

programme for Green Careers

www.newcastlecareers.org.uk

climatechange@newcastle.gov.uk



A Canny North East Guide to **Green Careers**

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Check out our guide to green careers

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Green jobs are essential for tackling climate change

We need green jobs as they will reduce the impact of climate change. They will also help us find new sustainable ways of living and help adapt to the change global warming is causing.

- Click here to find out more about climate change by watching this video
- Click here to find out why climate change affects you in Newcastle

Why choose a green job?



Higher Wages

Having a green job means you often earn more money than non-green jobs.



Average wage in the UK green economy £657.53

a week after taxes.

Non-green job

average wage £530.14 a week after taxes.



There are many different green jobs available in the North East.



The largest green sector employers in the region include Nissan, EQUANS, Siemens, SUEZ and Baker Hughes.

3

A growing sector

There are currently...

11.418 green jobs in the region



41.924 green jobs in the region by 2030

By 2030 it is expected there will be...

A job making a difference

Working in the green sector will help to tackle climate change.



It will also help improve the lives of local communities and the environment.

A job for everyone

The skills and opportunities in the green sector are available to anyone.



There are many jobs available in the green sector which are inclusive for all, from entry-level jobs and apprenticeships to management.

Transferable skills

You can gain key skills.



Many of the skills you learn working in the green sector can be transferred to other sectors and jobs.

5

Great opportunities in the North East

You can follow any pathway to a green job

Hear how people in the North East got there.

Apprenticeships



Tom Bates

Service Operations Manager, Siemens Gamesa UK

I oversee the daily operations of the North England Onshore Hub, totalling over 400MW of power output across 30 wind farms.

- I never wanted to attend University, I always wanted to take the route of a hands-on apprenticeship
- Wind Turbine Technician Apprenticeship in 2011
- Authorised Technician for 4 years
- Progressed to Service Team Leader in 2018
- Regional Supervisor for East of England
- Currently Service Operations Manager for North of England

"Looking back to when I started my career as an Apprentice in 2011, I always knew I wanted to climb the ladder, and there's no better industry to do that than the Renewable sector."



Higher Education



Maddie Benton **Biodiversity Technical Officer, Environment Agency**

I advise on wildlife legislation and assess permits for projects that are near, or may affect, rivers and other protected habitats and species in Northumberland.

- Biology, Chemistry, and Maths A-Levels • Ecology and Wildlife Conservation Degree • Worked with skilled researchers, ecologists and rangers all over
- the country.
- Joined the Environment Agency in 2023

"Our overall aim as a team is to improve the quality of rivers, and to protect and conserve the wide range of wildlife that depends on river habitats".

Straight into Work



Anna Wadcock Hotel General Manager, The Maldron Hotel

I manage The Maldron Hotel - a 265 room 4-star hotel in Newcastle. The Maldron has achieved Gold in the Green Tourism Award three years running.

- Began as a casual receptionist.
- Worked up through the ranks at various hotels.
- Now the General Manager of the Maldron Hotel

businesses that drive this are becoming more

- "Guests today are now looking to book hotels that are actively working to reduce their carbon footprint and giving guests a 'greener' stay, so

How do I get there?

Once you've finished your GCSEs or A-Levels / BTEC, there are lots of different options for you to work or study in the green sector.

A Levels

You choose three subjects to study for two years in sixth form.

Apprenticeships

These are available for people aged 16+ and involve working for an employer and studying towards a qualification at the same time.

Pathways

T Levels

College

at College.

two years long.

 \bigcirc

Straight into Work

You could get a job directly, and sometimes there is a chance to be trained up in the workplace or be put through an apprenticeship later on.

Study Programme - Level 1

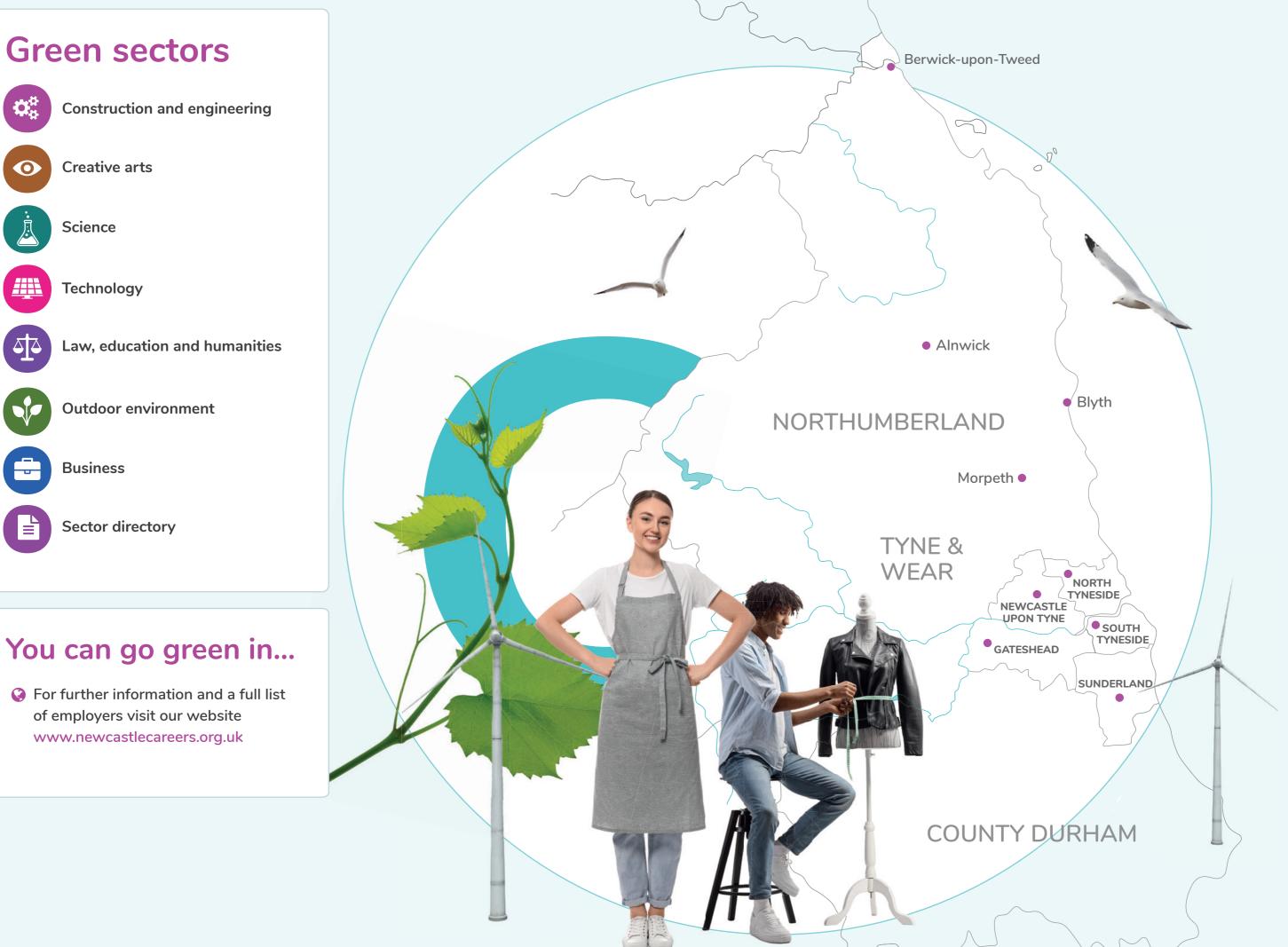
These are Level 1 courses designed to help you build your confidence, skills, and also include intensive Maths and English support.

You can study Level 1, Level 2 and Level 3 courses



These are equivalent to 3 A Levels. 80% takes place in the classroom, and 20% in the workplace. They are







Construction and engineering

There are many exciting and varied green jobs within construction and engineering. The North East has always had a strong tradition in construction and engineering. You can continue this by designing, making, and building the houses, energy and vehicles of the future - from renewable energy to electric cars. You can work in an office, a factory or on a construction site – there's a job for everyone.

Skills

- Physical strength
- Detail orientated
- Teamworking
- Endurance

- Working with tools
- Practical work

Interests

- Designing and making products
- Built environment

What next?

- Green engineering careers students | Neon Brilliant inspiration (neonfutures.org.uk)
- Construction and the built environment Green Careers Hub
- Careers Blyth STEM Hub, Energy Central (stem-energycentraluk.co.uk)



Rose Miller

Apprentice Site Manager, EQUANS

"During my apprenticeship at EQUANS, I have been on a project called Shieldfield Towers. Working within sustainability allows me to make a positive impact on society by promoting eco-friendly practices and creating a more sustainable world for all. It's a rewarding field that combines environmental consciousness with the opportunity to drive meaningful change."







North East green construction and engineering employers

Morpeth •

GATESHEAD

NEWCASTLE **JPON TYNE**

NORTHUMBERLAND



Poppy Atterton

BERNICIA **Environmental Sustainability Officer, Bernicia**

'My role involves delivering the Environmental Strategic Plan, which set environmental targets for the company to achieve. This includes supporting the retrofitting of our housing to improve energy efficiency. Getting to see first-hand the difference some of these projects make to local communities makes me really proud."



Ben Drury Graduate Structural Engineer, Fairhurst

"My role involves structural calculations, marking up drawings and carrying out site inspections. Since joining Fairhurst I have been able to understand first-hand how to assess the environmental impact of the structures we're designing and how we can have a positive influence towards achieving Net Zero."



North East Wide

- Bernicia Group
- Hitachi
- Northern PowerGrid
- Network Rail

Northumberland

- Decerna
- DeepOcean
- National Renewable Energy Centre
- Port of Blyth
- Reheat

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Windel Energy

Newcastle

- Arcadis
- Atkins
- Baker Hughes
- Balfour Beatty
- Bellway Homes
- British Engines
- Cathie
- Cundall Engineering • EQUANS
- Fairhurst
- GHD
- Houghton International

- Jacobs
- Jasper Kerr
- JC Consulting
- Karbon Homes
- McGrady Clarke
- Mott MacDonald
- Natural Power
- - Shepherd Offshore
 - Ramboll

 - Stantec

TechnipFMC

- Turner & Townsend

- Wardell Armstrong
- WSP

- Pegasus Group

 - RPS Group

• Port of Tyne

North Tyneside

Blyth

NORTH TYNESIDE

> SOUTH TYNESIDE

SUNDERLAND

Seaham •

Siemens

COUNTY DURHAM

Smulders

South Tyneside

- Amari Plastics
- Castle BS
- Equinor
- Storm Tempest

- - Willmott Dixon
- Schneider Electric



TYNE & WEAR

Insulation Engineer

Sunderland

 AR Power Nissan

Gateshead

• AMB Packaging Graphic Packaging International • Green Leaf Engineering

 $\mathbf{Q}_{\mathbf{a}}^{\mathbf{a}}$

Creative Arts

You could work in the theatre, within music, write or act to communicate powerful messages about climate change. To make the world more sustainable, story-telling and messaging are essential. Jobs in the creative sector often inspire change through emotive theatre, dance, art and music. If you like designing, you could work as a graphic designer or even as a fashion designer to grab everyone's attention.

Skills

Interests

- Communication
- Art and designDrama
- Creative thinking
- Confidence
- Open-mindedness
- English

Music

What next?

- Creative Careers Youth Employment UK
- CreativeCareer-Publication-2022-Campaign-15thSept-Proof02.pdf
- Creative Industries and the Climate Emergency: The Path to Net Zero
- C Roles in film, TV, games, animation and VFX ScreenSkills



Brad McCormick Artistic Director, Cap a Pie

"I plan and deliver theatre, creative and philosophical workshops for primary school aged children. The subjects can range from the climate crisis to global insect decline. We want young people to think about really big questions, to be creative, have fun, work together and express their opinions."



Communications Officer



Environmental Author

Graphic Designer

Film Set Designer

Green Marketing





North East green creative arts employers

Morpeth •

NORTHUMBERLAND



James Moore Creative Director, Luminous

luminous

"As Creative Director my role is to lead and manage the Luminous North studio in Newcastle. The biggest part of our role is helping business communicate their story through creativity. The world of sustainability is moving at a rapid pace and is a crucial part of the story for companies to tell now more than ever."



Rowan McCabe Spoken Word Poet

"I'm a poet and professional waffler. I believe in the power of poetry. A good poem might only last a minute or two, but it can change your life. If I can write a poem about climate change that inspires someone to make a positive difference in the world, that's the kind of thing that gets me out of bed in the morning."



Sunderland

• Theatre Space North East

•

NEWCASTLE **UPON TYNE**

GATESHEAD

Blyth

NORTH

TYNESIDE

SOUTH TYNESIDE

SUNDERLAND

Newcastle

- Bryonn Architecture LTD
- Cap-a-Pie
- Crystallised
- Gradon Architecture
- JDDK Architects
- Luminous
- Nomad Digital
- Sail Creative
- Space Architects

- The Farrell Centre
- Tyne & Wear Museums and Archives
- Ubisoft
- Young Women's Film Academy

Gateshead

- Baltic Centre
- Coatsink
- Northern Print Solutions
- Proto
- The Glasshouse





Science

If you love gathering evidence, carrying out research and coming up with new ideas to solve problems, this could be for you. Working within science will help to protect our native plants and animals, find new ways of growing our food and defend our local communities from the effects of climate change

Skills

Interests

• Maths

- Good with numbers
- Problem solving
- Critical thinking
- Practical working
- Nature and wildlifeResearch
- Innovation

What next?

- Health & Science Careers Youth Employment UK
- Discover Green Jobs for Nature Get that Green Job
- Key Conservation Roles | Conservation Careers



Liz Heard

Wild City Manager, Northumberland Wildlife Trust

"I manage the Wild City Team, which aims to connect people with nature and support taking action – I work with schools and youth/community groups. I've always loved nature and being outside, and wanted a career that would allow me to help nature and people at the same time. I love working for an environmental charity as you can see the impact you create through your work daily."







Climate Scientist

Researcher

Marine Biologist

Hydrologist





North East green science employers

Alnwick

NORTHUMBERLAND



Paul Stevens ERIC NE Coordinator, ERIC NE

Morpeth •

Blyth

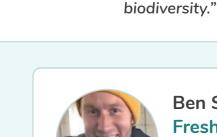
NORTH TYNESIDE

SOUTH TYNESIDE

NEWCASTLE **JPON TYNE**

GATESHEAD

COUNTY DURHAM



Ben Strachan Freshwater Pearl Mussel Technical Specialist, **Environment Agency**

with my role, and I'm encouraged that I'm hopefully doing my bit to protect

"I work with various organisations to conserve freshwater pearl mussel populations within England. My key objective is to restore the River Rede and North Tyne freshwater pearl mussel population. I wanted to work in Marine Biology, where my office would be in the great outdoors, doing something good for the planet."



North East Wide

- Groundwork NE & Cumbria
- Northumbria NHS Trust
- Regional Universities
- The Wildlife Trust
- Tyne Rivers Trust
- Wildlife and Wetland Trust

Newcastle

- AECOM
- BSG Ecology
- Earth & Marine Environmental Consultants
- Enviresearch Ltd.
- Environment Agency
- ERIC NE
- FALCO Ecology

- JBA Consulting
- Marine Management Organisation
- Natural England
- Newcastle University
- Northumbria University
- Roberts Environmental





R&D Engineer

Technology

Tech is a fast paced and ever-growing sector! If you love thinking about new technologies, products, services and finding new technological solutions for problems, this could be for you. Whether it's an app, an electric car or new low carbon technologies, there's something for everyone.

Skills

- Problem solving
- Attention to detail
- Critical thinking
- Curiosity and Imagination
- Interests
- Computing
- Coding and data
- Artificial intelligence (AI)
- Designing and making new products

What next?

- Technology Green Careers Hub
- C Overview of the UK's IT industry | Prospects.ac.uk
- Careers in games ScreenSkills



Heidi Portwine Technical Consultant, CGI

"My role as automation tester mainly falls within the areas of software engineering and testing. I am responsible for designing, developing, and executing automated tests to ensure the software created by developers fits its purpose. I chose this career because I have always had an interest in technology and enjoy working on and solving complex problems."







GIS Technician

App Designer

Green Data Analyst

Web Designer

Data Scientist



North East green technology employers

Alnwick

NORTHUMBERLAND



Joshua Allison **R&D Technician, Low Carbon Material**



RENEWABLE ENERG

"My role involves the research and development of new low carbon construction materials to make a positive impact on the built environment and the planet. I'm driven to find innovative ways to build strong, functional structures while minimising environmental impact."



SIEMENS Games **Oliver Strong** Hydrogen Power Unit Technician Apprentice, **Siemens Energy**

Urban Observatory

ZeroLight

• Zero Carbon Futures UK

"My job involves making hydrogen power units. I am responsible for work such as mechanical fitting, field wiring and pipe fitting. I completed a level 3 BTEC engineering course and got into this career by applying for an apprenticeship program. I learn new things every day and looking forward to continuing my work in sustainable technology."



Newcastle

- Caspian
- CGI
- Equiwatt
- Ingram AV
- National Innovation Centre for Data
- Optimise
- PowerRoll
- Siemens Energy

Gateshead

- Turntide Technologies
- VRAI

Sunderland

Envision AESC



Law, education and humanities

If you are interested in bringing about change, solving problems in society and holding power to account then this sector is for you. All of these will be important in dealing with the social and economic issues that are linked with climate change. If you like looking at the big picture, or are interested in politics, law, policy or planning, these areas can make a big difference.

Skills

Interests

- Leadership
- Communication
- Teamworking
- Research

- Politics
- History
- Geography
- Public speaking

What next?

- C What is environmental law? | University of Law
- C Top 10 public policy skills you need to grow your career | Oxford
- ☑ w4mp | The site for everyone working for an MP (w4mpjobs.org)



Rachel Somerville Climate Policy and Delivery Officer, Newcastle City Council

"I support the transition to Net Zero by 2030 in Newcastle. This involves working on the main categories that create emissions, which are energy, transport, waste, and biodiversity. The most enjoyable part of my job is collaborating with like-minded people to educate future generations on the importance of climate change action."



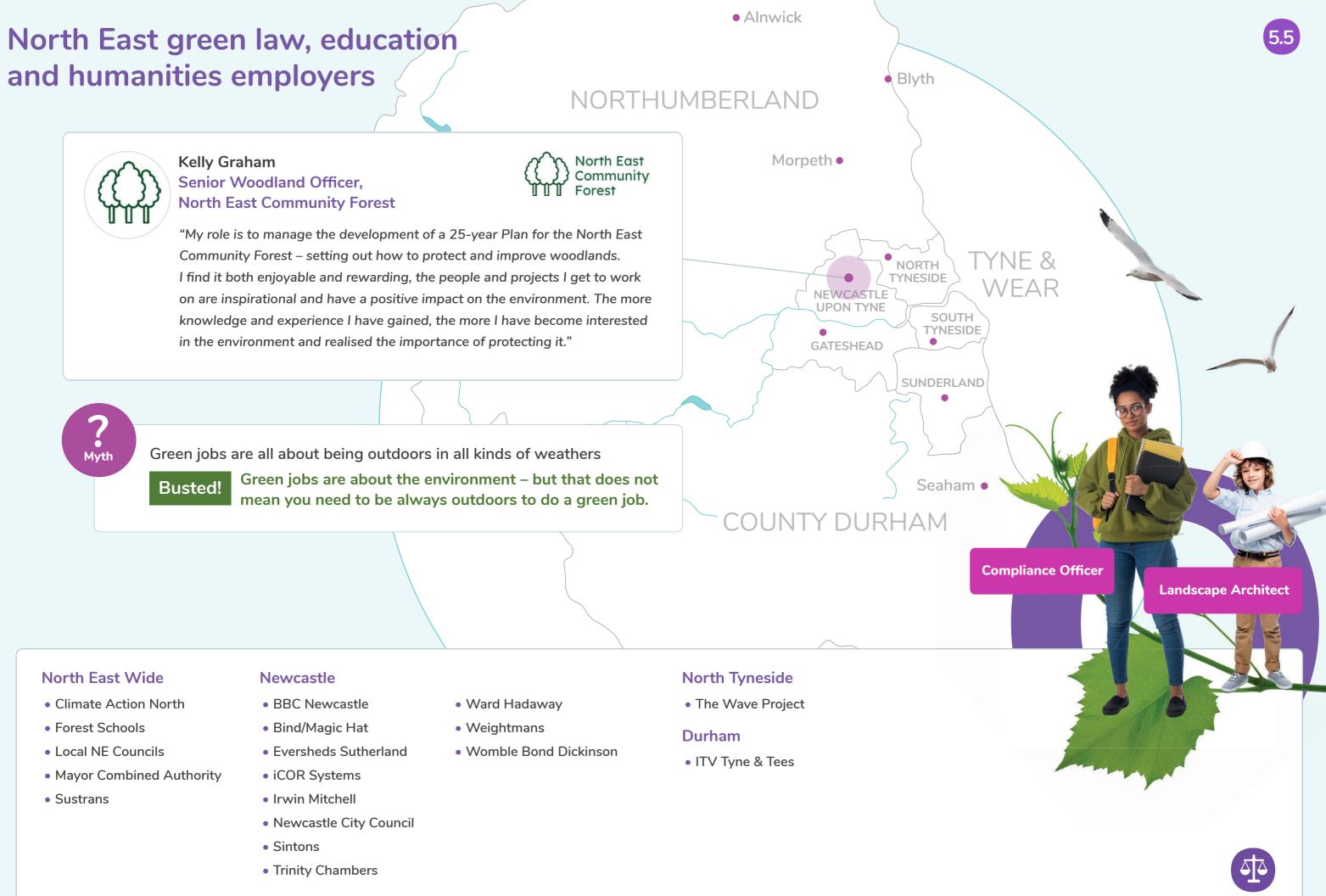


Environmental Historian

Carbon Literacy Trainer

Environmental Lawyer







Outdoor environment

Do you like working outdoors? Jobs that protect our trees, landscapes and wildlife are so important as the effects of climate change take place. We also need to build defences against natural disasters like flooding. If you are passionate about the environment or want to look at how we produce food more sustainably, this could be for you.

Skills

Interests

- Practical working
- Resilient
- Teamwork
- Organisation

- Working in the outdoors
- Nature and wildlife
- Waste and recycling
- Working with tools

What next?

- Arboricultural Association Careers in Arboriculture (trees.org.uk)
- Discover Green Jobs for Nature Get that Green Job



Vincent Jenkins Ranger, Urban Green Newcastle

"My job involves checking parks daily to make sure they are clean and safe for the public to enjoy. My aims are for every park to be maintained and kept to a high standard and for nature to thrive. I love working outdoors in all weathers in the 32 parks in Newcastle, it's great for mental health and wellbeing."



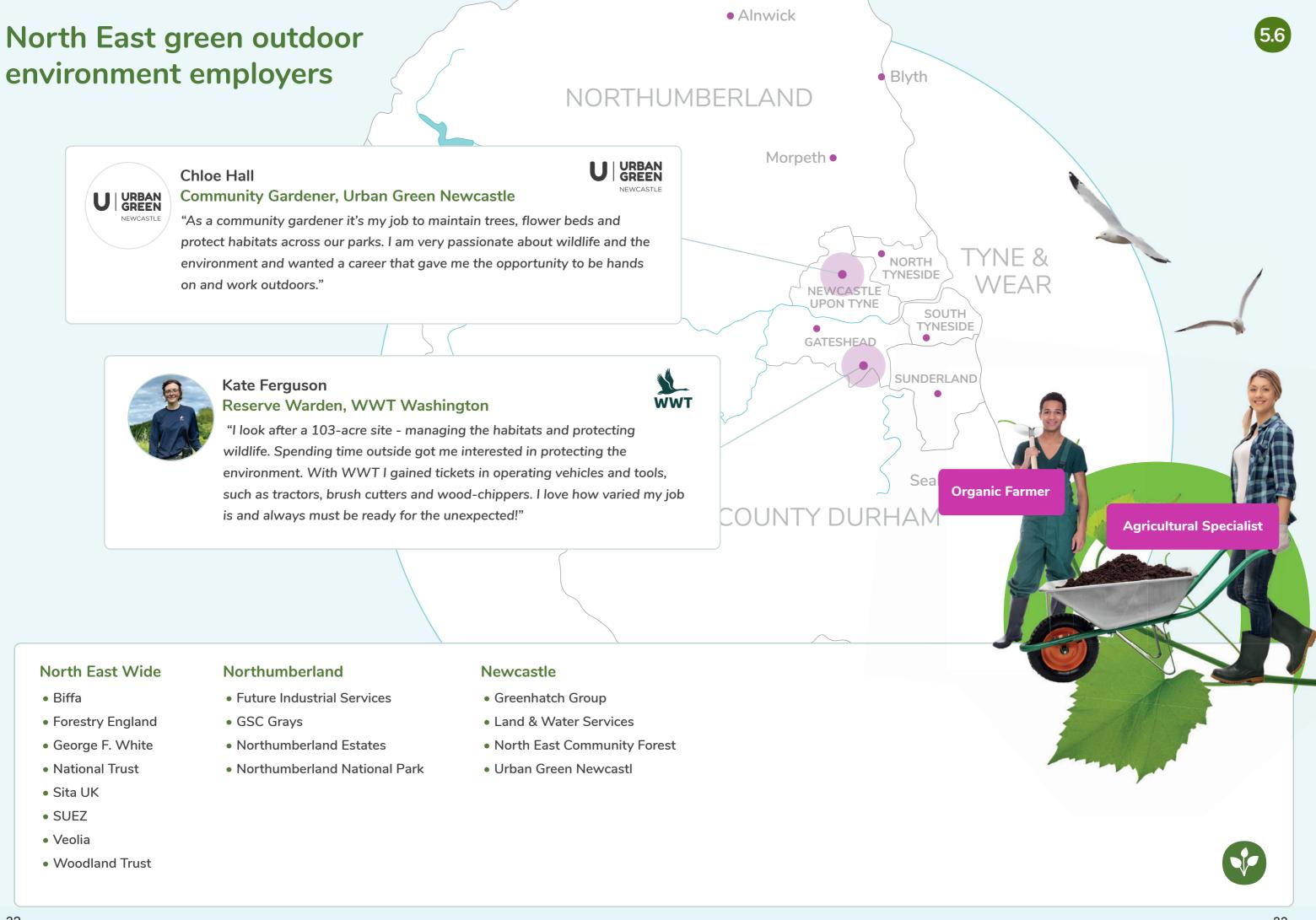




Countryside Ranger

Agricultural Specialist







Business

In order to tackle climate change, we must change the way we produce, sell and buy products and services. A key challenge to business and finance is ensuring this process makes an overall positive impact on the planet. The need for sustainable business practice is a growing area and can be one of huge demand and opportunity!

Skills

Interests

- Communication
- Creativity
- Ambition
- Leadership

Innovation

• Finance and economics

- Marketing
- Community interests

What next?

- C Green Business Guide BIPC North East
- How to launch a green business from idea to reality Start Up Loans Company
- Promoting sustainable business tourism | Green Tourism -Green Tourism (green-tourism.com)



Tamma Carel

Senior Environmental Consultant, Imvelo Ltd and iCOR

"Environmental awareness in business has increased globally, with more environmental laws governing business emissions. I ensure that my clients are at the forefront of best practices in environmental and sustainability strategies. I specialise in environmental law and co-founded iCOR – a software solution to help organisations show they are following the law."

Quality Control Inspectort Sustainable Hairdresser Hotel Manager in Green Tourism





Ecological Economist

Sustainable Clothing Retailer

Carbon Accountant

Sustainable Beauty Consultant



North East green business employers

Morpeth •

Blyth

NORTH

SOUTH TYNESIDE

Seahan

NEWCASTLE **UPON TYNE**

GATESHEAD

OUNTY DURHA

NORTHUMBERLAND

EARTHLING

IMVELO



Joseph Grugeon-Dixon Café Manager, Earthlings – The Healing Café

"I work in a small independent business that is directly involved with my local community. The café uses organic, whole ingredients along with a dedicated approach to allowing plants and food to be healing for our bodies. I work in a place that helps support my own creative and personal journey through sustainable practices - giving me a real feeling of purpose and community."



Tamma Carel Senior Environmental Consultant, mvelo Ltd and iCOR

"I am one woman on a mission to help the environment and use my position to demonstrate that women can be powerful agents of change!"

North East Wide

- LNER
- Northern Rail
- CrossCountry Trains
- Arriva Northumbria
- Go North East

Northumberland

• Caribe Coffee Co.

Newcastle

Erudus

Imvelo Ltd.

Nexus Rail

• Earthlings Café

• Full Circle Brew Co.

Newcastle Airport

• Blackfriars Restaurant

Carbon Zero Consultancy

• Future Transport Systems

- SLR Consulting
- Terra Infirma
- The Green Energy Advice Bureau
- The Maldron Hotel
- Thornton-Firkin
- Urban Foresight

Sunderland

• Berghaus

North Tyneside

- Accenture
- Finch Salon
- Green Zone Surveys
- Sage

South Tyneside

Consultiv Utilities





Next steps

Helpful links



Friends of the Earth What's a green job Friends of the Earth



Green skills and careers www.greencareershub.com



EAUC Green Careers Guide EAUC Scotland's Green Careers Guide (2023)

Great Place To Work

Great places to work Global Authority on Workplace Culture Great Place To Work® UK

Job roles and routes

- Green careers | National Careers Service
- North East in the UK (greenjobs.co.uk)
- What's next? A guide to starting your career 2024 (reed.com)
- Find an apprenticeship GOV.UK (www.gov.uk)
- Apprenticeships, 14 to 19 education and training for work GOV.UK (www.gov.uk)



Sector directory



Construction and engineering

Newcastle

Baker Hughes

Balfour Beatty

Bellway Homes

British Engines

Cundall Engineering

Houghton International

Arcadis

Atkins

Cathie

EQUANS

Fairhurst

GHD

Jacobs

Jasper Kerr

JC Consulting

Karbon Homes

McGrady Clarke

Mott MacDonald

Natural Power

Pegasus Group

Ramboll

Stantec

WSPI

TechnipFMC

RPS

Shepherd Offshore

Turner & Townsend

Wardell Armstrong

North East Wide **Bernicia Group Hitachi** Northern PowerGrid **Network Rail**

Northumberland

Decerna DeepOcean National Renewable **Energy Centre** Port of Blyth Reheat Windel Energy

North Tyneside

Port of Tyne Siemens **Smulders**

South Tyneside

Amari Plastics Castle BS Kier North East Storm Tempest

Sunderland

AR Power Nissant

Gateshead

AMB Packaging **Graphic Packaging** International **Green Leaf Engineering Schneider Electric** Willmott Dixon

Please note this is not an exhaustive list of employers with green jobs available in the North East, there are likely to be others operating within the region. However, this list illustrates the wide range of green career opportunities that are available to young people in this region. Newcastle City Council cannot be held responsible for any content published on third party websites hyperlinked above.

O Creative arts

Newcastle

Bryonn Architecture LTD Cap-a-pie **Crystallised Gradon Architecture** JDDK Architects Luminous Nomad Digital Sail Creative **Space Architects The Farrell Centre** Tyne & Wear Museums & Archives Ubisoft Young Women's Film Academy



North East Wide

Groundwork NE & Cumbria Northumbria NHS Trust **Regional Universities** The Wildlife Trust **Tyne Rivers Trust** Wildlife and Wetland Trust Young Women's Film Academy

Newcastle

AECOM **BSG Ecology** Earth & Marine Environmental Consultants **Enviresearch Ltd Environment Agency** ERIC NE FALCO Ecology JBA Consulting Marine Management **Organisation Natural England** Newcastle University Northumbria University **Roberts Environmental**



Gateshead **Baltic Centre Coatsink Northern Print Solutions** Proto The Glasshouse

Sunderland Theatre Space North East



North East Wide
Climate Action North
Forest Schools
Local NE Councils
Mayor Combined Authority
<u>Sustrans</u>



North East Wide Biffa **Forestry England** George F. White National Trust Sita UK **SUEZ** Veolia Woodland Trust

GSC Grays

Newcastle **Caspian** Equiwatt Ingram AV **National Innovation Centre** for Data

Technology

Gateshead Turntide Technologies **VRAI**

Sunderland **Envision AESC**

<u>CGI</u>

Optimise

Durham Low Carbon Materials

Business North East Wide

Arriva Northumbria **CrossCountry Trains** Go North East LNER Northern Rail

Northumberland Caribe Coffee Co.

Newcastle

Blackfriars Restaurant Carbon Zero Consultancy Earthlings Café Erudus Full Circle Brew Co.

Future Transport Systems Imvelo Ltd. Nexus Rail **Newcastle Airport SLR Consulting** Terra Infirma The Green Energy Advice Bureau The Maldron Hotel **Thornton-Firkin Urban Foresight** South Tyneside **Consultiv Utilities**



Newcastle

BBC Newcastle **Bind/Magic Hat Eversheds Sutherland** iCOR Systems Irwin Mitchell Newcastle City Council Sintons **Trinity Chambers**

Ward Hadaway **Weightmans** Womble Bond Dickinson

North Tyneside The Wave Project

Durham **ITV Tyne & Tees**

Northumberland Future Industrial Services Northumberland Estates Northumberland National Park

Newcastle **Greenhatch Group** Land & Water Services North East Community Forest Urban Green Newcastle

North Tyneside

Accenture Finch Salon **Green Zone Surveys** Sage

Sunderland **Berghaus**