# Leveraging Leasing and Power Purchase Agreements (PPAs) to Fund Renewable and Energy Efficiency Infrastructure in the UK Public Sector

WHITE PAPER

**Supporting Cost Reduction, Immediate Savings, and Zero Commitments**

# Executive Summary

The UK public sector — comprising schools, the NHS, local authorities, emergency services, and other public bodies — faces rising energy costs and growing pressure to reduce carbon emissions in line with national net-zero targets (Net Zero by 2050) and sector-specific commitments. Traditional capital funding for energy efficiency and renewable installations is constrained, while energy prices continue to rise.

Leasing and Power Purchase Agreements (PPAs) have emerged as compelling, low-barrier financing mechanisms that allow the public sector to deploy:

### LED Lighting Retrofits

Energy-efficient lighting upgrades across public estates

### Solar PV Arrays

Photovoltaic installations generating clean on-site power

### CHP Systems

Combined heat and power for efficient energy generation

### Battery Storage

Energy-management systems and storage solutions

...without large upfront capital expenditure. These models can deliver **cost savings, carbon reductions, and rapid deployment**, helping meet net-zero goals and deliver immediate operational benefits.

# Context: Public Sector Energy and Net-Zero Policy

## Government Net-Zero Commitment

The UK has a legally binding commitment to achieve **Net Zero greenhouse gas emissions by 2050** under the Climate Change Act 2008 (amended) — a policy framework that continues to drive energy efficiency and clean energy adoption across all public sectors. Public bodies are expected to align their assets, estates, and operations with net-zero pathways.

## Public Sector Energy Spend

Public sector organisations incur significant energy costs annually. For example:

- Schools consume electricity and gas for lighting, heating, IT infrastructure, and other essential services.
- NHS hospital estates are among the largest public sector energy consumers.
- Local authority buildings (offices, leisure centres, public facilities) also represent sizeable energy portfolios.

With energy prices volatile and often increasing, there is a strong imperative to reduce costs through efficiency and renewables.

# Barriers to Traditional Capital Funding

Despite the clear economic and environmental case for energy investment, significant structural barriers often prevent the public sector from deploying capital in this area.

### Limited Capital Budgets

Public sector capital budgets are typically constrained and heavily competed for. Renewable installations and energy efficiency projects are often **deprioritised relative to core service delivery** when outright capital funds are required.

### Competing Infrastructure Priorities

Institutions like schools and hospitals often face urgent estate priorities — **roof repairs, compliance works, and accessibility improvements** — which can delay energy projects, even when strong economic returns are available.

- These barriers make alternative funding mechanisms such as leasing and PPAs not merely convenient — but essential — for unlocking energy investment in the public sector.

# Funding Mechanisms: Leasing

## Leasing for Energy Technologies

Leasing can be used to fund the acquisition and deployment of:

- **Solar PV Installations**
- **LED Lighting Upgrades**
- **CHP Systems**
- **EV Charging Infrastructure**

Leasing allows organisations to **pay for the asset over time rather than upfront**, aligning payments with budget cycles and operational savings.

For example, schools in England now routinely use leasing under **Secretary of State Class Consent** for asset finance (e.g., IT equipment, vehicles. LED); similar frameworks can support energy technology leasing where compliance and accounting treatment are agreed.

# Funding Mechanisms: Power Purchase Agreements (PPAs)

## Power Purchase Agreements (PPAs)

PPAs allow an organisation to purchase electricity generated by an on- or off-site renewable system (e.g., solar PV) at a **long-term contracted price** without owning the physical assets. A third party funds, installs, and operates the system, and the buyer pays for energy delivered.

Benefits include:

### No Upfront Capital Outlay

Zero capital expenditure required from the public body to deploy renewable infrastructure.

### Predictable Energy Costs

Long-term contracted pricing provides budget certainty and protection from market volatility.

### Carbon Savings

Renewable energy generation directly reduces carbon emissions and supports net-zero commitments.

# Public Sector Case Studies

## Schools

Leasing under Secretary of State Class Consent for asset finance enables schools to deploy energy technologies. Similar frameworks support energy technology leasing where compliance and accounting treatment are agreed, allowing schools to access LED upgrades without capital bids.

## NHS Trusts

The NHS Sustainable Development Unit has long advocated for energy efficiency and renewable energy projects. NHS trusts have rolled out solar PV and CHP installations, often using **third-party financing and leasing models** to minimise capital outlays and accelerate deployment. Example outcomes include reduced annual energy spend, contribution to local carbon reduction targets, and stability of long-term energy costs.

## Local Authorities

Many councils are installing solar arrays on building rooftops and fleet depots via PPAs or leases. Energy-as-a-Service providers fund, install, and operate the systems, selling energy back at long-term fixed prices. Some councils also embed CHP and biomass systems within district-heating networks, funded through long-term leases or energy service agreements. These investments support local strategies for **climate action and reduced public energy spend**.

# Structuring Successful Projects

## Lease Design Considerations

- Match lease term with technology life cycle (e.g., 7–15 years for PV)
- Ensure cost savings exceed lease costs
- Align with public sector accounting and procurement treatment (e.g., IFRS 16 / class consent frameworks)

## PPA Contract Essentials

- Define energy price structures
- Performance and availability guarantees
- Clarity on ownership and decommissioning at expiry

# Recommendations

Public sector bodies should:

1. **Conduct Energy Audits**

   Conduct energy audits to prioritise projects and understand actual usage

2. **Explore Leasing and PPA Models**

   Explore leasing and PPA models routinely in business cases

3. **Leverage Procurement Frameworks**

   Leverage existing procurement frameworks for equipment supply

4. **Align with Net-Zero Plans**

   Align energy projects with net-zero plans and public reporting obligations

# Conclusion

> Leasing and Power Purchase Agreements present **practical, cost-effective, and compliant mechanisms** for the UK public sector to fund renewable energy and efficiency projects without prohibitive capital investment.

By harnessing these models, schools, NHS trusts, local authorities, and other public bodies can achieve **immediate cost savings, reduce carbon emissions**, and demonstrably support the government's **Net-Zero by 2050 commitment**.

## References


- UK Government — Net Zero Strategy
- GOV.UK — Leasing for Maintained Schools
- NHS England — Greener NHS Programme
- UK Government — Renewable Electricity Use in Public Sector