

Should I Buy Solar and/or Batteries?

by TallOak Group Ltd

A simple guide to help you understand the real benefits, the downsides, and how solar and home batteries can fit into your budget and lifestyle.

Buying solar panels or a battery is a significant decision. Most people have heard that they ‘save money’ or ‘help the planet’, but it can be difficult to distinguish fact from marketing and understand what really matters for your home.

This guide provides a straightforward, honest overview to help you decide whether solar panels, a battery or both are right for you.

1. Why People Choose Solar

Solar panels turn sunlight into electricity you can use at home.

Benefits:

- **Lower electricity bills** – every unit your panels generate is one you don’t have to buy.
- **Clean, renewable energy** – reduces your carbon footprint.
- **Can help during power cuts** – if installed with a battery and backup circuit, you can keep key circuits running.
- **Works on cloudy days** – modern panels still generate in low light.
- **Roof angle is now flexible** – south-facing is best, but east, west and mixed roofs can still work well.

2. The Downsides of Solar

- **Installation cost** – a typical UK solar system for an average home costs roughly **£5,500–£8,500** fully installed, depending on the system size and roof.
- **Savings depend on your usage** – if you’re out all day and use most electricity in the evening, solar alone gives limited benefit without a battery.
- **Maintenance** – panels may need occasional cleaning, and the inverter may need to be replaced after 10–15 years.
- **Payback period varies** – many homes achieve payback in **8–12 years**, depending on the roof, shading, electricity usage and whether a battery is added.

3. Typical UK Sizes, Savings and Costs

These are **rough, UK-typical figures** to give you a feel for scale.

2-bed home (family of 3–4)

- Typical system: **4 kW**
- Panels: **10–11 panels** (around 430 W each)
- Roof space: roughly **20–22 m²** of usable roof
- Typical annual saving: about **£600–£780 per year** (bill reduction + export payments, good roof, normal usage).
- Typical install cost (solar + inverter): **£5,500–£7,000**.

4-bed home (family of 4–6)

- Typical system: **4–5 kW**
- Panels: **10–14 panels** (around 430 W each)
- Roof space: roughly **20–28 m²** of usable roof
- Typical annual saving: about **£700–£1,000 per year** (bill reduction + export, good roof, normal usage).
- Typical install cost (solar + inverter): **£6,500–£10,000**.

Batteries and inverter costs (rough guide)

- Adding a battery to a solar system typically adds **£2,500–£9,000**, depending on capacity and brand.
- A combined solar + battery system for a typical family home often lands around **£10,000–£14,000** fully installed.

These are indicative figures. Actual quotations vary, but the figures are suitable for initial budget planning.

4. What Does a 10 kWh Battery Look Like?

A 10 kWh home battery is usually:

- About **1 m tall**
- Around **0.5–0.6 m wide**
- Around **0.2–0.3 m deep**

In practice, it is roughly the size of a **slim fridge or a large suitcase on its side** and may be wall-mounted or floor-standing. It needs a dry, accessible space, often in a utility room, garage or dedicated cupboard.

5. Why Batteries Matter (Often More Than Solar)

A home battery stores electricity for later use.

Key benefits:

- **Solar charges the battery first** – you store free energy from the sun.
- **The battery powers the house during expensive periods** – especially between 4 pm and 7 pm.
- **Works even without solar** – you can charge it using cheap overnight tariffs.
- **Helps during power cuts** – with a backup circuit, you can keep essentials running.
- **Can increase savings when combined with solar panels** – you may save by generating your own electricity and avoiding peak prices.

6. Why Battery Size Matters

- Too small: it empties quickly and you still buy a lot from the grid.
- Too big: it may never fully charge, especially with a small solar system.

The “right” size depends on your usage, but many family homes land around **10–20 kWh** of storage as a sensible range.

7. Solar + Battery: How They Work Together (Priority Order)

The setup we like to see:

1. **Solar charges the battery first** – free stored energy.
2. **Battery powers the house** – especially during expensive times.
3. **Grid electricity is used last** – only when the battery is empty.

This gives the best mix of savings and resilience.

8. Installation in Stages (Budget-Friendly)

You don't have to buy everything at once.

- **Stage 1 – Inverter:** the ‘brain’ of the system, which must be installed first.
- **Stage 2 – Battery:** start with one battery and add more later as your budget allows.
- **Stage 3 – Solar panels:** add panels when you are ready.
- **Stage 4 – Power-cut backup:** install backup circuits at the outset or add them later.

This staged approach makes it easier to fit solar and batteries around real-world budgets.

9. Is Solar or a Battery Right for You?

You may benefit if you:

- Want lower electricity bills

- Want cleaner energy
- Want resilience during power cuts
- Use electricity in the evenings
- Have or plan flexible tariffs
- Plan to stay in your home for several years

You may want to think carefully if you:

- Have heavy shading
- Plan to move soon
- Have very low electricity usage
- Have a roof that's difficult to work with

TallOak Group Ltd – Friendly, Honest Advice

We help homeowners understand:

- Whether solar or batteries make sense for their home
- What size system they need
- How much they can realistically save
- How long payback might be
- Which installation stages suit their budget
- How backup power works
- What maintenance looks like

If you would like a personalised assessment, or simply want to talk through your options, we are here to help.

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