Heating Business Service Service Brochure & Research Highlights



About LCP Delta



Our mission is to enable a better, faster energy transition for all

Founded in 2004 and based across the UK, France, Norway, the Netherlands and beyond, LCP Delta provide data-driven research, consultancy, technology products and training services to companies investing in and navigating the energy transition.

We are a diverse team from a variety of backgrounds including engineers, data analysts, environmentalists and more.

LCP Delta is a mission driven organisation - all of us want to make a difference to the energy transition and accelerate the path to a low carbon future.

The energy market is becoming increasingly complex. As consumers become more empowered and as energy systems around the world decarbonise, there is a need to understand both the generation and demand side to effectively navigate the rapid changes occurring.

We know it's a complicated topic, and we're here to help.

Andy Bradly, Partner, LCP Delta

LCP Delta was formed through the merger of Delta-EE and LCP Energy to bring together deep generation and consumer-side expertise, to provide our clients with a single partner to help them on their journey and provide them with a 360° view across the energy spectrum.



Andy Bradley
Partner
andy.bradley@lcp.com



Jon Slowe Partner jon.slowe@lcp.com











LCP Delta provides the best advice, support and tools to enable the energy sector to drive the energy transition



Subscription research services

Our portfolio of subscription research services offer in-depth insights across the energy transition landscape. We have been undertaking primary research with organisations active in the energy transition since 2004 – we have an unparalleled international network of contacts we can draw on. Each service focuses on a particular aspect of the energy transition.

Market and strategic advisory consulting

We provide support across the full energy value chain with bespoke research, insight, forecasts and advice tailored to them. Our consultancy offerings draws on expertise and data from across LCP Delta, from strategic market entry analysis through to detailed half-hourly revenue forecasting.



We support our clients in four ways



Technology & data

Data integration and analysis is at the heart of the energy transition. However, sourcing and navigating complex, wide-ranging datasets is challenging. At LCP Delta, we combine and curate proprietary and public datasets to provide you with a single source of truth across the energy spectrum and make this data interactive using our cutting-edge technology.

Training

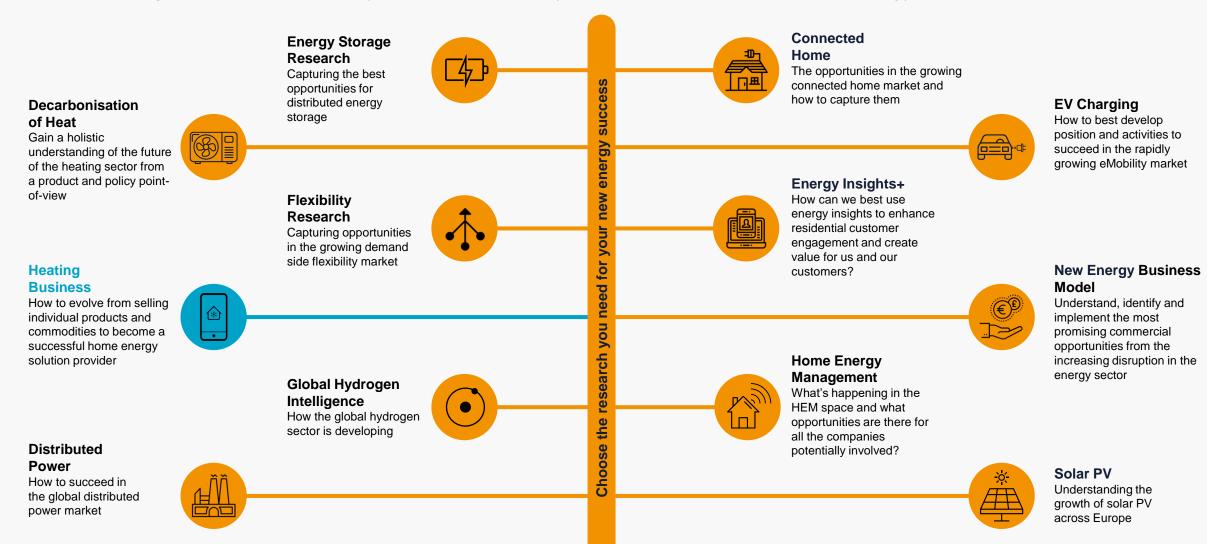
Our training helps professionals quickly develop their new energy knowledge, accelerating their impact for organisations who want to capture opportunities. We provide meaningful, concise and easy to understand short courses.





Subscription Research Services

Use a combination of our subscription research services, bespoke consultancy projects and training services to gather the information you need to ensure your business's success in the energy transition.





LCP Delta Heat Research Services Team

Our research team works together to deliver all 3 of LCP Delta's heat research services.

Team members have a strong breadth of knowledge on the topic of heat decarbonisation, as well as individual knowledge and skills specialisms linked to the different research services.

We publish well in advance of 30 deliverables and updates each year, with subscribers receiving a minimum of 1 new item per service per month.



Klara Ottosson
Research Manager: Heating
Business Service (HBS)



Guillermo Yañez
Associate Consultant:
Heat Research Services



Thomas Barquin
Research Manager:
Electrification of Heat
Service (EHS)



Steven AshurstHead of Heat Research



Zoltan Karpathy
Research Manager: Gas
Heating Service (GHS)



Oismita Mitra

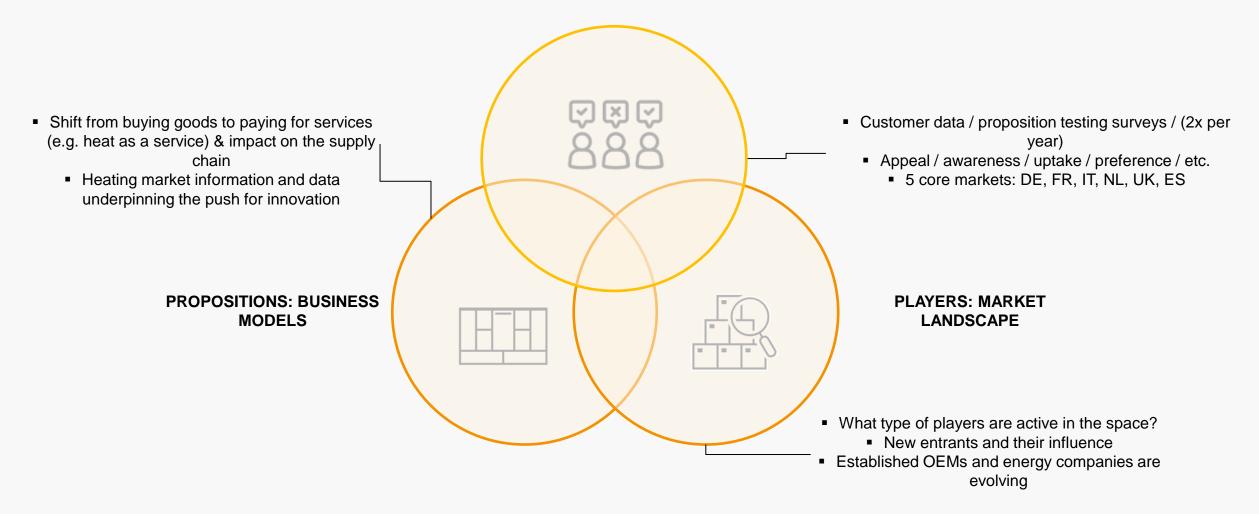
Analyst: Heat Research
Services



Core Research Topics and Themes

Heating Business Service

PEOPLE: VOICE OF THE CUSTOMER





Heating Business Service: Example Questions

Market research and analysis exploring how innovative value propositions, changing routes to market and new entrants are disrupting the EU heating sector.



What 'new heat' business models are emerging across Europe and how do they capture value?

digitalisation, connectivity, smart controls, optimisation, heat services, decentralisation



Which 'new heat' propositions are proving most successful with customers and why?

customer preferences, willingness to pay, segmentation analysis, behavioural science



What is the importance of green finance in the decarbonization of heat?

green mortgages, project finance, cashbacks, partnerships



Who are the new entrants threatening heating industry incumbents?

start ups, energy suppliers, tech giants, oil majors



How significantly will the transition to 'new heat' impact the heating value chain?

online sales channels, logistics, retailers, installers

Helping subscribers to:

Make strategic decisions about what customer propositions to offer today.

- Develop successful customer propositions for different segments based on independent customer research and analysis.
- Track the evolving competitive landscape for heating propositions and decide how to position your business.
- Navigate changes in sales channels and the impact these have on the heating value chain.
- Keep on top of important industry developments and understand how they impact your business.



What Heating Business Service Subscribers Get

Subscribers have access to a range of research and personal support

IN-DEPTH REPORTS



Thoroughly researched reports on major markets, topics and technologies based on primary interviews and analysis

"VIEWPOINTS"



Shorter, reactive analysis of major developments arising in the heating sector, from an expert point of view

DATABASES & DATA SETS



Historic & forecast sales data, pricing and cost data, company data, policy data, proposition data, customer data...

MODELLING & ANALYSIS



Techno-economic analysis and forecasted uptake of heating products & propositions, carbon savings

AD-HOC EXPERT SUPPORT



Bespoke support from our expert team of Analysts – timely and insightful responses to your specific questions about heat

NEW ENERGY SUMMIT



Discounted entry to our New Energy Summit, including attendance at the Subscriber-only day each year



People: The Voice of the Customer

Unique programme of primary customer research

More than 1,200 respondents per survey!

Covering six core markets: UK, NL, DE, IT, FR, ES

Robust samples:

Even split of different age and income groups, coverage of onand off-gas heating sectors



We carry out **two customer surveys per year**, once in the late summer and one early in winter. We cover a range of topics, including:



Awareness and appeal of different heating technologies.



Proposition testing: Appeal of various customer propositions and payment preferences – this can then be used to estimate uptake.



Willingness to pay for heating appliances, using transfer pricing analysis.



Testing the customer appeal of a range of concepts like specialty tariffs, green finance products and much, much more.

As a subscriber you have the opportunity to influence the topics and questions in the customer survey - what would You like to understand about your customers?



Deliverables Archive



Heating Business Service deliverables

In-depth reports



DATA

COUNTRY REPORT

VIDEO

VIEWPOINT



- Heat as a service market status and outlook: United Kingdom providing an overview of market players and current sales, as well as forecasting the potential of HaaS by 2030.
- Heat as a service market status and outlook: Germany providing an overview of market players and current sales, as well as forecasting the potential of HaaS by 2030.
- Beyond upfront payment: What do homeowners think about alternative finance for heating? – Results from customer research carried out among private homeowners in 6 markets, understanding the appetite for green finance when buying a heating appliance
- One-stop-shops the future of buying heating appliances? This report examines the various strategies heating sector stakeholders are taking to become a one-stop-shop.
- The journey to a new heating appliance: What are the key considerations for homeowners? Result from customer research identifying what influences a homeowner's purchase of a new heating appliance
- What is the role of energy retailers in the residential HVAC market? What is driving their increasing involvement, and how will it develop.





Heating Business Service deliverables

Short reports and viewpoints



REPORT

DATA

COUNTRY REPORT

VIDEO

VIEWPOINT



- Case study: Hometree
- Heat in Europe: 2023 highlights and 2024 predictions a short report looking back on key developments in the European heating market in 2023.
- Case study: WOAB
- Case study: Snugg
- Octopus Energy's intriguing foray into heat pumps: a calculated gamble or a stroke of genius? – LCP Delta's view on Octopus Energy's heat pump product and business model.
- Green rewards, green loans and green mortgages how banks are getting involved in the decarbonisation of heat. – Taking a look at the drivers for these players to get involved, and what they are offering



Are European householders warming to air conditioning? - customer insights about the the appeal for A/C among consumers.



Heating Business Service deliverables Databases



DATA

COUNTRY REPORT

VIDEO

VIEWPOINT



- Heating Installers in selected EU markets quantification of heat pump and gas boiler installers across several European markets (continuously updated)
- European Heating Market Landscape: Detailed residential heating market statistics for 5 core countries (France, Germany, Italy, the United Kingdom and the Netherlands from 2015 onwards) and a growing number of other EU heating markets, and key heating brands.
- Residential Heating Propositions Database: Profiles of innovative residential heating propositions on the market or in development across Europe, including company overview, business model details, the customer proposition, and sales.



European Customer Research: the full results of our annual winter online surveys with European homeowners in France, Germany, Italy, the United Kingdom and the Netherlands from 2019 onwards, and Spain, from 2023 onwards.



Research Extracts





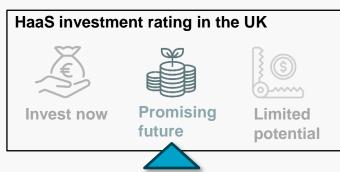
Key Findings

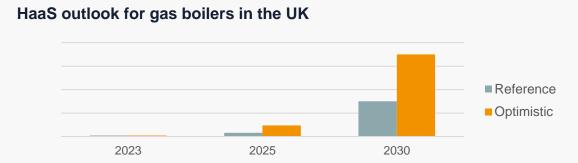
Heat as a service is still in its early days in the UK, but does show potential for both heat pumps and gas boilers

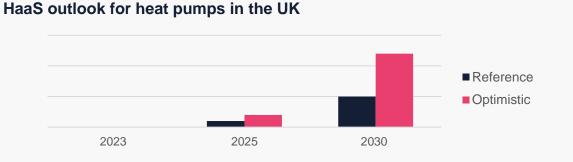
High customer appeal and the cost of living crisis could drive the HaaS market despite limited activities in the sector – the few players already on the market have a clear head start to capture the opportunity

- HaaS is available in the UK for gas boilers only, with three provider offering this proposition. Annual sales are just over 1,000 contracts, making up a negligeable share of the massive total gas boiler market.
- Several players, including some energy retailers, offer the possibility to spread the cost of a heat pump purchase – project & protect according to LCP Delta's definition.
- While some of these providers would certainly like to offer HaaS, they are unlikely to do so until HaaS contracts are eligible for the BUS grant – currently not available for HaaS contracts.
- The value of the gas boiler HaaS market in 2023 can be estimated to £5.6 million. In 2030, we expect this to grow to a value of £200 million.
- Assuming the BUS grant becomes available for HaaS we expect the HaaS with heat pumps market to reach a total value of over £400 million.
- Customer appetite for HaaS is quite high in the UK. The size of the UK
 heating market means that while HaaS will not reach more than 10% share
 of the total heating market by 2030, there is a good chance for service
 providers to capitalise on this opportunity. Those providers moving early will
 certainly have an edge.









Heating Business Service Brochure





Case Study: Snugg

Revolutionising the home energy efficiency journey - simple and affordable for everyone

Background Information

Snugg

Snugg is a start-up that aim to help homeowners improve the energy efficiency of their homes. Snugg's software enables users to obtain a personalised renovation plan by filling out a short home survey.

User base	Employees	Funding	Founded
~1,000	14	£1.2 m	2022

Active countries



- Funding and investors: £1.2 million in the first seed funding round and £171,000 grant secured from 'The Green Home Finance Accelerator' for the Green home hub (separate from Snugg's website).
- Partnerships and acquisitions: Snugg has joined forces with EDF, Heat Save Scotland and recently TSB Innovation Labs.
- Recent developments: Partnered with the oldest remaining building society, Scottish Building Society (SBS), who offer Snugg's platform to all SBS members, whilst SBS offers financing options. Snugg has also partnered with Natwest and TSB Innovation labs.

Snugg's Market Impact

Mission: To help over 500k homeowners in the UK on their decarbonisation journey by tracking their savings post energy retrofits and rewarding (in the pipeline) for their efforts to address the dual challenges of lowering carbon emissions while improving the financial well-being of their customers

How will they do this?

- Snugg provide bespoke, free home renovation plans to homeowners to improve the energy efficiency of their homes to reduce energy bills, increase property value, and reduce carbon emissions. Snugg also helps the customers to identify the eligible grant options.
 - The renovation plans are based on key criteria selected by the homeowners, and Snugg provides the cost estimates. Snugg refers customers to installers to get the actual quotes.

Similar Players



Managed by Energy saving trust, offers impartial and free guidance on insulation, financial incentives, and fuel poverty assistance.



UK based organization offering guidance and support to individuals, businesses, and communities in reducing energy consumption, and lowering carbon emissions.

Website link: Snugg - Making Home Energy Efficiency Simple and Affordable

Beyond upfront payment: What do homeowners think about alternative finance for heating?

Heating Business Service





Key Findings

Although still incipient in Europe, there is a high interest and opportunity for alternative payment methods for heating appliances

There is a high appeal for alternative payment methods across all markets and especially among the younger generations

On average, the majority of homeowners find alternative payment methods appealing. As high as 70% (green mortgages and green loans) to 50% (Heat as a Service and salary sacrifice) of homeowners find the propositions to be 'very' or 'quite' appealing. Country differences show Italy and Spain as the most enthusiastic audiences for this products, whereas the Dutch homeowners tend find the propositions less appealing – aside from salary sacrifice schemes.

For the increase in interest and uptake, there are important barriers to overcome:



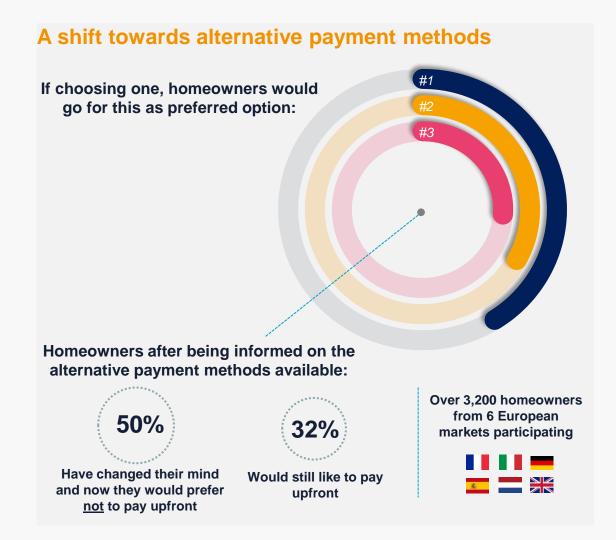
Increase awareness – There is a positive feedback loop between prior awareness and appeal



Target younger age groups – These groups show a stronger preference for non-upfront payment options



Revisit propositions – especially suppliers of green loans and mortgages could do more to offer attractive propositions



Household Energy Action Tracker (HEAT)

Heating Business Service

OCTOBER 2023



Household Energy Action Tracker (HEAT) Autumn 2023

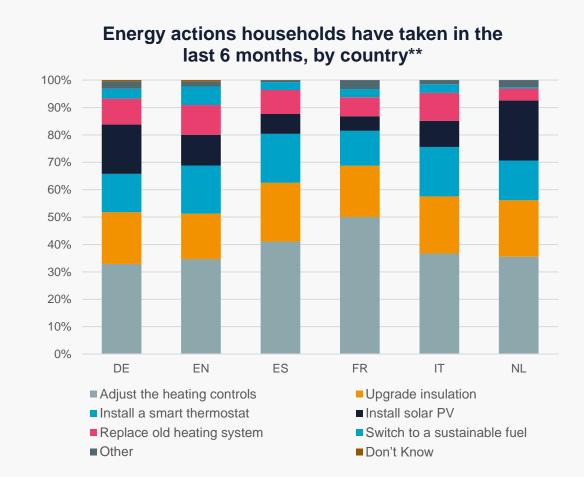
Key findings from the first edition

Just over half* of private households can be considered somewhat engaged with their home energy use based on their actions over the past 6 months. This is a good thing, but industry should not get too comfortable as there are clearly barriers for many households, keeping them from action.

Household Energy Action Tracker, October 2023



Share of homeowners who have made changes to the way they use energy in their homes in the last 6 months, based on more than 3,000 responses.



^{*57%} have engaged in the past 6 months and 11% have engaged before this.

^{**}n = 3,214





Key Findings

Cross-selling heating appliances with other energy assets is a growing opportunity

One-stop-shops *cross-selling* heating technologies with other energy assets presents a promising opportunity, particularly in Germany, while home energy asset *bundles* will likely remain niche.

The heating market is experiencing a **rise in one-stop-shops** as companies are expanding their portfolios to take advantage of the **growing demand for heat pumps**, **PV**, **batteries and other energy assets**.

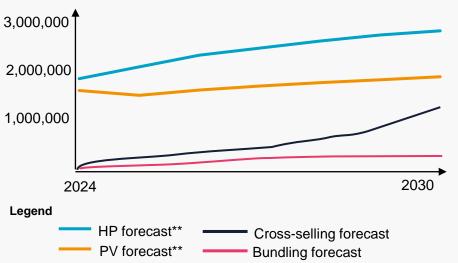
One-stop-shops can sell products in two ways: **1. Bundling** (selling multiple assets at the same time) **2. Cross-selling** (selling additional technologies later in time). The opportunities for these two business models vary:

- The German market currently presents the largest opportunity for one-stop-shops and, unsurprisingly, this is where most players are active. Examples include 1KOMMA5, Enpal, E.On and Viessmann.
- Bundling has a limited opportunity compared to cross-selling; the new build market segment is most attractive for bundling. Steep upfront costs limit the potential for bundling in retrofit to the 'deep renovation' segment or the affluent tech-savvy or environmentally conscious customers.
- Cross-selling is a promising opportunity as it is only dependent on the growth potential of the individual technologies in the long-term.
 However, in the short- to medium-term growth will likely be slow as customers gradually increase their willingness to invest in energy efficiency.

Top 3 recommendations for aspiring one-stop-shops

- 1. Put the customer first! Ensure the customer journey is seamless and can be tailored for individual customers. Make it easy for them to stick with you / come back for more.
- **2. Guarantee interoperability!** Products should be interoperable, even if they come from different OEMs.
- 3. Support your installer network! Upskill existing installers, attract new talent and streamline the process from lead generation to installation so that installers can focus on what they are best at.

Long-term outlook for one-stop-shops*



^{*}In five markets: DE, FR, UK, NL, IT

^{**}Based on data from LCP Delta's Electrification of Heat and Solar PV Research Services



Heat as a service market status and outlook: Germany

Heating Business Service





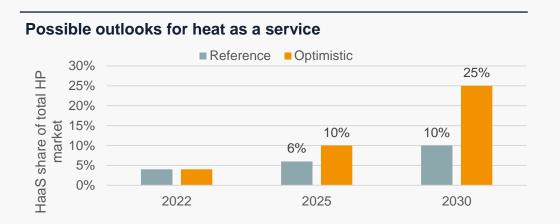
The status and outlook for heat as a service in Germany

Key findings

Germany is one of the most buzzing HaaS markets in Europe, with plenty of activity. However, high interest rates may slow the growth.

- The concept of HaaS is not new in Germany, but for heat pumps it is relatively nascent.
- In 2022, HaaS represented ~5% of total heat pump sales (10,000 units). These contracts will have a gross value of approximately €380 million over the contract time.*
- Sales growth slowed down in 2022 as a result of high interest rates pushing prices up.
- Our customer research shows that interest in HaaS is moderate, but not as high as in other countries in Europe. Based on customer appeal we estimate that the current highest uptake for HaaS is 8% of heat pumps.
- Heat pumps are set for continued growth in Germany the key question is by just how much. The recent of updating the GEG & BEG may cause a short-term bump in the road, but the long-term trend and level of ambition is clear. The need for alternative propositions like HaaS will therefore also grow, and number of contracts will increase.
- However, high interest rates lead to expensive borrowing and lower the appeal for HaaS. Unless interest rates return to lower levels, we will likely see a more conservative growth in number of HaaS contracts.





Market players

Top 3 O thermondo
VIESMANN

Challengers

Ökoloco

Likom
MA5°

Enpal.

AIRA

^{*}Based on the customer paying €209/month over 15 years

Green rewards, green loans and green mortgages – how banks are getting involved in the decarbonization of heat

Heating Business Service





Executive summary (1/2) Introducing green finance for homes Being seen as doing the right thing, and reaching sustainability targets is driving the development of green finance products targeting home renovations / heating upgrades

Why are banks getting involved?

Reaching sustainability targets

A key driver for banks getting involved in the decarbonization of heat, as they have committed to reaching net zero across their activities. And they also want to be seen as 'doing the right thing'.



Good business opportunity

Green lending could present a good business opportunity from additional lending revenue and low default risk. However, currently, there is not a lot of money to be made from green finance products.



Development of green finance product is slow

Most green finance products are only at pilot stage and uptake has been slow. Mainly because of low customer demand (and awareness) and cultural preference to pay for home renovations with savings, rather than get a loan.

How can they achieve this?

Green rewards + green mortgages



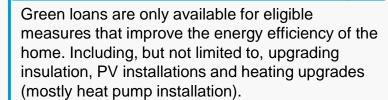


Cashbacks (green rewards) up to £2,000 are available for some products (PV, HPs etc.)

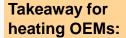
A green mortgage typically has a discounted interest rate for homes with good (or improved) EPC ratings. Though the reduction is not always very much.

Creates incentives for customers to invest in their properties and improve the energy efficiency.

Green loans



The loans typically have lower interest rates compared to standard loans, or at least a fixed period where the rate is 0%.



Given that this activity remains nascent, we do not think that low carbon heating manufacturers should be getting 'excited' just yet about it becoming new route to market for their products.

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EPC rating & low carbon heat: How do homeowners value them?



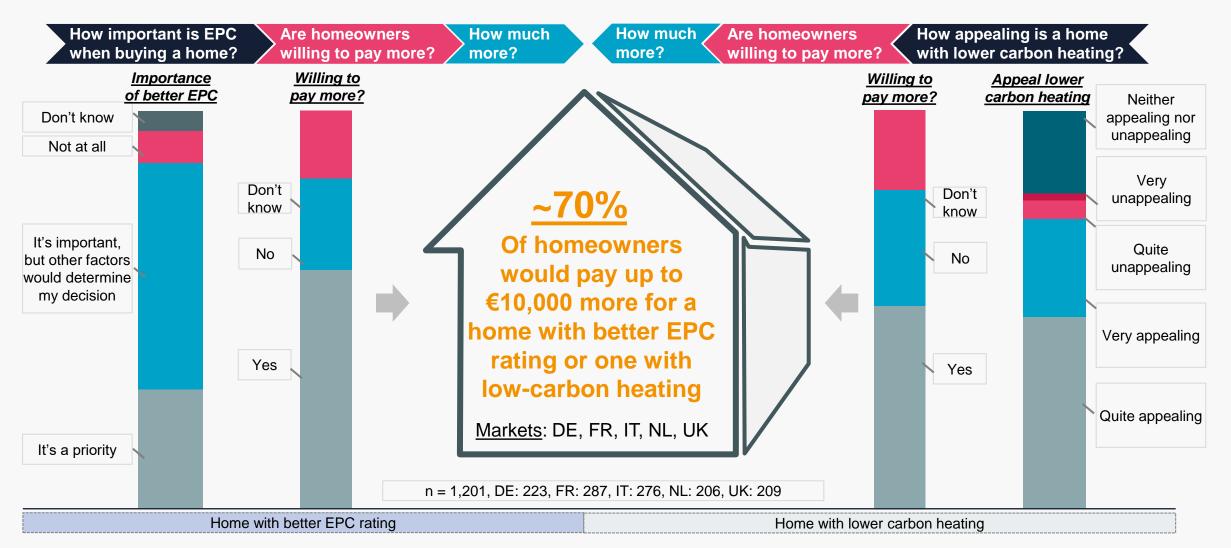
Heating Business Service

JUNE 2023

CONTACT: GUILLERMO.YANEZ@LCP.COM



Key findings (1/3): Customers demonstrate high willingness to pay for energy efficient homes



Heating Installers in selected EU countries database



CONTACT: <u>UILLERMO.YANEZ@LCP.COM</u>



The heating installer landscape in Europe is far from uniform

Some of the fastest-growing HP markets in EU are starting to experience shortage of qualified personnel

The information here presented is part of the 'Heating Installers Database' as part of the Heating Business Service at LCP Delta



It's become widely recognized that the heating installer workforce is under immense pressure to meet the demand and deliver installations in the time and quality required

Identified factors involved:

Aging current base of installers

- Lack of proper training and certification schemes
- Unclear policy resolutions on F-gas use
- Multidisciplinary nature of heat pump installations

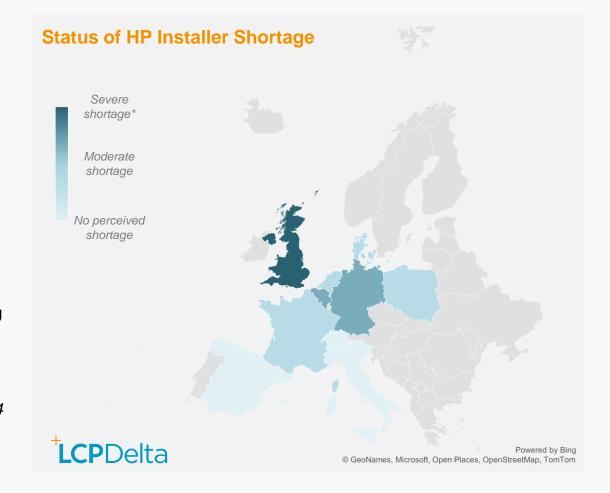
Our findings indicate that the overall situation in Europe is far from uniform, with some countries having enough qualified technicians, while others require a **substantial increase** in their installer workforce.



Number of installers **needs to double** to meet the target of 500,000 new installed HPs by 2024



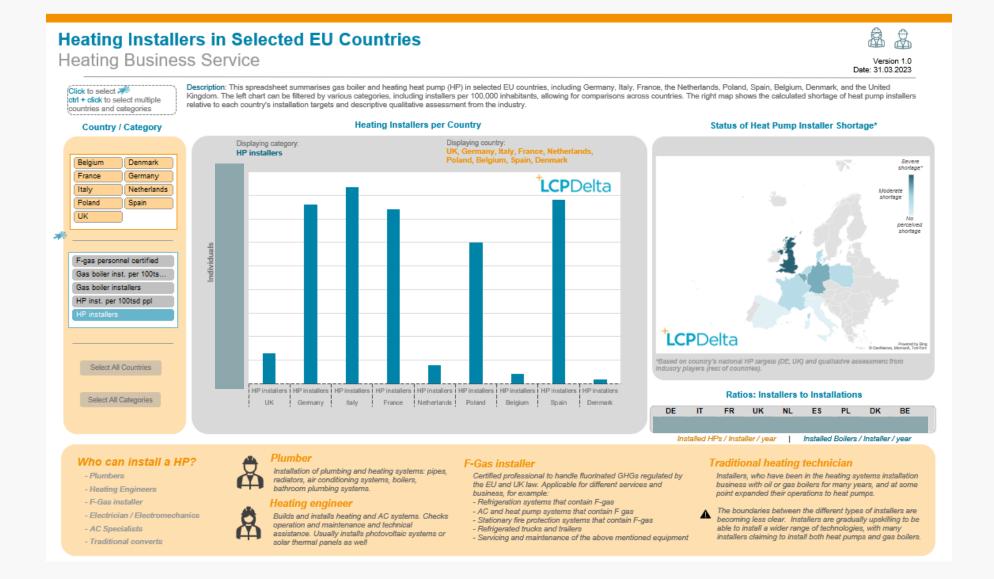
Needs to increase its installer workforce 7x to meet the target of 600k installs by 2028



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Heating installers in selected EU countries - dashboard



Are European householders warming to air conditioning?
Heating Business Service





Key findings: What do households with A/C look like?

Looking at who has installed already, and who will in the near future?

What does an A/C owning household look like?

One in three households have air conditioning 'A/C' systems, primarily installed in detached homes:







Detached homes: 39%

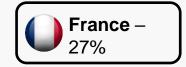
Flats: 31%

Semi-detached: 20% Terraced: 10%

A/C is much more common in Italy than in other markets, but sales have been growing in the last 1-2 years.



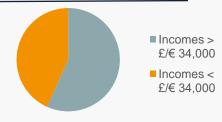








It is slightly more common for higher income households to have A/C than lower income households:



Are homeowners warming to A/C?

It looks like it! One in five homeowners are considering buying A/C in the next two years, and in markets that have not historically seen much interest in A/C.

Who are the customers considering buying A/C?

A/C will more likely be installed in detached houses

Detached homes: 52%

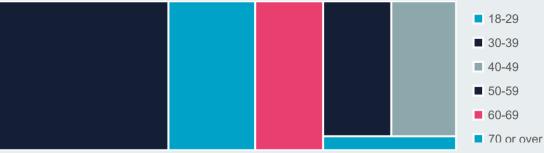


Flats: 13%

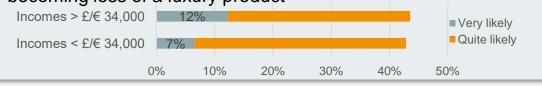
Semi-detached: 23%







There is very little difference by income – indicating that A/C is becoming less of a luxury product



What are the trends and opportunities within new heating propositions? And how can providers stand out?

Heating Business Service



JANUARY 2023 NISHANTH.SRINIVASA@LCP.COM



What features should providers add to their heating propositions? Key findings

The most important features to consider, and that will attract the most new customers, are those that minimise the disruption of installation, and enable customers to save on their energy bills.

Category:

Recommended feature:

Reason:

Quotation

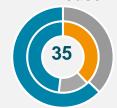
Online Fixed Quotation



- Customers are increasingly interested in purchasing heating appliances online.
- Adding this feature would enable the proposition to stand out as it is still an unexplored route to market by many providers.

Installation

Sub-contractors/ In-house



Subcontracting might have a slightly lower perceived value, but providers can still be equally attractive by ensuring accountability for the installation and making the process seamless for the customer.

Controls

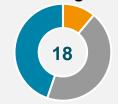
Smart Thermostat



Including smart thermostats would enable customers to get a better overview and control of their energy use – likely an attractive feature in the current energy landscape.

Maintenance & servicing

Remote Diagnostics



- Remote diagnostics can increase customer satisfaction by minimising disruption.
- Providers can save by using the engineers time more efficiently.
- Remote diagnostics has higher appeal if it can be offered free of charge.

Operation Services

ToU Optimisation Self-consumption Optimisation





- Operation services remain the **most** uncommon features in the analysed propositions.
- Adding one, or several, of these services would depend on the market where the proposition is launched and whether there are policies in place that could be a barrier.
- Allowing the customer to choose which suits them best would also be an appealing offer.

Total propositions on the market: 36

13

15

Energy Suppliers



Specialist Heating Providers

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Heating Business Service

Heat Pump Rental: is Thermondo's new offer what the market has been missing?







HEAT PUMP RENTAL: IS THERMONDO'S NEW OFFER WHAT THE MARKET HAS BEEN MISSING?

HEATING BUSINESS SERVICE

CONTACT

Steven Ashurst - steven.Ashurst@delta-ee.com



Top things to know about thermondo's new heat pump offer

Top 10 details you need to know:

- 1. There are **3**, **fixed term**, rental period options: 2, 10, 15 years
- Elements supplied are: ASHP, radiators and a hot water tank
- 3. thermondo **will not hybridise** existing boiler systems with this offer
- **4. Includes servicing** in the monthly payment figure
- 5. Energy supply not included
- 6. Fabric measures/improvements not supplied by thermondo
- Customers receive government subsidy (BEG; at varying levels)
- 8. An **early exit fee is chargeable** (for hardware only not servicing)
- Customer can take on ownership at the end of the contract
- 10. Offer is available to homeowners and private renters in Germany

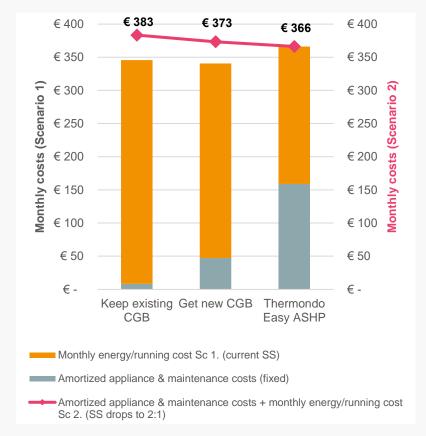


Figure 1: Monthly end user cost comparison between running an existing boiler, a new condensing gas boiler (GGB), and the thermondo Easy ASHP.

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Contact us





Leon Gielen
Head of Business Development Asia
+31 6 17935006
leon.gielen@lcp.com

About LCP Delta

LCP Delta is a trading name of Delta Energy & Environment Limited and Lane Clark & Peacock LLP. References in this document to LCP Delta may mean Delta Energy & Environment Limited, or Lane Clark & Peacock LLP, or both, as the context shall require.

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