Advanced Energy Jobs in Texas

Advanced energy employs 143,000 workers in Texas, more than twice as many as Airlines, more than Chemical Manufacturing and Petroleum Refining, and approaching Building Construction.¹ The advanced energy industry now supports just over 1% of total statewide employment.

Employers expect to add 9,334 new jobs by the end of 2016, an increase of almost 7%. This projected growth would bring total advanced energy employment in the Lone Star State to just over 152,000 workers.

In 2015, there were 14,968 advanced energy companies doing business in the state, the vast majority of which support or service other local Texas businesses and customers: 62% report sourcing their technologies from in-state vendors while 74% report serving in-state customers. These firms represent more variety of industry segments and technology types than in other states with sizeable advanced energy economies, where firms tend to be more concentrated in one segment or another. While energy efficiency workers comprise just over half of the advanced energy workforce in Texas, the share is over two-thirds nationally as well as in other large advanced energy economies like California.

With almost 39,000 workers, employment in Texas’s Advanced Electricity Generation segment is notably large. In Texas, this segment is primarily composed of wind, which continues to thrive in the state as a result of high wind resource potential, available transmission capacity, and the state’s unique competitive power system. Wind generation firms employ 45% of the Advanced Generation workforce, or about 17,000 workers. Solar, the next largest Advanced Electricity Generation technology, represents about three in 10 Advanced Electricity Generation workers.

Texas is also home to a significant Advanced Fuels industry – about 9,500 workers in total, the majority of which are working in corn ethanol. With 13% of total advanced energy employment, Advanced Transportation is also a significant segment of the state’s advanced energy economy. Advanced Transportation employs almost 19,000 workers who spend some or all of their time on hybrid, plug-in hybrid, and natural gas vehicles.

As the Advanced Energy industry grows in Texas, it is also showing signs of maturing. As with most advanced energy economies, Texas has a heavy concentration (55%) of employment in installation, repair, and maintenance operations. However, there is notable employment in trade, distribution, and transport (19%), engineering and research (18%), and manufacturing (6%), indicating that the industry as a whole is large and stable enough to support jobs in service professions as well as in project development or maintenance.

The advanced energy workforce in Texas is quite diverse. Although predominantly male (78%), advanced energy workers in Texas are 43% ethnic or racial minorities. Five in 10 (53%) recent hires over the last year are reported ethnic or racial minorities. One in 10 advanced energy workers in Texas are Veterans.