

Money for something: Designing effective heat pump support schemes in Europe

Duncan Gibb, Marion Santini, Lorenzo Sapochetti, Samuel Thomas

Steffen Verheyen (Agora Energiewende)

Executive summary

Heat pumps are a central pillar of Europe's electrification and energy security strategy. Yet several countries have scaled back heat pump support schemes, or subjected them to stop-and-go cycles, just as adoption must accelerate. This paper argues that the answer to budget pressure is not less but better-designed subsidy programmes. Clarity on the role of public funding and careful design improves effectiveness and can avoid unintended consequences.

This brief finds that to design financial support schemes that drive widespread adoption, governments should commit to stable, multi-year support and fix the wider framework.

- For most efficient use of funds, grants should pay flat-rate amounts per technology and efficiency class. Percentage-based grants can fuel price inflation: Germany's switch to this design helped contribute to significant price increases, while flat-rate schemes in the United Kingdom and France absorbed grant increases without comparable inflation.
- To create space for new business and delivery models, policy makers should let third parties claim subsidy support so heat-as-a-service models can scale. To allow competitive pressure to bring down installation costs, policy makers should open the installer market by recognising certification across borders.
- To ensure public funds are used where most needed in complement to private finance, subsidies should target support by household need. To enable widespread uptake, grants should be deducted at the point of sale and backed with local technical assistance.

Introduction

Deploying heat pumps at scale in Europe's buildings can drastically reduce imported fossil gas and oil, shielding European citizens from fossil price spikes.¹ The European Commission in its Electrification Action Plan stated that “switching from gas to heat pumps and district heating in homes and offices reduces system costs, delivers more affordable, secure and cleaner European energy.”²

In Europe, as in other regions in the world, upfront subsidies to consumers have historically helped clean technologies such as solar panels develop from niche markets to widespread adoption. Many European countries already have subsidy schemes for heat pumps in place.³ Some of these programmes have been active for years and are providing financial support to households, most commonly in the form of grants or tax credits.

As several European countries face public budget constraints, some subsidy schemes have recently been scaled back.⁴ These rollbacks are concerning because of a growing urgency to accelerate heat pump deployment and to ensure that the transition is accessible to all households.⁵ For now, subsidies are still the backbone of rolling out heat pumps, and these evolving conditions create a case to reassess how they are designed and delivered.

This paper discusses how subsidies can be structured to maximise impact, improve equity, drive down costs, and support the development of a mature heat pump market.

How the broader policy framework shapes the role of subsidies

Subsidies do not operate in isolation. Their effectiveness in achieving policy objectives in a cost-effective manner depends on the broader policy environment and measures affecting both the demand for and supply of heat pumps.⁶ Understanding the added value of subsidies as well as these policy interactions is therefore essential when designing support schemes.

¹ European Commission. (n.d.). *Heat pumps*. https://energy.ec.europa.eu/topics/energy-efficiency/heat-pumps_en; International Energy Agency. (2022). *The future of heat pumps*. <https://www.iea.org/reports/the-future-of-heat-pumps>

² European Commission. (2026). *Electrification Action Plan*. https://energy.ec.europa.eu/publications/communication-electrification-action-plan-com2026595_en.

³ European Heat Pump Association. (2025). *Subsidies for residential heat pumps in Europe*. <https://ehpa.org/news-and-resources/publications/eu-countries-tighten-heat-pump-subsidies-in-self-defeating-move>

⁴ European Heat Pump Association, 2025.

⁵ European Commission, 2026. https://energy.ec.europa.eu/publications/communication-electrification-action-plan-com2026595_en

⁶ For a full overview of policies supporting heat pump deployment: Lowes, R., Gibb, D., Rosenow, J., Sunderland, L., Thomas, S., Graf, A., Verheyen, S., Kelpsaite, L., Malinowski, M., Ross, A., Graham, P., Kabare, R., & Njendu, M. (2024, November). *A policy toolkit for global mass heat pump deployment (Version 2.0)*. Regulatory Assistance Project, Agora Energiewende, CLASP, and Global Buildings Performance Network. <https://www.raponline.org/knowledge-center/a-policy-toolkit-for-global-mass-heat-pump-deployment-version-2-0/>

The role of subsidies: market building and targeted support

In nascent markets, subsidies can help to build heat pump demand, enabling the development of supply chains and creating the conditions for sustained growth. They are also important to overcome barriers to investment and support those least able to afford the upfront costs.

Supporting early market development

In nascent markets, the primary objective of heat pump subsidies is to spur demand, helping to overcome market inertia and build product and installation supply chains. Although heat pumps provide clear public benefits – including improved energy security and lower greenhouse gas emissions – historic market and policy developments have often meant that they are not considered as a viable option. Building owners rarely choose heating technologies independently. Instead, trusted intermediaries, particularly installers, play a pivotal role in shaping decisions, often recommending familiar gas boilers over heat pumps, reflecting existing knowledge and practice, skills, business models and perceptions of risk.⁷ Boosting demand through subsidies can shift heat pumps from niche markets to mainstream.⁸

As deployment of a technology increases, costs often decline through learning-by-doing, economies of scale and greater competition. At the same time, familiarity reduces uncertainty and can strengthen consumer confidence and willingness to adopt.⁹ This learning effect highlights the importance of viewing subsidies as a long-term market-building tool. Frequent unexpected changes or unclear rules can lead to boom-and-bust cycles, undermine trust, and deter industry investment in manufacturing capacity and workforce training. Stable and predictable programmes provide a stronger foundation for market development.

Unfortunately, changes to subsidy schemes often occur in a more ad hoc manner, and frequently in response to budgetary pressures. When poorly prepared or communicated, such changes can create uncertainty for both consumers and industry. In several countries, recent revisions have led to confusion among households and delayed investment decisions. For example, Italy and Switzerland reduced support, while administrative delays in France contributed to a downturn in the market.¹⁰

⁷ Wade, F., Shipworth, M., & Hitchings, R. (2016). Influencing the central heating technologies installed in homes: The role of social capital in supply chain networks. *Energy Policy*, 95, 52-60. <https://doi.org/10.1016/j.enpol.2016.04.033>

⁸ International Energy Agency, 2022. <https://www.iea.org/reports/the-future-of-heat-pumps>

⁹ Geroski, P. (2000). Models of technology diffusion. *Research Policy*, 29(4-5), 603-625. [https://doi.org/10.1016/S0048-7333\(99\)00092-X](https://doi.org/10.1016/S0048-7333(99)00092-X)

¹⁰ European Heat Pump Association, 2025.

Targeting those in need

The key barriers to heat pump adoption and their relation to subsidies are described in Table 1. These barriers are particularly important for low-income and vulnerable households, who face both greater economic and non-economic barriers to access clean technologies.¹¹

For this reason, it is important to design subsidy schemes with the needs of different households in mind, so that all households can access electrified heating.

Table 1. Barriers to heat pump adoption and the role of subsidies

Barriers	Role of subsidy
Economic barriers	Subsidies reduce the upfront capital cost of heat pump installations, making them accessible to a wider range of households. As heat pumps are often more expensive than fossil fuel alternatives, ¹² these initial costs remain an important barrier to adoption, even when households benefit from economic savings over time. Furthermore, in the absence of price reform, a disproportionate tax and levy burden on electricity reduces investment returns and can necessitate higher subsidy levels to maintain investment incentives.
Financial barriers	Subsidies help households overcome liquidity constraints linked to high-cost investments. These constraints may include limited savings, competing spending priorities, or restricted access to credit. In some cases, however, public loans or other financing mechanisms may be more appropriate, particularly for households that have a viable investment case but lack access to affordable financing.
Structural barriers	Markets for heating technologies are characterised by increasing returns and path dependence, meaning incumbent technologies may remain dominant despite the emergence of superior alternatives. ¹³ Demand-side support can help overcome this lock-in by enabling alternative technologies to achieve sufficient deployment for learning-by-doing, installer experience, manufacturing scale and supply-chain investment to reduce costs over time. ¹⁴
Informational barriers	Subsidy programmes are often accompanied by communication and outreach efforts, which can increase awareness and strengthen trust in the technology, enabling greater uptake. ¹⁵

¹¹ Sunderland, L., & Gibb, D. (2022). *Taking the burn out of heating for low-income households*. Regulatory Assistance Project. <https://www.raonline.org/knowledge-center/taking-burn-out-of-heating-low-income-households/>

¹² HeatPumpsWatch. (2026, 10 February). *Heat pump installation costs: Germany vs. Europe*. <https://heatpumpswatch.org/heat-pump-installation-costs-germany-vs-europe/>.

¹³ Arthur, W. B. (1989). Competing technologies, increasing returns, and lock-in by historical events. *The Economic Journal*, 99(394), 116-131. https://fbaum.unc.edu/teaching/articles/Arthur_EJ_1989.pdf

¹⁴ International Energy Agency, 2022. <https://www.iea.org/reports/the-future-of-heat-pumps>

¹⁵ Knight, H. (2026). *Constructive narratives for home heat decarbonisation*. Users TCP, part of the IEA Technology Collaboration Programme. <https://doi.org/10.47568/1AR153>

How subsidies interact with other policy instruments

Subsidies are widely used in many European jurisdictions, often more frequently than other important policy tools such as regulation, taxes, industrial policy and communication across society.¹⁶ Subsidies interact with these policies at different levels.

Policies reducing operating costs and improving the business case for heat pumps

Heat pumps are typically three to five times more efficient than the combustion technologies they replace, such as fossil or biomass boilers.¹⁷ However, the relative price of electricity compared to fossil fuels in some countries means that these efficiency gains do not always translate into meaningful cost savings.¹⁸ This directly affects households' willingness to pay, and can limit the development of innovative business models that rely on future energy savings to finance upfront investments, such as on-bill financing.

Policies that rebalance electricity and fossil fuel prices can strengthen the economic case for heat pumps over their lifetime.¹⁹ One of the most direct levers available to governments is to address the relatively high taxes and levies often applied to electricity.²⁰ Lower operational costs can reduce the level of upfront support required for households that are able to finance the initial investment, while also supporting the development of innovative financing models.

Policies building consumer confidence and willingness to invest

Measures that increase overall consumers' willingness to pay for heat pumps include information campaigns and quality assurance schemes. These policies can improve consumer confidence and strengthen demand. For example, the Danish Energy Agency's 'Varmepumpelisten', launched in 2013, recommends heat pumps meeting Danish and EU requirements, and verified by independent laboratory testing, giving consumers a trusted way to compare products and access reliable performance information. Subsidy schemes are restricted to a list of products that have met certain requirements.²¹

Building codes, minimum energy performance standards, phase-out dates for fossil fuel heating systems, and clean heat standards can also create more predictable demand for clean heating technologies.²²

¹⁶ Regulatory Assistance Project & Clean Heat Forum. (2025). *Clean heat policy tracker 2025*. <https://www.raonline.org/toolkit/clean-heat-policy-tracker/>.

¹⁷ European Commission, n.d. https://energy.ec.europa.eu/topics/energy-efficiency/heat-pumps_en

¹⁸ Sunderland, L., Gibb, D., & Thomas, S. (2025, September). *Making electricity cheaper: Redistributing policy costs for affordable household heat electrification*. Regulatory Assistance Project. <https://www.raonline.org/knowledge-center/making-electricity-cheaper-affordable-household-heat-electrification/>

¹⁹ Sunderland, L., Pató, Z., Morawiecka, M., & Claeys, B. (2025, September 29). *Making electricity cheaper: RAP's eight priority actions*. Regulatory Assistance Project. <https://www.raonline.org/knowledge-center/making-electricity-cheaper-8-priority-actions/>

²⁰ Sunderland, Gibb et al., 2025.

²¹ Danish Energy Agency. (n.d.). *Varmepumpelisten* [The heat pump list]. SparEnergi. <https://sparenergi.dk/varmepumpelisten>

²² Lowes et al., 2024.

Complementary policies that reduce upfront costs

Like subsidies, several policies effectively reduce capital costs related to purchasing a heat pump. Most notably, this includes energy company obligation schemes, supply chain policies, and appliance manufacturer obligations. Table 2 sets out how these complementary policy measures reduce upfront costs and can interact with subsidy schemes.

Table 2. Complementary policy levers to reduce upfront cost and their interaction with subsidies

Policy lever	Interaction with subsidies
Energy company obligation schemes	In some jurisdictions, energy companies are required to deliver energy savings through actions including, but not limited to, heating system replacements. In many countries, these obligation schemes provide financial support for heat pumps, although the level of support may vary between energy companies and over time. Where such schemes exist, households may be allowed to combine, or “stack”, support from energy efficiency obligations with public subsidies. While this reduces the level of public subsidy needed to make heat pump projects financially attractive, it adds complexity to the funding environment. France provides a calculator to help people understand how multiple subsidies and support from energy companies can be accumulated.²³
Supply chain policies	A shortage of trained installers can constrain heat pump deployment and increase installation costs. It can also lead to an increase in poor-quality installations as less-skilled installers rush to meet increasing demand. Expanding training programmes, supporting companies to reskill installers, strengthening certification systems, and improving coordination across the value chain are therefore essential complements to subsidy schemes.
Appliance and manufacturer obligations	Regulation on appliance manufacturers can both create a trajectory for heat pump deployment and encourage manufacturers to look for pathways to reduce appliance and installation costs. In the United Kingdom for example, the Clean Heat Market Mechanism obligates heating system suppliers to sell an increasing proportion of heat pumps in a scheme that is analogous to the EU’s new vehicle CO₂ regulations.²⁴ The EU is considering adopting a market instrument of this kind as well, and different design options are possible.²⁵

²³ Mes aides réno. (2026). *Estimez vos aides pour rénover votre logement* [Estimate your renovation grants]. Government of France. Retrieved 7 July 2026, from <https://mesaides.france-renov.gouv.fr/>

²⁴ Santini, M., Thomas, S., Lowes, R., Gibb, D., Cowart, R., & Rosenow, J. (2024, April). *Clean heat standards handbook*. Regulatory Assistance Project. <https://www.raponline.org/knowledge-center/clean-heat-standards-handbook/>.

²⁵ European Commission. (2026b). *AccelerateEU to strengthen EU energy resilience*. https://energy.ec.europa.eu/strategy/accelerateeu-strengthen-eu-energy-resilience_en; Verheyen, S., & Graf, A. (2025, February 5). *Boosting the clean heat market: A policy for guiding the transition of the EU heating industry*. Agora Energiewende. <https://www.agora-energiewende.org/publications/boosting-the-clean-heat-market-impulse>.

In short, subsidies do not exist in a vacuum. Their effectiveness depends on the wider policy framework. A more supportive framework generally reduces the level of subsidy required for many households, potentially allowing more funding to be channelled to the most vulnerable households for the same budget envelope.

Designing efficient subsidy schemes for value-for-money

Once policymakers have identified the policy mix they wish to pursue, they can focus on designing subsidy schemes that deliver the greatest impact of public spending. Key design choices include determining who should receive support, what technologies and outcomes should be incentivised, and how subsidy amounts should be structured to maximise uptake while avoiding unnecessary costs and price inflation.

Targeting support to household needs

A central challenge in subsidy design is determining who should receive support and how much. Untargeted schemes tend to flow disproportionately to higher-income households, while income-based support with automatic qualification through existing social entitlements reaches households that would not otherwise invest.

- Some households may only need limited support. For example, households in a position to invest are more likely to adopt heat pumps without significant support, especially as costs decrease, electricity becomes more affordable than fossil fuels, and the technology reaches more mainstream adoption.²⁶
- Others may not be willing or able to invest, even if most of the cost is covered. While some households may still face residual financial barriers, investment decisions are also shaped by factors such as lack of time, competing priorities or housing circumstances, including living in rented accommodation.

Recognising differences in households' ability to invest enables public authorities to better target financial support. By reducing assistance for households that would have invested without subsidies and concentrating support on those facing genuine financial or structural barriers, policy can limit free riding.²⁷ Household income is often used by public authorities to determine the level of support provided.

Some jurisdictions however choose to disburse the same amount to all applicants installing the same equipment. Governments aiming to quickly scale a nascent market may want to rely on higher-income households to drive early adoption.

Evidence across multiple European countries shows, however, that untargeted or weakly targeted energy efficiency support is likely to benefit higher-income households

²⁶ Chitchyan, R. (2025). Overcoming barriers to heat pump adoption among able-to-pay households. *Energy Policy*, 206, 114660. <https://doi.org/10.1016/j.enpol.2025.114660>.

²⁷ Olsthoorn, M., Schleich, J., Gassmann, X., & Faure, C. (2017). Free riding and rebates for residential energy efficiency upgrades: A multi-country contingent valuation experiment. *Energy Economics*, 68(Suppl. 1), 33-44. <https://doi.org/10.1016/j.eneco.2018.01.007>

disproportionately.²⁸ In Austria, the highest income decile receives over six times more support for residential renewable energy and efficiency than the lowest.²⁹ In France, the scheme that preceded MaPrimeRénov' was available to all and was shown to disproportionately benefit households that were wealthier, older, owner-occupiers who lived in houses in rural areas.³⁰ UK government analysis also shows that the Boiler Upgrade Scheme has largely been accessed by higher-income households³¹ and the Netherlands' Investeringssubsidie duurzame energie (ISDE) subsidy disproportionately reaches "capital-rich private households".³²

The pace of the transition and concerns about fairness limit the applicability of relying on higher-income early adopters to heat electrification, which is a basic need and a major expense for many households.³³ Without adequate support, lower-income households risk missing out on the benefits of electrification and remaining exposed to volatile fossil fuel prices. Calibrating subsidy levels can help ensure that the benefits of the transition are shared more evenly.

It is also important that this targeted support is easy to understand. When countries make available different levels of support to different income brackets, applicants may need to provide additional information to determine the level of support available to them. This can create barriers to participation, particularly for households with limited time, confidence or ability to navigate administrative processes.³⁴

These challenges can be mitigated through clear communication, automatic qualification based on existing social entitlements, and delivery models that minimise the burden placed on applicants.³⁵ In France, the complexity of the funding landscape is mitigated, at least in part, by the Government's online calculator – a tool that accumulates and itemises the various supports available to a building owner considering renovating their property.³⁶

²⁸ Olsthoorn et al., 2017.

²⁹ Government of Austria. (2025). *Transparenzportal* [Transparency portal]. https://transparenzportal.gv.at/tdb/tp/menu_soFoerdertOesterreich_visualisierungTool

³⁰ Loiseau, R. (2023). *Bilan de l'utilisation du crédit d'impôt transition énergétique* [Review of the use of the energy transition tax credit]. Direction générale des finances publiques. https://www.impots.gouv.fr/sites/default/files/media/9_statistiques/0_etudes_et_stats/0_publications/dgfp_analyses/2023/num04_07/dgfpanalyses_04.pdf.

³¹ Department for Energy Security and Net Zero. (2024). *Evaluation of the Boiler Upgrade Scheme: 2024 interim report*. <https://assets.publishing.service.gov.uk/media/679129c5119e3470fd1e26c7/bus-evaluation-2024-interim-report.pdf>

³² Schep, E., van Santen, W., van den Assum, J., Kruit, K., Koeman, N., & Konijn, S. (2025). *Evaluatie ISDE* [Evaluation of the ISDE]. CE Delft & SEO Economisch Onderzoek. https://cedelft.eu/wp-content/uploads/sites/2/2025/07/CE_Delft_240452_Evaluatie_ISDE_Def.pdf

³³ Sunderland & Gibb, 2022. <https://www.raonline.org/knowledge-center/taking-burn-out-of-heating-low-income-households/>

³⁴ Surveys on France's subsidy programme show administrative complexity as one of the top challenges for households. Batiweb. (2025). *MaPrimeRénov', REP... La CAPEB sonde les difficultés des artisans* [MaPrimeRénov', REP... CAPEB surveys the difficulties facing tradespeople]. <https://www.batiweb.com/actualites/etude/maprimerenov-rep-la-capeb-sonde-les-difficultes-des-artisans-47880>

³⁵ Lowes et al., 2024.

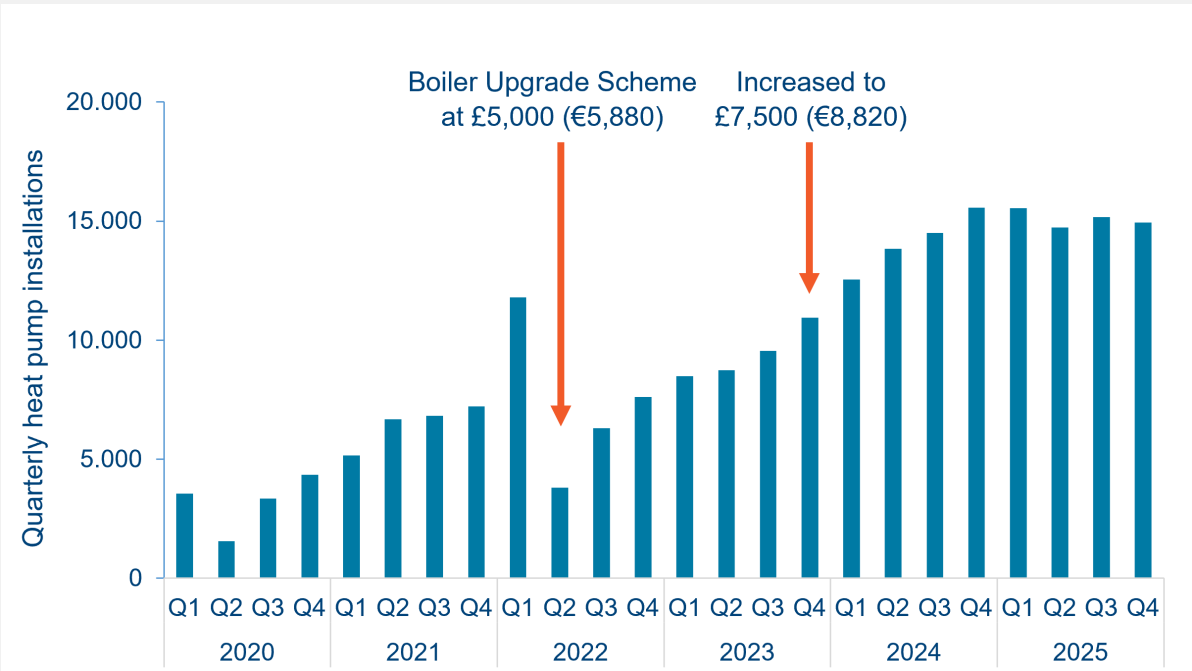
³⁶ Mes aides réno, 2026. <https://mesaides.france-renov.gouv.fr/>

Universal and targeted support: lessons from the United Kingdom and France

Two approaches can be seen in the United Kingdom and France, which are at different stages of market maturity.

The United Kingdom’s Boiler Upgrade Scheme was introduced following the phase-out of the Renewable Heat Incentive (RHI) in 2022. The scheme provides a fixed grant to all eligible households regardless of income. Since its introduction, quarterly heat pump installations have grown rapidly and, following an increase in the grant from £5,000 (€5,880) to £7,500 (€8,820) in late 2023, reached a higher, more stable level than under the RHI (Figure 1).³⁷

Figure 1. Quarterly Microgeneration Certification Scheme installations and Boiler Upgrade Scheme subsidy amount, 2020-2025

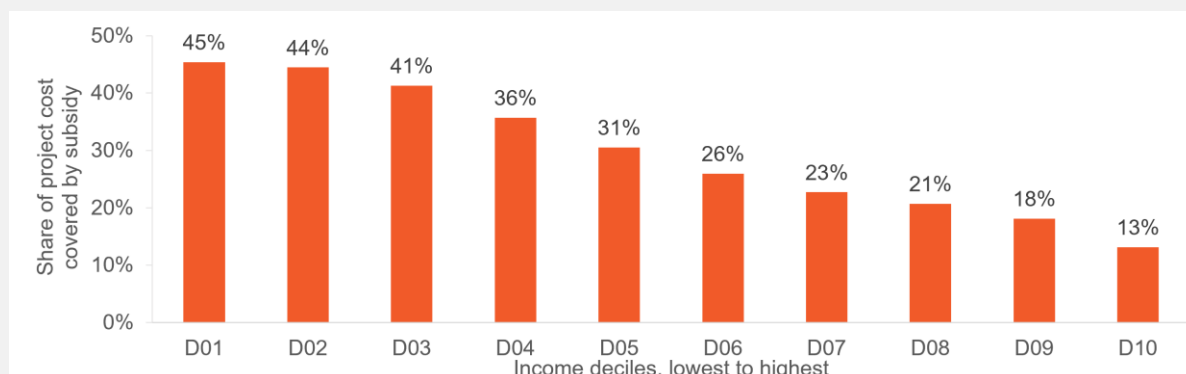


Source: Microgeneration Certification Scheme (MCS). (n.d.). *The MCS data dashboard*

France has adopted a different approach through MaPrimeRénov', where subsidy amounts vary according to household income. As a result, lower-income households receive a much larger share of their project costs through public support than higher-income households (Figure 2).³⁸ In 2023, lower-income households typically had 40-45% of their project costs covered, compared with around 13-18% for higher-income households. In the Île-de-France region, four-person households earning more than €84,562 per year receive no support.

While this approach is administratively more complex, it results in more support for households facing greater financial barriers to adoption.

Figure 2. Share of MaPrimeRénov' subsidy in total project cost per income decile, 2023



Source: Service des données et études statistiques. (2024). *Les rénovations énergétiques par geste aidées par MaPrimeRénov' en 2023*

Together, these examples illustrate the trade-off between simplicity and targeting. Universal schemes can support early market growth, while targeted schemes direct a larger share of public support towards households facing greater barriers to adoption. Once a heat pump market reaches a certain maturity, it is advised to use targeted schemes to support adoption from low-income households. In the United Kingdom, heat pumps made up 6% of the space heating market in 2024, whereas in France they accounted for 45%.³⁹

Deciding the scope of the support

Governments may wish to support certain technologies, reward specific technical characteristics, or encourage lower-cost installations that make efficient use of public funds. These choices influence both the effectiveness of subsidy schemes and the extent to which public spending supports wider energy, industrial, environmental and social goals.

Differentiating support based on technology type

Different heat pump technologies face different costs, benefits and barriers to adoption.⁴⁰ They also bring different value in different settings (urban, rural, etc.) and climatic zones. Governments usually have preferences on which technologies they want to support and typically differentiate support between heat pump types, as described in the box below.

³⁷ Microgeneration Certification Scheme. (n.d.). *The MCS data dashboard*. <https://datadashboard.mcscertified.com/InstallationInsights>

³⁸ Service des données et études statistiques. (2024, December). *Les rénovations énergétiques par geste aidées par MaPrimeRénov' en 2023* [Energy renovations by measure supported by MaPrimeRénov' in 2023]. Observatoire national de la rénovation énergétique. <https://www.statistiques.developpement-durable.gouv.fr/les-renovations-energetiques-par-geste-aidees-par-maprimerenov-en-2023>

³⁹ European Heat Pump Association. (2026). *2025 European Heat Pump Market Report*. <https://www.ehpa.org/wp-content/uploads/2025/07/EHPA-Market-Report-2025-executive-summary.pdf>

⁴⁰ International Energy Agency. (2026, May 22). *Heat pump taxonomy: A common framework for heat pumps classification and data*. <https://www.iea.org/reports/heat-pump-taxonomy>

How countries prioritise different heat pump technologies

Governments calibrate eligibility and grant levels to reflect each technology's costs, performance and fit with national building stock and climate, supporting some technologies generously, others conditionally, and excluding some altogether.

Air-to-water heat pumps are currently a common option in Europe. They provide both space heating and hot water, and work in a broad range of buildings. This makes them a central focus of many subsidy schemes that aim to replace fossil gas-fired heating.

Air-to-air heat pumps are generally cheaper and easier to install. They can be well suited to warmer climates as they can also provide cooling. They do not provide hot water, however, and several major schemes exclude or disadvantage them: they are ineligible under the Dutch ISDE and France's MaPrimeRénov', and the UK's Boiler Upgrade Scheme excluded them entirely until reforms announced in 2025 introduced a reduced grant of £2,500, against £7,500 for air-to-water systems.⁴¹

Ground-source heat pumps have the highest efficiency but require significant upfront investment. Their suitability can be limited by space or geological conditions. They are best suited to buildings with land available for drilling or trenching, though shared ground loops can serve apartment blocks or clusters of homes as a form of small heat network. Schemes typically reward their higher efficiency with higher support: the Dutch ISDE applies a base amount of €3,750 for ground-source systems against €1,025 for air-to-water units; Germany's Bundesförderung für effiziente Gebäude (BEG) grants a 5% efficiency bonus when ground, water or waste water is used as the heat source.

Hybrid systems combine a heat pump with a fossil fuel boiler. They could have value in certain conditions, but their long-term role is limited, as they continue to rely on fossil fuels.⁴² The Dutch ISDE actively supports hybrid heat pumps as a transitional measure; the UK's Boiler Upgrade Scheme, by contrast, does not support them at all.

⁴¹ Ofgem. (n.d.). *Boiler Upgrade Scheme*. <https://www.ofgem.gov.uk/environmental-and-social-schemes/boiler-upgrade-scheme-bus>

⁴² Gibb, D., & Lowes, R. (2024). *One foot in the past: The role of hybrid heat pumps in Europe*. Regulatory Assistance Project. <https://www.raonline.org/knowledge-center/one-foot-in-past-role-hybrid-heat-pumps-europe/>

Differentiating support based on technology characteristics

Governments may also choose to further calibrate subsidy levels according to different characteristics, including for example efficiency levels, the use of low emission refrigerants, or “Made in EU” requirements.⁴³ For example, the subsidy scheme in the Netherlands (ISDE) determines the grant for each heat pump model from a base amount plus a supplement per kW of thermal capacity, with a bonus of €200 for units achieving the highest efficiency class.⁴⁴ It includes a higher base amount for ground-source systems. A minimum efficiency label is required for eligibility, and from 2026 split units using refrigerants with a global warming potential above 750 are excluded — effectively steering the market towards natural refrigerants such as propane. To make it very clear to consumers, the scheme in the Netherlands provides a website where subsidy amounts per heat pump type are available.⁴⁵

Designing subsidy eligibility rules to enable alternative business models

Subsidy eligibility rules also determine whether alternative business models — such as heat pump leasing or heat-as-a-service (HaaS) — can develop alongside the grant. These models reduce the upfront cost for the end-user and introduce third parties, such as energy suppliers, into the market as active drivers of deployment rather than passive installers.

A critical design feature is whether the scheme permits third-party ownership of the heat pump. Requiring ownership of the installed system to access the subsidy may limit the use of HaaS and subscription models. In Germany, the 2024 reform of the heating subsidy reserved its largest bonuses for self-occupying owners, restricting third parties from accessing the full value of the subsidy. The country's largest installer, Thermondo, suspended its heat pump subscription offer, explicitly citing the change in federal subsidy rules, and shifted customers towards purchase with a credit product.⁴⁶ In Denmark, however, households can access support for an air-to-water heat pump supplied on a subscription basis by an approved energy service provider. The provider owns and maintains the unit, while the household pays a fixed monthly fee.⁴⁷ In the United Kingdom, the Boiler Upgrade Scheme currently requires the property owner to own the system on installation. Following a 2025 consultation, the UK government has committed to allowing third-party ownership agreements alongside the

⁴³ The EU's proposed Industrial Accelerator Act, adopted by the Commission in March 2026 and not yet in force, would define EU-origin criteria for technologies including heat pumps and require compliance as a condition of eligibility for related public support schemes. Some member states are taking the initiative. In July 2026, France released an initial list of “Made-in-EU” heat pumps that will be eligible for its support schemes starting on 1 September 2026. See Agence de la transition écologique. (n.d.). *Agrément des modèles de pompes à chaleur en matière de qualité et de résilience industrielle* [Approval of heat pump models for quality and industrial resilience]. <https://bonus-pac.ademe.fr/>.

⁴⁴ ISDE amounts, A++ requirement, air-to-air exclusion, GWP rule: Rijksdienst voor Ondernemend Nederland. (n.d.). *ISDE: Meldcodelijsten* [ISDE: Reporting code lists]. <https://www.rvo.nl/subsidies-financiering/isde/meldcodelijsten>

⁴⁵ Rijksdienst voor Ondernemend Nederland. (n.d.). *ISDE: Meldcodelijst warmtepompen* [ISDE: Heat pump reporting code list]. <https://www.rvo.nl/subsidies-financiering/isde/meldcodelijsten/warmtepompen>.

⁴⁶ Thermondo. (n.d.). *Häufige Fragen zum Heizungs-Contracting* [Frequently asked questions on heating contracting]. <https://www.thermondo.de/leistungen/einzelleistungen/heizungscontracting/haeufige-fragen/>

⁴⁷ Danish Energy Agency. (n.d.). *Sådan får du luft til vand-varmepumpe* [How to get an air-to-water heat pump] (see section on heat pump subscription, *varmepumpe på abonnement*). SparEnergi. <https://sparenergi.dk/privat/tid-til-skifte-varmekilde/saadan-faar-du-luft-til-vand-varmepumpe#module-81-1>

scheme.⁴⁸ Eligibility rules written around the assumption of household ownership can inadvertently restrict business models that can help solve the upfront-cost barrier the subsidy itself is meant to address.

Determining the amount of support

Heat pump installations can vary significantly in cost depending on the equipment selected, installation expenses (including labour and materials), and any associated works, such as upgrades to the heat distribution system. A key design choice is how the subsidy amount relates to the cost of the project. Policymakers must decide which of these costs are eligible for support and whether subsidies should be provided as a fixed amount or as a share of the total project cost.

Flat-rate vs. percentage-based subsidies

A flat-rate subsidy provides a fixed amount for the installation of a given type of heat pump, regardless of the overall cost of the project. Households that choose a larger or more expensive system receive the same subsidy as those opting for a lower-cost installation. This is the approach used in the UK's Boiler Upgrade Scheme. France follows a similar model: for a given technology type, such as an air-to-water heat pump, the subsidy amount is fixed and does not vary according to the size of the system or the total installation cost. The only adjustment is based on household income.

A percentage-based subsidy covers a pre-determined share of the total cost of the project. The percentage may scale based on household income, as is the case in Germany, subsidising a higher share for lower-income households. These subsidies often include cost caps to prevent cost escalation and protect the government budget allocated to the scheme. In Germany, eligible expenditures are capped at €30,000, limiting the maximum grant to €21,000 even at the highest 70% subsidy rate.⁴⁹

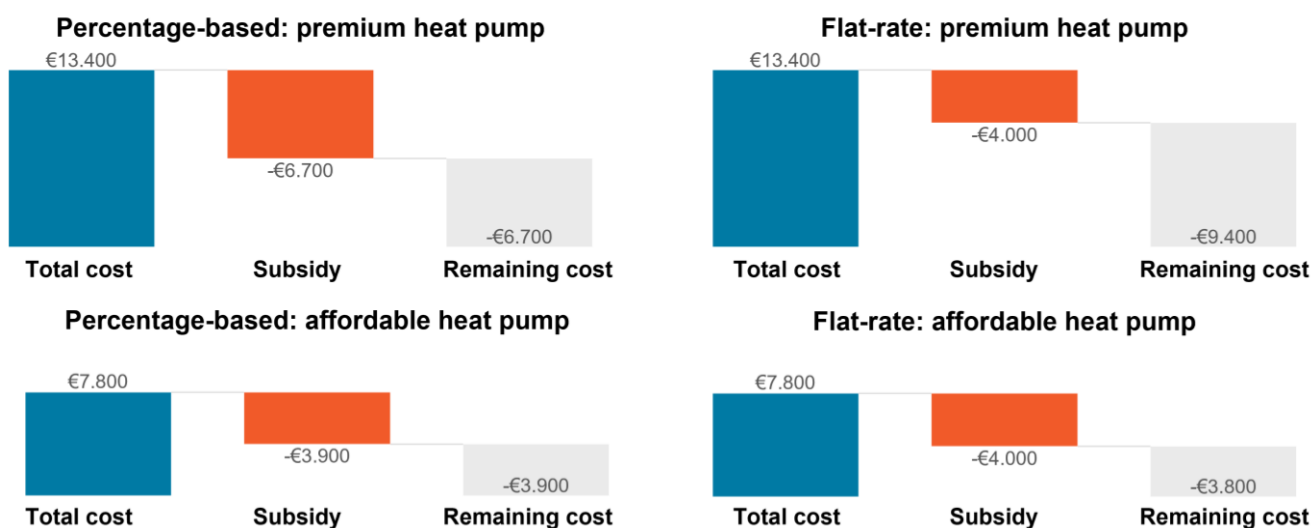
Percentage-based subsidies tend to benefit larger and higher-value installations, whereas flat-rate subsidies can have more equitable outcomes. This paper investigates this using 2023 heat pump cost data from France (Figure 3).⁵⁰

⁴⁸ Department for Energy Security and Net Zero. (2025a, April). *Boiler Upgrade Scheme and certification requirements for clean heat schemes* [Consultation]. <https://www.gov.uk/government/consultations/boiler-upgrade-scheme-and-certification-requirements-for-clean-heat-schemes>; Department for Energy Security and Net Zero. (2025b, November). *Boiler Upgrade Scheme consultation: Government response*. <https://assets.publishing.service.gov.uk/media/691af26bd140bbba59a2874/amendments-to-the-boiler-upgrade-scheme-government-response.pdf>

⁴⁹ KfW. (2023, 29 December). *Heating Act: KfW presents funding schedule*. https://www.kfw.de/About-KfW/Newsroom/Latest-News/News-Details_792128.html

⁵⁰ According to Observ'ER, 10-12 kW heat pumps in 2023 ranged in price from €7,800 for affordable models (lower range) to €13,400 for premium models (upper range), not including installation costs. Observ'ER. (2024). *Suivi du marché 2023 des pompes à chaleur individuelles* [2023 market monitoring of individual heat pumps]. <https://energies-renouvelables.org/etudes-observer/>.

Figure 3. Simulation of flat-rate and percentage-based subsidies on 10-12 kW affordable and premium heat pumps



Source for premium and affordable heat pumps based on: Observ'ER. (2024). *Suivi du marché 2023 des pompes à chaleur individuelles*

In the example, a 50% subsidy for the premium heat pump model amounts to around €6,700 contribution to the cost. This is around 70% more than the subsidy allocated to an affordable heat pump model (€3,900). The flat-rate programme sees €4,000 disbursed with the customers responsible for paying the remaining cost. When these subsidies are applied to each type of heat pump, there are three observations:

1. Since it is assumed that both models are providing similar heating services (10-12 kW), households that opt for a more expensive heat pump are provided with a much higher subsidy in percentage-based programmes. In addition, they are left with higher remaining cost to pay than households who opt for an affordable model under the same percentage-based programme. Households willing to accept this extra cost for a premium heat pump model would likely be better off financially, skewing funding towards wealthier households.
2. More expensive projects also tend to be for larger homes that require more powerful heat pumps. These larger homes are typically owned by wealthier households.⁵¹ Allowing the subsidy to scale with project cost could end up further benefitting those who could have invested without financial support.
3. There are additional risks with the percentage-based approach. Since a household only pays for part of any upgrades, they may be more willing to pay for optional extras or purchase more equipment than is strictly needed, with the government footing a portion of the bill for eligible costs.⁵² Similarly, there is a risk that percentage-based schemes incentivise installers to increase prices. (See the case study on Germany.) In a flat-rate programme, if a customer wishes to opt for a premium model (assumed longer-lasting, perhaps local brand recognition), then they are responsible for the additional expense, not the subsidy programme.

⁵¹ Loiseau, 2023; Péligré, P., & Sempère, G. (2026, 12 January). *Climate policies in the housing market*. Centre for Economic Policy Research. https://cepr.org/system/files/2026-01/CPH_1225.pdf.

⁵² Corsello, F., & Ercolani, V. (2025, 9 February). *The impact of the Superbonus on Italian construction costs*. VoxEU. <https://cepr.org/voxeu/columns/impact-superbonus-italian-construction-costs>

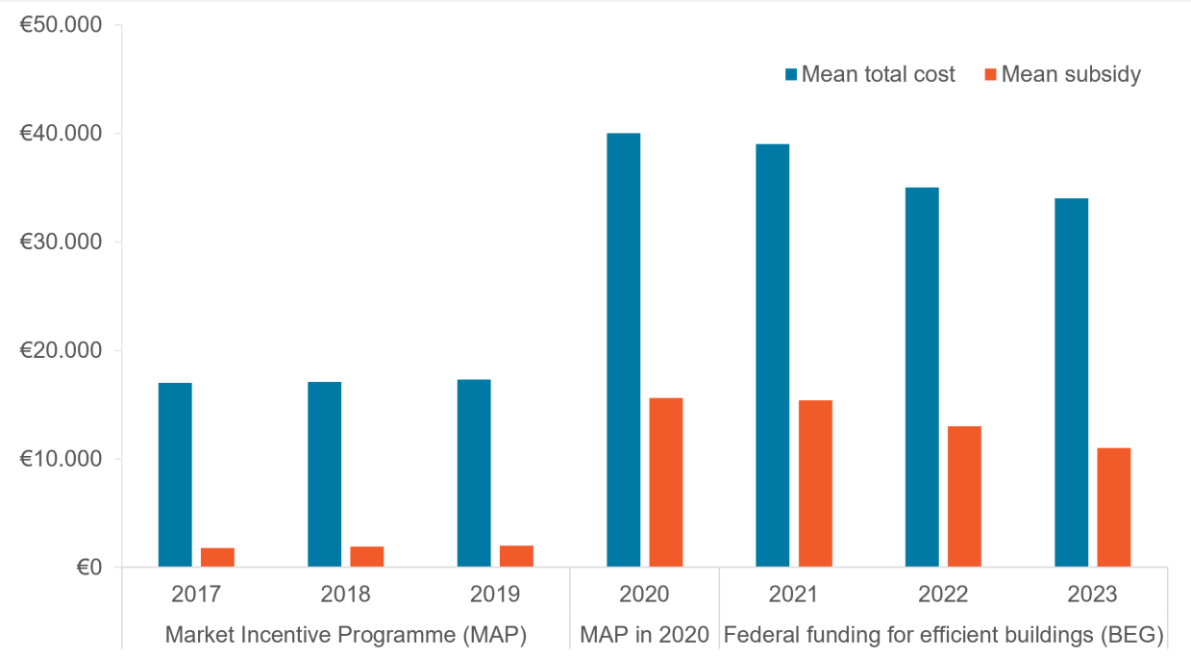
Case study: Germany's percentage-based heat pump subsidy

In Germany, government grants for heat pumps have been in place since 1999 as part of subsidy schemes for renewable heating systems under its Marktanreizprogramm (Market Incentive Programme). In its current design, the support scheme, which is a subsection of Germany's broader building efficiency grants (Bundesförderung für effiziente Gebäude, BEG), was introduced in 2021.

For air-to-water heat pumps, this 2024 support scheme provides a grant covering 30% of the installation costs for all installations in existing buildings. Additional top-ups for low-income households, the replacement of old fossil fuel boilers, and natural refrigerants can increase the volume of the grant up to 70% of the installation costs, with the maximum amount of the subsidy being fixed at €21,000.

Germany serves as an interesting test case for how the design of a subsidy affects heat pump prices. Germany revised its subsidy design in 2020, switching from a fixed to a percentage-based design. As a recent evaluation of heat pump prices in Germany has shown, prices increased significantly around the same time (see Figure 4).⁵³

Figure 4. Annual average installation cost of an air-to-water heat pump and average subsidy in Germany, 2017-2023



Source: Institut für Energie- und Umweltforschung. (2025). *Analyse zu Kosten für Material und Einbau von Wärmepumpen in Deutschland und ausgewählten EU-Mitgliedstaaten*

According to the authors of the evaluation, the increase can probably be linked to different factors, such as the new scheme covering a broader range of installation costs, meaning part of the increase might simply result from households submitting costs that they would not have submitted before. However, the authors also conclude that a significant part of the

increase can be attributed to the design change as it incentivised manufacturers and installers to increase prices, knowing that higher prices will also lead to an increase in public subsidy.⁵⁴

The German case serves as a relevant example on the role of subsidies in scaling the heat pump market. On the one hand, the subsidy has helped to incentivise manufacturers and installers to progressively switch from boilers to heat pumps, leading to hydronic heat pump sales overtaking sales of new fossil fuel boilers in 2025. On the other hand, the example also shows the risk of decreasing efficiency of public spending, which is especially challenging when the heat pump market needs to grow further.

In contrast to Germany, subsidy levels in the United Kingdom and France rose substantially without triggering obvious price inflation. When the UK's flat-rate Boiler Upgrade Scheme grant was increased by 50% in late 2023, the median real installation cost did not rise — it fell, from a quarterly average of £14,550 to £13,230 (€16,725.23 to €15,214.50 in 2023).⁵⁵ In France, the median MaPrimeRénov' subsidy grew by 19% between 2022 and 2025 while total installation costs rose by just 3%, leaving consumers paying slightly less.⁵⁶

Certification and competition

Both schemes pair fixed subsidy amounts with robust delivery safeguards. In the United Kingdom, installers must be Microgeneration Certification Scheme (MCS)-certified and submit to regular inspections. In France, eligibility is conditional on installation by a professional certified as "Reconnu Garant de l'Environnement" (RGE).⁵⁷

These safeguards, however, also define who can compete for subsidised work. Because certification schemes are national, and equivalent qualifications earned in other member states are generally not recognised, the subsidy-eligible market is in practice reserved for domestically certified installers. In Germany, an installer from a neighbouring country can lawfully carry out heat pump installations in Germany under a simple notification procedure.

⁵³ Institut für Energie- und Umweltforschung. (2025). *Analyse zu Kosten für Material und Einbau von Wärmepumpen in Deutschland und ausgewählten EU-Mitgliedstaaten* [Analysis of material and installation costs for heat pumps in Germany and selected EU member states]. Bundesministerium für Wirtschaft und Energie. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Downloads/Studien/ergebnisbericht-analyse-zu-kosten-fuer-material-und-einbau-von-waermepumpen.pdf?__blob=publicationFile&v=10.

⁵⁴ Institut für Energie- und Umweltforschung, 2025. https://www.bundeswirtschaftsministerium.de/Redaktion/DE/Downloads/Studien/ergebnisbericht-analyse-zu-kosten-fuer-material-und-einbau-von-waermepumpen.pdf?__blob=publicationFile&v=10

⁵⁵ Department for Energy Security and Net Zero. (2026). *Boiler Upgrade Scheme statistics: February 2026*. <https://www.gov.uk/government/statistics/boiler-upgrade-scheme-statistics-february-2026>

⁵⁶ Agence nationale de l'habitat. (2025, March). *Reporting MaPrimeRénov' – T4 2024* [MaPrimeRénov' reporting – Q4 2024]. <https://www.anah.gouv.fr/sites/default/files/2025-03/reporting-MPR-T42024.pdf>; Agence nationale de l'habitat. (2026, March). *MaPrimeRénov' : bilan trimestriel – T4 2025* [MaPrimeRénov': Quarterly review – Q4 2025]. https://www.anah.gouv.fr/sites/default/files/2026-03/202603_MPR-BilanTrimestriel-25T4.pdf; Service des données et études statistiques, 2024; Service des données et études statistiques. (2023, 3 October). *Les rénovations énergétiques aidées par MaPrimeRénov' entre 2020 et 2022* [Energy renovations supported by MaPrimeRénov' between 2020 and 2022]. Observatoire national de la rénovation énergétique. <https://www.statistiques.developpement-durable.gouv.fr/les-renovations-energetiques-aidees-par-maprimerenov-entre-2020-et-2022-0>

⁵⁷ Department for Energy Security and Net Zero, 2025a.; MCS. (n.d.). *Boiler Upgrade Scheme*. Retrieved 1 June 2026, from <https://mcs-certified.com/consumers/consumer-grants-incentives/boiler-upgrade-scheme/>; Ministère de la Transition écologique, de l'Aménagement du territoire, des Transports, de la Ville et du Logement. (2025, 11 June). *Le label « reconnu garant de l'environnement » RGE* [The 'recognised environmental guarantor' (RGE) label]. <https://www.ecologie.gouv.fr/politiques-publiques/label-reconnu-garant-lenvironnement-rge>.

But they cannot obtain the *Fachunternehmen* registration on which BEG eligibility depends. Registration requires entry in the German trade register or proof of an equivalent qualification, a pathway that still lacks any published criteria or procedure.⁵⁸ A household choosing a cross-border installer would forfeit support worth up to 70% of project costs, which would be enough to erase any price advantage a new entrant could offer. Subsidies linked to national certification schemes tend to channel demand to incumbent firms, weakening the competitive pressure.

Mutual recognition of installer certification across EU member states could help restore that competitive pressure without sacrificing quality assurance. Installer scarcity is a widely recognised constraint on heat pump rollout as well as a driver of installation costs. Opening the subsidy-eligible tier to certified installers from other member states could expand effective supply and import price competition from lower-cost markets.

The architecture for this already exists in Article 18(3) of the recast Renewable Energy Directive, which requires member states to certify heat pump installers against common criteria and to recognise certificates issued by other member states.⁵⁹ Flanders shows what this looks like in practice; heat pump support under Mijn VerbouwPremie is conditional on the RESCert installer certificate, which is explicitly recognised EU-wide.⁶⁰ Other national programmes could achieve the same by defining eligibility as certification meeting the directive's criteria issued in any member state, rather than as a single national label. This could retain the safeguards that have boosted consumer confidence, while ending the insulation of incumbents from entrants able to deliver the same certified quality at lower cost.

Beyond subsidy levels: removing barriers to uptake

As discussed in the previous section, providing sufficient subsidy amounts is important to reach households that are further away from accessing heat pump technologies. But in some cases it is insufficient, due to other barriers such as cash constraints, administrative complexity, or structural barriers, like tenancy or multi-family housing. The design of subsidy schemes can address some of these barriers.

Reducing barriers to upfront payment

Grants can be applied directly at purchase, given to installers or disbursed via a reimbursement or a tax credit. For disbursements, late reimbursements can be an important

⁵⁸ Handwerksordnung [HwO] [German Crafts and Trades Code], § 9(1) (Ger.). <https://www.gesetze-im-internet.de/hwo/>; Deutsche Energie-Agentur. (2025). *Allgemeine Geschäftsbedingungen Fachunternehmer-Registrierung* [General terms and conditions for specialist company registration]. <https://fachunternehmen.energie-effizienz-experten.de/agb>.

⁵⁹ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), OJ L 328, 21.12.2018, p. 82, art. 18(3), as amended by Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023, OJ L, 2023/2413, 31.10.2023. <http://data.europa.eu/eli/dir/2018/2001/oj>

⁶⁰ Vlaamse overheid. (n.d.). *Mijn VerbouwPremie voor een warmtepomp* [My Renovation Premium for a heat pump]. Vlaanderen.be. Retrieved 3 July 2026, from <https://www.vlaanderen.be/bouwen-wonen-en-energie/bouwen-en-verbouwen/premies-voor-renovatie/mijn-verbouwpremie/mijn-verbouwpremie-voor-warmtepomp>; RESCert. (n.d.). *Qui fait quoi* [Who does what]. Retrieved 13 July 2026, from <https://www.rescert.be/fr/wie-doet-wat>.

deterrent, especially where applicants are obliged to follow a series of steps, fill out extensive paperwork, pay an upfront expense and wait while a portion of their costs is repaid. Households that cannot afford the initial outlay would also be excluded by default. Experience from residential clean energy programmes suggests that delivery models requiring households to finance the investment upfront tend to achieve lower uptake than mechanisms that remove this liquidity constraint.⁶¹

A point-of-sale subsidy can help by directly reducing project costs. The installers or intermediaries would handle these costs and receive reimbursements from the government programme. Point-of-sale delivery should be accompanied by transparent pricing, effective cost controls, and robust oversight to minimise the risk of subsidy capture or unjustified price increases, particularly where competition is limited or supply constraints exist. The Boiler Upgrade Scheme requires the deduction to be made upfront and visible on the installer's quote, and MCS and Ofgem carry out regular inspections to verify compliance.⁶²

Ultimately, it is important that all paperwork is handled by the industry or by a public authority, drawing on existing administrative data rather than requiring households to repeatedly provide the same information. A consumer-friendly subsidy is one that is deducted immediately from the final bill or handled through intermediaries, such as one-stop-shops, energy utilities or the installers, who deal with the paperwork as a profession and shield the building owner from the hassle and risk.⁶³

Adapting delivery models to broaden reach

Delivery mechanisms can help increase outreach. Research on place-based retrofit approaches in the United Kingdom argues that retrofit delivery should move beyond fragmented, place-agnostic schemes by embedding support within locally coordinated partnerships involving municipalities, community organisations, trusted intermediaries and the supply chain.⁶⁴ Rather than relying on individual households to navigate complex subsidy systems, place-based models embed delivery within local networks, working through municipalities, social actors and trusted intermediaries.

Poland's redesigned Clean Air programme reflects a similar logic by introducing dedicated programme operators to support households facing the greatest barriers throughout the retrofit process, from preparing applications to coordinating implementation where needed.⁶⁵ The operators also play an important consumer protection role, helping to safeguard households from low-quality or predatory contractors.

⁶¹ For an example of point-of-sale rebates reducing liquidity constraints in solar photovoltaics, see Matisoff, D. C., & Johnson, E. P. (2017). The comparative effectiveness of residential solar incentives. *Energy Policy*, 108, 44-54. <https://doi.org/10.1016/j.enpol.2017.05.032>

⁶² Department for Energy Security and Net Zero, 2025a. <https://www.gov.uk/government/consultations/boiler-upgrade-scheme-and-certification-requirements-for-clean-heat-schemes>

⁶³ The European Consumer Organisation. (2026). *How to make energy markets work for consumers and deliver affordable bills*. <https://www.beuc.eu/reports/how-make-energy-markets-work-consumers-and-deliver-affordable-bills>.

⁶⁴ National Retrofit Hub. (2026). *Place-based retrofit in practice: Guidance for developing a place-based retrofit strategy*. <https://nationalretrofit.org.uk/resource/place-based-retrofit-in-practice-guidance-for-developing-a-place-based-retrofit-strategy>.

⁶⁵ Fundusze Europejskie. (n.d.). *Czyste Powietrze [Clean Air]*. <https://czystepowietrze.gov.pl/>.

Installers also are important as trusted intermediaries, helping households navigate subsidy schemes and shaping public perceptions of heat pumps. The literature on engaging underserved communities similarly highlights the importance of working through trusted local actors and existing community networks, rather than expecting households to navigate complex programmes unaided.⁶⁶

Reaching apartment buildings and rental housing

Many subsidy schemes have focused on owner-occupied single-family homes (SFH). Eligibility design from Austria, Germany and Poland shows that owner-occupied SFH have been the original beneficiaries of the schemes before being extended to multi-family buildings.⁶⁷ In addition, the market uptake of heat pumps has been much higher in SFH than in apartment buildings.⁶⁸ SFH may be easier to target, as investment decisions are taken by a single household that will benefit directly from any running cost savings.

However, much of Europe's housing stock differs from this model. In 2024, 48% of the EU population lived in flats and 32% lived in rented accommodation.⁶⁹ Apartment buildings and rental housing raise different barriers to heat pump adoption, requiring different or complementary subsidy design.

In multi-apartment buildings, investment decisions are often collective. This can slow or complicate investment projects, as agreement is needed from multiple owners. Some countries have adapted their schemes to reflect these challenges. For example, support can be provided at the level of the building or the homeowners' association, rather than to individuals. In France, MaPrimeRénov' Copropriétés follows this approach by allowing applications to be submitted by the building manager on behalf of all co-owners, while requiring dedicated technical and administrative support throughout the renovation process.⁷⁰ The scheme also complements the building-level grant with additional income-based support for lower-income co-owners, recognising that governance and affordability barriers often coexist within the same building.

In rental housing, financial support alone may not overcome the split incentive between landlords and tenants. Landlords may have little incentive to invest if it is the tenants who receive the benefit through lower energy bills. At the same time, tenants often cannot take investment decisions themselves. Many countries offer subsidy schemes for landlords in

⁶⁶ Rotmann, S., Mundaca, L., Castaño-Rosa, R., O'Sullivan, K., Ambrose, A., Marchand, R., Chester, M., Karlin, B., Ashby, K., Butler, D. & Chambers, J. (2020). *Hard-to-reach energy users: A literature review*. Users TCP, part of the IEA Technology Collaboration Programme. https://userstcp.org/wp-content/uploads/2019/10/HTR-Task-Literature-Review_EBook.pdf

⁶⁷ KfW. (2024, 27 February). *Heating subsidy: Application process opens today for owner-occupied single-family homes*. https://www.kfw.de/About-KfW/Newsroom/Latest-News/News-Details_798016.html; IEA. (2026). *Poland's Clean Air Programme*. <https://www.iea.org/policies/11538-clean-air-programme>; Cool Products for a Cool Planet. (2023). *Green Heat for All 2*. https://www.coolproducts.eu/wp-content/uploads/2023/10/Annex-1_GHA1_National-incentive-schemes-2023-august.pdf

⁶⁸ Cauret, O. (2021, January). Heat pumps in multi-family buildings, drivers and barriers. *HPT Magazine*, 39(1). <https://heatpumpingtechnologies.org/articles/hpt-magazine-vol-39-no-1-2021/heat-pumps-in-multi-family-buildings-drivers-and-barriers/>

⁶⁹ Eurostat. (2025). *Housing in Europe – 2025 edition*. <https://doi.org/10.2785/1681390>

⁷⁰ Agence nationale de l'habitat. (n.d.). *MaPrimeRénov' Copropriété* [MaPrimeRénov' for apartment buildings]. France Rénov'. Retrieved 13 July 2026, from <https://france-renov.gouv.fr/aides/maprimerenov-copropriete>; Agence nationale de l'habitat. (2024). *Le guide tout savoir sur la rénovation énergétique de votre copropriété* [The complete guide to the energy retrofit of your apartment building]. Retrieved 13 July 2026, from <https://www.anah.gouv.fr/anahtheque/le-guide-tout-savoir-sur-la-renovation-energetique-de-votre-copropriete>.

rental housing or subsidise the social housing providers. Financial support, however, may need to be complemented by regulations that better align incentives between landlords and tenants, such as minimum energy efficiency standards in the private rented sector, while ensuring tenants share fairly in the benefits of renovation. In France, buildings with an F energy rating under the Diagnostic de Performance Énergétique may not be offered for rental. This restriction will expand to E ratings beginning in 2028 and D ratings in 2034.⁷¹ In the United Kingdom, since April 2020, properties with an Energy Performance Certificate rating below E are not allowed to be rented, with plans to strengthen the standard to C from 2030.⁷²

Recommendations

As the EU and its member states sharpen their policy toolbox to progress towards electrification goals, our paper recommends that they assess existing and new subsidy schemes against the following principles:

1. Build the right framework for effective subsidies

Commit to stable, predictable support

National governments should set subsidy budgets on multi-year horizons, announce changes well in advance with transition periods and communicate consistently the purpose and evolution of support. Where revisions have been abrupt or poorly communicated, households have delayed investment and industry confidence in manufacturing and training has suffered.

Anchor the role of the subsidy scheme within the broader policy framework

Member states should assess the most appropriate policy mix given local circumstances, with a focus on rebalancing taxes and levies that inflate electricity prices. The European Commission should advance a Clean Heat Market Instrument to shape the future heating market and encourage investments. Every improvement in the overarching policy framework lowers the subsidy required per household, allowing public funds to be used more effectively.

2. Ensure the transition is accessible to all

Calibrate subsidy level to household need

Governments should differentiate subsidy levels based on household need, rather than paying universal grants that flow disproportionately to wealthier households.

Improve access by deducting the subsidy at the point of sale and providing technical assistance

When designing targeted subsidies, governments should ensure they are accompanied by measures that improve access. This includes the point-of-sale deduction of the subsidy, and provision of technical assistance via place-based solutions.

⁷¹ Ministère de la Transition écologique et de la Cohésion des territoires. (2023). *Location : gel des loyers des passoires énergétiques* [Renting: rent freeze on energy-inefficient dwellings]. Retrieved 1 July 2026, from <https://www.ecologie.gouv.fr/politiques-publiques/location-gel-loyers-passoires-energetiques>.

⁷² Department for Energy Security and Net Zero. (2017). *Domestic private rented property: Minimum energy efficiency standard – landlord guidance*. GOV.UK. Retrieved 1 July 2026, from <https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance>.

3. Make the market work for households

Introduce fixed subsidy amounts to guard against price inflation and subsidy capture

Governments should set flat-rate amounts per technology and efficiency class rather than cover a share of project costs. According to a recent evaluation, Germany's switch to a percentage-based design was in part responsible for significant price increases. Flat-rate schemes in the United Kingdom and France absorbed grant increases without comparable inflation.

Make certification a guarantee of quality, not a barrier to entry

Installer certification should assure quality without fragmenting the market or deterring new entrants. Wider competition may help drive down installation costs. Member states should fully apply the mutual recognition of installer certification required under the Renewable Energy Directive and avoid linking subsidy eligibility to national labels that duplicate recognised qualifications.

Remove barriers to third-party ownership and heat-as-a-service

Subsidy eligibility should not be limited to the owner of the equipment. Allowing energy service companies, utilities and leasing providers to claim support on behalf of the household will create opportunities for novel business models that remove the upfront cost barrier and help guarantee stable running costs for the end-user.

Looking ahead

As long as high upfront costs continue to slow adoption and important barriers to access remain in place, heat pump subsidies will remain an important tool in many European countries. If the EU manages a significant reduction in electricity prices, the role of subsidies could evolve rapidly. Support could become increasingly focused on households facing financial hardship, while new, possibly publicly backed, business models would use future energy savings to finance upfront investments.

It is important to recognise that financial support alone is not sufficient to ensure broad participation in the transition. Low-income and vulnerable households often face barriers that go beyond affordability, including lack of information, administrative complexity and limited access to trusted advice. More comprehensive approaches, such as place-based delivery models, have already proven effective in several countries and should be expanded, with appropriate long-term funding and institutional support.

Finally, policymakers may wish to consider not only how many heat pumps are installed, but also where they are deployed. The growing focus on integrated energy planning, electricity network development and local heating and cooling plans creates opportunities to align subsidy schemes more closely with local circumstances and system needs. Additional incentives for flexibility-ready heat pumps, thermal storage – including through enhancing buildings' fabric – or deployment in areas identified through local heat planning could help reduce network costs and increase the value delivered by public spending. These considerations are likely to become increasingly important as Europe moves from early market development towards large-scale electrification.



Regulatory Assistance Project (RAP)[®]
Belgium · China · Germany · India · United States

Rue de la Science 23
B – 1040 Brussels
Belgium

+32 2 789 3012
info@raponline.org
raponline.org

© Regulatory Assistance Project (RAP)[®]. This work is licensed under a Creative Commons Attribution-NonCommercial License (CC BY-NC 4.0).