-grade civics class, I was drawn to studying politics and citizen engagement in the government.** I decided I wanted to be in a career where I helped people learn about what the government is doing and how they are impacted by it – by blending a communications and political science background. I was Editor in Chief of my collegiate weekly paper and got to take advantage of an internship on Capitol Hill and with a few senators’ district

offices during college. After working on a presidential campaign and a nonprofit, I earned a master’s degree in government and started working in federal communications with the DOE.

**We have a limited amount of time to address the climate crisis head-on, and we need all hands on deck to do it.** Some of the biggest ways people can make an impact on our nation’s energy and environmental challenges is by pursuing STEM careers, and learning about STEM fundamentals in school regardless of what profession they end up choosing. It’s exciting to work in a field to support this outreach.

**I wish I started studying environmental and climate causes sooner.** I love reading, being outdoors and learning, but it didn’t occur to me I could combine all my passions into a career or a degree. But it’s never too late to jump in and make an impact where we can, and I’m happy I get to work on encouraging people to make a difference through energy careers.

## HOW WOULD YOU DESCRIBE STEM RISING?

STEM Rising is an outreach effort to showcase the DOE’s extensive programmes, events, competitions and resources for science, technology, engineering and mathematics (STEM) learning. You can find us online ([energy.gov/STEM](http://energy.gov/STEM)), on social media (#STEMRising), your inbox (subscribe to the newsletter), and at STEM events in the US.

## YOU LAUNCHED STEM RISING IN AUGUST 2017 IN THE OFFICE OF PUBLIC AFFAIRS. WHAT WAS YOUR REASON FOR DOING THIS?

I created STEM Rising in an effort to cohesively message the investment in STEM by the DOE and make it easier to learn about the wide variety of STEM offerings across our National Laboratories, National Nuclear Security Administration (NNSA), site offices and programme offices. Previously, to know what the DOE does in the STEM space, from kindergarten all the way up through the energy workforce, you had to visit, one place at a time, the websites or offices of all 17 National Laboratories, field sites, programme offices and the NNSA to explore what is offered. With STEM Rising, this information is brought together in a digital format and printed materials for the public, educators and educational organisations.



### WHAT IS THE DOE ULTIMATELY HOPING TO ACHIEVE THROUGH STEM RISING?

Building a high-quality STEM workforce is critical to the agency's mission success as well as to the nation. The DOE is striving to accomplish this not just in the government sector, but the entire energy sector at large. STEM Rising's goal is to package and share what the DOE is doing to address the climate crisis and solve big problems in this arena. Nearly 40 percent of the federal staff of the DOE are in STEM positions, and the percentage is even higher amongst the contractors in the National Laboratory workforce.

### HOW HAS STEM RISING ADAPTED ITS RESOURCES FOR HOME AND VIRTUAL LEARNING?

A large majority of programmes are pivoted to meet people where they are. There are virtual tours of all 17 national labs, the contests shifted to virtual participation, and even some internship experiences at the labs are virtual. STEM Rising revamped the K-12 page to make searching for virtual resources easy, and a new page is in development to showcase all of lab's virtual tours.

### WHAT DOES SUCCESS LOOK LIKE FOR STEM RISING?

Every time a student, teacher or young person connects with the DOE, and thinks a little longer or a little harder about learning about our agency's work, it's a huge success. We hope you're considering it right now!

## STEM RISING IS YOUR GO-TO RESOURCE FOR ALL-THINGS-STEM AT THE DOE

**STUDENTS** – You will find competitions, learning resources, events, internship opportunities and a whole lot more. Check out resources on the K-12 page or the Undergrad & Continued Learning page, which is a great launch pad. Starting in high school, students can join the DOE team as an intern, fellow or researcher.

"It's an amazing way to gain exposure to energy careers and what we do," says AnneMarie. "It's also a huge boost to any resume. If students don't have the time or ability yet to come work with us, they can get experience by jumping into one of our national competitions, like the National Science Bowl or Solar Decathlon." Look at the STEM Rising pages in the "Contests and Competitions" section to find more information on these programmes and a host of others.

**TEACHERS** – You will find STEM lesson activities, virtual learning resources and research opportunities. The resource library pages are a great place to start, and both the Idaho National Laboratory and Fermilab have robust offerings. Their pages provide an overview of available materials, from videos to podcasts to downloadable lessons to virtual tours.

[www.energy.gov/STEM](http://www.energy.gov/STEM)