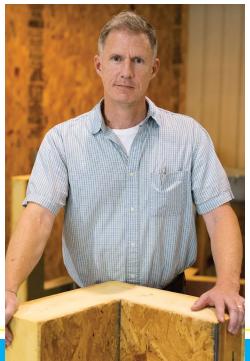


## Ffficiency Workers

n Winston-Salem, NC, Richard Tate needed a job. He found out about a six-week weatherization class after his mom's home was weatherized. He earned a perfect score in the class, which introduced him to energy efficiency and landed him a job. Now he works on homes. "I like getting up into the attic, getting down those crawl spaces, sealing up those penetrations, knowing that what I'm doing is going to be beneficial to the homeowner," Tate says. "It's just a beautiful thing to see the smiles on their face and know you're causing them to save some money."





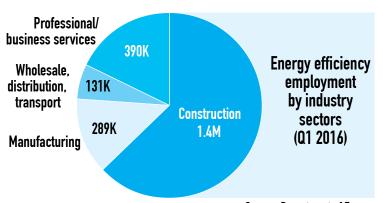
"We want to bring advanced building technologies to the residential market where the builder ... can literally say, 'You have the most energyefficient building envelope in the state, in the southeast, in the country." - Charles Leahy, CEO of Eco-Panels

"Seeing the feedback from the customers that got it and hearing the stuff they say about it is one of the greatest parts of the job. And we're actually doing something good for the world." — Sonny Gordon, machine operator at Eco-Panels

Like Tate, millions of people work to save energy in the United States. They work in every US state, across industries and technologies. They make, sell, and install efficient products such as ENERGY STAR® appliances, build well-insulated homes, or offer energy-saving services such as weatherization. They are the faces of a sizable and growing energy efficiency workforce.

To show the diverse arc of this work, ACEEE visited North Carolina. We met a manufacturer of structural insulated panels, a SIPs builder, energy efficiency trainers, weatherization workers, and the recipients of these efforts, including a homeowner. They are passionate about saving energy.

At least 2.2 million people work some or all of their time on energy-efficient technologies and services, according to a 2017 report for the US Department of Energy. They outnumber the 1.9 million who work to produce electricity, coal, oil, and gas.



Source: Department of Energy

Other jobs are related to energy efficiency. DOE reports another 0.7 million jobs that focus on vehicle fuel economy and alternative fuel vehicles, as well as three million jobs that sell efficient (and other) appliances and building materials. These numbers don't include the indirect jobs that result when customers spend or invest the money they save in lower energy bills somewhere else in the economy.

Take Blanche Tate-Lee, a North Carolina resident who had her home weatherized. She saved enough money on her utility bills that she was able to buy Christmas gifts for her grandchildren.

She did something else with her energy savings: "I gave my husband his man cave."

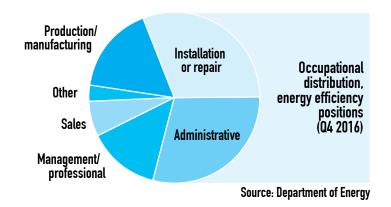


Blanche Tate-Lee

More than half of these jobs occur in construction. In fact, one of every five US construction jobs now deals with products — lighting, heating/cooling, building materials, appliances — that are proven to save energy.

The other direct jobs are in professional and business services, followed by manufacturing as well as wholesale trade, distribution, and transport.

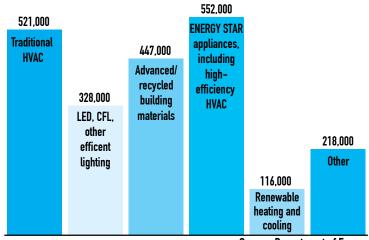
These jobs span the various types of energy efficiency technologies, notably ENERGY STAR appliances. The market penetration of these certified products, and consequently their manufacturing and sales, continue to increase. About half of US refrigerators, 45% of residential boilers, and 93% of computer LCD screens now meet ENERGY STAR guidelines.



Energy efficiency jobs also vary widely by occupation, showing it's a field for everyone.

The future appears bright for the energy efficiency workforce, which continues to grow. Employers expect it will expand by about 9% overall during 2017, with construction showing the biggest gains.

## Energy efficiency employment by sub-technology (Q2 2015 - Q1 2016)



Source: Department of Energy





"I spend my time working with developers and builders, and my main job is to help them design, build, and ultimately sell a more efficient home." – Taylor Fearrington, SEM business development manager

When Harriet O'Rear and her husband Steve moved to Snow Camp, NC, they wanted to buld an energy-efficient home. She researched building technologies and, rather than stick-frame construction, she chose factory-built, airtight structural insulated panels. "The simplicity of it going up is incredible," says O'Rear. She says she wants to use as little energy as possible, because she's concerned about global warming: "Steve and I have spent our entire lives trying to make the place that we live as good or better as when we came.... We want to do the best we can for the world."



"I hope that many people will catch on to this. It's easy, it's efficient, it's not particularly costly."

- Harriet O'Rear, homeowner and homebuilder





Photo portraits by Daniel M.N. Turner