OPEN eco HOMES

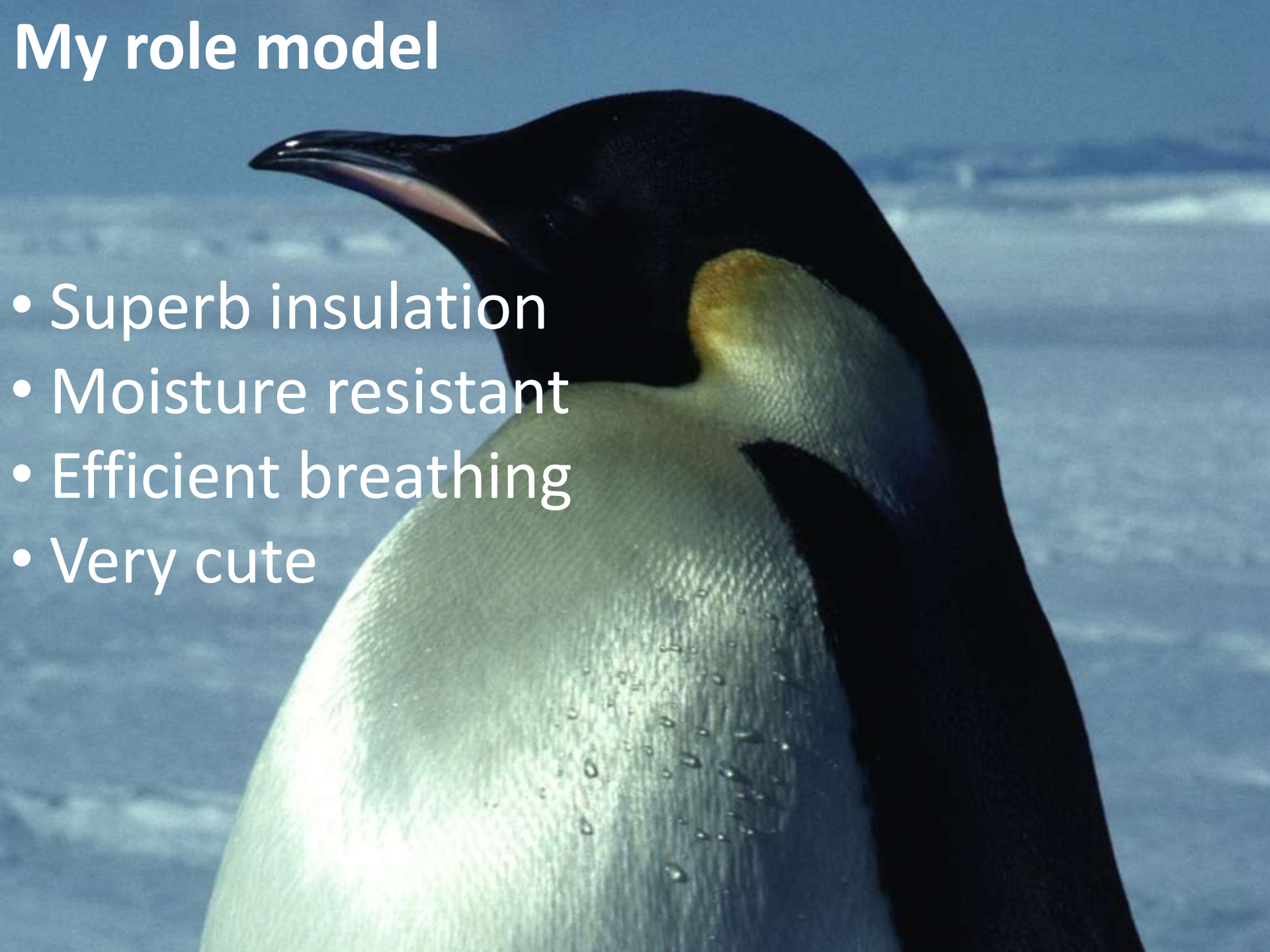
Silverdale Ave, Coton

Before

Guiding principles

- Sustainable
- Practical
- Affordable

My role model



- Superb insulation
- Moisture resistant
- Efficient breathing
- Very cute

Key decisions

- Structure / materials
  - Block & beam foundation
  - Timber frame kit – “Scandia Hus”
  - Block / render & cedar cladding
  - Slate roof with integrated solar PV

- Build route options
  - Fully self-build
  - Project manage with contractors
  - Main contractor


VOLVO
Danger
Deep excavations
HERAS

Foundations

Structure

Structure

Structure

Structure


Newmarket
MANITOU

Insulation

Celotex - foil-backed rigid foam

Insulation

Rockwool – mineral wool

Underfloor heating

Underfloor heating

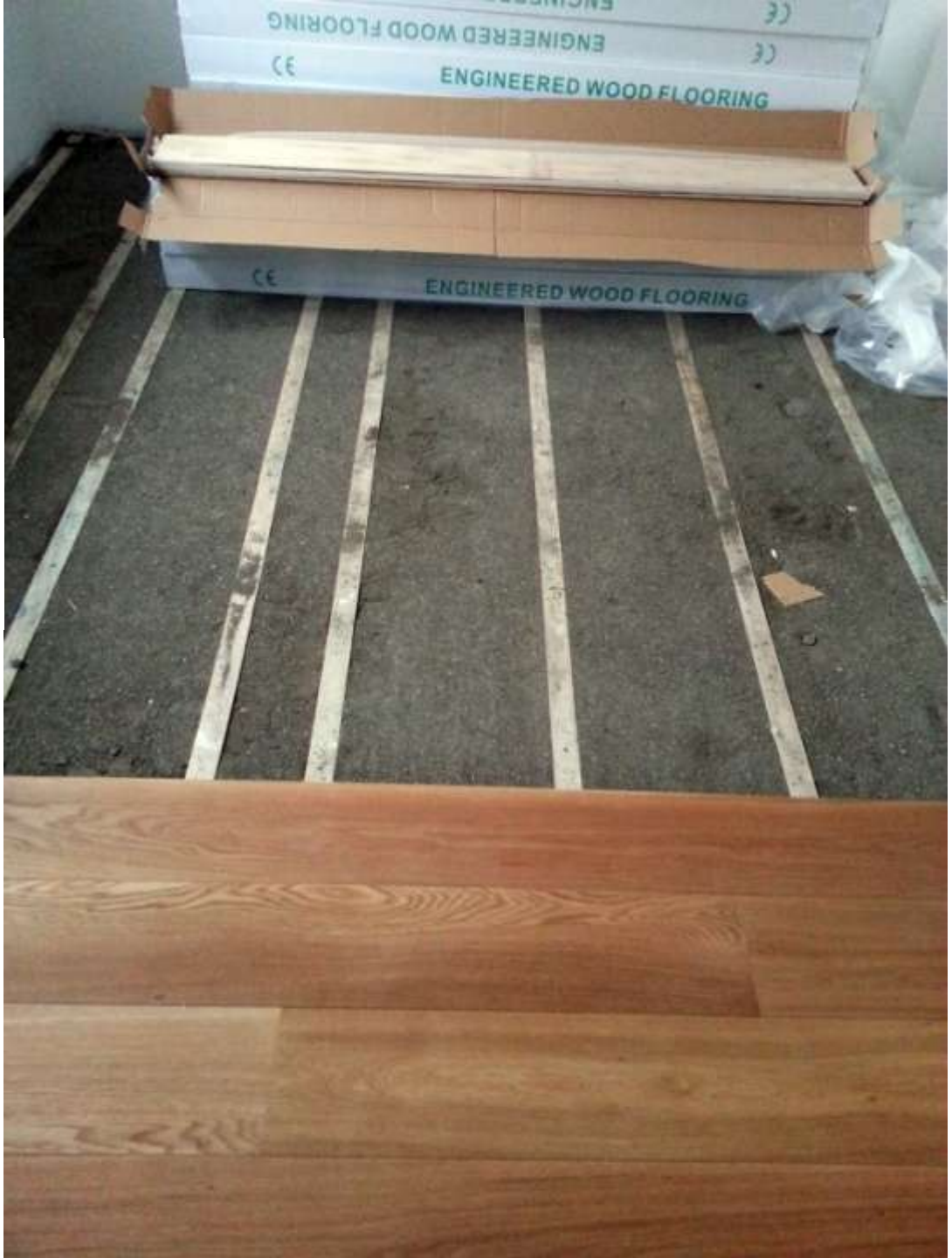
Underfloor heating

Underfloor heating

+ insulation

+ controlled ventilation

Overnight room heat loss in winter 2°C : 21°C to 19°C



Roof-integrated solar PV

Per year: 1.9 t CO_2 saved
£650 FIT income
Payback 10 yrs

After…

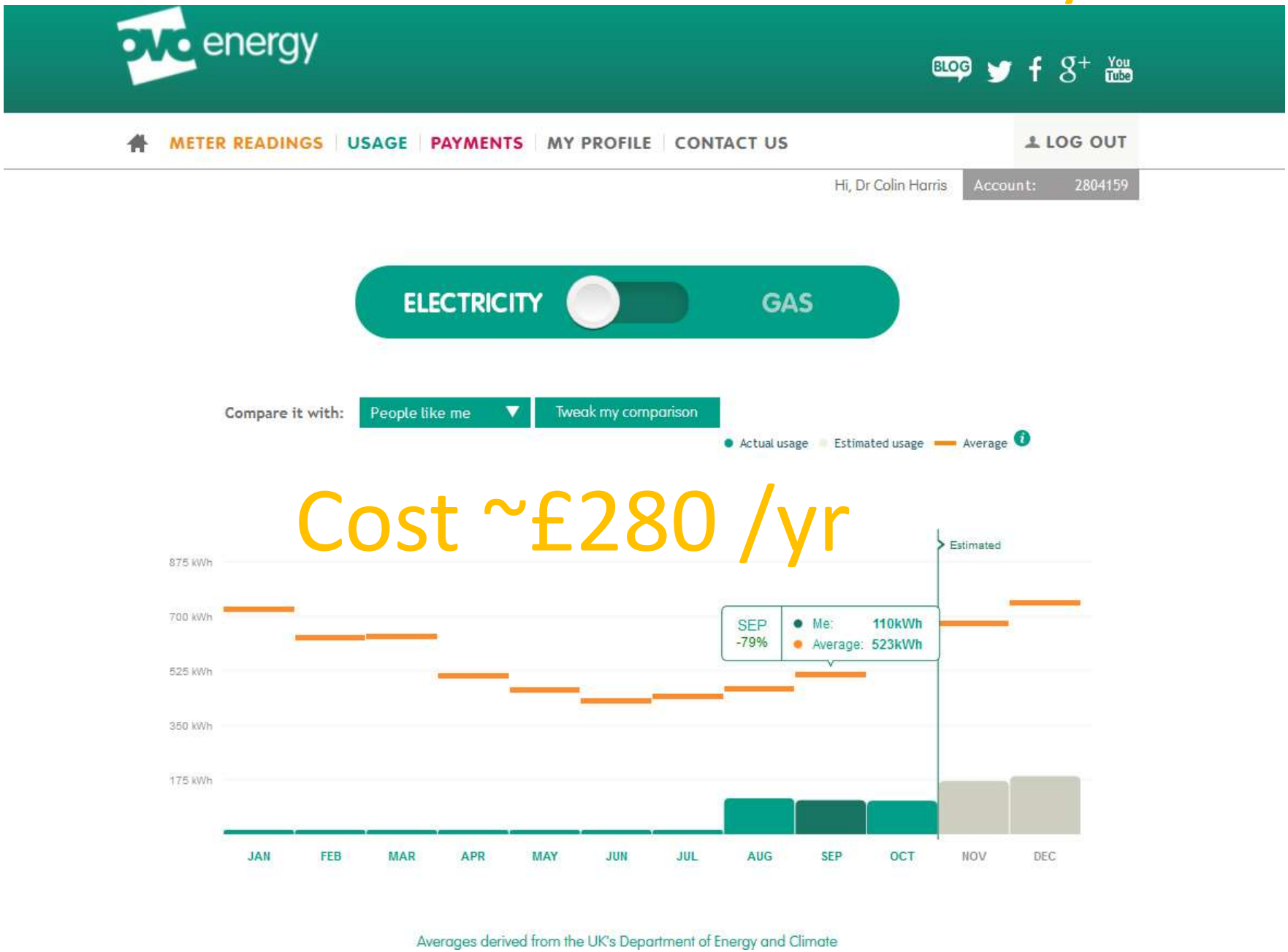
LED lighting

Natural light

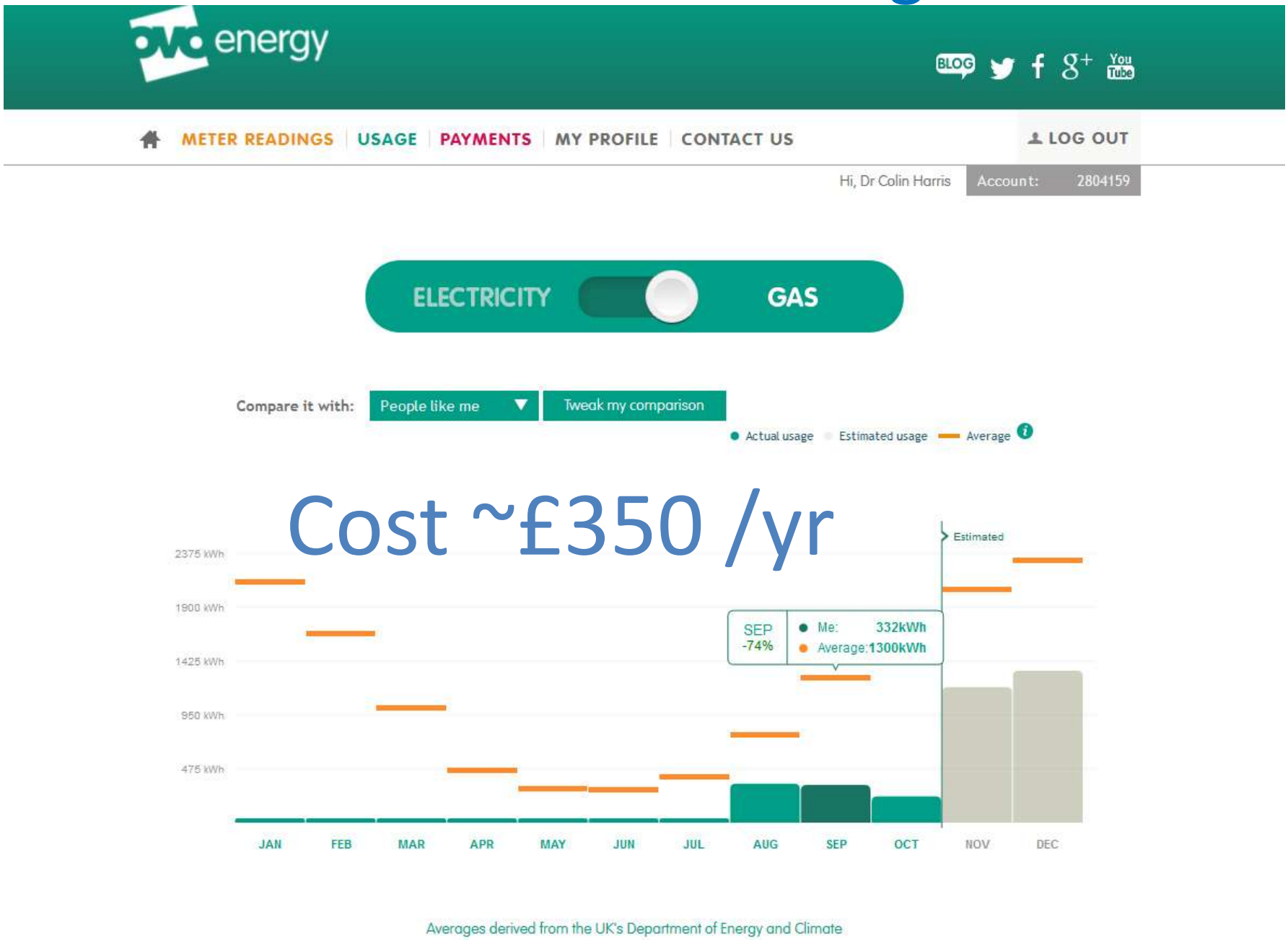
Solar gain

Triple-glazed

The bottom line – electricity



The bottom line – gas



My Top Tips

- Invest in permanent stuff
- **Best ECO-Investments:**
  - **INSULATION**
  - **Air tight with controlled ventilation**
  - **Solar** (PV + thermal)
  - **Large windows** (solar gain) + Triple glazing
  - **Underfloor heating**
  - **LED lighting**
  - **Timber – renewable & sustainable sources (FSC)**

- Timber-frame package efficient, effective, renewable
- Add a third to your budget
- **Have fun!**

See: Case Study