Mia

Year 12, interested in STEM and climate solutions

Mia enjoys STEM subjects, and is motivated by a great science teacher; she enjoys using data to find out about, and make sense of, the world. She is interested in climate change and the role technology could play in reducing its impact.

She isn't sure yet whether she wants to study science or engineering at university, but she'd like to work on problems, where solutions can benefit people and the environment.

Her starting point:

Mia explores the data and notices that energy use isn't constant. There are clear patterns during the school day, at weekends and during holidays. This makes her wonder why there are all these differences and what could be done to reduce energy use.



What outcomes could this lead to:

- An investigation of energy use within the school.
- A report on different technological solutions to energy reduction.
- De-carbonisation planning in the school Climate Action Plan.

What could an investigation look like?

Energy Sparks data could contribute to a project investigation exploring energy use at school and potential approaches to energy reduction. For Mia, this might mean using real school energy data and using skills in data interpretation and analysis. Projects could include researching different technological solutions and generating different options for the school.

Technological options might be the equipment or design of heating/electrical systems, or the types of building materials used to reduce energy loss and use. It will help her understand the different factors that need to be studied in any design work. It could create scope for Mia to consider costs/benefits, generating insight into the real opportunities and challenges that decision-makers face.