



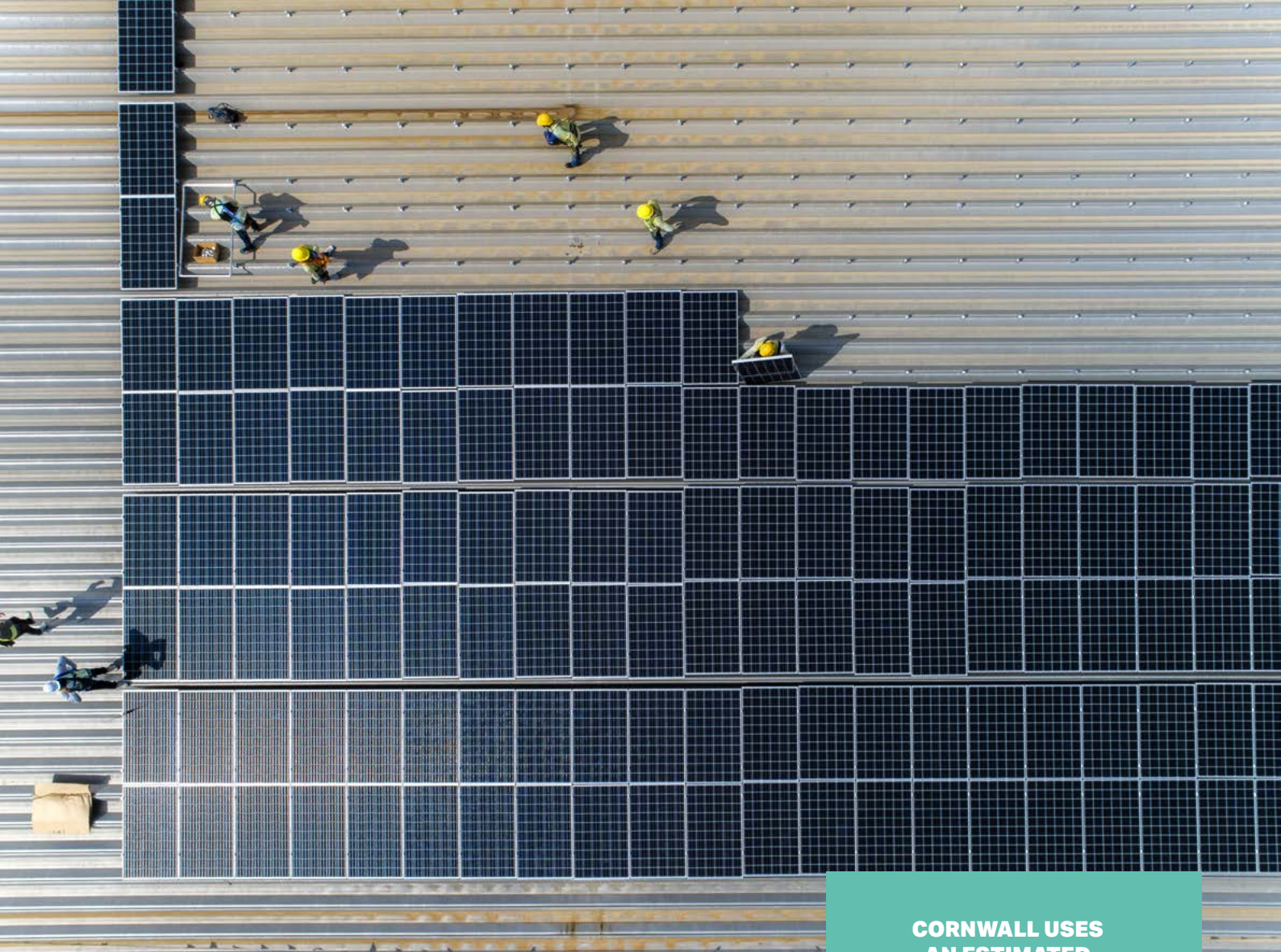
Make informed decisions about your career path by learning about key labour market sectors in Cornwall & the Isles of Scilly

CLEAN ENERGY

(RENEWABLES)

SECTOR IN CORNWALL & THE ISLES OF SCILLY





Introduction to the clean energy sector

Clean energy is energy that comes from renewable, zero emission sources that do not pollute the atmosphere when used, as well as energy saved by energy efficiency measures.

Most countries are aiming to cut greenhouse gas emissions to as close to zero as possible (Net Zero). This requires a substantial change to the energy sector with an increasing focus on clean energy and renewables. Cornwall is at the forefront of this move and is developing projects in wind, wave, solar and geothermal power.

Cornwall uses an estimated £500m of energy each year. Much of this energy is imported from outside Cornwall and is largely dependent upon fossil fuel consumption. Cornwall has the potential to provide and develop a broad range of renewable and low carbon infrastructure, including wind, geothermal, photo-voltaic, biomass and wave power. The aim is for the area to become self-sufficient and able to produce all of the energy that it needs.

The kind of energy transition imagined under net zero will require the creation of a lot of new clean energy jobs. As Cornwall pursues its aim of becoming energy self-sufficient, more and more people will be needed to work in this sector in roles such as solar power, electric vehicles and house retrofits.

**CORNWALL USES
AN ESTIMATED**

£500m

**OF ENERGY EACH
YEAR.**

**AROUND 40%
OF CORNWALL'S
ELECTRICITY
COMES FROM
RENEWABLE
SOURCES**



Current outlook

Cornwall & the Isles of Scilly have a climate change plan and a detailed strategy to drive forward the green economy, including clean and renewable energy. Cornwall Council declared a climate emergency in 2019.

Salaries in the clean energy sector

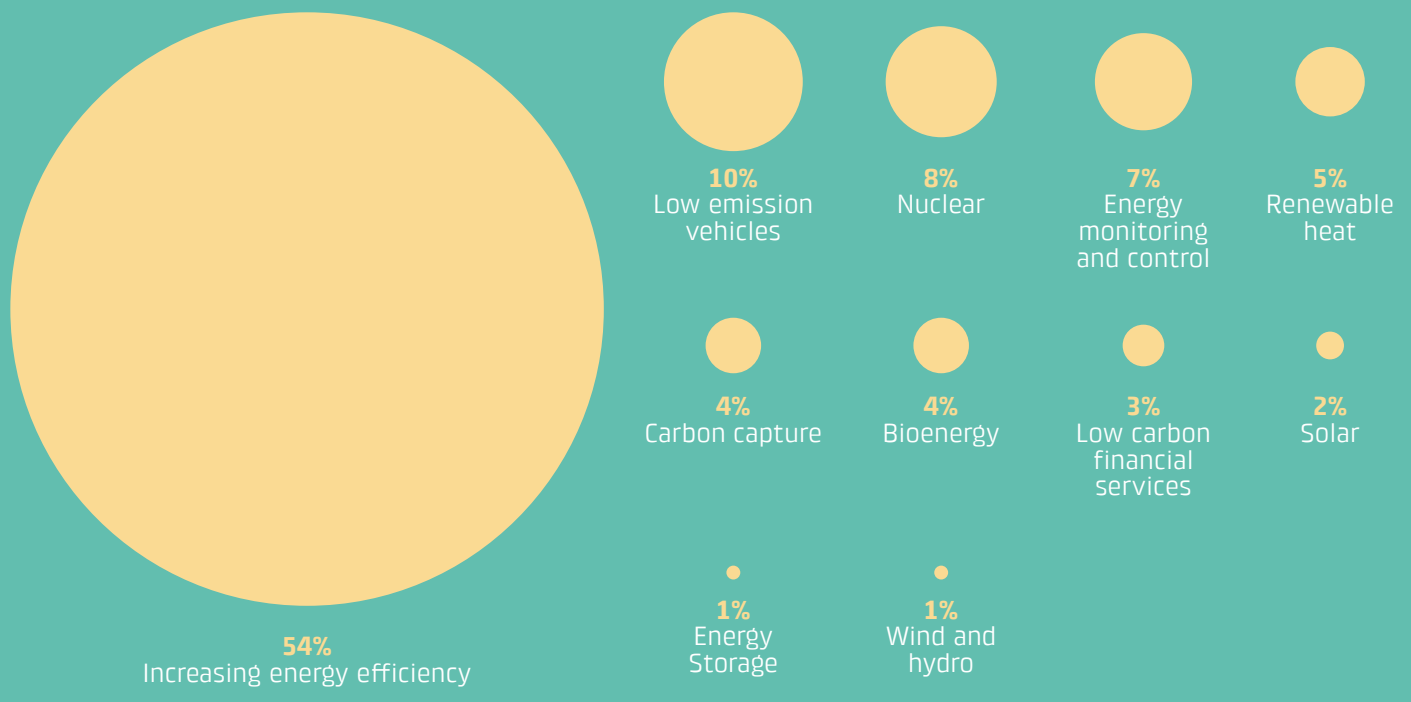
Occupation Title	Mean Salary (UK-wide)
Geotechnical engineer	£75,000
Safety manager	£62,500
GIS engineer	£50,000
Metocean engineer	£50,000
Mechanical engineer (Field based)	£45,000
Commercial analyst	£40,700
Electrician	£37,500
Solar consultant	£33,000
Solar installer	£30,000
CAD technician	£28,000
Renewables engineer (site based)	£26,000
Business Development Officer	£24,500

Jobs

The Office for National Statistics¹ estimates that there are 68,000 businesses across England that are engaged with the clean and renewable energy sector. Collectively they employ over 3 million people.

Green jobs in the energy sector are distributed across a range of sub-sectors-

Distribution of employment in renewable energy by sub-sector (England)



Data from: Office for National Statistics and describes employment in England in 2020. <https://www.ons.gov.uk/economy/environmentalaccounts/datasets/lowcarbonandrenewableenergyeconomyfirstestimatesdataset>

Key jobs in the sector include:

- Civil and mechanical engineers
- Construction workers
- Control engineering
- Cyber security
- Data analysts
- Electrical engineers
- Electricians
- Engineers
- Environmental scientists
- Grid infrastructure operatives
- Fitters for domestic use of renewable technologies
- Heat network development manager
- Joiners
- Manufacturing workers
- Modellers and programmers
- Offshore technicians and seamen
- Overhead lines people and general grid electric system installers
- Product development managers
- Project managers
- Roofers
- Technicians
- Quantity surveyor
- Welders

¹ Low carbon and renewable energy economy estimates - Office for National Statistics <https://www.ons.gov.uk/economy/environmentalaccounts/datasets/lowcarbonandrenewableenergyeconomyfirstestimatesdataset>



Demand

Nationally there is demand for the following roles in the clean and renewable energy sector.

- Engineers (all types)
- Heat network development managers
- Joiners
- Quantity surveyors
- Technicians
- Welders

Research commissioned by the LEP on Cornwall's Green Economy highlights local demand for the following roles in the sector.

- Electrician
- Energy assessor
- Engineers (all types)
- Researcher
- Solar installer
- Wind turbine technician

Employers

Key local employers include

- Bennamann
- Carbon Offset Cornwall
- Carnegie
- Celtic Sea Power
- Eden Geothermal
- Geothermal Engineering Ltd (GEL)
- Go-EV
- GreenGen UK
- Kensa Heat Pumps
- Morek
- Naked Solar
- Natural Generation
- Renewable Energy South West
- Water Powered Technologies

Skills

The Government has highlighted the following groups of skills that will be needed in the green economy

- Digital and data skills
- Education, communication and change management
- Leadership, management and communication skills
- Project management
- Science, technology, engineering and maths skills

In Cornwall there is current demand for people with qualifications in the following areas.

- Electrical and electronic engineering
- Operations management and supervision
- Environmental science
- Engineering (all types)



Future outlook

The volume of jobs in the clean energy and renewable sector is expected to grow rapidly over the next decade or more. The Green Alliance estimates that there will be an additional 80,000 jobs in this sector by 2040, with some sub-sectors like wind power growing very rapidly.

What is more net zero targets are likely to drive a wide range of labour market changes with many people employed in the traditional energy sector, and other high carbon industries, required to transition to new roles in the clean and renewable sector.

Floating offshore wind is anticipated to bring many opportunities locally over the next decade. The first FLOW project is expected to be in the water off the coast of Cornwall around 2026 with the first wave of projects completing by 2030

Automation

Automation and artificial intelligence are already a major part of the clean and renewable sector. The utilisation of automation is expected to grow, but this sector will still see a net increase in jobs over the next few decades. Many of these jobs may involve working closely with AI and forms of automation.

For further support:

Green Jobs <https://www.greenjobs.co.uk>

Prospects on renewable energy careers

<https://www.prospects.ac.uk/jobs-and-work-experience/job-sectors/energy-and-utilities/renewable-energy-careers>

Renewable UK <https://www.renewableuk.com>

Contact the Cornwall & Isles of Scilly People Hub, they can help if you are:

- unemployed and wondering what options are open to you
- out of work and looking to retrain or develop new skills
- recently redundant and want to get back into work or training

Call - 0333 0150699 (Monday–Friday, 9am–4pm)

Visit – www.peoplehub.info

Email – hello@peoplehub.info

The National Careers Service provides free careers advice and guidance to individuals from the age of 14. Visit 'Get the Jump' for 14-19 year olds and the National Careers Service website for adults.

Get the Jump: explore your education and training choices | National Careers Service (<https://nationalcareers.service.gov.uk/explore-your-education-and-training-choices>)

Careers advice - job profiles, information and resources | National Careers Service (<https://nationalcareers.service.gov.uk>)