



CLIMATE CAREERS: JOB TRENDS ACROSS THE US

LENSA

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WHAT ARE LENSA REPORTS?

Lensa has been collecting data since 2015, tracking over 100 million job postings and 9 million users, and we're ready to bring that information to you through Lensa Trend Reports.

Lensa Trend Reports provide clear and concise snapshots that help you stay informed about trends and changes in the world of work.

INTRODUCTION

The Intergovernmental Panel on Climate Change (IPPC) released its special report on the impacts of global warming last October declaring that action needs to be taken within the next 12 years in order to keep global warming to a maximum of 1.5C above pre-industrial levels.¹

Without urgent and radical change our world will experience the increasing negative effects of global warming. These effects include intense and frequent extreme weather events, massive loss of biodiversity, increased food insecurity and devastation of ecosystems.

The future of our planet depends on global efforts towards reducing carbon emissions.

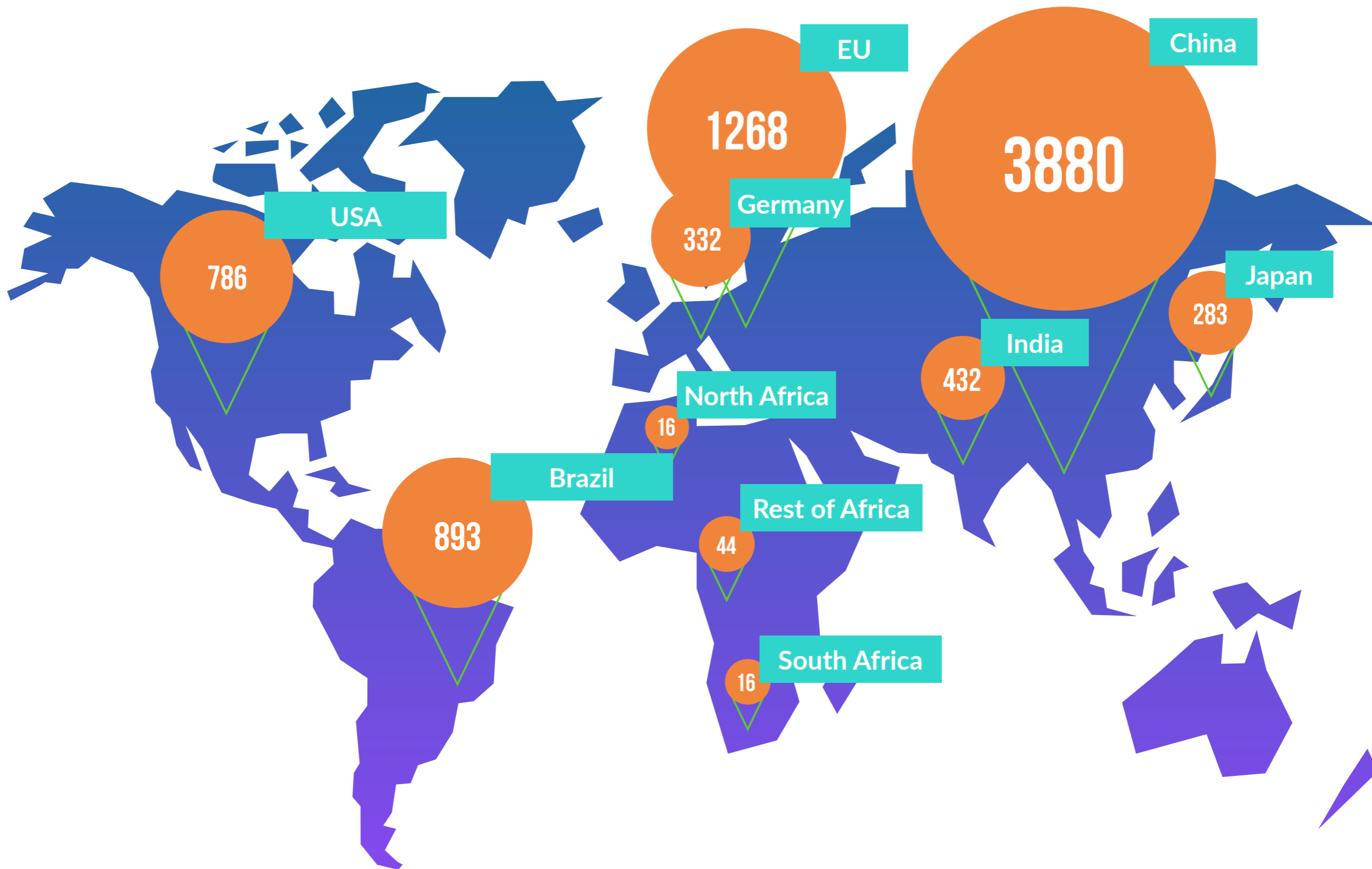
The engineering sector is at the heart of both climate change adaptation and prevention. But other jobs sectors such as agriculture, material design and construction all have a huge responsibility.

Sustainability jobs are growing at a fast pace, have higher wages and contribute to local economic and environmental improvements.

1. ipcc.ch

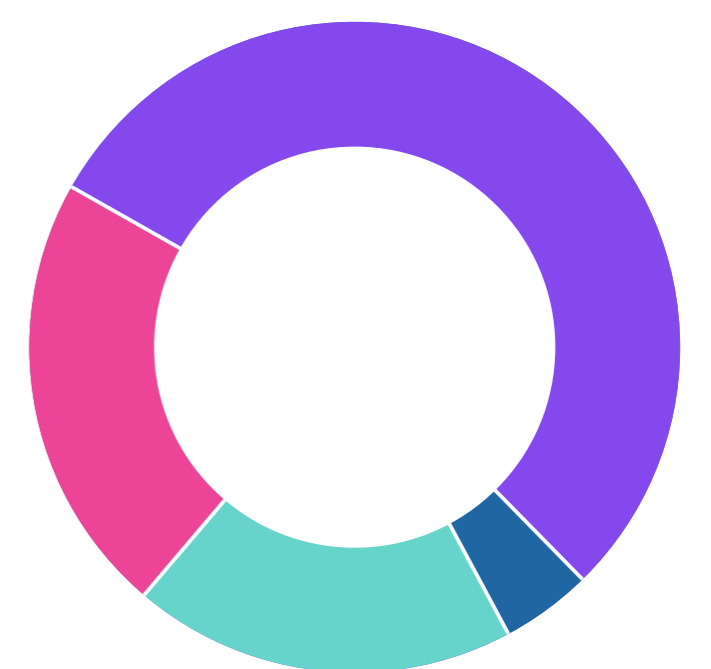
HIGHLIGHTS

- Recent research shows there are 10.3 million renewable energy jobs globally, a 5.3 percent increase since 2017²



- Clean energy and sustainability jobs are present and growing in every state in America. There are more than 4 million jobs clean energy and sustainability jobs in the U.S.³

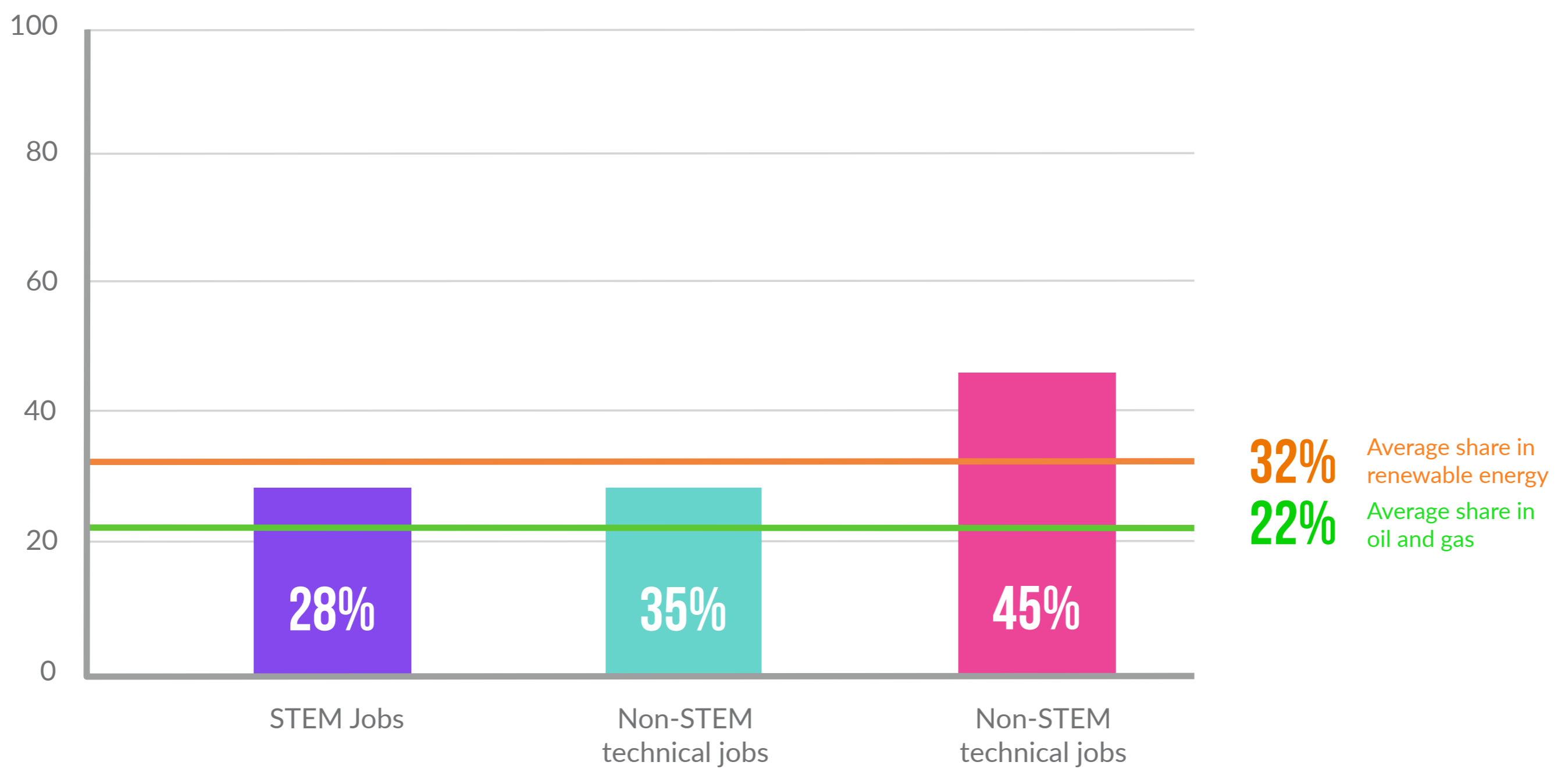
FIELD	NUMBER OF JOBS
Energy efficiency	2,2 million
Public sector	890 000
Renewable energy	769 000
Advanced vehicles	174 000



² International Renewable Energy Agency
³ edfclimatecorps.org

HIGHLIGHTS

3. Women hold a 32% share of renewable energy jobs worldwide compared to just 22% of jobs in the fossil fuel industry.⁴



SECTOR SPOTLIGHTS

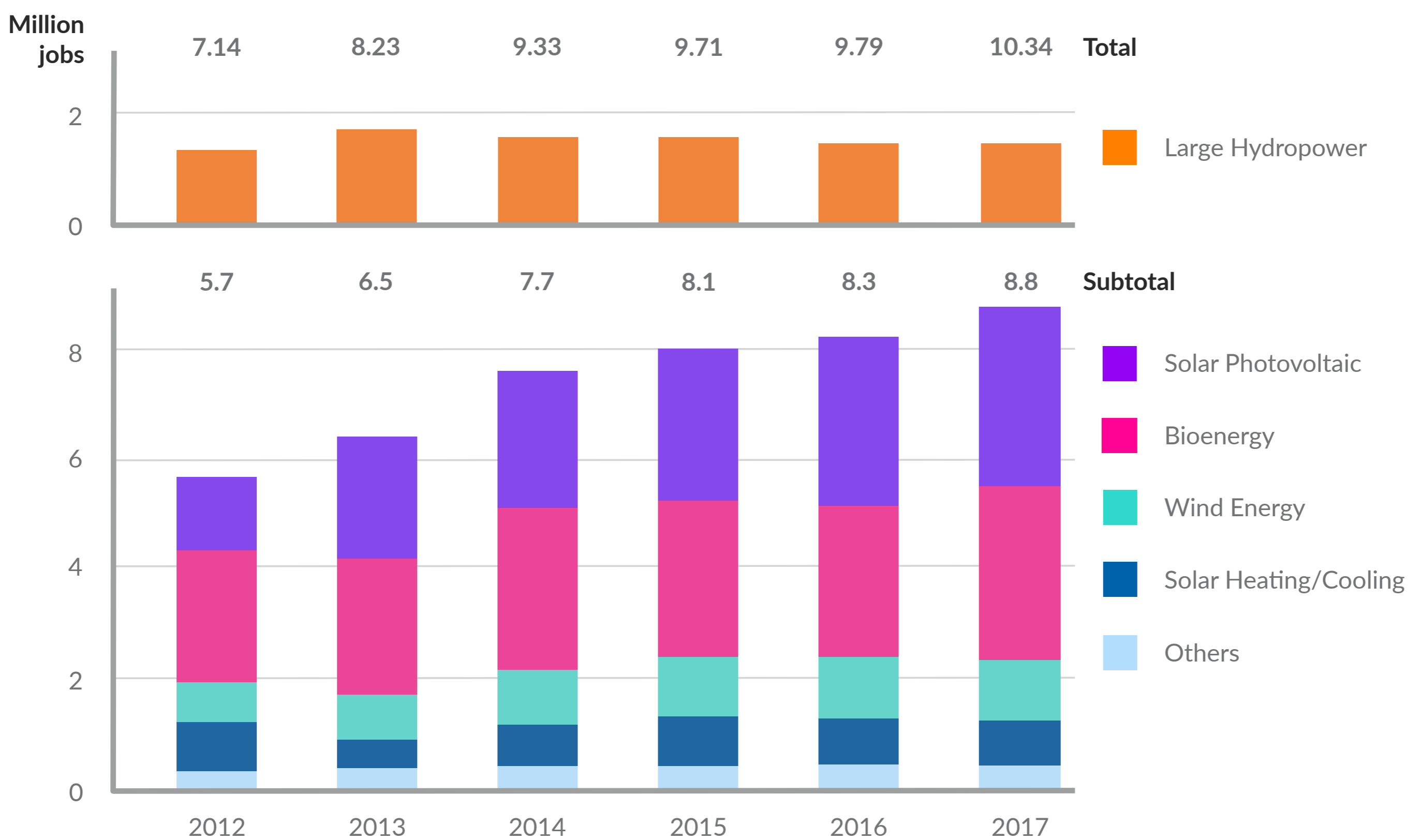
RENEWABLE ENERGY

Employment in the renewable energy sector has been growing rapidly across the U.S. The sector includes jobs in solar power, wind, geothermal, bioenergy and small hydropower.

Solar employment opportunities are currently growing at a rate 12 times faster than the rest of the economy. Wind Turbine Technician is the fastest growing profession in the United States.⁵

Job growth in the renewable energy field is strong and steady growing at a compound annual growth rate (CAGR) of 6% since 2012, rising to 769,000 in 2015.⁶

GLOBAL RENEWABLE ENERGY EMPLOYMENT BY TECHNOLOGY, 2012 -17



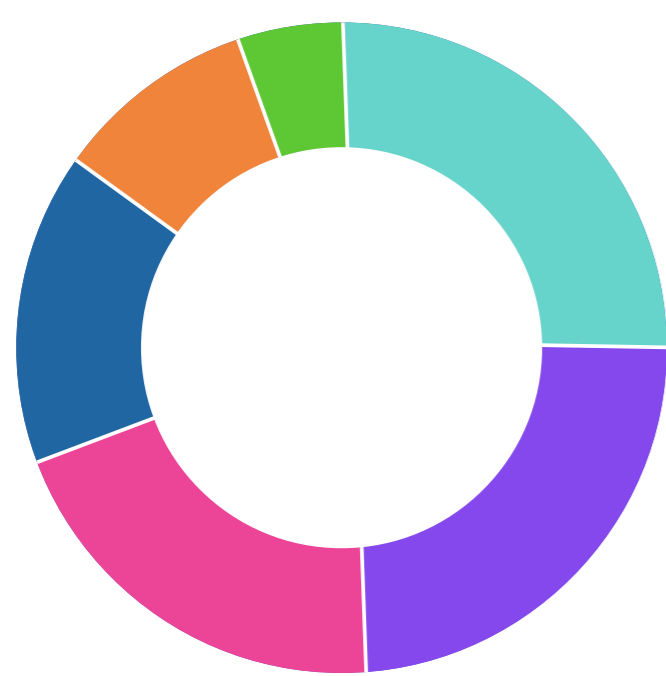
5 Bls.gov
6 Irena.org

SECTOR SPOTLIGHTS

ENERGY EFFICIENCY

Energy efficiency jobs range from technical to administrative positions including product design and manufacturing, to installation and building retrofit. Much of the employment in this sector is driven by local legislation around energy efficiency and building code. 55% of the sectors employment is connected to ENERGY STAR appliances including high efficiency heating, ventilation and air conditioning.⁷

ENERGY EFFICIENCY EMPLOYMENT BY SUB-TECHNOLOGY (2016)



JOB CATEGORY	WORKERS
Energy Star Appliances	552,147
Traditional HVAC	520,572
Advanced and Recycled Building Materials	446,796
LED, CFL and Other Efficient Lighting	327,792
Other	217,759
Renewable Heating and Cooling	116,445

SECTOR SPOTLIGHTS

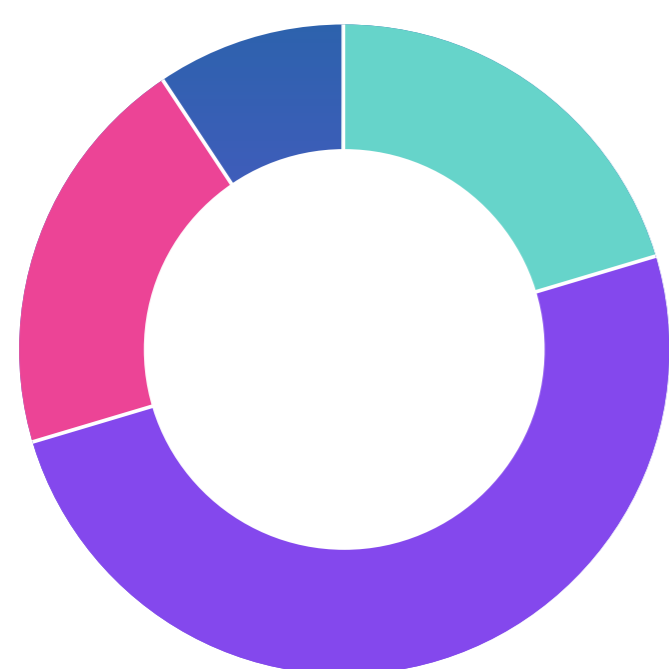
TRANSPORTATION


Demand for non-fossil fuel reliant vehicles and transportation methods is rising across the globe. The U.S automotive industry has invested heavily in clean-fuel vehicles, such as hybrid-electric, plug-in hybrid, electric, and fuel cell vehicles. In 2016 there were more than 174,000 green-transport related jobs across the U.S. Jobs in the sustainable vehicle sector range from electrical and mechanical engineers, to factory workers and assemblers, to automotive repair technicians.⁸

Tesla is one of the largest employers in the sector with more than 45,00 employees across the country.⁹

Employment in the advanced vehicle industry includes 35,794 workers in electric vehicles, 87,492 workers in hybrid electric vehicles, 35,121 workers in plug-in hybrid vehicles and 16,207 workers in fuel cell and hydrogen vehicles.¹⁰

EMPLOYMENT IN THE VEHICLE INDUSTRY



VEHICLE TYPE	WORKERS
 Hybrid electric vehicles	50,3%
 Electric vehicles	20,2%
 Plug-in hybrid vehicles	20,2 %
 LED, CFL and Other Efficient Lighting	9,2 %

8. Energy.gov
9. Statista.com
10. Irena.org

GRADUATE AND GROWTH TRENDS

Demand for jobs related to the climate crisis will increase as policy changes reflect the urgent need for action. Job titles will alter to reflect specific specialisation into climate crisis management adaption and prevention.

Engineering lays at the heart of both climate change prevention and adaption. The sector continues to grow strongly, up more than 5 % over the last three years.

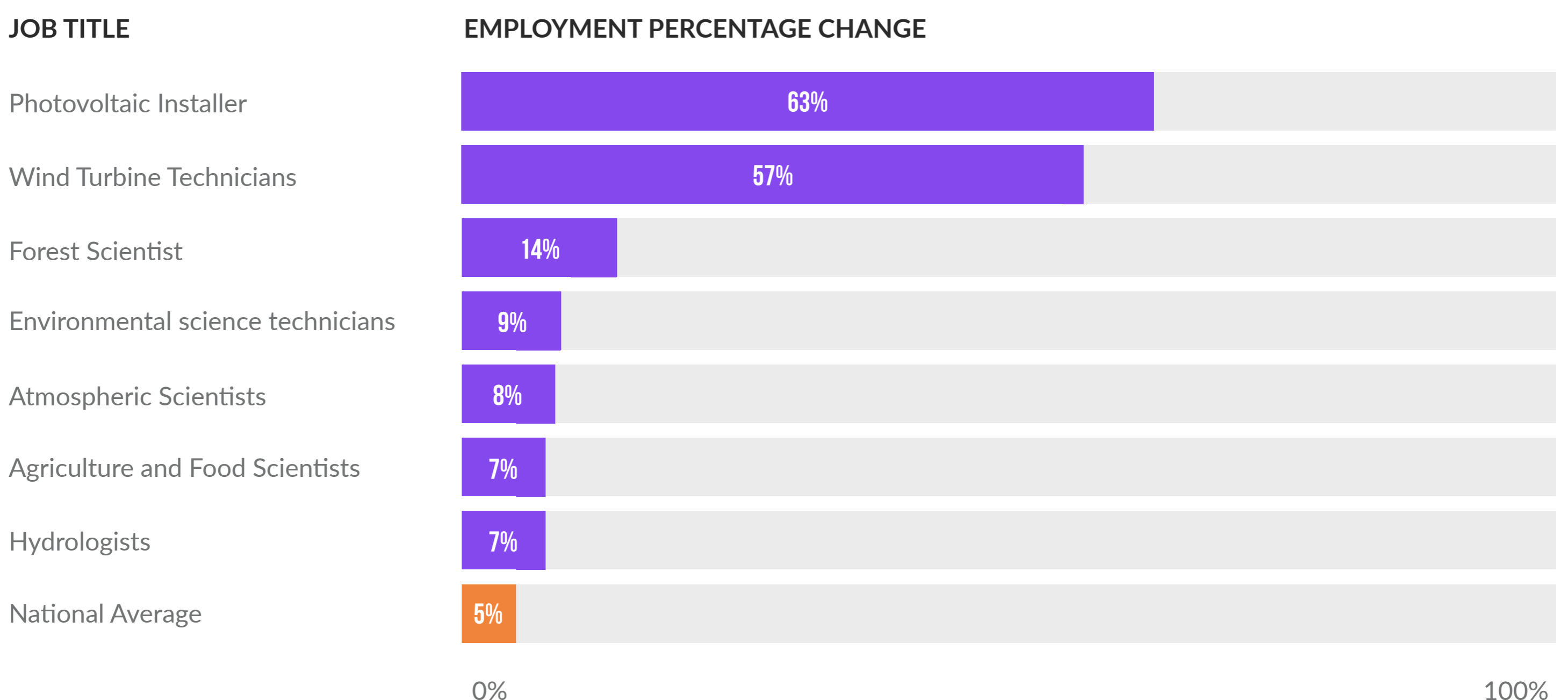


The number of **Engineering** graduates in the workforce has been growing at a rate of 5.13%, from 4.09M in 2016 to 4.3M in 2017.

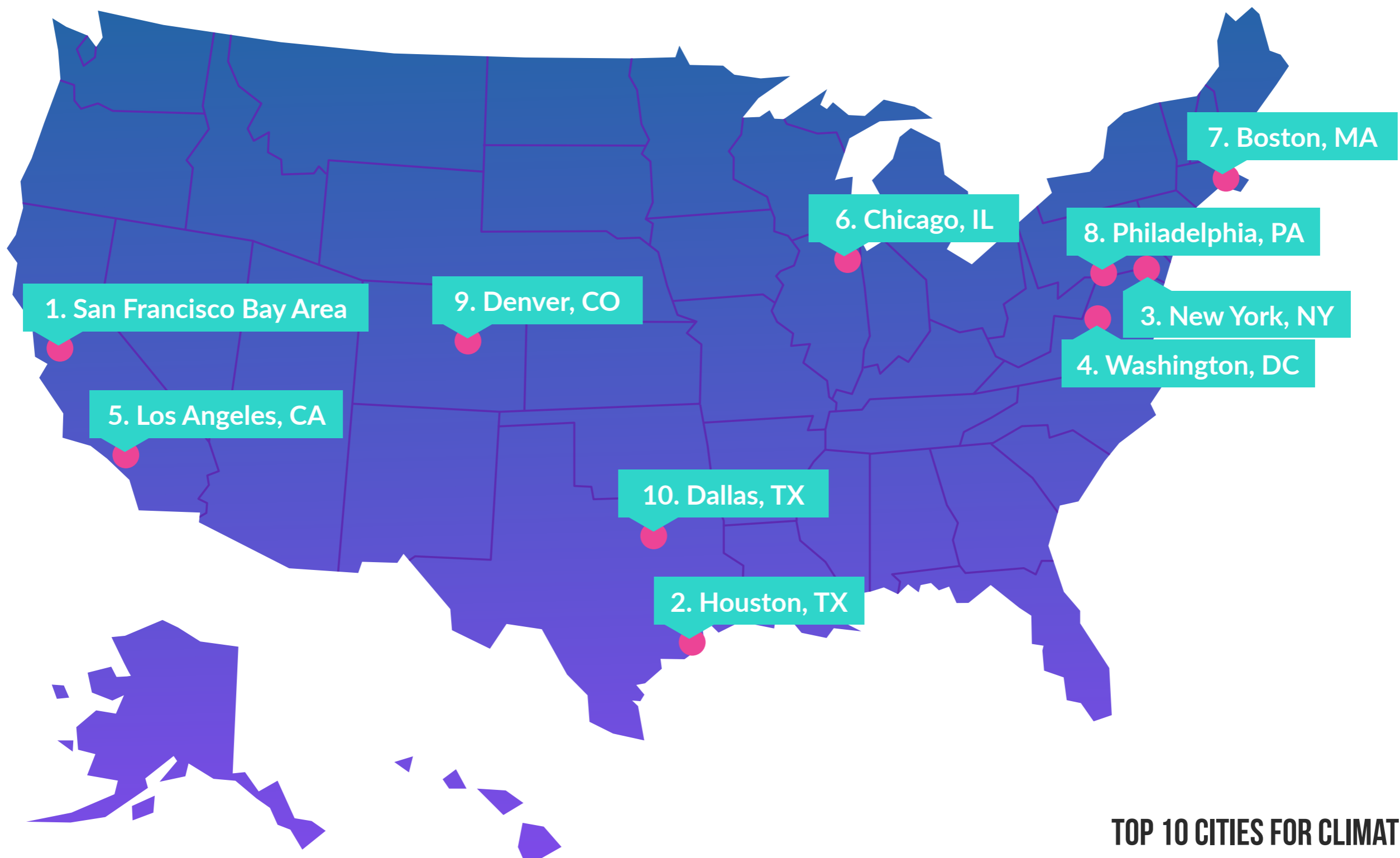


California is the hot spot for cutting edge Engineering education. Los Angeles County, CA and Santa Clara County, CA awarded the most Engineering degrees in the USA in 2017.

CLIMATE RELATED JOB OUTLOOK 2018 - 2028:



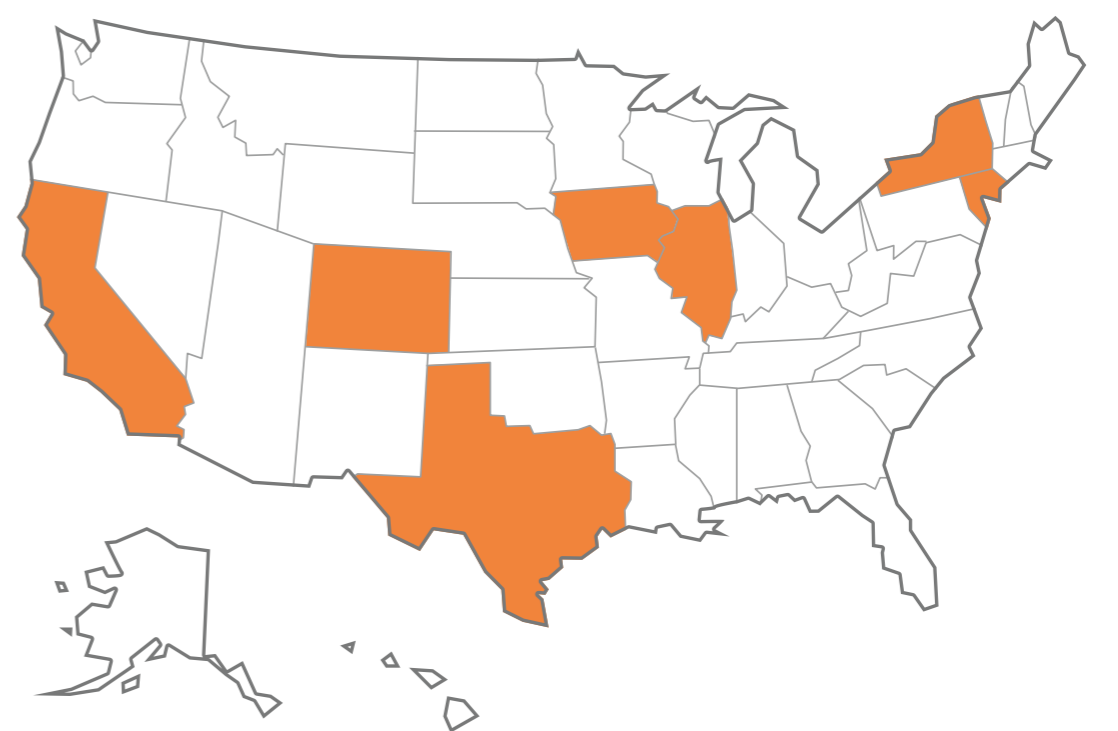
DISTRIBUTION OF JOBS



KEY SUSTAINABILITY JOBS ACROSS THE U.S.

California is the highest employer of sustainability and climate related jobs followed behind by Texas, Colorado and New York.

JOB TITLE	TOP LOCATIONS (1, 2, 3)
Photovoltaic Installer	California, New York, New Jersey
Wind Turbine Technician	Texas, California, Iowa
Forest and Conservation Scientist	Texas, California, Colorado
Agriculture and Food Scientists	California, New Jersey, Illinois
Hydrologists	California, Colorado, Washington
Civil engineer	California, Texas, New York
Environmental engineers	California, Texas, New York



KEY SUSTAINABILITY JOBS ACROSS THE U.S.



DISTRIBUTION OF ARCHITECTURE AND ENGINEERING JOBS ACROSS THE STATE OF CALIFORNIA

CONCLUSION

Assessing the impacts of the climate crisis on the economy and society is at best a complex task. But there is no doubt the rapid climate changes we are currently experiencing will continue to influence and alter the world of work across the globe. New jobs and industries will be created, while other fossil fuel-dependent sectors will shrink, and even disappear. The exact impacts will be influenced by a multitude of factors, including global growth and inflation, regional effects of climate change, and policy responses.

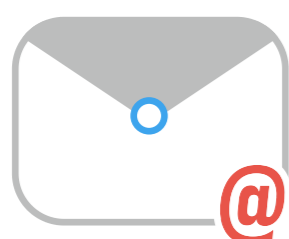
All industries must be ready to adapt to the challenges ahead.



If you are thinking of a career that will make a positive impact on the planet, now is the perfect time to search for your new job on [Lensa.com](https://lensa.com).



Lensa will continue to monitor the impacts of climate change on careers using our latest data and insights. Stay up to date by subscribing to our [blog](#) and following us on social media.



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