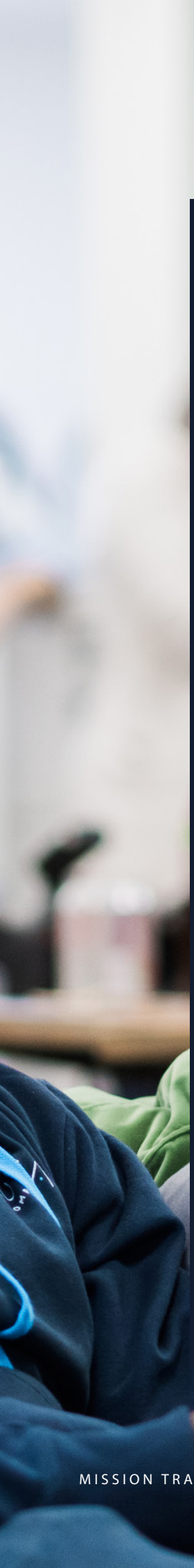
KALUZA

MISSION TRANSITION

OUR VISION

2021



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OUR STORY

The scientific community is clear. Unless there are immediate, rapid, and large-scale reductions in greenhouse gas emissions, limiting warming to close to 1.5°C or even 2°C will be beyond reach. This would be catastrophic for the planet, and humanity. With energy production and consumption generating over 70% of the world's greenhouse gas emissions, we must accelerate the industry's transition to net zero.

Yet, from speaking with energy companies, we know that most of their time is spent struggling with ageing technology. Basic processes such as customer billing require frequent manual intervention and new products take months to launch, slowing the pace of decarbonisation.

We cannot let technology from the past stop us from fighting for our future. At Kaluza, we believe that the energy transition can only be successful if energy companies become the drivers of change and bring every customer with them. Our technology is enabling this transformation to ensure decarbonisation becomes a simple and affordable option for our clients and their customers. Together, we can power a world where net zero is within everyone's reach.

ABOUT THIS REPORT

The results of climate inaction would be catastrophic. Yet, what drives us is not fear. What drives us is our collective willingness to build a prosperous world powered by clean energyv This is why, as a company built to accelerate decarbonisation, we are proud to formalise our approach to environmental sustainability. We call it Mission Transition.

In order to play our part, Kaluza is committed to:

1 LEAD BY EXAMPLE AND BECOME A CARBON NEGATIVE COMPANY BY 2030

While the world will need to reach net zero, those of us who can afford to move faster and go further should do so. This is why Kaluza commits to be carbon negative by 2030, setting one of the highest decarbonisation standards for its industry.

2 DRIVE POSITIVE CHANGE BY BUILDING THE PLATFORM ACCELERATING THE ENERGY TRANSTION

Using insights, expertise, and technology, we aim to accelerate the decarbonisation journeys of our clients and their customers. We do so by providing our clients with a platform that takes cost out of the system to pay for decarbonisation. The platform lowers cost to serve and cost to change, while providing the tools and insights to truly focus on engaging customers and decarbonising their homes.

OUR AREAS OF FOCUS

LEAD BY EXAMPLE: CARBON NEGATIVE

REDUCE OUR EMISSIONS

Work to reduce our Scope 1, 2 and 3 emissions in line with the the Science Based Target initiative and limiting global warming to 1.5°C degrees

OPTIMISE OUR CLOUD USAGE

Adopt sustainable software development practices to lower our usage of the cloud, reducing emissions and costs

REMOVE CARBON

Back both nature-based and carbon removal technology solutions to reach our carbon negative target

DRIVE POSITIVE CHANGE FOR ALL

CONTINUOUSLY INNOVATE

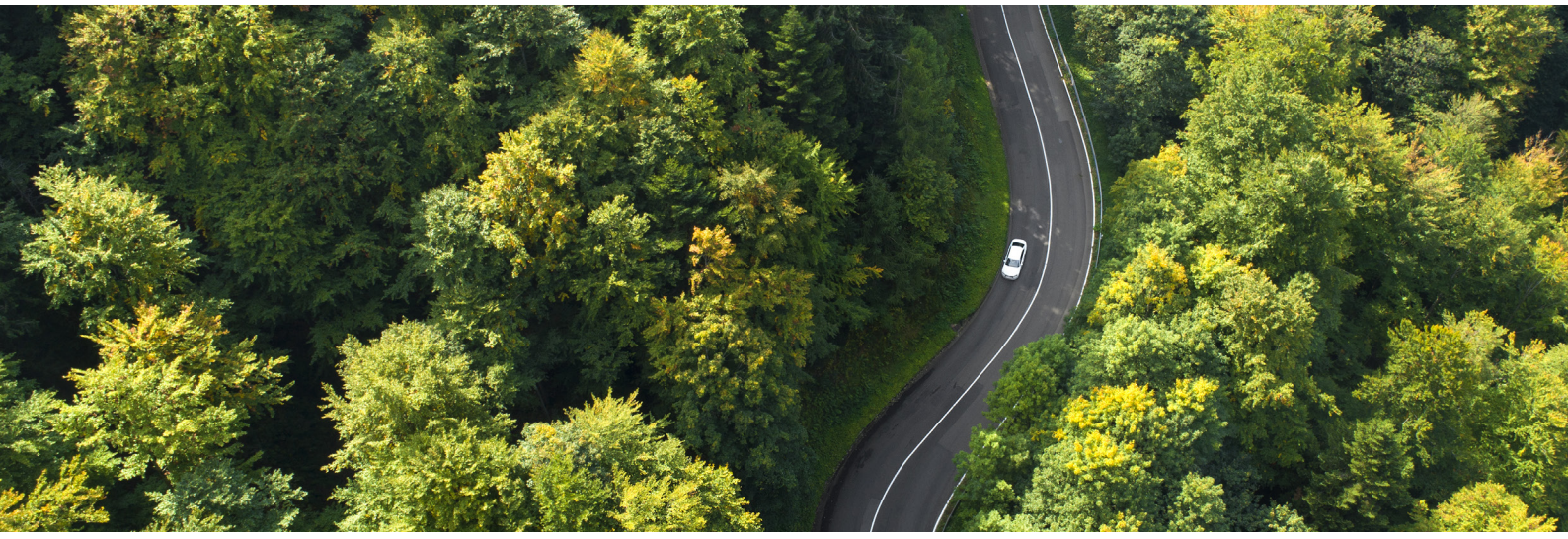
Foster a culture of innovation to deliver the operational excellence, cost reductions, and tools energy companies need to decarbonise at speed

SHAPE ENERGY MARKETS

Advocate for a re-think of market designs that enable a less expensive and more flexible virtual grid atop today's more expensive physical grid

BRING EVERYONE ALONG

Grow the number of end customers on the Kaluza platform to amplify our decarbonisation impact



POWERING THE FUTURE OF ENERGY

Kaluza is a software-as-a-service (SaaS) business providing energy companies with a real-time billing, intelligent grid services, and seamless customer experiences. The platform was originally developed for OVO Energy, one of the largest energy suppliers in the United Kingdom, to deliver cheaper, greener, and simpler energy. OVO Energy was seeking the data flexibility, agility, and speed to market required to lead the future of energy.

Today, our technology is available to any energy company and together we are accelerating a sustainable, affordable and resilient energy transition. This is our mission.

KALUZA ENERGY RETAIL

Kaluza's Energy Retail product offers end-to-end customer lifecycle management, supported by intelligent customer tooling, all designed to deliver a high level of insights and analytics. It is built around a reactive and real-time, datastreaming architecture utilising Kafka as a core technology and enables Kaluza to offer next generation propositions.

The product delivers the agility and data flexibility needed to adapt to changing market conditions and innovate. It offers discrete modules and extensible APIs.

KALUZA FLEX

Our demand response technology, Kaluza Flex, is built to connect millions of smart home devices like electric vehicles, storage heaters, and home batteries and intelligently manage their charging. We are also a pioneer of the world's first and largest rollout of vehicle-to-grid technology.

By optimising when devices charge and discharge, Kaluza Flex reduces pressure on the grid at peak times and allows more renewable energy to be used, saving costs and carbon for operators and end customers at scale.

In combination, Kaluza is turning one of the biggest challenges of our time into an opportunity for sustainable growth. Today, our technology is licensed to energy companies across the world including OVO Energy and AGL - the largest utility in Australia - and we have partnerships with leading auto and smart home device manufacturers such as Nissan, Stellantis, Sonnen, Glen Dimplex and Bosch.

OUR HIGHLIGHTS

LETTER FROM OUR CEO

All of us at Kaluza are fiercely committed to accelerating the energy transition. We believe that modern technology is a key piece of the puzzle, enabling energy companies to streamline operations and to empower their end customers as agents of decarbonization.

We need everyone to make smarter energy decisions and energy suppliers are uniquely positioned to impact customers on a massive scale.

Fortunately, awareness of the decarbonization imperative is rapidly growing across the globe. New commitments are surfacing all across Europe, China, Latin America, the US, and more. While the regulatory landscape is evolving, so must our personal relationship with energy. For too long the energy experience has been stale and underwhelming, it is now crucial that we shift away from simply paying a static bill at the end of every month.

I joined Kaluza in July 2021 to help bring about a revolution in the way we consume energy. We need to fundamentally redesign how we generate, manage, and use energy in a way that ensures the lights are kept on and that operators, retailers, and customers all save money. Because, if we can't take cost out of the system and reward customers for the active role they play, then we can't pay for decarbonization

We also strive to make decarbonization simpler. Combining Kaluza's billing engine and demand response technology, we bring all energy transactions into a single view and we refresh that data in real time. It means that customers can manage the charging of their electric vehicle, check how much they are earning from their solar panels feeding electricity back to the grid and view their home's energy usage all in one, live data view.

Today, I am truly excited to be sharing with you the first chapter of Mission Transition. From the very first conversation I had with some of the folks at Kaluza I could feel the passion and commitment everyone shares for driving a greener and fairer world. Mission Transition channels that energy and outlines our approach to environmental sustainability and how we will continue to work to accelerate the energy transition for the benefit of all.

I am particularly proud to announce our commitment to become carbon negative by 2030. This means that we will be removing more carbon emissions from the atmosphere than we emit. It's an audacious target, but the kind that reflects the passion and ambition of our people.

This is the first chapter of Mission Transition. It introduces how we intend to decarbonize inside and out, driving positive change across the energy ecosystem through innovation, policy lobbying, and scale. Our team and I look forward to hearing your feedback and ideas as we continue to evolve our strategy.

Onwards!

Scott Neuman

OUR COMMITMENT TO THE WORLD

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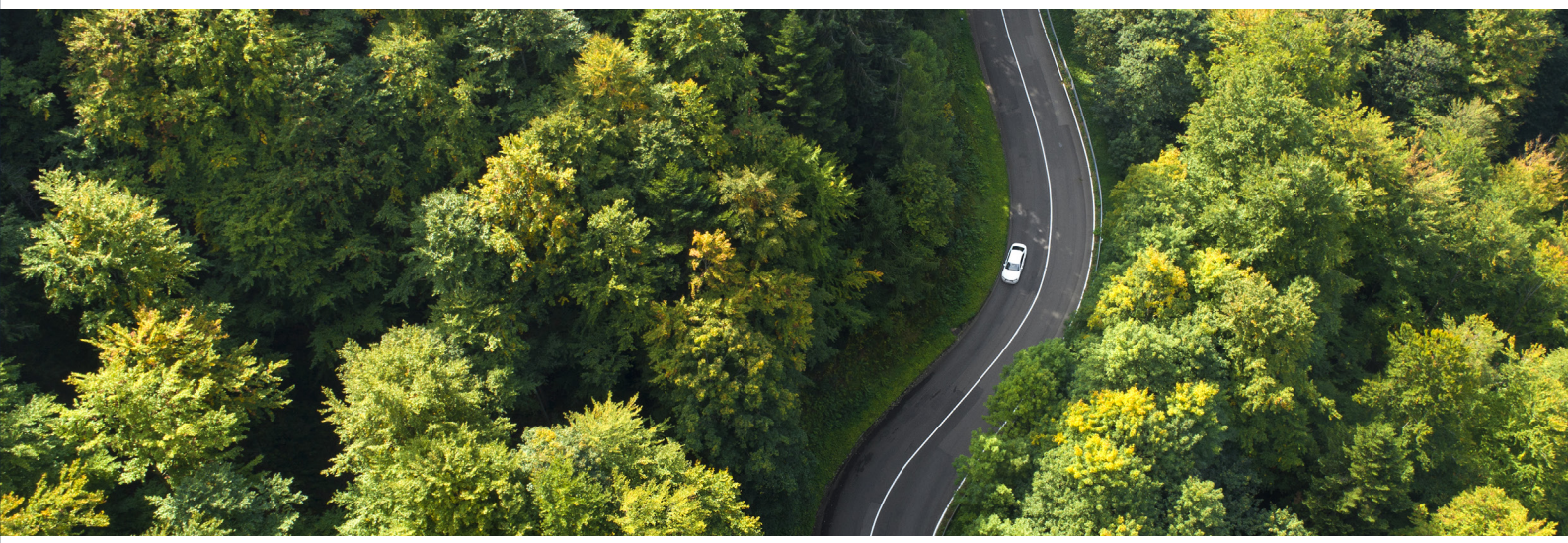


LEADING BY EXAMPLE: CARBON NEGATIVE BY 2030

We consider that it's not enough to do less harm. It's about taking bold and collective action to reverse damage and build a green future. This is why Kaluza is committing to becoming carbon negative by 2030.

A growing number of companies are setting targets to become carbon neutral companies - i.e they are removing the amount of carbon emissions they produce, typically by purchasing carbon credits. Going carbon negative takes this a step further. It means that we will be contributing to removing more CO2 emissions than the amount of CO2 emissions we put out in the atmosphere.

Our carbon negative target and our carbon reduction goals are underpinned by the latest guidance from the Science-Based Target Initiative. We will be submitting our targets for approval by June 2022.

AVOID

We enable our people to make conscious decisions and avoid emissions where possible. For example, we can avoid emissions by promoting flexible working and avoiding air travel.

REDUCE

Where our emissions cannot be avoided, we aim to reduce them as much as possible. For example, while our technology is cloud-based, we can promote sustainable software practices.

REMOVE

For the remainder of our emissions, we will invest in technology and nature-based solutions in line with international standards. Removing emissions is how we get to carbon negative.

The first step in becoming carbon negative is to reduce our own impact and we plan on doing so for our Scope 1, 2 and, 3 emissions. We know that our Scope 1 and 2 emissions are primarily caused by the electricity and gas we use in our buildings. As for Scope 3, most of these emissions are associated with our usage of third-party cloud providers.

Once we have reduced our impact as much as possible, we will ensure we remove the remainder of our Scope 1, 2 and, 3 emissions responsibly, leveraging both technology and nature-based carbon removing solutions.

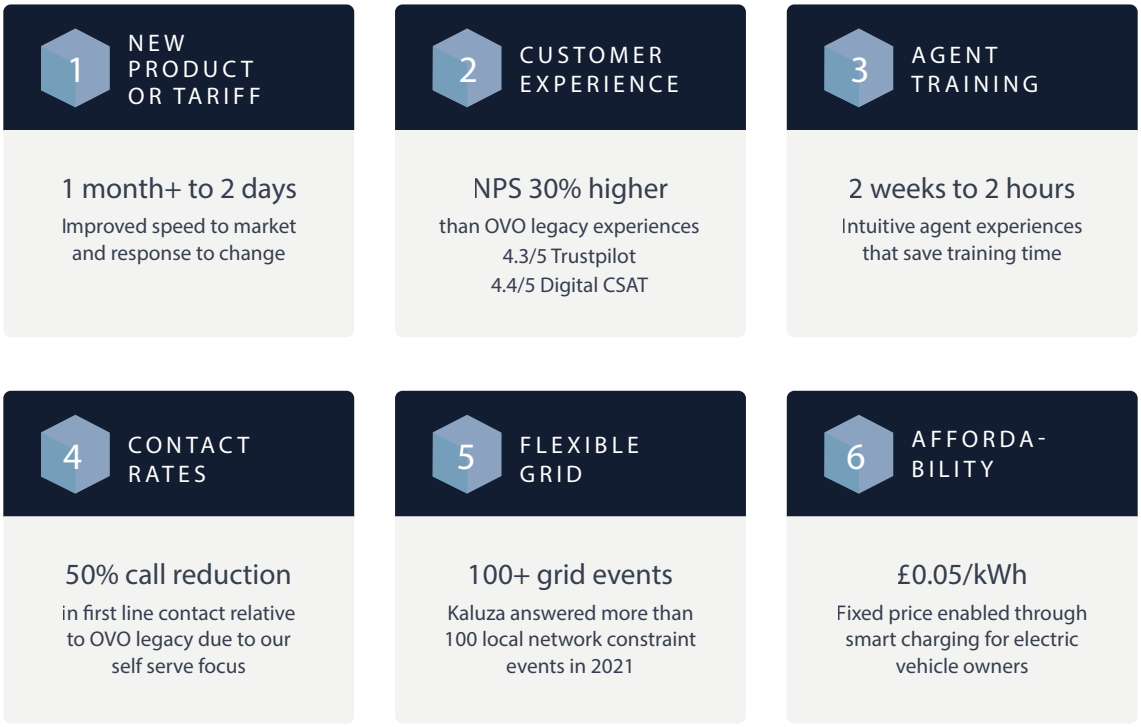
> Scope 1 relates to emissions associated with the direct combustion of fuels for example, natural gas for heating or petrol for vehicle fuel. Scope 2 relates to the emissions associated with purchased energy, for example building electricity and district heating and cooling. Scope 3 emissions are all indirect emissions. (not included in Scope 2) that occur in the value chain, which an example in this case is our cloud usage.

LEVERAGING OUR TECHNOLOGY TO DRIVE POSITIVE CHANGE

Kaluza drives positive change by building a fast, flexible platform that engages all energy customers.

Our business seamlessly connects the energy industry, energy companies, and their customers. As part of Mission Transition, we commit to removing any unnecessary complexities that cost our clients time and money and may slow down reaching net zero. We will continue to improve our platform, providing the data flexibility, agility, and speed to market energy companies need to engage their customers and drive a renewable-powered world. Our aim is for our clients to no longer have to adapt to market and customer trends and instead set those trends.

The technology to deliver a flexible energy system is ready today and we can already prove its benefits to energy companies.



To realise the full potential of our technology, Kaluza must continue to work closely with policymakers and regulators. We believe a new type of energy system is possible. One where intelligent flexible devices such as electric vehicles, batteries, and heat pumps help balance the grid to deliver net zero at low cost for customers. However, in most markets, progress towards this future energy system is being slowed down by regulatory barriers and access to data. For example, in the United Kingdom we do not have visibility of the constraints on the electricity system below a certain voltage level.

Without the right policy and regulatory framework, there is no decentralised renewable energy system. This is why we commit to continue to leverage our expertise and technology to influence policy and regulation so that everyone can become active grid participants and be fairly rewarded.

WHAT'S NEXT?

We have a bold plan and we recognise that a detailed plan and real transparency are key to our success. We commit that in 2022, we will be sharing the second chapter of our sustainability approach, including:

BALANCING ENVIRONMENTAL SUSTAINABILITY AND MEETING OUR CLIENTS' NEEDS

Born out of an energy company, we have a deep understanding of the pressures our clients face. While decarbonisation is on everyone's mind, energy companies have pressing challenges they must address today while they plan for the future. From transforming their relationship with their customers to finding ways to digitalise their systems while keeping costs low, it can be tempting to put decarbonisation on hold. We firmly believe, however, that we can meet the needs of energy companies' today, while shaping a net zero carbon future.

Kaluza is looking to 2030 and beyond where our energy supply is largely, if not all, from renewable sources. Passenger transport and residential heat have been massively electrified. Long-duration energy storage solutions have matured and are complemented by commercial and residential flexibility and essentially every home can act as a virtual power plant providing grid services within which customers can be rewarded. This energy system is a lot greener and fairer to everyone and it requires a level of digitalisation and agility that Kaluza is built to deliver.

Mission Transition is more than a sustainability plan. Its purpose is to shape our long-term product, technology, and business decisions and ensure we strike the right balance between delivering today's needs and accelerating the energy transition. To help us navigate this, we base our work on three strategic pillars:

1 We drive operational excellence to focus on what matters

2 We enable decarbonisation through data and tools

3 We bring everyone along

1 WE DRIVE OPERATIONAL EXCELLENCE TO FOCUS ON WHAT MATTERS

Our aim is to enable energy companies to spend less time and money on operating their business and instead focus on differentiation, retention, and their transformation to meet net zero. Empowering our clients to achieve operational excellence is therefore a crucial priority in driving their progress towards decarbonisation.

The Kaluza platform enables our clients to evolve with the energy transition and quickly react to market and regulatory changes. This is done in three key ways: enabling self-service for the users of the platform, innovating to increase billing accuracy, and reducing cost to serve.

We promote self-service, empowering all the users of the platform

- Self-serve tariffs consoles, for commercial teams to create price changes effective in hours, across the entire platform
- API Developer Portal, to enable our clients to easily build their own differentiating experiences and propositions

We innovate to increase billing accuracy and prevent bad debt

- Consumption and charging pipeline that turns analogue meters into smart meters for billing purposes
- Dynamic updates to weather coefficients to recalculate previously estimated consumption due to weather events

We leverage digital experiences and our agent tooling to lower cost to serve

- Digital customer experiences that promote self-service, reducing contact rate and freeing-up our clients product and engineering teams' time
- AI-driven predictive customer issue handling, empowering agents with the most efficient course of action to resolve complex exceptions

CASE STUDY

HAPPIER AGENTS + HAPPIER CUSTOMERS = MORE FOCUS ON INNOVATION AND DIFFERENTIATION

Authored by

Rebecca Gray, Head of Product at Kaluza
and Sarah Ball, Head of OVO Care

Kaluza's Agent Platform is a module within Kaluza's Energy Retail product that helps to simplify and streamline how support agents serve energy customers over phone, email, and live chat.

Since OVO Energy adopted Kaluza's Agent Platform they have seen huge benefits across their business and customer base. For example, Kaluza has reduced agent training time from 2 weeks to only 2 hours and increased customer net promoter score by +30%.

OVO Energy's Head of Customer Care, Sarah Ball commented:
"We have been working closely with the Kaluza team over the last two years to build an agent experience that helps drive the best possible experience for our customers. Under our 'Agent Excellence Program', Kaluza worked with our expert advisors to identify improvements and build tens of agent tooling capabilities. These new tools give our support agents more power, enabling them to resolve customer issues more quickly and efficiently at the first point of contact."

This year alone, over 40 tooling improvements have gone live, following direct agent engagement into Kaluza's research work, leading to 35% improvement in average handling time reductions and 20% fewer handoffs to other internal teams. The changes have created a far superior customer experience, evidenced by a 6% increase to over 63% in OVO's customer satisfaction scores compared to the same period in the previous year.

With Kaluza powering better agent and customer experiences, OVO is now able to focus on innovating new aspects of the customer journey and increasing customer lifetime journey. For example, OVO is developing its 'Intelligence Hub' to anticipate customer needs while ensuring that every customer gets a tailored experience with exactly the right advisor.

2 WE ENABLE DECARBONISATION THROUGH DATA AND TOOLS

A successful transition to clean energy means more engaged and educated energy customers. In order to move to a renewable world of unpredictable supply, customers need to be able to seamlessly shift their demand to when the grid is less constrained and green energy is abundant.

This shift requires unyielding customer centricity and data mastery. This is why we use Kafka as a core technology for our data-streaming architecture, a technology never before used in energy. This architecture allows Kaluza to leverage live data to its fullest extent, unleashing flexibility from multiple sources – including the industry, the grid, and customer interactions.

In addition to insights, we are providing our clients with the tools to move beyond kWh and directly engage with their customers to help them reduce costs and carbon. For example, our platform powers the world's first and largest deployment of vehicle-to-grid technology. Kaluza optimises the chargers to import energy into the EVs when renewable energy is in abundance and then exports it back to the grid based on the live needs of the energy system. V2G owners get paid for the energy sold back to the grid from their vehicle and use a mobile app backed by Kaluza to tell the platform when they would like their car ready to drive. The innovation has game changing potential for the energy transition across the world as EV adoption grows.

Kaluza Flex's engine powers cost and carbon reducing propositions

- Optimisation of the energy consumption of connected devices to maximise the availability of renewable energy on the grid
- Powers propositions that lower the cost of owning and using a low-carbon smart device by offering grid services

Energy insights drives informed decision making

- Reactive, real-time reporting for our clients, straight from the source data itself via our data-streaming architecture
- Actionable insights for end-customers about their energy usage to reduce their bills and their carbon emissions

Targeted experiences and products to increase gross margins

- Changes and product launches happen in days, not months, always keeping up with market events and customer trends
- Intelligent eligibility engine to target different customer groups with the most suitable proposition

CASE STUDY

KALUZA'S DATA ARCHITECTURE ENABLES TAILORED SOLUTIONS FOR ITS CLIENTS

Authored by

Lottie Swift, Product Manager

Kaluza's agility and speed to market allows energy companies to leverage the extensive data on the platform and offer tailored propositions to their customers that differentiate themselves from competitors.

For example, Kaluza built SSE Energy Services a bespoke 3-year fixed tariff in response to UK price spikes in autumn 2021. The tariff was created in 24 hours, allowing SSE Energy Services to bring it to market as a quick response to the energy crisis and give customers certainty in an uncertain market. Two weeks after launching, 8,000 customers had signed up for the tariff.

In tandem with this launch, Kaluza also rapidly supported deactivating a range of other, less commercially viable tariffs at the request of SSE Energy Services to increase simplicity for their customer base.

For each tariff, including the 3-year tariff, Kaluza offers a solution for self serve price changes. Our simple tooling allows energy companies to alter price points in tariffs at any moment in time.

We are also working on allowing suppliers to not only create tailored tariffs for entire customer segments but personalised tariffs for individual customers based on Kaluza's real-time data and insights.

3 WE BRING EVERYONE ALONG

In line with Kaluza's vision for a world where net zero is in everyone's reach, our platform has been built to engage all customers - irrespective of age, income, disability or technology-savviness. To do this, we are focusing on how to make the energy experience easy and rewarding for everyone.

We want to change the fact that many people don't engage with energy when it could mean saving money on their monthly bills (which also means saving carbon). This means simplifying energy and working hard to make it engaging and rewarding. We want to make sure that all customers can be rewarded for adopting behaviours that turn static demand into dynamic demand, helping the integration of more and more intermittent renewable energy.

Reducing the cost and effort to decarbonise people's homes

- Continously engaging policymakers and regulators to unlock residential flexibility, broadening the customer reward opportunities
- Focus on coupling electrical heating and cooling appliances with Kaluza Flex, to reduce their heating and cooling costs without affecting comfort

Making it simple to engage with energy

- Intuitive and user-friendly digital experiences, built to increase engagement, educate customers and promote self-serve
- Personalised insights into how customers can curb their energy usage and carbon footprint, down to the appliance level

Accesibility at the heart of what we do

- Everyone at Kaluza is responsible for the accessibility of our tolls and we include users with disabilities in our user research
- Regular testing of our digital experiences and community of practice to improve accesibility in design

CASE STUDY

HOW KALUZA FLEX REDUCES THE COST OF ELECTRIC VEHICLE OWNERSHIP

Authored by

Michael Blom, Senior Product Manager, Kaluza Flex

The electricity grid is the most complex human-made system on earth.

Lying at the very heart of Kaluza Flex is our Flexibility Engine: an artificial intelligence capable of analysing and optimising the energy consumption of millions of connected electric devices in real time. Our team of world class engineers and data scientists have developed proprietary machine learning algorithms and combined them with a highly decoupled events-driven architecture to create a new energy intelligence platform; one that can scale infinitely to meet the growing demands of the world's electricity grids.

In August 2021, OVO Energy's market-leading Drive + Anytime EV charging proposition launched nationwide, powered by Kaluza. The tariff is the UK's only green energy plan to provide customers with separate energy rates for their car and home - slashing charging costs by 70% and enabling customers to drive their EV for just £100 across the year.

Customers on this tariff are able to access an ultra-low rate of £0.05 per kWh regardless of the time of day their vehicle is charged as a result of Kaluza's smart charging innovation. Using an intuitive mobile app enabled by Kaluza, EV owners can set the time by which they need their car to be charged and ready to drive, and leave the platform's AI to optimise charging when emissions and prices are low.

This flat-rate proposition gives customers more control of their home energy costs, and differs from others in the market, where customers are either exposed to significantly higher prices during peak hours or directly exposed to energy price spikes. As a result, OVO members are given a hassle-free charging experience that fits around their lives and rewards them for helping create a more decarbonised and resilient energy system.

The product developed to serve Drive + Anytime is already being adopted by international energy companies, with providers in Japan and Spain already signed up.

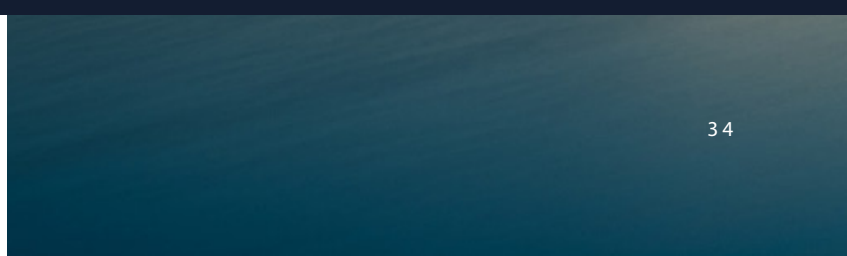
MISSION TRANSITION ON A PAGE

There is no more time to waste. The effects of climate change are already being witnessed across the globe and the energy industry has a huge role to play in ensuring we limit the warming of the planet.

As a technology company born to enable cheaper, greener, and simpler energy, we have two messages for the world:

1. We are committed to doing our part and are proud to announce that we will become a carbon negative company by 2030

2. We are building the platform that energy companies need to transform their business and accelerate net zero for everyone



OUR PEOPLE'S COMMITMENT

Kaluza's executive team is fully committed to the success of Mission Transition and is looking forward to sharing our progress with the world.

Scott Neuman

CEO

Autumn Pray

CPO

Ed Conolly

CTO

Mel Gander

COO

Cassie Harman

VP OF PRODUCT

Matt Johnson

VP OF FINANCE

Toby Ferenczi

VP OF BUSINESS DEVELOPMENT

Marzia Zafar

SUSTAINABILITY & POLICY DIRECTOR

Tash McArthur

PEOPLE DIRECTOR

Our people's passion is what drives us to strive to be better every day. We would like to give a special thanks to everyone who was involved in shaping the first chapter of Mission Transition:

Alex Ashford

Alex Veale

Alice Goodman

Amalia Kroch

Amane Toda

Andrea McCormick

Ben Garvey-Cubbon

Ben White

Emily Devine

Emily Ryatt

Fabio Labella

Jack Lockyer-Stevens

Jaime Thompson

James Campbell

Jason Brewer

Julian Norman

Liam McArdle

Lottie Swift

Lucie Agass

Michael Blom

Paul Puget

Rajit Singh

Rebecca Gray

Rebecca Heaton

Robert Runge

Robin Abraham

Sam West

Sasha Annis

Sarah Ball

Sukhil Patel

Valts Grintals

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Published 2021