# **Energy Transition**

Renewable and low carbon energy will provide the foundation of our future energy system. By 2030 Scotland aims to generate 50% of Scotland's overall energy consumption from renewable sources.

As we transition to renewable energy there are huge opportunities to create high value circular jobs across the energy sector with a focus on resource recovery, reuse, repair and remanufacture.

Source: Renewable and Low Carbon Energy Policy.





# **Energy Transition Circular Jobs**

# What do circular jobs look like in the energy transition?



"Wind turbine repair specialist to maximise resource lifetime."



"Circular materials resource manager to focus on keeping

materials and products in circulation for as long as possible through repair, recycle or reuse."

#### These jobs will use waste as a resource and sustain and preserve what is already there.



"Heavy lifting engineers will be required for the safe dismantling, transportation and handling of large energy infrastructure components required to bring these assets onshore."





# **Energy Transition Enabling Circular Jobs**

What kind of jobs will enable the circular economy and support circular jobs in the energy transition?

"Brokers and data analysts to develop and populate a national database of decommissioned assets."



These practices will ensure more jobs become circular through incorporating digital technology, designing for the future, innovating and assessing assets for reuse or remanufacture.



"Highly skilled industrial designers to experiment and innovate around the reuse of

**"Material Innovation** specialist to identify practical applications and material solutions for entire decommissioned assets and components."





# **Energy Transition Enabling Circular Jobs**

What kind of jobs will raise awareness of the circular economy and support circular jobs in the energy sector?

"Energy infrastructure product designers to embrace designing for disassembly. If they know how to build it, its easier to dismantle and reuse."

"Health, safety and environmental manager to assess the contamination and requirements for reuse in different sectors."

These jobs will provide services to core circular strategies which will increase the effectiveness of circular jobs.

"Sales and marketing responsible for the external image and highlighting sustainability activities across the energy sector."





#### **Case Study**

#### **EMR**

## Global leader in sustainable materials

- Communication, resilience, customer service, solution focused, Skills: innovative and enterprising.
- **Roles: Environmental Manager**
- **Examples:** across the UK.

Energy Infrastructure Project Manager: With a background in energy construction, and experience in managing contractors and plant, this role leads on the coordination of deconstruction, repurposing and reusing decommissioned assets such as wind turbines.

Laboratory Technician: With a good understanding of material properties, specifically plastics, metals and minerals, this role ensures the highest-quality of recycled materials re-enter the circular economy to make tomorrow's products.



Project Manager, Operations Manager, Laboratory Technician, Engineer, Safety and

**Operations Manager:** Responsible for ensuring safe, environmentally sound, efficient and productive operations to ensure the high-quality recovery and recycling of materials from different types of customers





#### **Renewable Parts**

#### Renewable Parts focuses on the refurbishment and remanufacture of wind turbine components.

- Technical expertise, teamwork and collaboration, communication, solution focused, Skills: innovation.
- Disassembly Operatives, Fabrication Specialists, Assemblers and Product Designers. **Roles**:
- **Examples:** Using waste as a resource and sustaining assets in the wind industry.

Head Of Circularity: With an engineering background, responsible for overseeing the recirculation of component parts to ensure refurbishment is a profitable business model. Identifying future innovation projects and solutions within the wind industry.

Operations: Warehouse, marketing and sales team responsible for ensuring remanufactured wind turbine components contribute to a circular supply chain.



Workshop Technicians: On the job training within the Innovation Centre. Damaged assets are broken down, assessed, and refurbished to send back to the market as recirculated rather than going to landfill.



#### **Case Study**

### Reblade

### The UK's wind turbine blade experts.

- Innovative, technical expertise, collaboration, adaptability, solution Skills: focused, enterprising, creative and design skills.
- **Roles**: circular design, Geographic Information Systems (GIS) technicians.
- **Examples:**

Clean-Tech Company Director: Entrepreneurial skills to identify a pragmatic and commercial based circular business plan for the provision of a successful start-up.

Sustainable Marketing Specialist: Identifying and implementing ways to promote the business's objectives and prompting sustainability principles to clients and stakeholders as the sector shifts to a circular economy.



Circular materials resource manager, circular onsite cutting/decommissioning technicians,

Sustainable Development Manager: Utilising waste streams to prioritise, and plan the use of renewable, reusable, and non-toxic resources. Knowledge of the quality of the incoming material is crucial. These jobs ensure that raw material cycles are closed and thus from the core of the circular economy.

