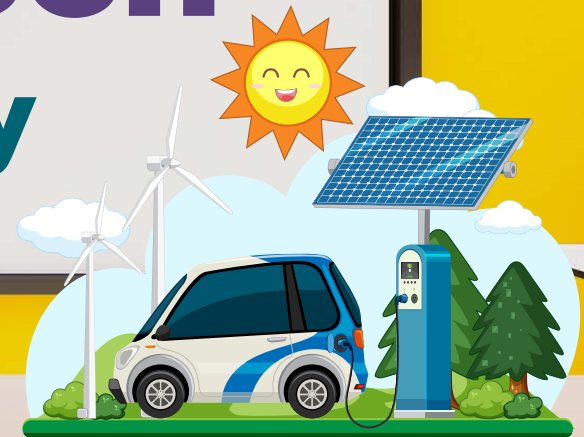
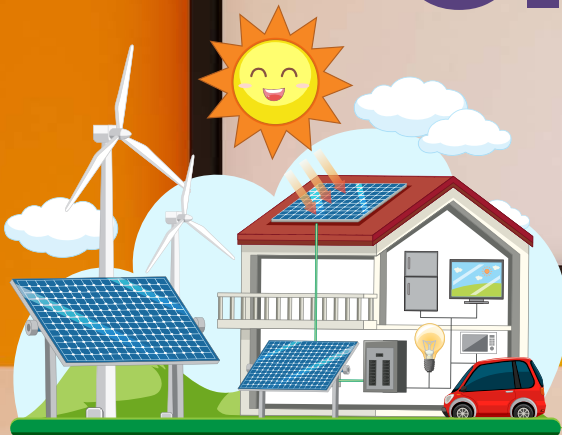




My  
World of  
Work  
*LIVE!*



# Clean and Green Renewable Energy



# Classroom Clash: Clean and Green

## Introduction

Welcome to Classroom Clash! This suite of nine games has been designed to inspire pupils to think about possible future careers.

Each game is linked to an industry important to Scotland's economic growth and where there are lots of opportunities for interesting and successful careers. By playing Classroom Clash, your pupils will be introduced to meta-skills and will start to recognise how these skills can be used in lots of different jobs.

Industries explored within Classroom Clash include:

- **Early Learning and Childcare**
- **Health and Social Care**
- **Construction**
- **Digital Technology**
- **Finance**
- **Manufacturing**
- **Life and Chemical Sciences**

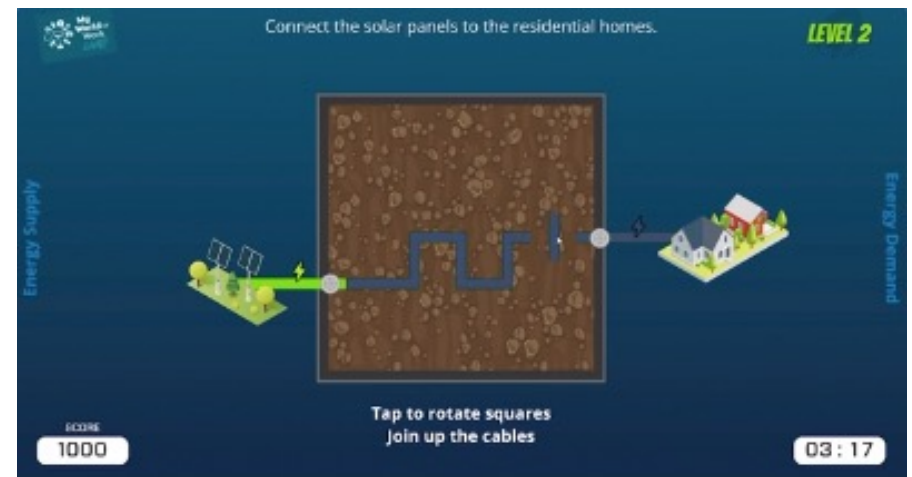


# Classroom Clash: Clean and Green

## Learning objectives

Using the Clean and Green game and [My World of Work](#), you will explore careers in renewable energy and discover what skills are required to work in these important job roles. You will learn what renewable energy is, the different types, why it is so important, and why organisations and governments need to ensure we use more renewable energy in the future.

**Help households and businesses get connected to sustainable green energy sources, by correctly routing the underground power cables that link them.**



## Success in this lesson will look like:

- I can identify the different meta-skills needed to work within the renewable energy industry
- I can identify different types of renewable energy
- I can give examples of careers related to renewable energy
- I understand the difference between renewable and non-renewable energy sources
- I understand what renewable energy career opportunities there are in Scotland

# Classroom Clash: Clean and Green

## Curriculum links

**Sciences:** SCN 3-05b; SCN 2-04b

**Technologies:** TCH 2-02b; TCH 2-06a

**Social Studies:** SOC 2-08a; SOC 4-10a; SOC 4-12a

**Literacy:** LIT 2-04a; LIT 2-07a; LIT 3-07a

## Meta-skills

**Self-management:** Initiative; Adapting

**Social Intelligence:** Communication

**Innovation:** Sense making; Creativity

## How did your school do?

- Once the game is finished, input your score to the leaderboard
- Check how well your school has scored compared to others across the nation
- Play again to try and beat your high score!



**Well done!**

Your final score is

**8000**

Enter your details to submit your score to the leaderboard

Please note by entering your details, your information will display on the leaderboard and be visible to everyone who selects your school. If you do not want your name displayed, please choose an alias to use instead.

Select your year group

Please select a school

Type your first name here

Submit my score

[Privacy notice](#)

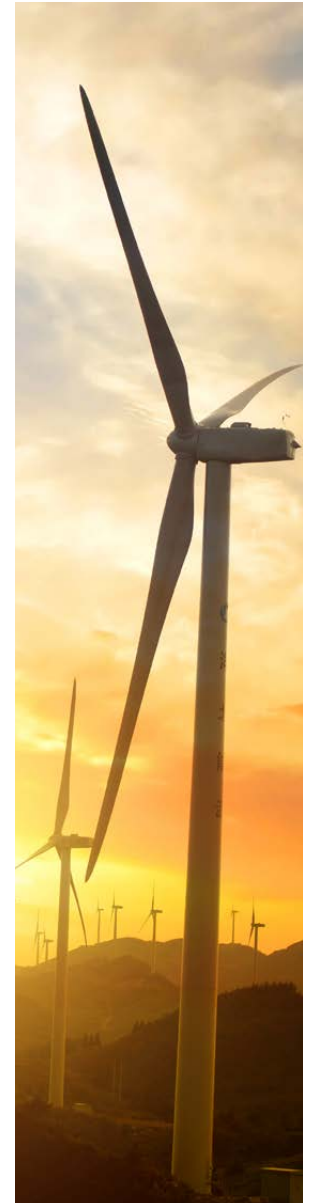
# Classroom Clash: Clean and Green

## Follow on learning – 10 min activity

- Using the **Explore careers** profiles on **My World of Work**, find three careers related to the renewable energy industry and give a brief description of each and where they might work
- From the careers you found on **My World of Work**, list some of the skills you need to work in the renewable energy industry
- What subjects do you think would be most useful for working in the renewables industry?

## Additional classroom activities

- **Renewable vs. non-renewable:** using pictures of fossil fuels and renewable energy sources, ask the pupils to correctly split them into renewable and non-renewable groups and explain their decisions
- **Design a sustainable city:** divide pupils into groups and challenge them to design a city powered entirely by renewable energy. They can draw it, use building blocks, or even create a digital model
- **Benefits of renewable energy:** encourage pupils to design visually appealing materials or create short social media videos to educate others about the benefits of renewable energy
- **Design a sustainable fuel:** ask pupils to research alternative fuels and design a model car prototype powered by their chosen fuel, considering efficiency and environmental impact
- **Energy debate:** organise a debate where pupils argue for or against different renewable energy sources, considering factors like cost, efficiency, and environmental impact



# Classroom Clash: Clean and Green

## Related careers

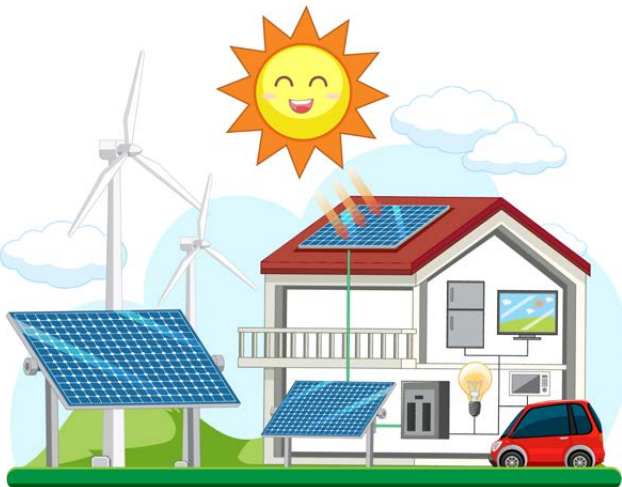
- Climate scientist
- Wind turbine technician
- Energy engineer
- Land surveyor
- Environmental manager
- Civil engineer
- Electrical engineer

## Useful renewable energy links

- Scottish Renewables
- My Energy Future
- Renewable Energy: Scotland
- Scottish Environmental Protection Agency
- Green Careers
- EAUC Green Careers Guide

## Sectoral Skills Assessments




- Engineering
- Construction
- Energy





# Find your route...

## When it comes to your career, there are so many possibilities

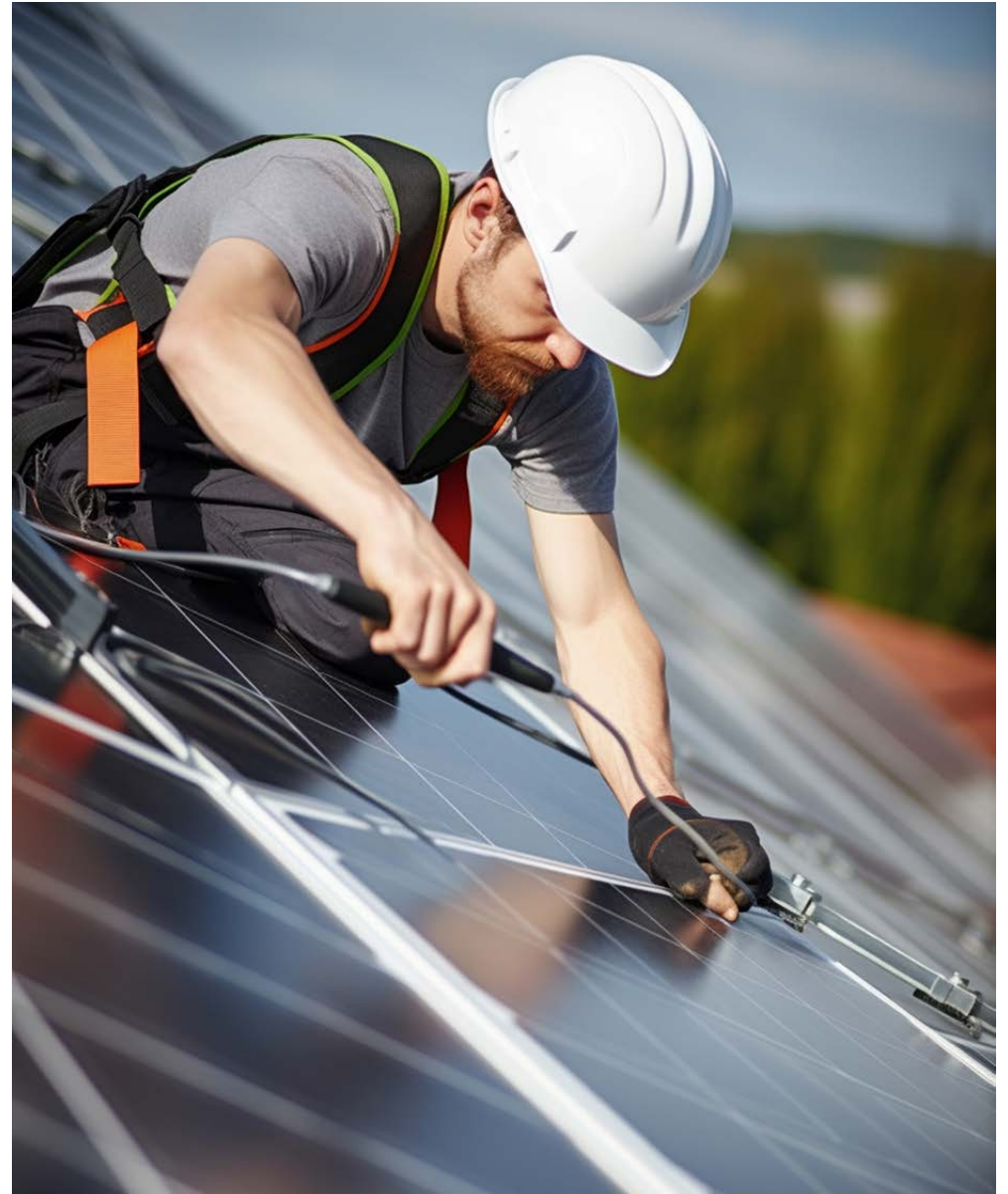
- Use [My World of Work](#) to find out about different options
- Research different colleges or universities for any courses that interest you:
  - [Colleges in Scotland – list of members](#)
  - [Universities Scotland – list of members](#)
- Look at [Apprenticeships.scot](#) to learn about the pathways that are available. You can start an apprenticeship whilst still at school and you work towards gaining a qualification while on the job. There are 3 options available:
  - **Foundation Apprenticeship** 
  - **Modern Apprenticeship** 
  - **Graduate Apprenticeship** 



# Next Steps

## Interested in learning more about this sector?

- Make an appointment to speak to your school careers adviser
- Check out the related [Energy](#) industry pages on [My World of Work](#)
- Do some research on related careers by checking out the Explore careers pages on [My World of Work](#)
- Listen to industry experts explain their roles within the sector by watching the [Virtual Meet the Expert](#) videos
- Find out about routes into work and careers by checking out [Apprenticeships.scot](#)





# Classroom Clash: Clean and Green

## Further information and learning

- Day in the life of a wind turbine engineer: <https://www.youtube.com/watch?v=vfUhBKZR4sU>
- Generation of electricity: <https://www.bbc.co.uk/bitesize/guides/zbsdmp3/revision/4>
- Explore fossil fuels and renewable energy: <https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/zntxgwx>
- The challenge of recycling wind turbine blades: <https://www.youtube.com/watch?v=c-2Sw-fPgeY&t=1s>
- How do offshore wind turbines generate electricity?: <https://www.youtube.com/watch?v=xV4taxLLNlw>
- How do wind turbines work?: <https://www.youtube.com/watch?v=xy9nj94xvKA>
- Can 100% renewable energy power the world?: <https://www.youtube.com/watch?v=RnvCbquYeIM>

## Additional class resources

- Glasgow Science Centre: Climate Change
- The Royal Society – what do you want to know about climate change?
- STEM Learning: Climate change resources