









Developed as part of Newcastle City Council's Go Zero programme for 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.



Scan QR code with your mobile phone camera to find out more about climate change by watching this video



Scan QR code with your mobile phone camera 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.

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# **Great opportunities in the North East**

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.

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# A growing sector

There are currently...



11,418 green jobs in the region

By 2030 it is expected there will be...



41,924 green jobs in the region by 2030

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.

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# 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.

# 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

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

# 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.



# **Green sectors**



Construction and engineering



Creative arts



Science



Technology



Law, education and humanities



**Outdoor environment** 



**Business** 



Sector directory

# You can go green in...

For further information and a full list of employers visit our website www.newcastle.gov.uk/netzero



# 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

# **Interests**

- Working with tools
- Practical work
- 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

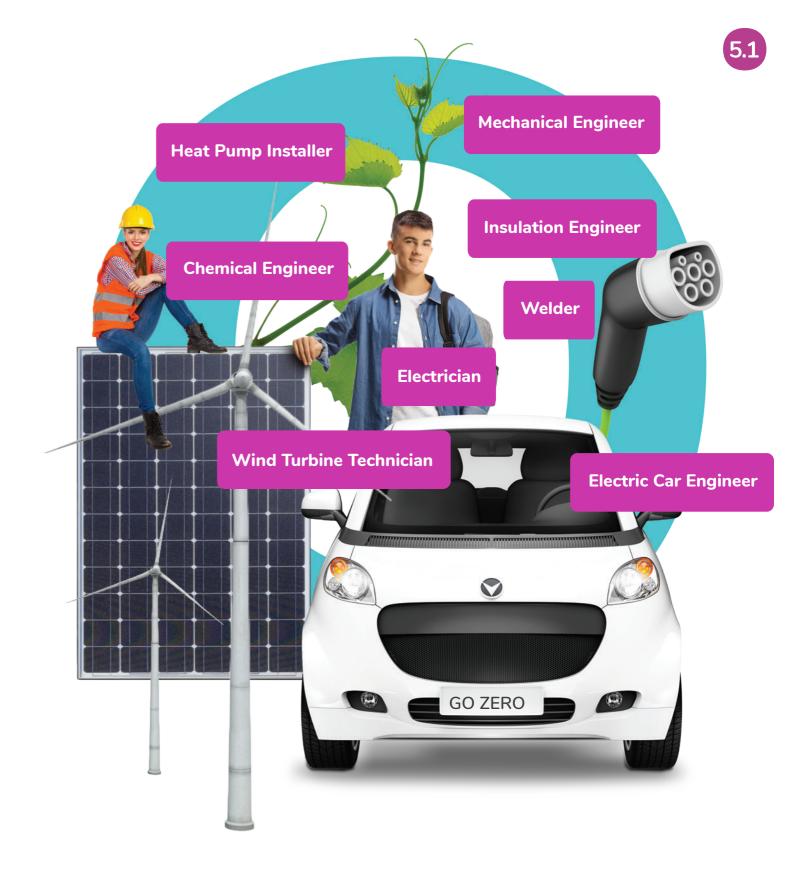


Careers - Blyth STEM Hub, Energy Central (stem-energycentraluk.co.uk)



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



Alnwick

Blyth



### **Poppy Atterton 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."



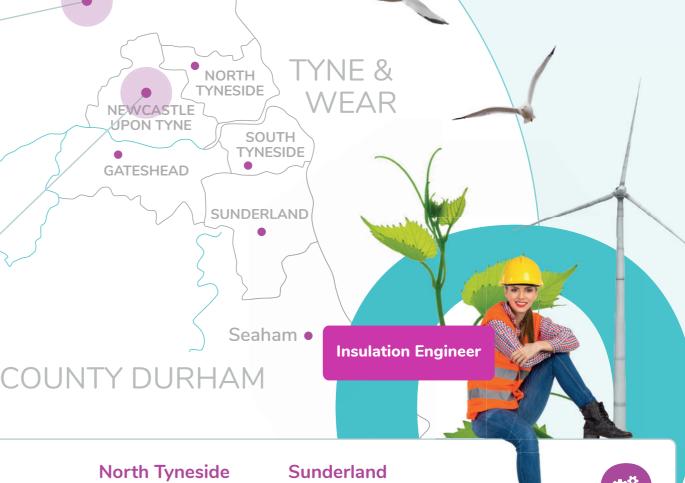
## **Ben Drury Graduate Structural Engineer, Fairhurst**

"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."

# **FAIRHURST**

**BER OICIA** 

Morpeth •



#### North East Wide

- Bernicia Group
- Hitachi
- Northern PowerGrid
- Network Rail

#### Northumberland

- Decerna
- DeepOcean
- National Renewable Energy Centre
- Port of Blyth
- Reheat
- 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
- Pegasus Group
- Shepherd Offshore
- Ramboll
- RPS Group
- Stantec

- Port of Tyne
- Siemens
- Smulders

#### **South Tyneside**

- Amari Plastics
- Castle BS
- Equinor
- Storm Tempest

- AR Power
- Nissan

#### Gateshead

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

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TechnipFMC

WSP

• Turner & Townsend

Wardell Armstrong

# **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

- Communication
- Creative thinking
- Confidence
- Open-mindedness

# **Interests**

- Art and design
- Drama
- 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



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."







# North East green creative arts employers

NORTHUMBERLAND

Alnwick



### 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

• The Farrell Centre

Ubisoft

• Tyne & Wear Museums and Archives

Young Women's Film Academy

"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."

# Morpeth NORTH TYNE & TYNESIDE WEAR NEWCASTLE UPON TYNE SOUTH TYNESIDE GATESHEAD SUNDERLAND Seaham COUNTY DURHAM

**Sustainable Fashion Designer** 

Blyth

#### Newcastle

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

# Gateshead

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

#### Sunderland

Theatre Space North East



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Film Set Designer

# You can go green in...

# 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**

- Good with numbers
- Problem solving
- Critical thinking
- Practical working

# **Interests**

- Maths
- Nature and wildlife
- Research
- 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."







# North East green science employers



Alnwick

Morpeth •



## Paul Stevens ERIC NE Coordinator, ERIC NE



"I run a Local Environmental Records Centre that manages wildlife data for the region. I came to this field whilst working in a retail job and being concerned by the effects of overfishing. I really enjoy the variety that comes with my role, and I'm encouraged that I'm hopefully doing my bit to protect biodiversity."



Ben Strachan Freshwater Pearl Mussel Technical Specialist, Environment Agency



"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."



Blyth

#### **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



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# You can go green in...

# **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



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."







# North East green technology employers



Alnwick

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

Carbon Materials

"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."



# Oliver Strong Hydrogen Power Unit Technician Apprentice, Siemens Energy

"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."

SIEMENS Games

COUNTY DURHAM

Software Developer

NEWCASTLE UPON TYNE

**GATESHEAD** 

Blyth

NORTH

TYNESIDE

SOUTH TYNESIDE

SUNDERLAND

Seaham •

#### Newcastle

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

#### Gateshead

• Zero Carbon Futures UK

ZeroLight

- Urban Observatory
   Turntide Technologies
  - VRAI

#### Sunderland

Envision AESC

#### Durham

Low Carbon Materials





# 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
- Politics
- Communication
- History
- Teamworking
- Geography

Research

Public speaking

# What next?



What is environmental law? | University of Law



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."







# North East green law, education and humanities employers

NORTHUMBERLAND

Alnwick



Kelly Graham
Senior Woodland Officer,
North East Community Forest



"My role is to manage the development of a 25-year Plan for the North East Community Forest – setting out how to protect and improve woodlands. I find it both enjoyable and rewarding, the people and projects I get to work on are inspirational and have a positive impact on the environment. The more knowledge and experience I have gained, the more I have become interested in the environment and realised the importance of protecting it."

? Myth

Green jobs are all about being outdoors in all kinds of weathers

**Busted!** 

Green jobs are about the environment – but that does not mean you need to be always outdoors to do a green job.

Ward Hadaway

Womble Bond Dickinson

Weightmans



Blyth

#### **North East Wide**

- Climate Action North
- Forest Schools
- Local NE Councils
- Mayor Combined Authority
- Sustrans

#### Newcastle

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

# North Tyneside

• The Wave Project

#### Durham

• ITV Tyne & Tees



**Landscape Architect** 

# **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

- Practical working
- Resilient
- Teamwork
- Organisation

# **Interests**

- 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."







# North East green outdoor environment employers

NORTHUMBERLAND

Alnwick



# Chloe Hall Community Gardener, Urban Green Newcastle

U | URBAN GREEN NEWCASTLE

"As a community gardener it's my job to maintain trees, flower beds and protect habitats across our parks. I am very passionate about wildlife and the environment and wanted a career that gave me the opportunity to be hands on and work outdoors."



# Kate Ferguson Reserve Warden, WWT Washington



"I look after a 103-acre site - managing the habitats and protecting wildlife. Spending time outside got me interested in protecting the environment. With WWT I gained tickets in operating vehicles and tools, such as tractors, brush cutters and wood-chippers. I love how varied my job is and always must be ready for the unexpected!"

# North East Wide

- Biffa
- Forestry England
- George F. White
- National Trust
- Sita UK
- SUEZ
- Veolia
- Woodland Trust

#### Northumberland

- Future Industrial Services
- GSC Grays
- Northumberland Estates
- Northumberland National Park

#### North Tyneside

The Wave Project

#### Newcastle

- Greenhatch Group
- Land & Water Services
- North East Community Forest
- Urban Green Newcastl





# **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

- Communication
- Creativity
- Ambition
- Leadership

# **Interests**

- Finance and economics
- Innovation
- Marketing
- Community interests

# What next?



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."







# North East green business employers



Alnwick

Morpeth •



# 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,
Imvelo 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!"



EARTHLING



Blyth

#### **North East Wide**

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

#### 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

#### **Sunderland**

Berghaus

#### **North Tyneside**

- Accenture
- Finch Salon
- Green Zone Surveys
- Sage

#### **South Tyneside**

Consultiv Utilities



# Next steps

# Helpful links







What's a green job?



Green skills and careers



Great Place To Work



EAUC Scotland's Green Careers Guide (2023)



Global Authority on Workplace Culture

# 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 (https://www.gov.uk/apply-apprenticeship)



Apprenticeships, 14 to 19 education and training for work - GOV.UK (https://www.gov.uk/browse/education/find-course)



# Sector directory





# **Construction and engineering**

#### 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** 

on third party websites above.

Schneider Electric

Willmott Dixon

# **Creative arts**

#### 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** 

Pegasus Group

**Shepherd Offshore** 

Ramboll

**RPS** 

Stantec

TechnipFMC

**Turner & Townsend** 

Wardell Armstrong

**WSPI** 

Please note this is not an exhaustive list of employers with

green jobs available in the North East, there are likely to be

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

others operating within the region. However, this list

# Newcastle

**Bryonn Architecture LTD** 

Cap-a-pie

Crystallised

**Gradon Architecture** 

JDDK Architects

Luminous

**Nomad Digital** 

Sail Creative

**Space Architects** 

The Farrell Centre

Ubisoft

Young Women's Film Academy

**Science** 

Tyne & Wear Museums & Archives

Gateshead

**Baltic Centre** 

The Glasshouse

Sunderland

**Northern Print Solutions** 

Theatre Space North East

Coatsink

Proto

#### **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

# Technology

#### Newcastle

Caspian

**CGI** 

Equiwatt

Ingram AV **National Innovation Centre** 

for Data

**Optimise** 

#### Gateshead

**Turntide Technologies VRAI** 

Sunderland

**Envision AESC** 

**Durham** 

Low Carbon Materials



## Biffa

Sita UK

Veolia

## **Woodland Trust**

Law, education and humanities

Bind/Magic Hat

iCOR Systems Irwin Mitchell

**Newcastle City Council** 

#### Newcastle

**BBC** Newcastle

**Eversheds Sutherland** 

Sintons

**Trinity Chambers** 

Weightmans Womble Bond Dickinson

#### **North Tyneside**

Ward Hadaway

The Wave Project

#### **Durham**

**ITV Tyne & Tees** 

# **Outdoor environment**

# North East Wide

North East Wide

Climate Action North

**Mayor Combined Authority** 

**Forest Schools** 

Sustrans

**Local NE Councils** 

Forestry England George F. White

**National Trust** 

**SUEZ** 

#### Northumberland

**Future Industrial Services** 

**GSC Grays** Northumberland Estates

Northumberland National Park

# **North Tyneside**

The Wave Project

#### Newcastle

**Greenhatch Group** Land & Water Services North East Community

**Forest** 

**Urban Green Newcastle** 

# **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** 

The Green Energy Advice Bureau

Imvelo Ltd. **Nexus Rail** 

**Newcastle Airport SLR Consulting** 

Terra Infirma

The Maldron Hotel Thornton-Firkin

**Urban Foresight South Tyneside** 

**Consultiv Utilities** 

## **North Tyneside**

Accenture Finch Salon

**Green Zone Surveys** Sage

Sunderland

**Berghaus**