



Energy
Superhub
Oxford

Case Study
Activities
and worksheets
KS3/KS4

Worksheet - Activities

Activity 1: Debate

“heat pump uptake is currently low, and installation can be costly”

- Imagine you are **presenting at a planning meeting** held by Greenville City Council who have recently declared a climate emergency.
- Choose **one** of the two roles below

1. Local councillor working to promote schemes like ESO

Age: 40
Occupation: *Teacher*
Memberships: *Friends of the Earth, Historic England*

Lives with partner and two children

Campaigns for action on climate change. Encouraged pupils to engage with School Strike for Climate. Has recently bought and restored a derelict Georgian building in the city centre.

2. Resident and chair of 'Conservation of Historic Greenville'

Age: 79
Occupation: *Retired architect*
Memberships: *National Trust, Historic England*

Married, adult children live aboard, no grandchildren

Interested in sustainable energy but concerned about the aesthetic and physical impact of such a project. Is also currently lobbying the council to invest in restoration projects around the city.

Using information given in the **ESO case study** and from linked resources, create a **coherent argument** for or against the roll out of a similar ground source heat pump installation scheme in Greenville (population 150,000).

Further source links:

[Article on ESO heat pumps](#)

[GSHP pros and cons](#)

Tip!

Whilst the role you choose will have genuine and valid reasons for their point of view, it is always important to engage with and address conflicting views and suggest resolutions.

Please use the following page for notes and planning

Worksheets - Activities

Outline your argument for or against GSHP scheme

Key reasons behind argument for or against

Address possible conflicting views

Sum up the benefits

Worksheet - Activities

Activity 2: Research and present

Using information given in the **ESO case study** and from linked resources, **research** the project strategies for **either transport or power**, and prepare a **short (3-5 min) presentation**, outlining their **benefits to the community**.

Notes

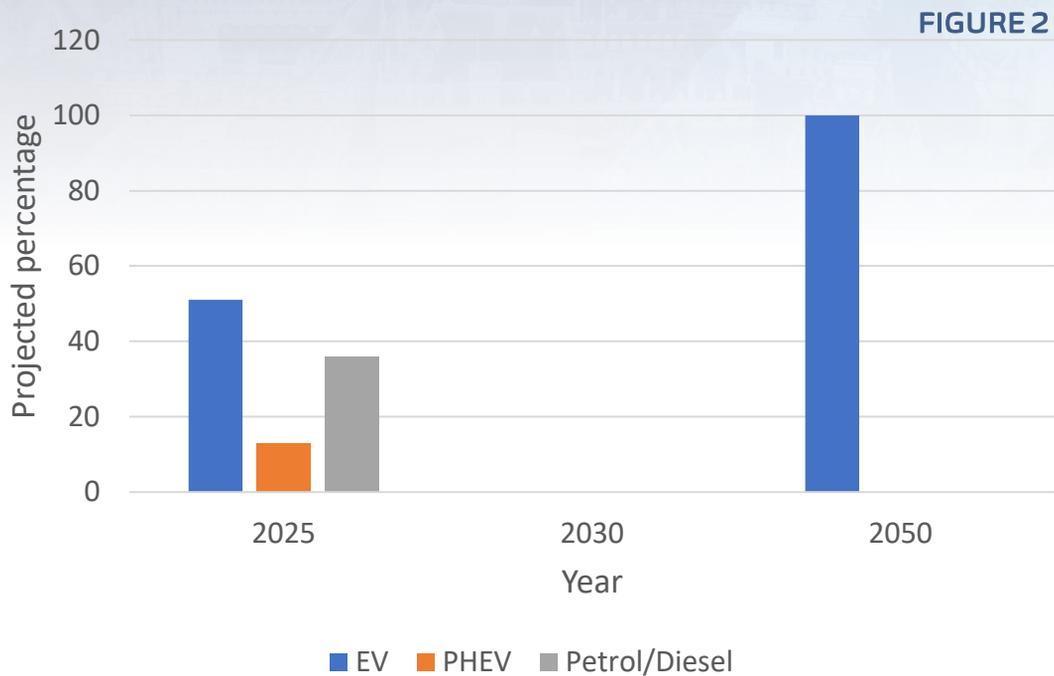
Strategy

Costs

Benefits

Worksheet - Questions

3. Study **FIGURE 2** below, a graph showing the projected shift to electric vehicles in Oxford [figures taken from Oxford City Council Climate Emergency strategy Support 09/2019](#)



a) Complete **FIGURE 2** using the data in the following table. (2 marks)

Year	EV	PHEV	Petrol/Diesel
2025	51%	13%	36%
2030	76%	14%	10%
2050	100%	0%	0%

b) Calculate the **difference between** the 2025 percentage of PHEV and petrol/diesel and the 2030 percentage of PHEV and petrol/diesel.

(1 mark)

