RSA

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Powering people

How might we support communities to transition to renewable energy?

Brief 2:
Powering people

How might we support communities to transition to renewable energy?

Background

Have you ever wondered what a complete re-imagining of our **energy systems** could look like?

What if, instead of large global companies controlling the gas and electricity we all use, the energy system of the future was affordable, sustainable and **community-owned?**

It is now widely accepted that the global energy system is in crisis. Energy prices have risen severely this year, partly due to increases in demand, and uncertainty as world conflicts have affected gas supplies in Europe. This has contributed to a **cost-of-living** crisis where many families and businesses may find it harder to afford their rising energy bills.

At the same time, **energy inequality and poverty** remain a global challenge, with some people using cheaper but more polluting energy sources like firewood or charcoal to fuel their homes. Because they are unable to access cleaner energy sources due to high costs, they are forced to use sources that actively damage both their own health, and the planet's. On top of this many people living in remote parts of the world may not be able to easily access an **electricity grid** for energy.

These sorts of issues highlight the growing gap between world-wide energy demand, and the need for green, sustainable solutions.

Currently when we think about energy, many of us will imagine big central power plants sending electricity to homes and businesses over huge geographical distances. However, local communities across the world are trying to change that.

When energy is produced locally, shared, or managed by small **co-operatives** or community groups, we call it **community energy**. This puts the power in the hands of local people and creates new income that can be reinvested in local causes and clean energy for communities.

Often community energy projects develop in areas with more wealth, but the potential benefits are even greater for those on lower incomes struggling with **fuel or energy poverty,** as energy costs are reduced.

How to approach the brief

We are excited to hear your ideas for ways to enable communities to find new, local energy solutions.

Thinking about the information above (and perhaps even doing wider research alongside your classmates and teacher) how might your proposal incorporate long-term thinking to make this happen?

You can choose to explore whatever priorities you want – but here are some suggestions to help inspire you:

• Globally we need to **transition** to more accessible, renewable forms of energy. How can communities across the world achieve this, using their local resources?

• How can we create more collaborative ways of generating, sharing and consuming energy, that are better for us and our planet's health?

• Solar and wind-based community energy projects are popular, but there is also an opportunity for heat-generating projects. Can you imagine ways to reduce the complexity of **retrofitting** and heating spaces through more sustainable means so that more communities feel able to do it?

 We are looking for proposals that:

• Consider how a **co-design** approach can build and strengthen local relationships – how can this be a way of creating community empowerment, bringing together local communities, energy providers and others?

• Consider those who need clean, affordable energy the most - those most affected by energy inequality, and the cost of living crisis

• Consider climate, geography, local architecture and infrastructure, relevant technologies and how your design could be expanded and replicated in other similar locations

• Consider the existing community spaces and public assets - what local resources are available, and how can they play a role? Are there public buildings that could have rooftop solar panel installations? Is there a windy coastline perfect for hosting a wind turbine? Is there underground infrastructure suitable for distributing biogas for heating? Could local homes be upgraded with energy-efficient heat pumps?

Evaluation criteria

Your proposals will be evaluated based on the following criteria:

1

Social and environmental impact:

- How does the proposal make a positive difference for people and/or the natural world?
- How does the final proposal consider diverse needs and equitable ways to meet those needs?
- How does the proposal engage with the local community in its chosen context?
- How does the proposal consider using materials, processes, and resources in a sustainable way?

2

Rigorous research and compelling insights:

- Has the pupil/team undertaken first-hand research by identifying the needs and motivations of people affected by the problem in your brief?
- Has the pupil/team conducted research into the wider context of the problem on the internet or through reading material?
- How does the proposal build on key insights grounded in people's needs and motivations, and gained through wider research?
- How does the proposal incorporate feedback and testing through prototyping and iteration?

3

Viability:

- Has the pupil/team considered how the proposal will work in practice?
- Has the pupil/team considered the cost of the proposal and how it might be funded and sustained?
- Has the pupil/team identified any potential barriers that might prevent the proposal working in practice? How might these be overcome?
- Has the pupil/team considered how they would measure the success of their proposal if it became a reality?

4

Creativity and innovation:

- How is the proposal different from existing solutions? How might it be better or more useful?
- What unexpected or surprising elements are included in the proposal? What value do these add to the idea?

How to submit your work

You may work as a team or individually. To submit your work into the RSA Pupil Design Awards you will need to present your proposal on **six A3 boards.** These six boards need to tell the story of your design thinking process from research to final idea. The experts will be looking for the story of how your design developed over time. When the experts first look at your work, you won't be there to explain it, so your six boards need to do all the explaining for you!
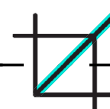
## The six boards:

1. Research

- What design brief are you tackling?
- What research have you done to investigate the challenge and understand how the people/environment are affected?
- How did you conduct some primary research to understand the issue better?

2. Findings

- What is the specific problem you are focusing on?
- What were your key findings from your research?
- What were your insights from your research?

3. Ideation
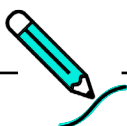
- How have you explored potential ideas?
- What ideas did you decide to explore further?
- What was successful/unsuccessful about them?

4. Testing & Development

- How did you test your idea?
- Who did you ask for feedback?
- How did you incorporate feedback into your proposal?

5. Impact

- How could your proposal work in the real world?
- What could be the challenges you might face when putting your proposal into the real world?
- What positive impact will your proposal have?

6. Final Idea

- Tell us about your final idea in one statement.
- Who is your proposal aimed at and why?
- What makes it different to existing solutions?