



Priva explains:

How to take control of your school's energy bill with cloud-based building energy management

White paper





Introduction:

Last December the UK Government made over £500 million available to schools and colleges in England for energy efficiency upgrades – helping them to save on bills and manage their energy consumption more effectively.⁽¹⁾

These funds are much needed. The rising energy costs have further depleted school funds. In fact, analysis by the House of Commons Library has found that gas and electricity prices for schools rose by 83% in the first quarter of 2022, but, according to education sector website Schools Week, some schools have reported rises in energy bills of more than 500%.⁽²⁾

Suggested energy efficiency improvements cited by the Department for Education (DfE) include:

- Insulation to reduce heat loss from pipes
- Switching to energy efficient lighting
- Installing better building control systems



As energy tariffs have never been higher (and more volatile) our digital technologies can help you to manage energy consumption – right across your school/college estate – and keep your Net Zero carbon (and cost efficiency) goals on track.



An opportunity to get a grip on energy use

We see the DfE Energy Efficiency Fund as a major opportunity for schools and colleges to fund an update to their building controls to cloud-based building management technologies.

A low-cost upgrade in building controls represents excellent value and return on investment from your DfE grant funds. And, the good news the cost of making the move to the cloud is affordable (it's typically under £2000 for the initial set-up and initial subscription cost) – and once you're set up, you simply pay a low-cost on-going subscription.

In this Whitepaper, we'll show you how your school or college – or your external technology supplier or consultant – can optimise its share of the DfE funds by investing in energy management solutions that will deliver dramatic savings for many years to come.

What you'll learn:

- How the cloud can benefit schools' relationship to energy
- How the cloud can improve energy data security
- How to get started with a move to the cloud
- How Priva Digital Services can support an easy cloud migration
- How the cloud future-proofs your school: the main takeaways



How the cloud can benefit your school's relationship with energy

If you are involved in the day-to-day management of energy functions in your school or college building(s), you may already be aware of the many ways in which cloud-based building management can add value to your estate and energy management through:

- Improved resource optimisation
- Ease of management
- Ease of access to upgrades and maintenance

However, if you outsource the management of your building services and energy management functions, you may not be familiar with this kind of technology.

Simply put, you can use our cloud-based tools to track and store data related to key building systems such as heating, lighting and air quality. This means you can adjust settings, times etc and improve occupant comfort anytime, anywhere and on any device.

Remote access also means that your service provider can assist you from afar rather than have to attend site. This will offer maximum convenience and can save on expensive unnecessary call outs. Even if a site visit is required at least your service provider will be more informed.



Using cloud-based building controls, you can adjust settings, times and improve occupant comfort anytime, anywhere and on any device



Benefits of moving to the cloud for your energy infrastructure:

1) It's low-cost to migrate – and inexpensive to manage.

With cloud migration processes now quicker than ever, the costs of moving to the cloud – even when there are large estates involved – are invariably low. With many platforms running on a SaaS (Software as a Service) subscription basis, it's also very easy to keep track of ongoing operational costs.

2) You can have more data – and better control of it.

Cloud-based platforms support the creation and analysis of extensive data. For instance, Priva Digital Services provides a range of APIs (Application Programming Interfaces) that can be connected to third-party systems in a building, enabling the generation of real-time and historical data. Having greater command of your building data makes it easier to spot inefficiencies or potential problems – and then take steps to resolve them.

3) You can have more flexible control of your building systems.

With Priva's powerful app, it's possible to control and adjust your building systems at any time, and from anywhere – which makes things much easier if your maintenance teams use remote or hybrid working.

4) You can take immediate advantage of updates.

Historically, on-premise systems have been subject to periodic updates – often by external IT companies or specialists who may have many other customers to deal with. Once everything has been tied to a cloud-based platform, this is no longer an issue as you can have it set-up to automatically download new features and updates.

5) You will be able to reduce your support and maintenance expenses.

Moving your building & energy management to the cloud means less demand for on-site technical assistance. Updates to on-premise systems can take days to complete, and if you are using third-party contractors, result in substantial costs. These no longer apply if you are using a cloud-based platform backed by a global technology provider (in the case of Priva Digital Services, that's Microsoft Azure).

6) You will have more options for remote control and support across multiple sites.

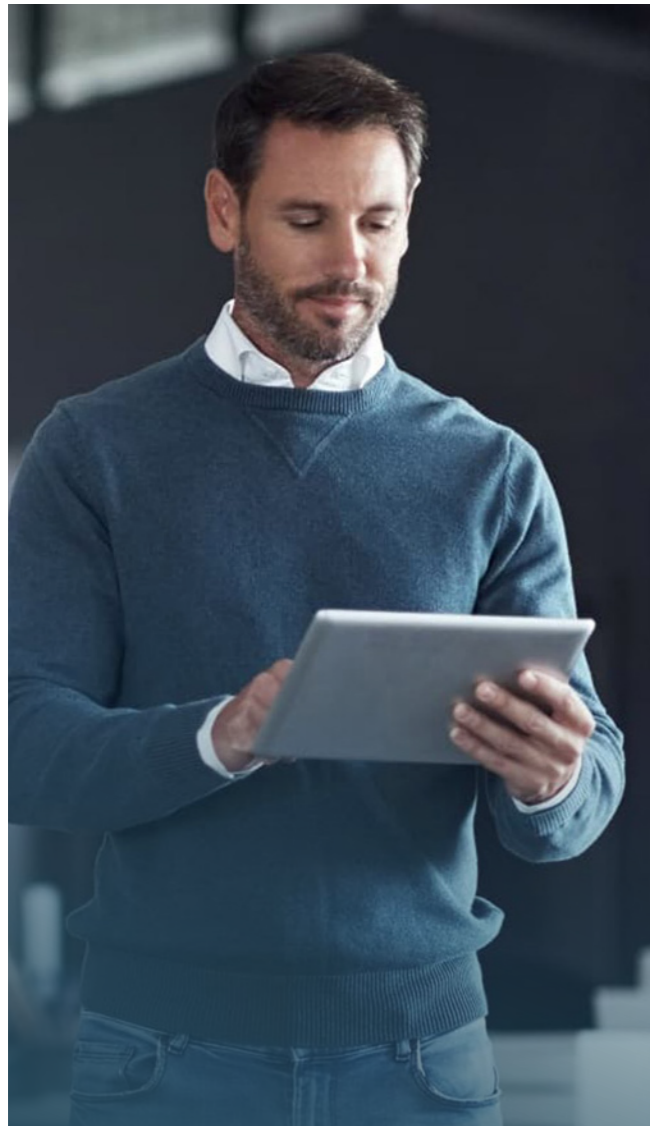
Some schools are part of regional groups, and as such it's often the case that their technical infrastructures are managed from one location. This might be via an internal IT department or a third-party specialist. Whatever the approach, having all of the schools' energy systems run from the same cloud platform makes it easier to manage multiple sites remotely. The need for location visits can be greatly reduced – and with it the amount of travel. All of which suits schools and colleges' drive to be more sustainable.



How the cloud can improve energy data security

Moving to the cloud paves the way for schools and colleges to benefit from multi-faceted security protection. This might come as a surprise as there is a lingering – and misplaced – belief in some quarters that the cloud is less secure than on-premise systems. But as global consulting firm PwC observes:

“The perception of reduced security in the cloud is a challenge for many organisation, but moving to the cloud may generally increase security, contrary to common belief.”⁽³⁾



In large part, this is due to sustained investment in cloud platforms that individual companies tending their own on-premise systems couldn't hope to rival. For example, as PwC notes, “Microsoft invests \$1bn every year in cybersecurity for its Azure cloud platform – a platform that successfully fends off 7 trillion cyber threats a day.”⁽⁴⁾

With schools and colleges liable to hefty fines under GDPR regulations⁽⁵⁾, the impact of any IT-related data breaches can be substantial. With new types of cyber-threat emerging all the time, moving away from on-premise systems provides the best chance of staying one step ahead of the criminals.

Migrating to the cloud also reduces the possible impact on day-to-day operations from more localised factors, such as fire and water damage. The latest data centres used by the major cloud providers have been constructed to withstand a wide variety of risks factors associated with extreme weather. This will become even more important as climate change intensifies and large areas of the country become more vulnerable to its effects.



How to get started with a move to ‘the cloud’

Regardless of how large your school or how specific its requirements, our Priva Digital Services platform is simply structured and makes migration to the cloud easy and reliable.

The starting point for any school or college to upgrade to Priva Digital Services is that it already has a Priva Building Management System (BMS) – for example, Priva Blue ID – in place.

If you have an existing BMS supplied by another manufacturer, it is usually possible to use an additional piece of technology to enable your BMS to ‘talk’ to our Priva Digital Services platform.

Expert help is available

By enlisting an in-house facilities manager or regular third-party contractor (for example, one of our network of Approved Priva Partners), an educational establishment can then begin devising a pragmatic and inexpensive migration from an on-premise to cloud-based infrastructure. Priva is, of course, ready to provide guidance as you work on this migration strategy.

The main aspects to the Priva cloud architecture are as follows:

Edge Gateway:

This is the conduit between the Priva hardware and the Priva cloud. It means that data can be moved and accessed easily and securely.

Information & Communication Technology (ICT) Guidance:

Priva provides all of the information you need for cloud migration in simple data-sheets, allowing all of the networking and communication issues to be satisfied easily.

Metadata:

Metadata enriches data with information that makes it easier to locate, use and manage. Priva Digital Services employs metadata to optimise end-users' experience of its platform and their use of building management systems. To ensure that everything stays up to date, you need only upload metadata each time a change is made.

Rebooting & Updating:

The Edge Gateway can be rebooted within a matter of minutes, either on- or off-site.

Support & Assistance:

Priva and its Partners are always ready to help schools and colleges as they plan and implement their cloud migration.



The cost of moving to the cloud is usually in the region of £1500-2000 to set things up – and is often a lot less!



How the cloud future-proofs your school: the main takeaways

For schools and colleges who have received funds to improve energy efficiency from the DfE scheme, a cloud-based building management system represents an unbeatable investment.

Here are a few of the main takeaways:

- Cloud-based energy management, such as our Priva Digital Services, provides much better data about energy usage. As a result, schools can optimise their use of energy and save money.
- Our cloud-based Priva Digital Services, are inexpensive to implement and utilise on an ongoing basis. Depending on your existing system, the cost of set-up is usually in the region of £1500-2000 and often a lot less. Once up and running, the monthly subscription costs are low.
- Cloud-based energy management allows schools' infrastructures to be managed remotely and inexpensively.
- Moving to the cloud provides enhanced security measures and access to new features and improvements as soon as they become available.
- The cloud is scalable so schools can easily adapt to new requirements – for example, if they add a new building.



How we can help

We know how challenging it can be to reduce your energy costs and take control of your building energy management functions. Priva's team is here to help. Whatever your energy challenge, we look forward to speaking with you about how its cloud-based Priva Digital Services can transform your approach to energy management.

Sources:

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