

# NEWSLETTER SEPTEMBER 2026

Energy is now one of the biggest issues shaping the built environment. From installing a ground source heat pump for a listed Chelsea townhouse to planning heat networks serving whole neighbourhoods, the scale of infrastructure is changing and evolving.

Our recent work has reinforced the importance of considering energy alongside architecture from the earliest stages of a project. In this newsletter, we look at projects and research spanning residential design, community energy, museum collections and larger estates.

We also share Director Edward Williams' recent website Insights on the *Warm Homes Plan* exploring how buildings, energy systems and infrastructure need to be considered together, particularly in dense urban areas.

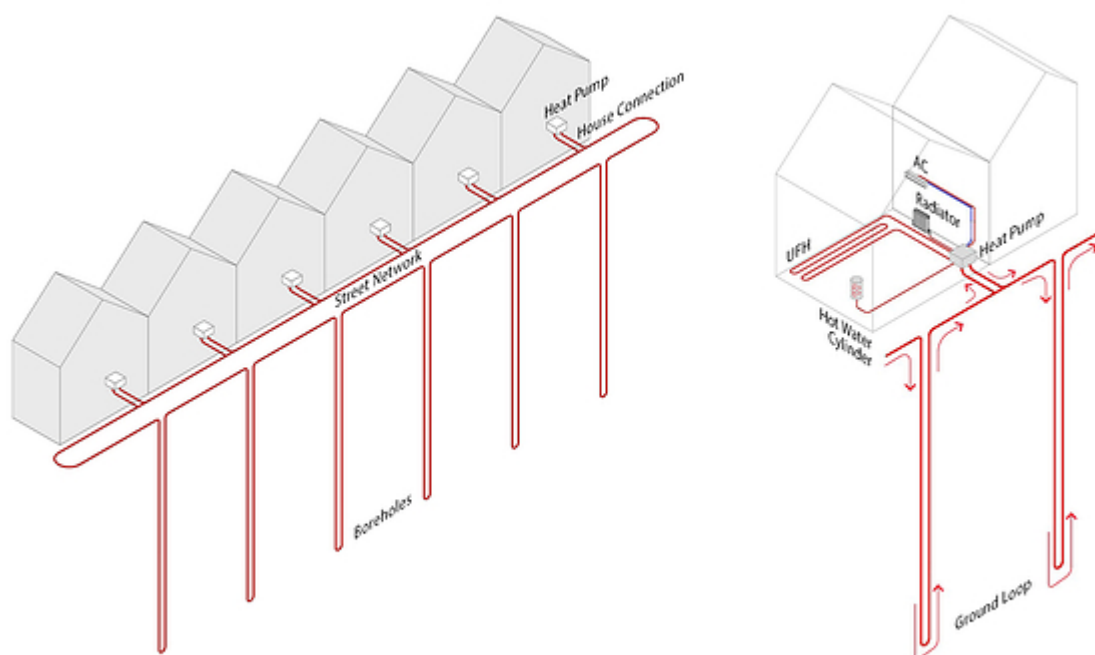
We want to answer practical questions:

- **How can existing buildings be adapted, preferably at scale?**
- **Why do shared energy systems make sense?**
- **How can new infrastructure be integrated into sensitive places?**
- **And how can early decisions support long-term performance?**

These are questions that increasingly sit at the centre of architectural and energy design.

---

## Sydney Street Heat Network: Clean Energy Beneath Chelsea, London

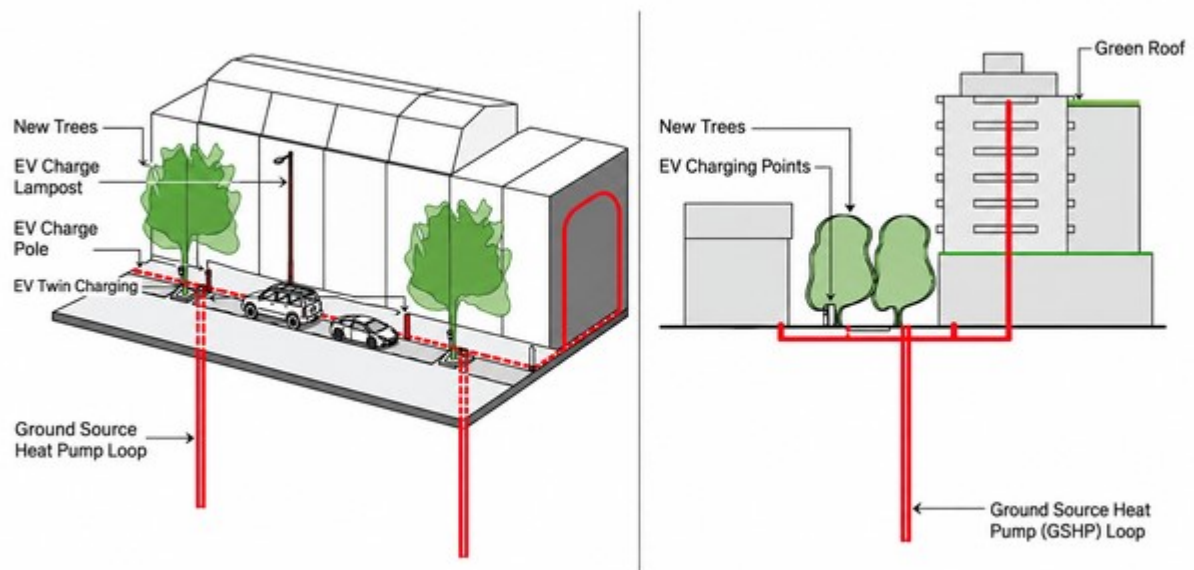


Ground source ambient loop diagrams

Planning permission has now been granted for the Sydney Street Heat Network, an important step towards delivering low-carbon energy infrastructure in the heart of Chelsea. The project proposes an underground ambient loop system beneath local streets, enabling homes and buildings to access sustainable cost-effective heating and cooling while preserving the character of this historic neighbourhood.

What makes the project particularly compelling is its ability to combine environmental performance with heritage sensitivity. Once complete, there will be no visible impact on the streetscape, no external plant cluttering building façades and no additional noise generated within the conservation area. The infrastructure remains largely invisible while supporting a significant reduction in carbon emissions and improving the resilience of local energy supply.

Alongside this project, we have also explored community-scale energy infrastructure through a series of heat network and ambient loop studies, demonstrating how neighbourhoods can benefit from shared energy systems that provide long-term flexibility and decarbonisation opportunities.



The project is an opportunity to improve the streetscape and public realm with planting

## Paris Musées: A new benchmark for Low-Energy Collection Storage

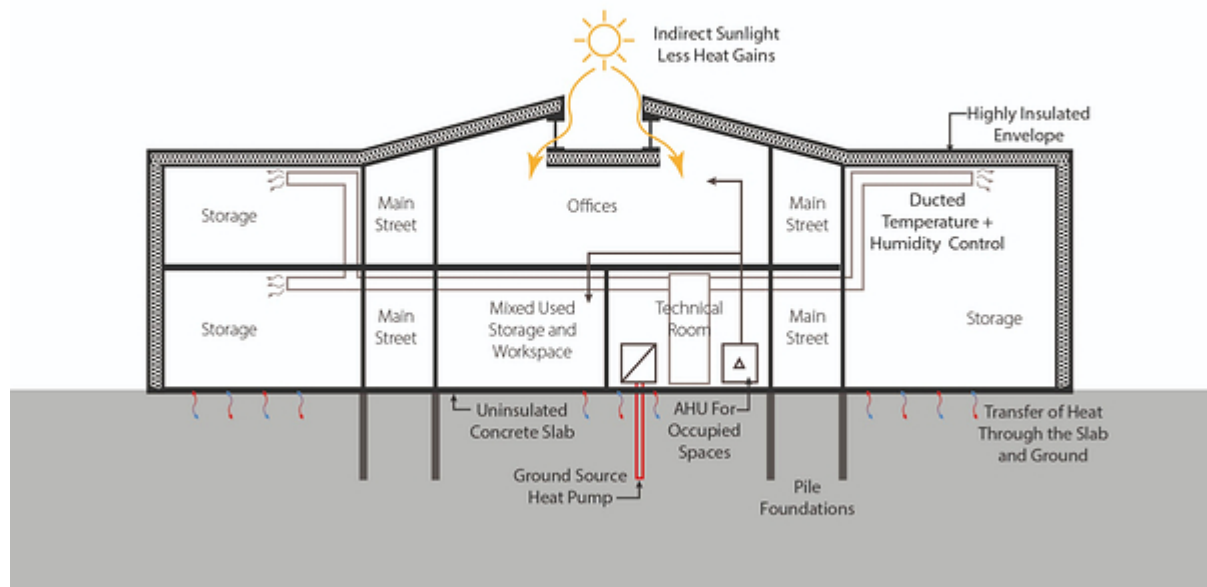


The City of Paris has millions of artworks that need to be preserved in energy efficient storage

We are part of the consultant team developing a new central collections storage facility for Paris Musées, which manages fourteen museums and nearly one million artworks.

The feasibility study led by consultant engineers mstep established the foundation for the project, based on a Danish model, with a focus on creating a highly energy-efficient centralised facility while maintaining the environmental stability required for long-term conservation.

Building physics analysis informed the design. A highly insulated envelope stabilises internal conditions, while an uninsulated ground slab provides thermal buffering. Ground source heat pumps deliver efficient heating and cooling where required. The project demonstrates how conservation, architecture and environmental performance can be successfully combined without compromising the building's primary purpose.



Concept diagram for the project including highly insulated envelope and ground source heat pumps

## Healthcare Estates, Heat Networks and Ambient Loops



Doncaster Tickhill Road mental health NHS campus where we are implementing an ambient loop

Healthcare estates present unique decarbonisation challenges. Hospitals often comprise multiple buildings with complex operational requirements, long investment horizons making strategic energy planning essential and short net zero targets.

Through Cagni Williams Energy, we are exploring heat networks, ambient loops and estate-wide energy strategies. Our studies consider existing assets, future demand, resilience and implementation pathways. The policy landscape is also evolving. Our work on the Warm Homes Plan reflects a growing emphasis on coordinated approaches that consider building fabric, ventilation, heating, electrical capacity and infrastructure together.

For healthcare organisations and other large estates, the key challenge is identifying realistic pathways towards zero-carbon operation while maintaining continuity of service. For large estates, campuses and healthcare organisations, energy infrastructure needs to be considered alongside capital investment and asset planning. A clear understanding of existing conditions can establish a realistic pathway towards future investment and decarbonisation.

---

## The Importance of Feasibility Studies



Feasibility workshop: interrogating the proposition before the big decisions are made

Clients frequently view feasibility as an optional preliminary exercise, yet it is usually the stage that provides the greatest clarity on risk, cost, opportunity and long-term value. Feasibility is one of the most valuable stages of any project. It provides the evidence needed to make informed decisions before significant investment is committed.

A robust study tests the brief against site constraints, budget, planning requirements, operational needs and energy considerations. It also allows alternative approaches to be evaluated before key decisions become embedded in the design.

Our work on the Sydney Street Heat Network in London and the Paris Musées projects shows the value of this early robust analysis. In both cases, feasibility has helped establish clear development frameworks and reduce uncertainty before detailed design begins.

We see feasibility as a critical part of the design process, providing the foundation for a stronger brief, realistic programme and better investment decisions.

## Heat Networks and the Warm Homes Plan



Director Edward Williams has written widely about sustainability and decarbonisation

The Warm Homes Plan is increasing the focus on how homes, estates and neighbourhoods can be decarbonised. In dense urban areas, constraints around space, electrical capacity, ownership structures and existing infrastructure make these decisions particularly complex.

Edward Williams has been exploring these issues through a series of insights on our website. His first insight argues that new build and retrofit projects should be viewed as a single energy system, considering fabric, ventilation, summer comfort, solar generation and heating together.

The second examines the factors that influence successful electrification in dense urban housing, including enabling costs, performance metrics and operational affordability. It also explores when communal and networked approaches may offer advantages over individual building solutions.

A third Insight focuses on heat network zoning and its implications for estates and major buildings. For some organisations, future network connections may become an important consideration when planning refurbishment, plant replacement or new development.

The central message is clear: energy decisions are strongest when informed by an understanding of the wider context, from the individual building through to surrounding infrastructure.

Read Edward Williams' Warm Homes Plan Insights

1. *New build and retrofit must be designed as one energy system*

2. *The three levers that make electrification scale in dense urban homes*
3. *Heat networks and zoning: what happens when your estate is inside the map*

## Integrating Architecture and Energy



The design and construction team at our Chelsea site celebrating the start of the bore hole drilling, Lucy Mori, Sam Schmolz, Martyn Fowler, Andrew Bollard, Dariusz Dominik, Lukasz Jedrusik, Abigail Abraham, David Balboa, Mia Fogg, Rasika Savaleker, Hannah Partridge, Edward Williams, Laura Carrara-Cagni

We established Cagni Williams Energy to bring architectural and energy expertise together, helping clients make informed decisions about carbon, infrastructure and building performance.

Working across residential, healthcare, education, commercial and community projects, allows us to support clients from strategy and feasibility through to implementation. Expertise includes heat networks, ground source heat pumps, renewable energy integration and building performance analysis.

Whether assessing a retrofit, developing an estate strategy or planning new infrastructure, our focus is on solutions that are practical, deliverable and appropriate to the places they serve. Decarbonising the world, at every scale.



Cagni Williams Associates  
Grand Union Studios, [332 Ladbroke Grove,](#)  
[London, W10 5AD](#)  
[United Kingdom](#)

[enquiries@cagniwilliams.com](mailto:enquiries@cagniwilliams.com)  
[www.cagniwilliams.com](http://www.cagniwilliams.com)

---

*Copyright © 2026, All rights reserved.*

