A new generation of skilled workers must be prepared to fill the energy and utility industry's skills gap!

The energy and utility sector, including traditional and renewable sources of energy, plus water, is projected to produce 2.4 million new STEM jobs from 2015 to 2018. These positions offer average salaries 160 to 300 percent more than the U.S. average. However, there are not enough students with strong STEM skills pursuing careers in the energy and utility industries. The increased demand for STEM skills and the retirement of large numbers of baby boomer workers has created a skills gap in this sector. More than half (55 percent) of the sector workforce may need to be replaced in the next 10 years. We need a new generation of well-trained, highly skilled employees to allow the sector to continue to grow and prosper.

Where do we start? Quality early learning programs can help build the STEM pipeline for energy jobs

A comprehensive solution to the skills gap requires that we start early. Disadvantaged children can lag behind their peers before they enter kindergarten, entering school already up to 18 months behind. High-quality early childhood education, which includes early math and science instruction, can lay the foundation for a future workforce that has the STEM and other skills this sector needs.

“What one of the keys to creating an energy workforce that will keep America competitive in the modern, global economy is committing to high-quality early education with a focus on STEM skills.”

— Paul Bowers, Chairman, President and CEO, Georgia Power

What can business leaders do to take action?

• Join ReadyNation! There are no costs or meetings, only a willingness to consider invitations to speak out, with our support.
• Speak to policymakers and/or the media — we prepare remarks.
Math skills learned in preschool predict success into elementary and high school, in both math and reading. Research showed that disadvantaged children who had quality early learning were more likely to finish high school, attend college and be employed. Early childhood education also builds the behavior skills — patience, problem-solving, team-work — that are essential for STEM jobs — and other positions as well. A recent study showed that “Kindergartners who share, cooperate and are helpful are more likely to have a college degree and a job 20 years later than children who lack those social skills” — skills that children can learn in preschool. As a result of these and other benefits, preschool can return to society an average “profit” of over $26,000 for every child served.

**The bottom line**

To secure the future of the energy industry and the economy, children must be prepared for the rigors of postsecondary education and the workforce. Companies can have a large impact by supporting efforts to put children on the right path and build the pipeline for a highly skilled future workforce.

**ENDNOTES**


“We need to start early to build the diverse, qualified talent that we will need. Students need a strong foundation in STEM as well as employability skills like problem solving, critical thinking, and teamwork to be prepared for tomorrow’s workforce.”

— Ann Randazzo, Executive Director, Center for Energy Workforce Development