



## An assessment of suitability for green energy

Creating a way for homeowners, landlords and businesses to assess how best to adopt renewable energy

**Butterflies** achieved this using

- SAS® Viya® 4 • SAS® ESP • SAS® Visual Text Analytics

**SAS Hackathon 2023** • Technology Winner for Visual Analytics

### Challenge

The cost of living crisis and rising energy prices have hit businesses hard. However, these businesses still need to contribute to national and global targets to reduce emissions.

- Businesses want to know how they can adopt renewable energy in the most appropriate way.
- With so many people working from home, a large part of every business's carbon footprint is its employees' home energy use.
- Businesses want to encourage employees to adopt renewable energy sources, but it is not always clear what would be most suitable.

### Innovation

This solution answers the question *'What renewable energy should I choose, given my location?'*

**Butterflies:**

- Combined data about house or business location and aspect with weather and climate.
- Created a model to use these data to predict the best type of renewable energy for that location.
- Used an API to link the model to current weather data to show real-time predictions of energy generation.

### Impact

It is essential to encourage businesses and homeowners to start generating their own renewable energy.

- This solution is primarily aimed at businesses looking to invest in renewable energy for their site.
- It could also be used by homeowners and landlords wanting to reduce energy bills at their properties.
- It has potential to be used around the world provided the source data are available for the location.

"[Using renewables is] better for our carbon footprint and better for the planet."

Sara Boltman • Founder, Director • Butterfly Data