

Accelerating Domestic Heat Pump Deployment

A Guide for Local Authorities

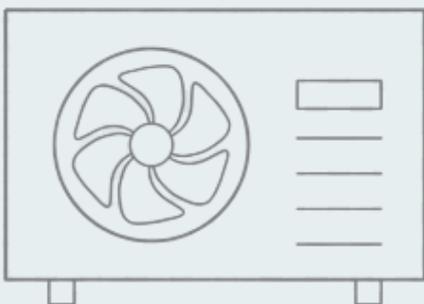
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SECTION 01 - INTRODUCTION

Why heat pumps matter now?

Domestic heat pumps are a key technology for decarbonising heating and achieving climate targets. According to the Climate Change Committee, installations need to rise from 60,000 currently to 1.5 million by 2035 to ensure a fully decarbonised housing stock by 2050.

Heat pumps can reduce household heating emissions by around 80%, making them one of the most effective low-carbon technologies councils can support.

Local authorities across the UK have made strong commitments to climate action and supporting residents to transition to low-carbon heating. However, the practical pathway from household interest to a successful installation can be complex. Planning requirements, regulatory processes and installer availability can all influence whether an installation proceeds smoothly or stalls.

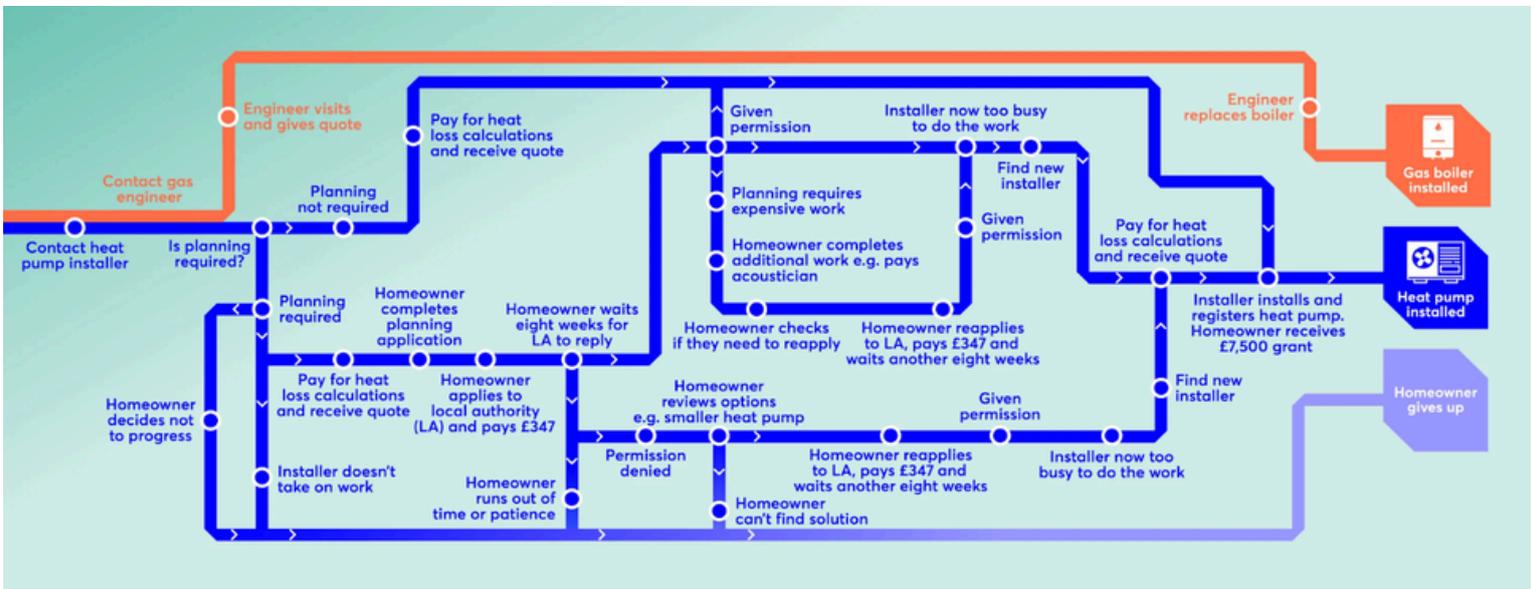
This guide focuses on the role councils play, especially how planning and regulatory services handle domestic heat pump applications. It outlines practical steps to improve consistency, reduce delays, and create a smoother experience for residents and installers.

SECTION 01

How heat pump cases move through the planning system

Unlike a gas boiler replacement, which is usually straightforward once an engineer is engaged, installing a heat pump may involve additional steps that can introduce delays or uncertainty for households. Taken together, they can make the process feel complicated, increasing the likelihood that residents pause or revert to a gas boiler replacement.

Figure 1. Heat Pump vs Gas Boiler Installation Journey: Points Where Delays and Drop-off Can Occur



Source: [Nesta](#)

The pathway from initial enquiry to installation can involve multiple decision points and waiting periods, meaning relatively small delays or uncertainties can sometimes lead households to abandon or switch to a gas boiler replacement.

60,000

Current rate of installations

1.5M

Annual installations needed by 2035

80%

Reduction in heating emissions

SECTION 02

Understanding the Barriers

For local authorities, the challenge is not simply one of public awareness. The barriers are practical, regulatory, structural, financial, bureaucratic and often interconnected; spanning finance, planning, skills and internal capacity.

A. Planning, noise and regulatory challenges

Unlike a gas boiler replacement which is straightforward, around 30% of heat pump installations require some form of planning approval. This introduces cost, uncertainty, delay and inconsistency at a critical point in the customer journey.

- Responsibilities for different aspects of an application can sit across several council teams, and internal workflows or evidence thresholds may vary between authorities or individual cases.
- In conservation areas, World Heritage Sites and listed buildings, permitted development rights often do not apply. This means applications may need to follow bespoke approval routes, which can add time to the process.
- Noise decisions present a particular challenge and can require multiple professional inputs. For example, planners often seek advice from Environmental Health teams on noise considerations, while also balancing wider planning policy objectives such as support for low-carbon heat. This can sometimes lead to different outcomes for similar installations depending on the circumstances of the case, with all the associated consumer/resident confusion.
- Cumulative noise impact in dense urban settings is an emerging concern as deployment grows. [Oxfordshire's Clean Heat Streets programme](#) offers a useful model for how place-based approaches can help manage this at scale.
- Residents may also be unsure who should submit the planning application and what information is required, which can make the process feel complex for those unfamiliar with the planning system.
- Even where planning conditions are met and discharged, they provide no mechanism for ongoing quality assurance and maintenance.

The noise problem in numbers: Sound is the biggest single driver of planning requirements for heat pumps.

£347 | 8 weeks

Average additional time & cost of a standard planning application for a heat pump

40%

Applications that also require a separate BS4142 noise assessment, adding to time & cost

£1,500 | 8 weeks

Additional time & cost when a BS4142 noise assessment is also required

40%

Rejection rates despite the additional noise assessments

By contrast, replacing a gas boiler typically requires no planning approval and can often be completed within a day.

B. Skills and supply chain

The installer workforce is not yet keeping pace with demand. Key challenges include:

- Uneven availability of training and skills, meaning some areas currently have fewer qualified installers than others.
- "Distress replacements", where households facing a sudden boiler failure may opt for a like-for-like gas replacement if a heat pump installer is not readily available or they face the barriers outlined above.
- Variation in installation quality, which can affect system performance and influence local confidence and word-of-mouth perceptions of heat pumps.

One poorly performing system can undo considerable community confidence-building.

C. Organisational priority

Heat pump deployment is not always treated as a top corporate priority within councils, even in authorities publicly committed to local climate action. In practice:

- Competing regulatory responsibilities can shape how officer time and resources are prioritised.
- Other decarbonisation measures, such as solar PV, may sometimes take precedence where delivery pathways and outcomes are more established.
- Clear leadership support, resourcing and internal ownership can help ensure heat pump ambitions are translated into sustained delivery alongside other priorities.

D. Money and affordability

The upfront cost of a heat pump remains the single biggest obstacle for most households, even with grants available through the Boiler Upgrade Scheme. Key pressure points include:

- Electricity unit prices are currently higher than gas, making the economics feel uncertain for many residents.
- Grant cost caps and annual funding cycles mean delivery windows are often narrow and hard to plan around.
- Finance options for 'able to pay households' the able to pay group remain underdeveloped.
- Council budgets and officer capacity are constrained, limiting the ability to provide additional support or redesign processes to accelerate deployment.

E. Householder confidence

Many residents remain uncertain about whether heat pumps will work for their home, particularly in older properties or during cold weather. Common concerns include:

- Whether existing radiators need replacing or significant building work is required.
- Reliance on existing heating engineers who may not be trained in heat pump systems and may, consciously or not, steer customers toward familiar gas options

Clear, trusted, accessible information is essential: not just about the technology itself, but about the process, realistic costs and what to expect.

SECTION 03

Planning in Practice: Where Delays Occur and How to Address Them

For installations that require planning permission, the process itself can be a significant source of delay. Understanding where cases stall can help councils run a faster, more consistent service.

01 Submission and validation

Many delays begin before a case is properly opened. Submissions can sometimes arrive without key information, such as clear site details, manufacturer specifications or a correctly completed noise assessment, which can lead to additional information requests and extended processing times. Clearer upfront guidance for installers and applicants can help improve submission quality and reduce avoidable delays.

02 Internal consultation and technical input

Noise considerations often require input from Environmental Health teams, and planners appropriately draw on that expertise. Where internal workflows and expectations between teams are clear, cases can progress smoothly. Where processes are less defined, additional clarification or evidence requests may arise, which can extend timelines for applicants.

Available data shows that around half of submitted applications fall within approximately 1 dB of meeting the relevant threshold, and around 80% are within 2 dB. This indicates that relatively small design or siting adjustments could enable a significant proportion of cases to proceed. In many instances, improving early communication and design iteration may be as important as addressing the technical noise considerations themselves.

A more nuanced picture on noise

Noise is often not a simple pass/fail question. Many cases are near-misses and resolvable with minor adjustments, while poorly designed systems can create genuine problems in dense or quiet settings. Requests for additional evidence are most common where predicted sound levels are close to permitted development limits, where units are near neighbouring windows or bedrooms, where siting options are constrained, or where multiple units may contribute to cumulative impacts.

Acoustic enclosures are not a default fix

They can introduce constraints around air intake and overheating risk. Minimising source noise and optimising siting from the outset is the more effective route. Outcomes consistently improve where planners and Environmental Health officers work closely together, supported by shared understanding of what decibel levels mean in practice.

Ongoing work by organisations such as [Nesta](#) and the [Chartered Institute of Environmental Health](#) is helping build the evidence base and practical guidance needed to support councils as heat pump deployment increases.

What Councils Can Do: Solutions and Best Practice

01

Make climate and net zero teams a formal internal consultee in planning

Formally designating climate or net zero teams as internal consultees on relevant planning applications, could ensure that low-carbon objectives are explicitly weighed alongside amenity concerns. It may give planners access to a wider policy and strategy framework, helping increase knowledge and confidence. This could ensure that climate benefits are being properly considered, and strengthen the wider policy basis for decision making and approving borderline cases.

Why it helps?

This can meaningfully shift how councils balance amenity and risk with low-carbon objectives, particularly in cases where noise or siting concerns might otherwise dominate the decision. It also creates a clearer internal accountability for climate outcomes within the planning process and an anchor for these discussions within councils.

Key Considerations

- A case-by-case consultee role may not be a good use of limited climate team capacity, particularly for smaller domestic applications.
- A practical alternative is to develop standing guidance that planners can apply consistently, with climate teams focusing their input on major applications or periodic guidance reviews.
- Cross-team coordination works best when it is structured and regular, not ad hoc.
- Recognition that in two tier areas, some of the relevant climate teams and expertise may sit in upper tier local authorities., while the planning authority will be the district council. This will eventually be resolved through local government reorganisation, but until then may present a barrier.

IN PRACTICE: Bristol

Bristol established a regular cross-team working group bringing together planning, sustainability and retrofit colleagues. This helped coordinate approaches and surface emerging issues early. Having the right people in the room together made it possible to work through these complexities more effectively.

02

Establish an internal protocol between Development Management and Environmental Health

A formal internal protocol clarifies when Environmental Health is consulted during a heat pump planning case, what technical question is being asked, what evidence is expected in response, and what the target turnaround time is. It brings consistency to a process and gives both teams a clear framework to work within.

Why it helps?

Clear protocols reduce inconsistent practice, set shared expectations and create a more predictable experience for applicants. Some councils already apply generic internal consultation protocols for noise, and other topics. Applying this approach specifically to heat pump noise inputs is a practical and achievable step.

Key Considerations

- While a protocol on its own may not significantly shorten overall timelines, it can help reduce inconsistencies and the additional clarifications that can extend case processing.
- Supplementary planning guidance can complement a protocol by setting out evidence thresholds and expectations upfront, improving validation quality and reducing near-miss ping-ponging between teams.

Procure quality-assured suppliers that able-to-pay segment can access

One option available for local authorities, is developing a council-led procurement framework that appoints vetted installers onto a preferred supplier list that residents can access directly. This creates a trusted route to installation for residents, reducing validation failures and repeat information requests.

Why it helps?

A procurement route gives residents confidence they are working with a trusted and vetted installer. It also creates a more predictable planning process: where installers submit consistent, complete application packs, validation delays reduce significantly. Requiring evidence of practical experience or proven performance, in addition to MCS certification, can further improve overall quality.

Key Considerations

- A procurement framework with clear terms outlining the council's role provides a stronger and more transparent approach than a simple "approved list," helping set expectations for residents and installers.
- Councils should avoid positioning this as an "approved list" of contractors, which can create liability exposure if an installer underperforms. Clear disclaimers that the council is not liable for installer performance are essential.
- Developing procurement processes from scratch can take time; sharing template language, disclaimers, and minimum competency requirements across councils can help streamline this.
- Access to installer performance data, such as from TrustMark or MCS, can support risk management, though such information is not always easily available.

Use Local Development Orders targeted to specific geographies or housing types

A Local Development Order (LDO) grants planning permission in advance for defined types of development within a specific area, subject to conditions. For heat pumps, this means householders in qualifying areas can proceed without a full planning application, provided they meet pre-agreed requirements. It is particularly effective where housing types are similar and background noise contexts are well understood.

Why it helps?

LDOs reduce repeated case-by-case assessments by setting clear upfront conditions for common housing types or estates. Postcode-based approaches can also reflect local noise realities, for example, higher ambient noise levels near rail lines, reducing disputes about marginal decibel differences that are unlikely to be perceptible in practice.

Key Considerations

- LDOs are resource-intensive to design, consult on and adopt, requiring legal and planning capacity upfront.
- External funding or support to cover the one-off design cost can make this more viable.
- The investment is most justified where there is a clear pipeline of similar cases that would benefit from a streamlined route, perhaps where place based energy or retrofit schemes at a neighbourhood level are planned.

Co-produce a local threshold ladder for noise evidence and officer training

A threshold ladder sets out a clear, proportionate escalation pathway for noise evidence: what is sufficient in straightforward cases, and when a fuller acoustic assessment is genuinely needed. Developed in partnership with Environmental Health specialists and professional bodies such as the Chartered Institute of Environmental Health (CIEH), it gives officers a consistent and defensible framework for handling near-miss cases. Work is currently underway by CIEH and their partners to consult on and develop new noise guidance for Environmental Health teams.

Why it helps?

The threshold ladder supports consistent decision-making and reduces the risk of over-requesting evidence in cases that could be resolved more simply.

Key Considerations

- Environmental Health specialists and relevant professional bodies should lead development to ensure technical and regulatory credibility.
- Two practical companion tools can extend the value of the threshold ladder significantly: a short plain-English decibel explainer for planners, and a "how to get validated first time" guide for installers and agents covering noise calculations, thresholds and mitigations.
- Together, these tools address both sides of the process, improving consistency for officers and submission quality from applicants

Adopt a standard planning condition focused on quality assurance

A standard planning condition can be included that requires heat pump installations to be carried out and maintained in line with MCS guidance. Applied consistently, it provides a clear benchmark for officers and supports more predictable planning outcomes.

Why it helps?

Consistent use of a standard condition clarifies expected standards, and helps manage perceived risk in borderline cases, including conservation area applications.

Key Considerations

- Once a condition is discharged, planning has no mechanism to enforce ongoing maintenance or performance. Issues that emerge post-installation typically fall into other regimes such as statutory nuisance. So planning and Environmental Health officers are concerned about managing this risk, especially in those marginal noise threshold cases.
- Quality issues can still arise despite MCS certification. Early operational data can highlight installations that do not perform as intended and support learning for future projects.
- A standard condition would be most effective as part of a wider approach to quality, supported by council processes like procurement, building control, and post-installation checks, rather than being used on its own.
- A standard condition is most effective when integrated into a broader quality framework, including procurement, building control, and post-installation monitoring, rather than as a standalone measure.

IN PRACTICE: Greater Manchester

Octopus Energy and Greater Manchester local authorities, working with GMCA, reviewed cases across ten councils to identify outliers and reduce inconsistency. They drafted a standard planning condition requiring installations to meet MCS guidance, and produced a plain-English decibel explainer to help officers interpret noise levels in context. The work also reinforced the NPPF requirement to give significant weight to low-carbon technologies.

Provide clear resident and installer guidance with a validation checklist

A simple, publicly available validation checklist tells installers and applicants exactly what is needed at submission: site details, manufacturer specifications, noise calculations and any location-specific requirements. Making the checklist available on planning portals helps clarify requirements and can reduce common delays in the submission process.

Why it helps?

Incomplete or unclear information at submission can contribute to additional clarification requests and longer processing times. A clear checklist, accompanied by a plain-English "do I need planning permission?" flowchart and guidance on how to complete noise calculations, addresses this directly. It benefits installers, applicants and planning officers alike.

Key Considerations

- Guidance needs to reflect local and national variation: Wales, for example, currently requires planning permission where a heat pump is within 3 metres of a boundary, and similar cross-jurisdiction differences should be clearly signposted.
- The checklist should be designed around what validation teams actually need, not what is theoretically required, to ensure it is genuinely useful in practice.

IN PRACTICE: Cotswold District Council & East Suffolk Council

Cotswold District Council prioritised clear, plain-English guidance for residents on whether planning permission is required for an air source heat pump, including specific advice for conservation areas and listed buildings. East Suffolk Council focuses on working towards approvals by default, following MCS standards for permitted development cases, while taking local context into account, such as very low background noise in rural areas. Asking for manufacturer specifications upfront has generally helped speed up decision-making.

Create a light-touch cross-team heat pump working group

A regular, informal forum bringing together planners, Environmental Health, retrofit and sustainability teams, and where relevant conservation and urban design officers. Its purpose is to build shared understanding, help guidance and protocols bed in, and give officers a space to test judgement calls and share emerging patterns; including, where they exist, any complaints related to installations.

Why it helps?

A working group creates the relationships and communication channels that make this possible in practice, without adding significant overhead.

Key Considerations

- This does not need to be a new structure or a frequent commitment. A quarterly meeting delivered through an existing forum could be sufficient.
- The most valuable use of the time is peer discussion: officers sharing cases, testing borderline judgements and identifying patterns that might point to a need for updated guidance.

Budget for specialist evidence within retrofit programmes

Building a small contingency into retrofit programme budgets to cover occasional specialist evidence costs, such as acoustic assessments in complex or noise-sensitive cases, prevents a handful of difficult cases from derailing otherwise viable installations.

Why it helps?

For households already navigating the retrofit process, an unexpected additional cost can be enough to cause them to drop out entirely. A modest programme-level budget for specialist input removes this risk and keeps viable installations on track.

Key Considerations

- It is important to consider this at the programme design stage, as funding rules may not automatically allow for contingency spending.
- Some discussion with funding bodies and programme managers can help incorporate small amounts of specialist input within existing frameworks.

SECTION 05

Solutions at a Glance

This matrix summarises the nine recommended solutions, their ease of implementation and potential impact.

Solution	What it involves	Ease of implementation	Impact potential
Climate teams as formal consultees	Involving climate or net zero officers as internal consultees on relevant applications, or having them help shape standing guidance	Low - Medium requires internal agreement and some capacity planning	Medium strengthens decision-making but must be structured carefully to avoid overburdening small climate teams.
Internal protocol between Development Management and Environmental Health	A formal agreement setting out when EHO input is sought, what evidence is required and target response times	Medium builds on existing practice in many councils	Medium reduces inconsistency without requiring significant new resources. However, a protocol alone is unlikely to shorten end-to-end timelines.
Procurement of quality-assured suppliers	A council-led framework appointing vetted installers that residents can access directly, with clear disclaimers on liability	Medium procurement processes take time, but templates and existing frameworks can accelerate this	High improves installation quality, builds resident confidence and reduces planning validation failures
Local noise threshold ladder and officer training	A co-produced escalation framework setting out proportionate evidence requirements, supported by plain-English guidance for officers and installers	Low - Medium requires drafting and internal agreement, but no new process or resource	Medium - High reduces variation and supports quality, but needs to sit within a wider quality assurance approach to be fully effective
Local Development Orders	Area-based planning permissions granted in advance for qualifying installations, subject to conditions	High resource-intensive to design and adopt, but costs can be shared between councils	High significantly reduces case-by-case friction at scale, particularly in areas with similar housing types
Standard planning condition	A consistent condition requiring installations meet and maintain MCS standards	Low requires drafting and internal agreement, but no new process or resource	Medium reduces variation and supports quality, but needs to sit within a wider quality assurance approach to be fully effective
Resident and installer guidance with validation checklist	Publicly available plain-English guidance and a submission checklist aligned to what validation teams need	Low requires time to develop but no significant new resource or process change	Medium helps reduce the most common source of upfront delay
Cross-team heat pump working group	A light-touch forum for planners, Environmental Health and sustainability teams to share cases, test judgements and review guidance	Low - Medium can sit within existing structures with minimal additional time commitment	Medium builds the relationships and shared understanding that help all other solutions work effectively
Retrofit programme budget for specialist evidence	A small contingency within retrofit budgets to cover acoustic or other specialist assessment costs in complex cases	Medium requires programme design consideration and potential negotiation with funding bodies	High prevents a small number of complex cases from causing household drop-out and keeps viable installations moving

What National Bodies and Partners Need to Do

Local authorities can do a great deal within their existing powers, but some of the important levers sit at national level. The following sets out what is needed from government, regulators and national bodies to make local action more effective and sustainable.

➤➤➤ Clearer national standards on noise and planning

- Standardised national criteria for assessing heat pump noise in planning contexts, including clarity on when simplified tools are sufficient and how near-miss cases should be handled proportionately. The recently published Warm Homes Plan signals government intent to make it easier for consumers to install heat pumps and commits to consulting in 2026 on further permitted development rights for air source heat pumps, building on recent reforms.
- National training and plain-English explainer materials usable by both planners and Environmental Health officers, reducing the burden on individual councils to develop their own.

➤➤➤ Reform and regulatory alignment

- Align planning, product standards and installer regulations so that quality assurance does not fall between the gaps.
- Streamline heritage consents for retrofit and low-carbon measures in protected buildings and areas.

➤➤➤ Funding and supply chain stability

- Provide faster clarity on Warm Homes Plan funding detail and timelines to maintain supply chain continuity and avoid installer drop-out, especially for the able to pay and private rented sectors.
- Resource one-off system-wide reforms, such as guidance production, LDO development and process redesign, where the benefits are shared across the sector.

➤➤➤ Raising the quality floor

- Expand training from short courses to competency-based programs covering system design, commissioning, and customer handover.

Conclusion

Domestic heat pumps are central to achieving climate targets, but accelerating their uptake requires more than just increasing household awareness and affordability. This guide highlights the range of solutions councils can adopt, from standard planning conditions and clearer guidance for applicants to cross-team collaboration, procurement of vetted installers, and targeted use of Local Development Orders. Implementing these measures consistently, would help reduce delays, increase confidence for households, and improve overall installation quality. By combining local best practice with national guidance, councils can create a more predictable, efficient, and resident-friendly pathway for heat pump deployment helping deliver low-carbon heating for homes across the UK.



About Us



UK100 is the only network of ambitious councils led by all political parties working together to tackle climate change. We help local leaders overcome challenges and turn innovation into solutions that work everywhere. We build the case for the powers needed to make change happen. From cities to villages, we help communities across the UK create thriving places powered by clean energy – with fresh air to breathe, warm homes to live in, and a healthy natural environment.

Find out more at: www.uk100.org



Octopus Energy is now the UK's largest electricity supplier, renowned as a global leader in energy technology and a nine-time Which? Recommended Provider. They are driving the transition to Low Carbon Technology (LCT) by providing smart tariffs and professional installations for heat pumps, solar panels, and electric vehicles. The company recently made history as the youngest-ever winner of Britain's Most Admired Company (2025), sweeping top honors for innovation and environmental leadership.

Find out more at: <https://octopus.energy/>