

Ensure a Competitive Energy Workforce

The United States energy sector’s demand for skilled workers is growing. And because the U.S. energy industry is so critical to the health and stability of the American economy and to our domestic security, building a competitive energy workforce is essential.

Unfortunately, new skilled workers aren’t entering the workforce fast enough to meet the industry’s needs. As the energy industry expands and as large segments of the current workforce retire—taking with them important knowledge and experience—our nation must commit to building a skilled energy workforce.

ONLY 1/3 OF 8TH GRADE STUDENTS



PERFORMED AT PROFICIENT LEVELS IN SCIENCE.



Policy Recommendations

- ✓ It should be a priority to align preparation, recruitment, induction, retention, and professional development of STEM teachers with the knowledge and skills needed to improve student performance.
- ✓ Pay and performance structures should reward STEM teachers whose performance contributes to substantial growth in student achievement; attract and retain effective instructors in subjects experiencing teacher shortages, notably math and science; draw effective educators to high-need schools; and remove ineffective educators.
- ✓ The America COMPETES Act should be fully funded by Congress in order to meet its objectives.
- ✓ The administration and Congress should reform visa and immigration policies to enable the United States to attract and retain science, technology, math, and engineering students from around the world to study for advanced degrees in U.S. colleges and universities and to stay to work in the United States.
- ✓ Community colleges should seek private-sector input and develop curricula available to a broad range of students that address energy and mining industry demand for qualified workers with technical backgrounds.

Keeping America's Energy Workforce Competitive

To take full advantage of abundant sources of American energy, and to continue to build and expand on America's energy framework, our nation must foster and attract skilled energy workers. This means that we need to:

- ✓ Provide strong educational opportunities in science, technology, engineering and math.
- ✓ Encourage students to pursue undergraduate and advanced STEM degrees.
- ✓ Remove barriers for qualified individuals to teach STEM subjects in schools.
- ✓ Prepare teachers and instructors to effectively teach STEM curriculum and improve student outcomes.
- ✓ Offer teacher pay, advancement opportunities, and rewards that align with the impact they have on academic performance.

There is a growing skills gap between adults entering the workforce and the jobs available, a gap that is particularly glaring in science, technology, engineering, and math (STEM) fields. Recent data from the Department of Education indicate that too many U.S. high school graduates were not ready for college work in science and math. Moreover, research from Harvard's Kennedy School of Government suggests U.S. elementary and high school students do not perform well compared to their international peers.

We must do a better job of drawing on the talents of all students at American academic institutions, from every background, to produce the engineers, scientists, and skilled workers necessary to design, build, and operate America's energy framework in the future.

Want to know more about energy workforce competitiveness? Read the full report, [Energy Works for US](#).



ENERGY
Works For US



www.energyxxi.org/energyworksforus

Data referenced from the following sources: Department of Education; Harvard's Kennedy School of Government, *Achievement Growth: International and U.S. State Trends in Student Performance*

70%

OF HIGH SCHOOL STUDENTS ARE UNPREPARED FOR COLLEGE SCIENCE COURSEWORK.

55%

OF HIGH SCHOOL STUDENTS ARE UNPREPARED FOR COLLEGE MATH COURSEWORK.

Just

31%

OF BACHELOR'S DEGREES IN THE UNITED STATES ARE AWARDED IN SCIENCE AND ENGINEERING FIELDS.