

Report: How Houston could gain, lose jobs in a clean energy transition

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As the "energy capital of the world," Houston's overall employment is significantly impacted by the energy industry. New research is shedding light on how Houston's economy could be impacted if the city doesn't lean into an energy transition to become the energy capital of the future.

The global push toward low-carbon, renewable energy sources over fossil fuels to address climate change will require trillions of dollars in infrastructure and new technologies around the globe, the Greater Houston Partnership laid out in its Energy Transition Strategy released June 29. While Houston has remained the energy capital of the world through previous economic cycles, approximately 125,000 jobs in the upstream and midstream oil and gas sectors were lost between 2014 and 2020. And in the Houston region, energy doesn't end at the wellhead. The decrease in oil and gas jobs impacts oil field service companies, law firms, technology providers, engineering firms, professional services and other of what economists refer to as "induced" jobs in restaurant and retail, the GHP said in the report.

The contraction of Houston's energy economy could continue, the GHP report suggests, if Houston chooses "business as usual" instead of leaning into and leading in the energy transition. If Houston can take a leading position in the energy transition to a lower-carbon economy, around 560,000 jobs could be created in the region by 2050, according to a McKinsey & Co. analysis cited by the GHP. Such a pathway would require carbon dioxide emissions by 2050 to drop by 90% compared to existing trends of global consumption, according to the report. Even with existing trends and captures technologies, leaning into solar, wind,

hydrogen, biofuels, energy storage, carbon capture utilization and storage, electric vehicles and more could add over 260,000 jobs in Houston.

On the flip side, Houston stands to lose hundreds of thousands of jobs over the next three decades if no action is taken to adjust to the changing energy landscape, according to the report.

The report notes that the transition to net-zero forms of energy will cost trillions of dollars to develop. Under the business-as-usual scenario, an estimated \$1.9 trillion could be spent on emerging clean energy sectors in North America alone. To meet the loftiest of net-zero goals in the 1.5° Celsius pathway, that cost could balloon to an estimated \$5.7 trillion in North America alone.

"Houston is well-positioned to take advantage of this opportunity, potentially capturing \$35 billion annually on the low side and as much as \$210 billion annually in the aggressive case," the report states.

Texas economists have suggested that the oil and gas sector won't be a massive driver of job creation in the Houston's future like it was during the fracking revolution. Speaking at the GHP's Future of Global Energy conference June 29, Bobby Tudor, chairman of Houston investment bank Tudor, Pickering, Holt & Co., reiterated that the incumbent oil and gas industry probably won't be as significant a driver for job growth in Houston as it has been historically.