



SCHOOLS

Energy Efficiency Guide



SMART SCHOOLS, LOWER BILLS, BRIGHTER FUTURES.

Schools are high-occupancy buildings with long daylight use, big heating loads in winter, and equipment used inconsistently across classrooms, halls, and kitchens.

With stretched budgets and environmental leadership increasingly part of school values, energy efficiency helps schools:

- **Reduce utility costs**
- **Improve pupil comfort and learning environments**
- **Meet local authority or trust sustainability goals**
- **Inspire the next generation to value climate action**

Where Schools Use Energy

- **Heating:** Often the biggest load – especially older, draughty buildings
- **Lighting:** Classrooms, corridors, halls, and after-hours clubs
- **IT:** Desktops, projectors, smartboards, servers
- **Kitchens:** Cookers, fridges, extraction
- **Cleaning & Maintenance:** Evening use of lighting and water



PRACTICAL ACTIONS

Heating

- Set timers and thermostats to match term time and daily schedules
- Set back temperatures overnight and during holidays
- Avoid heating corridors or storage areas unnecessarily
- Maintain boilers and bleed radiators regularly

Lighting

- Upgrade to LEDs with daylight sensors in classrooms
- Install motion sensors in toilets, halls, and staff rooms
- Encourage lights off during daylight or in empty rooms

IT & Equipment

- Set computers and whiteboards to auto-sleep after 10 minutes
- Power down all IT at the end of the day
- Plug equipment into smart power strips to avoid phantom load

Behaviour

- Run energy awareness campaigns with students
- Create student “Eco Teams” or “Energy Monitors”
- Train cleaning staff to turn off lights and report faults
- Display monthly savings in reception or assembly

Out-of-Hours Use

- Track and review energy use during holidays
- Turn off heating in unused buildings or zones
- Only run lights/heating in areas being used by clubs or external hirers

LONG-TERM SUSTAINABILITY

- Add roof or loft insulation
- Install solar PV – schools are ideal: large roofs, daytime usage
- Review boiler efficiency and explore heat pump options on upgrade
- Consider BMS (Building Management System) for larger or multi-building sites
- Meter zones or blocks separately to find usage hotspots

PEOPLE POWER IN SCHOOLS

Behavioural change is one of the quickest and cheapest ways to reduce energy waste in schools. Both staff and pupils play a role in making energy-smart decisions every day.

For Staff:

- Include energy use in classroom routines – lights off, screens off, doors closed
- Build energy tips into staff briefings and inset days
- Train cleaning and site teams to switch off equipment/lights post-hours
- Make heating and lighting part of caretaker checks

For Pupils:

- Introduce Eco Teams or Energy Monitors in each class
- Display savings in visual, student-friendly ways (charts, posters, or reward charts)
- Tie sustainability into lessons – maths (energy data), science (climate), PSHE (impact)
- Empower pupils to remind teachers to switch off projectors and lights

SUMMARY ACTIONS

Area	Action	Benefit
Heating	Programme timers by term & time of day	Avoids waste during off-hours & holidays
Lighting	Switch to LEDs & install daylight/motion sensors	Cuts lighting costs by up to 60%
IT Equipment	Auto-sleep and power down overnight	Reduces electricity waste significantly
Behaviour	Engage staff & pupils in energy routines	Embeds long-term savings culture
Out-of-hours	Zone and limit building use	Prevents whole-site heating/lighting
Insulation	Improve roof & pipe insulation	Keeps heat in, especially in older buildings
Solar PV	Install where feasible on large roofs	Offsets daytime use with renewable energy



Need Support? Let's Talk

At PE, we help schools understand, optimise and reduce their energy use – without disrupting learning.

Ask us about audits, retrofit support, or student-led initiatives.

Email :
Sustainability@pe.solutions