

New Energy Business Model Service



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



200+
Global clients



6
offices



110+
Colleagues

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.

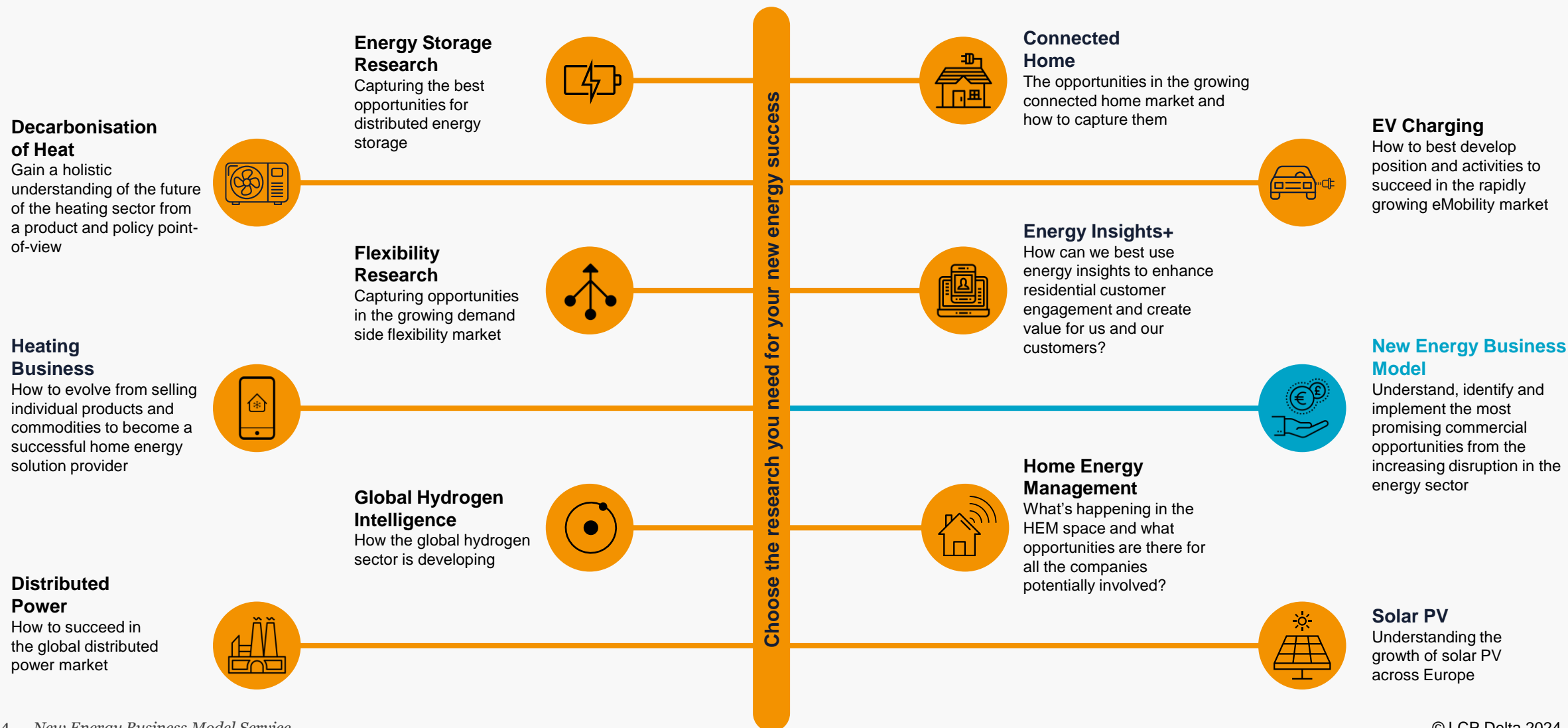
Training

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.



*Energy incumbents and disrupters are **playing different games**. The new energy industry is split between value & growth-oriented players.*

We explore the innovative business models proposed by both incumbents and disrupters, taking account of external factors such as policy, finance and technology.

Incumbents want to...

1. Maximise profits
2. Calibrate their investment, and balance it against their legacy business
3. Enter markets that show a clear and steady path to profitability.
4. Satisfy their investors, who are looking for steady income and predictable returns
5. Minimise risk and brand damage at all costs.

Disrupters want to...

1. Achieve rapid expansion into new markets
2. Acquire large volumes of new customers
3. Scale quickly, regardless of immediate profits, to achieve market power and brand recognition.
4. Satisfy investors, who look for high growth and exponential growth for long-term gain.
5. Take risks – “move fast and break things” - to seize opportunities before they are gone.

Clients we support



Govt, Regulators & System Operators



Oil & Gas Sector



Utilities



Energy Networks



Investors

What is NEBMS for?

Providing data and actionable insight for companies that wish to transform energy retail

NEBMS is a research service that helps companies understand which propositions and business models are most likely to succeed as the energy transition starts to accelerate.

Who's it for?

Corporate Strategy, Innovation, M&A and cross functional product teams with a strong focus on the energy transition

Energy companies

Energy manufacturers

Software providers

Investors & VCs

What questions are we trying to answer?

1. What is the best way to adapt my business model to be successful in the energy transition?
2. What are my competitors doing on energy tariffs and selling energy products / energy services
3. What new innovations on propositions and business models are out there that I can take inspiration from?
4. What new innovators are out there that I can partner with or look to acquire?
5. What do customers think of new products and propositions in the energy transition

Key content

1. Energy Tariffs

How have retail energy tariffs changed year on year, what are the emerging trends, and are there any new entrants?

2. Innovator Landscape

Annual review of interesting new companies, propositions and trends in the energy market.

3. Beyond box shifting

What approach are suppliers taking to energy products and services, how is it changing, what new innovations out there?

4. Customer view

Summary of what customers think of the energy transition, what do they think of tariffs, tools to manage their energy use and low carbon products.

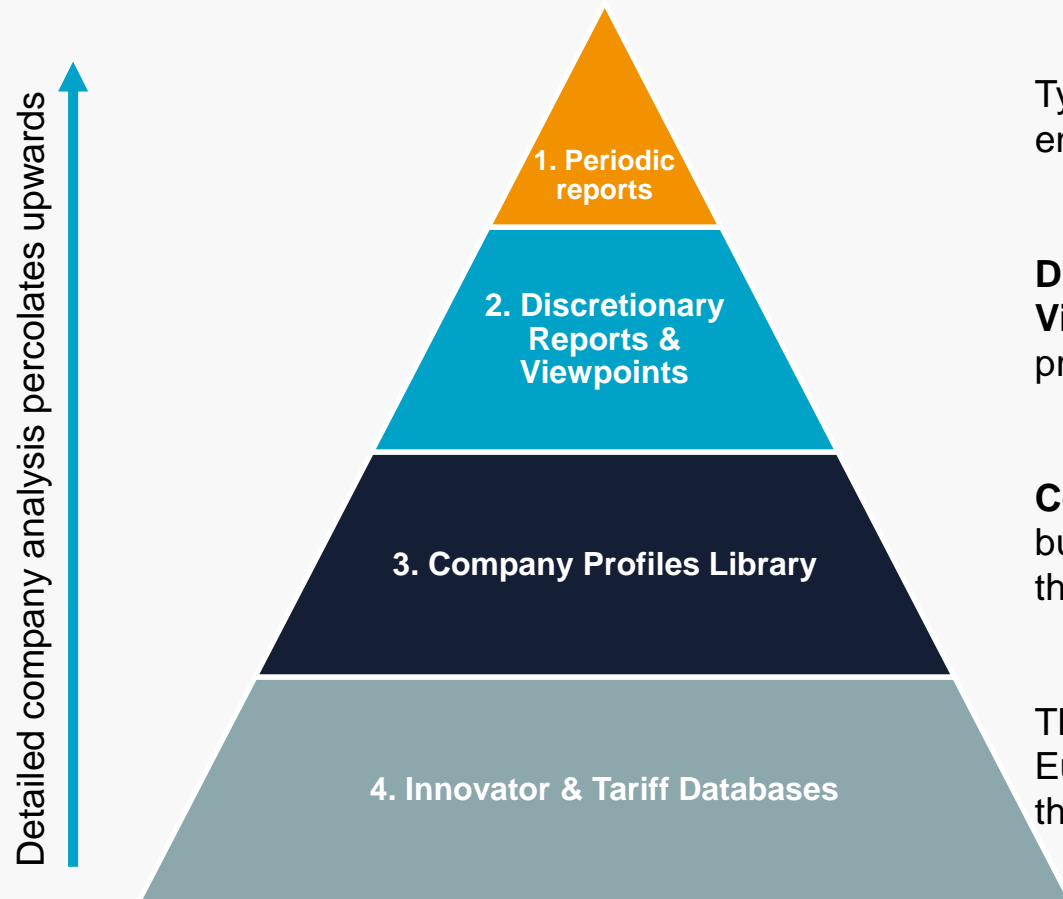
5. Key Enablers & Transition Priorities

Green finance, AI, energy communities, vulnerable customers..

Structure

Service Content Plan (1/2)

The service is designed on a “bottom-up” rather than “top-down” principle



Typically, **30-50 pages long**, offering a deep dive into an important new energy topic. We release one periodic report every quarter.

Discretionary reports can be of variable length but up to **40 pages** long. **Viewpoints** are usually shorter, opinion pieces of **5-15 pages**. We produce at least two discretionary reports or viewpoints every quarter.

Company profiles offer a detailed analysis of a single company or business model that we find especially innovative. We produce them throughout the year.

The **innovator database** provides a broad view of innovators across Europe's new energy landscape. The **tariff database** does the same thing for retail energy tariffs. They are updated at least annually.

Service Content Plan (2/2)

Current themes:

1. Engaging, and collaborating with customers
2. Maximising the value of data and AI
3. Risk management – tariffs and energy services
4. Moving beyond box-shifting – finance and digitalisation

Periodic reports (updated annually)

- **Energy Tariff Landscape (every Oct/Nov)** – how have retail energy tariffs changed year on year, what are the emerging trends, and are there any new entrants?
- **Innovator Landscape (every Feb/Mar)** – annual review of interesting new companies, propositions and trends in the energy market.
- **Beyond box shifting (every May/Jun)** – what approach are suppliers taking to energy products and services, how is it changing, what new innovations out there?
- **Customer view (every Aug/Sep)** – summary of what customers think of the energy transition, what do they think of tariffs, tools to manage their energy use and low carbon products

Supported by discretionary reports on key themes (typically, two per quarter)

- **Digital and AI** (e.g., the rise of app only suppliers)
- **Green finance** (e.g., rental and leasing business models)
- **New competition** (e.g., the role of manufacturers in energy supply)
- **Impact of new energy policy** (e.g., impact on business models for the move to HH settlements)
- **Community energy** (e.g., what role can energy companies have in enabling energy communities)
- **Supporting vulnerable customers** (e.g., business models for a fair transition)

Data Products supporting the service

Company profiles – detailed analysis of a particularly disruptive business model or company

Tariff database – an overview of different types of tariffs in the market for key European markets

Innovator database – an overview of innovative and disruptive companies

[illegible]

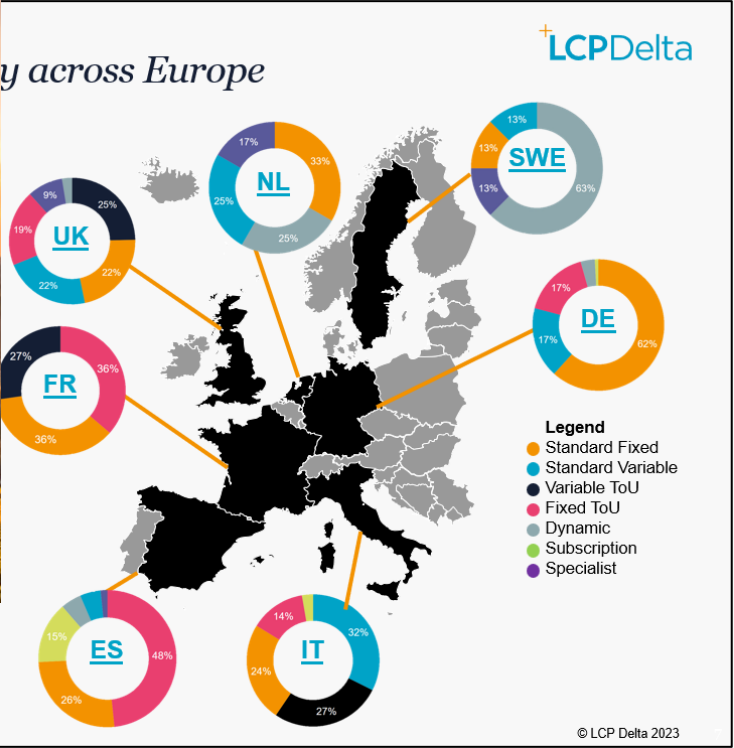
Reports, viewpoints and databases

Understand the latest disruptive technologies and trends that are shaping new business models



■ The countries in black, which have their tariff proportions displayed, are explored [on pages 18-33](#).

Smart Tariffs in 2023



Understand the latest disruptive technologies and trends that are shaping new business models

Generative AI will transform the way energy companies talk to their customers

An LCP Delta Viewpoint
New Energy Business Models Service

Executive summary

The launch of ChatGPT, and other Generative AI tools, will have a profound impact on retail energy.

The 2022 launch of ChatGPT has had a seismic impact on businesses and individuals, and left policymakers wondering about how to exploit and regulate AI. The public discussion extends far beyond energy but its impact on our industry will be dramatic. "Classical" AI has already become integral to demand forecasting and consumption analytics, but its newer "Generative" cousin will open a new frontier in language processing and enliven and inform the user experience.

Status of AI in the retail energy sector today

There are two types of AI. Classical AI refers to the use of AI for analytics and forecasting, to make sense of numerical data. The key concept here is prediction: the AI producing forecasts based on information from reliable sources.



Figure 1 - Classical AI makes predictions based on numerical inputs.

Generative AI is used to support language processing, image recognition and content production of programming code. It can handle a broad range of data without needing an initial data curation or cleansing phase.

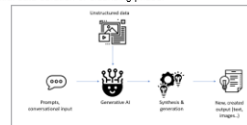


Figure 2 - Generative AI supports language and image generation.

The challenges with Generative AI include privacy concerns, cybersecurity, an unclear issue of how to deal with "hallucinations", or the wildly inaccurate claims the technology sometimes makes. There is no significant player in the energy sector that has fully tackled these issues yet.

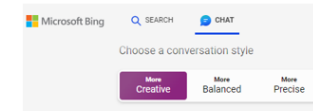


Figure 6 - Microsoft Bing allows users to vary the AI's "temperature" setting.

There are limitations to Generative AI's capabilities. For instance, a task as complex as writing a complete novel poses a huge challenge. While an AI can mimic the styles and patterns it has learned, it struggles with maintaining long-term consistency and coherence, which are obviously crucial elements in novel-writing. Additionally, it lacks genuine understanding of human emotions, motivations, or experiences. Its function is primarily mimicry, without the deep comprehension a human author possesses.

4. The range of benefits arising from AI is impressive.

There will be major benefits for both customers and energy companies, including:

- A new wave of advanced chatbots to address customer queries.
- Personalised customer experience.
- Advanced Home Energy Management.
- Operational savings for energy players.
- Predictive trading.

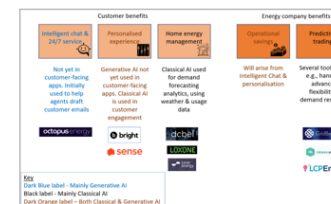


Figure 7 - AI will deliver a wide range of benefits.

Company profiles

Detailed case studies of innovative customer propositions to learn from and be inspired by

Cleanwatts: Company Overview

Value Proposition and Progress so Far

KPI snapshot

Employees

~120

Customer base

1,500 members

Investment

€25m

Series A funding in 2022

Similar to...

gridX

GridX creates a market for community members to trade energy amongst themselves. Aims to integrate flexibility and smart energy management

enogrid

Community energy actors, helping the for the developme

Value proposition

For residential customers:

- **Reward me financially:** consumers get lower cost energy and (in future) generate value by participating in flexibility markets. It also helps prosumers monetise surplus power. Members can lower their average energy costs by up to 30-60%.
- **Help me go green:** Cleanwatts' solution is built entirely on renewables and leads directly to the local installation of new clean energy generation capacity.

For commercial and industrial customers:

- **Be seen as innovative:** Helps participating businesses – especially anchor clients – be seen as forward-looking in the eyes of local stakeholders.
- **Unlock new value streams:** Cleanwatts aims to enable partnering companies to easily access flexibility value streams, e.g., by exploiting electric vehicle batteries.

How are they doing?

- In August 2021, Cleanwatts developed Portugal's first renewable energy community. They now have 180 renewable energy communities either operational or in development in Portugal, Italy, Spain and the USA
- They are responsible for 390MWp of renewable energy capacity and deliver energy to 22,500 meter points
- Verdane, an Oslo-based specialist growth equity investor, announced that it has invested €25M in 2022
- Revenue increased 65 per cent year-on-year in 2021 and they had an estimated revenue of €6.7m in 2022.

Cleanwatts energy management via Kiplo®



Cleanwatts interface flows

Holaluz: Company overview (1/2)

Holaluz combines renewable power supply, energy management & solar installation

holaluz

Company HQ:
Barcelona, ES

Target market:
Households, SMEs

Product areas:
BTM generation & storage

Holaluz offers a solar PV package to retail energy supply customers, including applying for building permits and subsidies, finance, maintenance, optimisation and 100% green electricity supply.

How is it done?

- Holaluz has ~325,000 green retail energy supply contracts, of which ~12,500 are for 'solar energy management', comprising systems installed by both Holaluz and third parties.
- In 2020, it launched its solar management offer, Rooftop Revolution, to provide solar PV & battery system installation and maintenance services, panel cleaning, yearly review of all components and electrical connections (optional), remote monitoring, incident resolution and consumption optimisation.
- For both solar and non-solar customers, Holaluz calculates a personalised monthly fee, based on historic energy usage habits. This is reviewed every 12 months, with a refund paid in the event of overpayment. If the customer has underpaid, there is no extra charge.
- The goal is to deliver a €0 bill for customers, or as is close as is possible, based on solar self-consumption and sharing of surplus power with other Holaluz customers.

Revenue Models

- Solar can be acquired either for upfront cash or via loans. The management service is provided for a fixed monthly fee that is integrated with supply payments and reviewed annually.

Route to market

- Direct B2C model at [Holaluz.com](https://holaluz.com).

Partnership

- Holaluz works with Santander bank for finance & new leads..

Holaluz Company Profile

E-Gap Overview

On-demand mobile EV charging service that makes city centre recharging easy by bringing a battery-powered charging unit to wherever the customer's car is located

E-GAP

Company HQ:
Rome, IT

Target market:
EV drivers

Product area:
E-Mobility

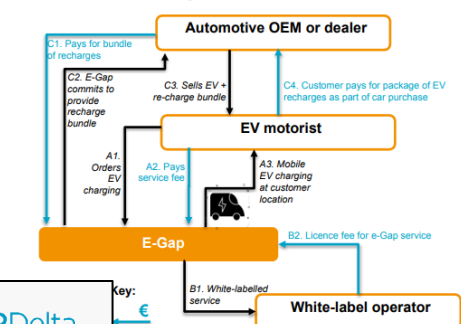
How is it done?

- E-Gap offers a mobile EV charging service in cities across Italy, Spain, France, and Germany. Charging speeds can be fast, with some services available rated at up to 80kW.
- E-gap vans drive to customer locations in response to orders placed via the company's app. The service is a premium proposition, with a premium price, where the motorist does not even have to be present if they can unlock their charging connection remotely via their smartphone.
- The service can be white labelled (e.g., Enel X are experimenting with this model) or deployed as an alternative to fixed chargepoints at busy locations, e.g., airports and filling stations. The company also works with automotive OEMs and dealers to bundle a package deal of recharges with new vehicle sales.

Revenue Model

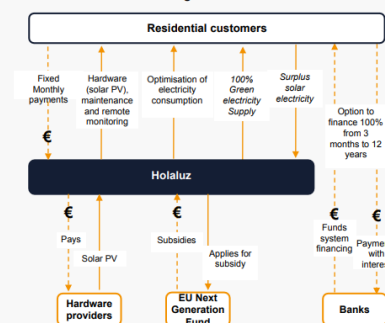
- Either:

Business model diagram



Key: €

Holaluz business model diagram:



© LCP Delta 2023

Tariff and Innovator Databases

Information and analysis making it easy to compare competing propositions

Databases with detailed data on the country focus, customer type, key characteristics and performance of new business models across the energy transition landscape

Cover page

Database design

User Guide

Sorting Dashboard

Proposition Profile

Disclaimer

Product area

All

End-Users

Multiple selections

Value proposition

Connect and operate devices easily

Revenue Model

All

© LCP Delta 2023

Sorting Dashboard

Proposition	Operational ?	Headquarter	Website	Description
Thermovault	Yes	Belgium	https://www.thermovault.com/	Thermovault platform for existing residential customers to respond to any business model based on their success from N
solytic	Yes	Germany	https://www.solytic.com/	Solytic automates the process of offering products to customers. Solytic to support in 201
Smart DCC Limited	Yes	UK	https://www.smartdccc.co.uk/	Smart DCC a monolithic platform for the UK market. The platform is designed to be used by the UK market and is designed to be used by the UK market.

Outputs																		
ID	Company Name	Country	Tariff Name	Brief Description	Website link	Review Date	Reviewed by	Fuel Type	Renewable	Smart Meter Required	Type of tariff pricing, Column	Comments on type of tariff	Primary On-Peak Time	Secondary On-Peak Time	Tertiary On-Peak Time	Primary Off-Peak Time	Secondary Off-Peak Time	Frequency price up
1	OVO	UK	OVO Charge Anytime	EV Smart Charging add-on tariff	https://www.ovogroup.com/ev-smart-charging-add-on-tariff	21/08/2023	CD	Electricity	No	Yes, with specific technical requirements	Standard Variable	Add-on to any Specialist OVO tariff						
2	Endesa	ES	Tempo Happy 24hours	Static ToU with possibility to choose 2 free hours/day	https://www.endesa.com/es/energia/tempero-happy	25/10/2023	AP	Electricity	No	Yes, any	Fixed ToU		MON-FRI 08:00-00:00			MON-FRI 08:00-00:00 + SAT-SUN	2 chosen hours/day	Annual
3	Endesa	ES	Tempo Happy Day	Static ToU with possibility to choose 1 free day/week	https://www.endesa.com/es/energia/tempero-happy	25/10/2023	AP	Electricity	No	Yes, any	Fixed ToU		MON-FRI 08:00-00:00			MON-FRI 08:00-00:00 + SAT-SUN	1 day/week	Annual
4	Endesa	ES	One Luz 3 Periodos	Regular Static ToU tariff with 3 periods/day	https://www.endesa.com/es/energia/one-luz	25/10/2023	AP	Electricity	No	Yes, any	Fixed ToU		MON-FRI 10:00-14:00 + 18:00-22:00	MON-FRI 08:00-10:00 + 14:00-18:00		MON-FRI 08:00-00:00	SAT-SUN-HOL 00:00-00:00	Annual
5	Endesa	ES	Solar Simply with Virtual Battery	Solar tariff	https://www.endesa.com/es/energia/solar-simply	25/10/2023	AP	Electricity	No	Yes, with specific technical requirements	Standard Fixed							Annual
6	Endesa	ES	24/7 Solar Solution	Solar bundle	https://www.endesa.com/es/energia/24-7-solar-solution	25/10/2023	AP	Electricity	No	Yes, with specific technical requirements	Standard Fixed							Annual
7	Endesa	ES	One Luz	Standard Fixed tariff for existing Endesa customers	https://www.endesa.com/es/energia/one-luz	25/10/2023	AP	Electricity	No	No	Standard Fixed							Annual
8	Endesa	ES	Endesa Connect	Standard Fixed tariff for new customers only	https://www.endesa.com/es/energia/connect	25/10/2023	AP	Electricity	No	No	Standard Fixed							Annual
9	Endesa	ES	Endesa Unica	Subscription tariff	https://www.endesa.com/es/energia/unica	25/10/2023	AP	Electricity	Yes	No	Subscription							Annual
10	E.ON	DE	E.ON Strom Öko	Standard Fixed tariff with 100% RE	https://www.eon.de/de/produkte/strom	04/09/2023	STA	Electricity	Yes	No	Standard Fixed	Fixed cost per year = X€/YWh (- possible additional bonus)						
11	E.ON	DE	E.ON ZukunftStrom	Standard Fixed tariff with 100% German RE + money invested in sustainable markets	https://www.eon.de/de/produkte/strom	04/09/2023	STA	Electricity	Yes	No	Standard Fixed	Fixed cost per year = X€/YWh (- possible additional bonus)						

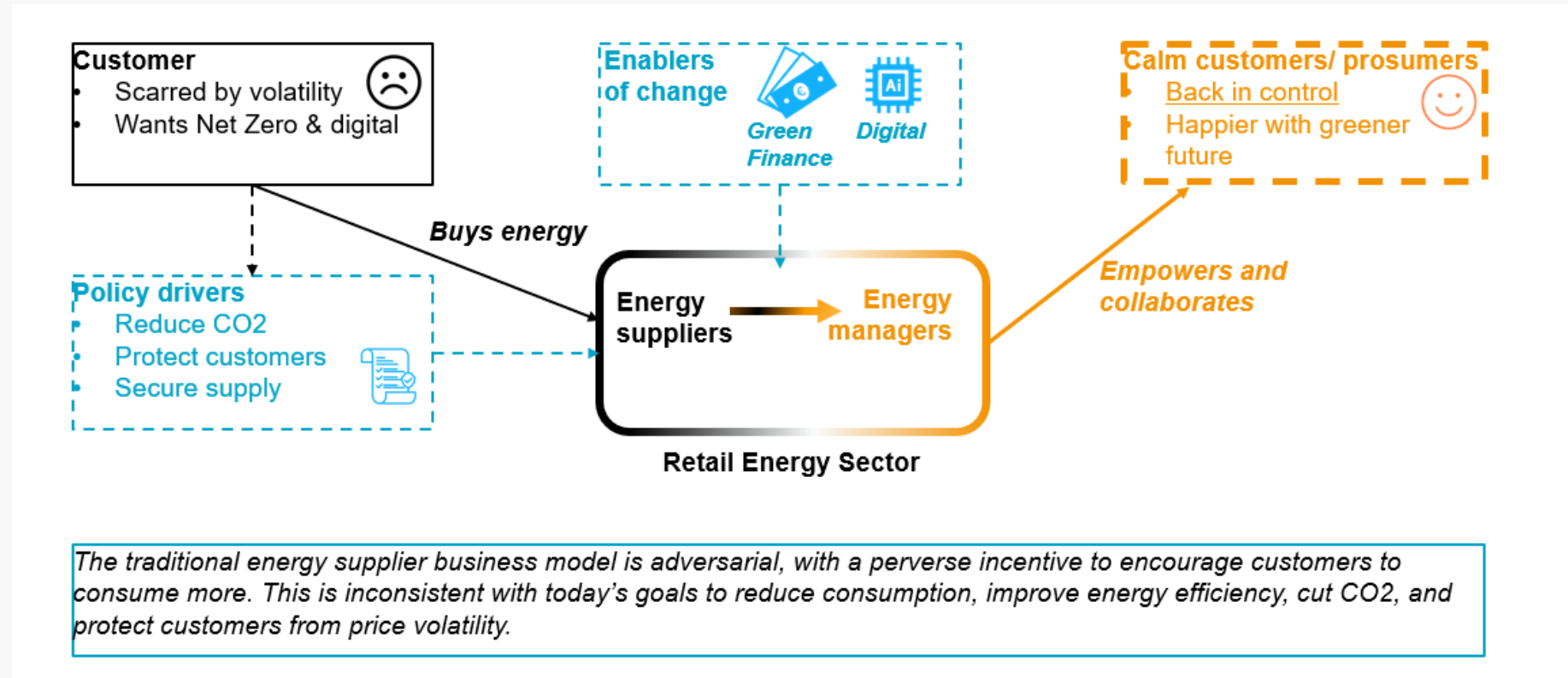
Status and outlook

NEBMS Service Focus

“Supplier of the Future” thesis forms foundation of remodelled service – i.e., **suppliers will become energy managers**

Service adopts an energy company-centric view

- Deeply oriented around shift **from kWh to service-based models**
- Explores the propositions that will win with customers in the rest of the decade.



Existing and upcoming reports and viewpoints

Release date	Report title
Feb 23	Accelerating the transition to net zero housing – Business models for deep energy retrofit
Mar 23	Is there an opportunity in providing public EV charging services?
May 23	Home Energy Management – the journey to revenue generation
Jun 23	Supplier of the Future – the need for change
Jun 23	NEBMS Quarterly Digest
Jul 23	State of New Energy Market (+ database)
Aug 23	Generative AI will transform the way energy companies talk to their customers
Aug 23	Fundamentals of Building Energy Management
Sep 23	NEBMS Quarterly Digest
Oct 23	Smart Tariffs in 2024: The Evolution of Tariffs Accelerates
Nov 23	Smart Tariffs Database
Dec 23	Energy Suppliers & Community Energy (+ case studies)

Release date	Report title
Feb 23	Accelerating the transition to net zero housing – Business models for deep energy retrofit
Mar 23	Is there an opportunity in providing public EV charging services?
May 23	Home Energy Management – the journey to revenue generation
Jun 23	Supplier of the Future – the need for change
Jun 23	NEBMS Quarterly Digest
Jul 23	State of New Energy Market (+ database)
Aug 23	Generative AI will transform the way energy companies talk to their customers
Aug 23	Fundamentals of Building Energy Management
Sep 23	NEBMS Quarterly Digest
Oct 23	Smart Tariffs in 2024: The Evolution of Tariffs Accelerates
Nov 23	Smart Tariffs Database
Dec 23	Energy Suppliers & Community Energy (+ case studies)
Jan 24	The changing face of Smart Energy Bundling
Jan 24	Protecting customers - Social tariffs, price caps, other measures
Jan 24	NEBMS Quarterly Digest

Release date	Report title
Jan 24	The changing face of Smart Energy Bundling
Jan 24	Protecting customers - Social tariffs, price caps, other measures
Jan 24	NEBMS Quarterly Digest
Feb 24	Innovator Landscape & Database
Feb 24	A fresh look at dynamic tariffs
Mar 24	Green Finance – How Not Why
Mar 24	Viewpoint: Centrica and Octopus are playing the same game in very different ways. Who's got it right – the incumbents or the disrupters?
Apr 24	How can energy companies improve customer loyalty?
Updated every month	<i>Case studies: new and updates</i>

Firm plan

Still open for input!

Contact Us



Leon Gielen

Head of Business Development Asia

+31 (0) 617935006

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.

Delta Energy & Environment Limited is a company registered in Scotland with registered number SC259964 and with its registered office at Argyle House, Lady Lawson Street, Edinburgh, EH3 9DR, UK.

Lane Clark & Peacock LLP is a limited liability partnership registered in England and Wales with registered number OC301436. All partners are members of Lane Clark & Peacock LLP. A list of members' names is available for inspection at 95 Wigmore Street, London, W1U 1DQ, the firm's principal place of business and registered office. Lane Clark & Peacock LLP is authorised and regulated by the Financial Conduct Authority and is licensed by the Institute and Faculty of Actuaries for a range of investment business activities.

LCP and LCP Delta are registered trademarks in the UK and in the EU. Locations in Cambridge, Edinburgh, London, Paris, Winchester and Ireland.

Copyright © 2023 LCP Delta.

<https://www.lcp.uk.com/emails-important-information> contains important information about this communication from LCP Delta, including limitations as to its use.

Disclaimer and use of our work

Where this report contains projections, these are based on assumptions that are subject to uncertainties and contingencies. Because of the subjective judgements and inherent uncertainties of projections, and because events frequently do not occur as expected, there can be no assurance that the projections contained in this report will be realised and actual events may be difference from projected results. The projections supplied are not to be regarded as firm predictions of the future, but rather as illustrations of what might happen. Parties are advised to base their actions on an awareness of the range of such projections, and to note that the range necessarily broadens in the latter years of the projections.