



The REA Quarterly

Expert insight and industry perspectives from the REA

QUARTER 2



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The REA Quarterly is the REA's flagship publication, delivering authoritative thought leadership and timely analysis from experts across the renewable energy and clean tech sector.

Designed to showcase the voices shaping the industry, REA Quarterly provides a platform to elevate your brand, drive sales, and demonstrate expertise. This is your chance to position your organisation at the forefront of industry dialogue, reaching a highly influential audience.

Included here are a selection of articles and opinion pieces from REA's expert team from the past few months.

To secure your place in the next edition or find out more, email Faye Clayton, REA Marketing Executive at fclayton@r-e-a.net.

QUARTER 2 | 6 EXPERT ARTICLES



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Watt Communities Want - Community Engagement for Building Clean Energy



Frank Gordon
Director of Policy, REA

ARTICLE 1

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Watt Communities Want: Six Insights into UK Public Opinion on Energy

The report, commissioned by eleven leading energy trade bodies, including the REA, reveals what communities across the UK want from the country's future energy system. The findings are based on a nationally indicative survey of 996 UK adults across all political voting affiliations.

Respondents were asked twelve questions about energy infrastructure and the energy transition, each answered across three time perspectives: recalled 2020, current 2026, and projected 2030.

The findings describe how communities understand the direction of travel, not only where opinion sits today.

The headline is that most people understand the link between clean power and better energy security, between international events and energy bills, and most still prioritise tackling climate change.

The public backs long-term infrastructure investment, and wants costs spread fairly, preferring this to paying less now if that incurs costs later on. People recognise storage and flexibility as essential, back grid upgrades and, in general, are more system literate, more engaged, and more willing to support the transition than the industry conversation typically assumes.

Six key strategic insights emerge from the data.

First, most people associate clean power with improved security, both in terms of energy supply and dependence on international supply chains.

Second, whilst lowering energy bills is a priority, the public is asking for investment rather than delay; the preference for spreading costs over many years now leads by some way across every political persuasion.

Third, whilst the cost of energy and energy security remain the top concerns, there is still strong support for tackling climate change and reducing air pollution.

Fourth, there is majority support for a flexible, storage-led system to accommodate the variable output from renewables - grid upgrades, storage and smart technology to shift when we use power, with only 4% of the public willing to fall back on fossil fuels.

Fifth, clean energy is increasingly seen as supporting the country's jobs and industrial strategy, with UK industrial competitiveness the fastest-rising of the seven options.

Sixth, whilst there is support for the energy sector's transition, there is a need to improve communications to correct misperceptions.

People have valid and understandable questions about why energy bills are so high, and the sector, stakeholders and governments need to do a better job in communicating the facts.

Ultimately, there is public support for action to decarbonise power, tackle climate change and improve energy security.

What's missing is an understanding of how this will practically be achieved - what is actually happening, what the impact will be and what the trade offs are.

Read the full report [here](#).



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How do Electric Vehicles increase drivers' peace of mind in the current crisis?



Mark Constable
Head of Transport, REA

ARTICLE 2

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How do Electric Vehicles increase drivers' peace of mind in the current crisis?

EVs have played a high-profile role in the UK's political life. A new way of powering what is essentially the same old device used in the same old way has become one of the most acrimonious fronts in the ongoing culture war between change and being left alone. Misinformation is rife, but for those who make the switch, hardly any go back...

Just when new EV registrations growth was softening slightly against a backdrop of new taxes and manufacturer pushback on the ZEV Mandate, along comes a geopolitical shock that's fed through into both liquid fuel pricing and availability. This has given a whole new group of drivers reason to look at switching and they are certainly acting - many national EV portals report a rise in enquiries by up to 50%.

There are now more mass-market EVs at all price points than there have ever been before. Multiple studies are showing annual savings of over £1000 are available to those who can charge at home, and the proportion of UK drivers who can is growing thanks to innovations such as Cross-Pavement charging. Even the focus around the new 3 pence per mile proposal for EVs has been all but negated by the 3 pence per mile rise in running costs for a 40mpg petrol car since the start of February. **There's more good news on the horizon with the recent ruling meaning the 20% VAT Rate on Public Charging could have been incorrect all along**, along with recent enhancements to the amounts available for some home and business charge point installations.

Electricity simply isn't subject to the same volatility as petroleum. Domestic costs are regulated, and supply is managed entirely onshore. Waking up to a full charge at a known cost is very different to having to queue for a tank of petrol at a surprising price. EV drivers spend very little of their own time charging, going about their day while their batteries are refilled - and that's true of charging at home and while out and about. Predictability has suddenly shot up in consumer value - lower carbon emissions and better air quality will be the welcome outcomes of hard-headed economic decisions that consumers are increasingly taking.

The ZEV Mandate must remain a robust mechanism for driving EV adoption, while improvements to the onshore EV supply chain for both vehicles and batteries must also be made.

The recent award of a £380m grant to Tata's Agratas plant in Somerset is a clear statement that the direction is set and electric mobility is here to stay.

"What would happen if everyone tried to charge their EVs at the same time, eh?"

Broadly the same thing that would happen if everyone went out and tried to buy toilet roll, rice, clothes pegs or petrol, frankly, at the same time. We'd run out, of course. But that's not how populations behave and that assertion also assumes no-one is managing the electricity system.

The largest pickup in grid demand in modern times wasn't the 2.8GW at the end of the penalty shootout when England played Germany at Italia 1990 (#2) nor the 2.2GW directly after JR got shot in 1985 (#9) but the 3GW experienced once the total eclipse of Aug 11th 1999 was over - broadly equivalent to 425,000 EVs being plugged into their home chargers all at once, as the nation went back to work.

There wasn't a flutter - the system operator knows how populations behave and plans accordingly. Public Holidays, weather, TV shows, sporting events, news events, seasonal behaviour and a whole host of other data get crunched day in day out, and demand predictions are made, generators are engaged, and then fine control occurs in real time. The idea that EV uptake and usage couldn't be modelled in the same way is fanciful in the minds of those who need them to fail.

EVs are great for drivers, their wallets, and their local environment, but they can also help the robustness of the grid, instead of threatening it.

Having a vast amount of battery storage plugged in and available to balance loads, either by taking power from, or returning it to, the grid, can help the UK reach a 100% carbon free grid, and increase the amount of Renewables on the system previously reliant on coal - a transition where the UK already leads the developed world. The technology is referred to as "bi-directional charging", "Vehicle-to Grid (V2G)", or even "Vehicle-to Home (V2H)" where the car only supplies the home, and not the grid.

There has been some nervousness among consumers that this activity would shorten the life of the battery. But phone batteries prompting this fear would last a lot longer if they were liquid cooled while charging and discharging, like those in EVs. Also, an EV battery has to cope with full power going out under the vehicle's full acceleration and then a total reversal of flow as power flows back into the battery via regenerative braking a moment later, and then accelerating.

There might be dozens of such cycles in even a short journey. Using an EV for demand management using only a few percent of the total battery power capability and 20-30% of its capacity once a day, barely registers, by comparison. What's even better, is that there is a financial return for doing so. Less copper in the ground, less construction, less disruption, more energy security.





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VAT off electricity bills, but the economy needs more



Matt Parry
Head of Energy Demand and Power, REA

ARTICLE 3

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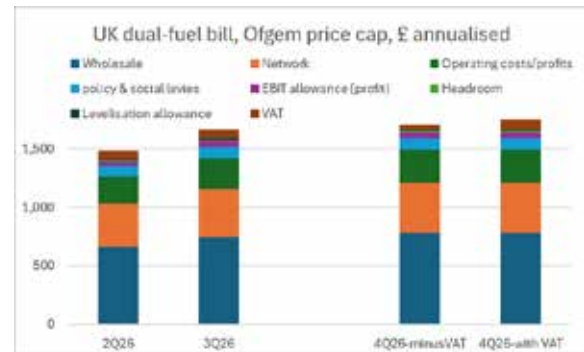
VAT off electricity bills, but the economy needs more

Scrapping VAT on electricity bills is welcome, but moving all levies off bills (and onto general taxation) would provide the real 'breathing space' that is required.

Andy Burnham did not take long to make his mark. One of his first acts (day 2) as Prime Minister was to strip VAT from household electricity bills, a measure that will run for at least six months from October 2026. The REA has pressed for this for years and is accordingly delighted to see it done.

Our next request is bolder: take all levies (social and green) off bills too and shift the 'cost' (more on this later) onto general taxation. The sums, according to REA modelling, would more than pay for themselves.

The government reckons the VAT cut will "take around £45 off the yearly Ofgem price cap in October". That is not, on its own, enough to stop the typical dual-fuel bill rising in the fourth quarter of 2026, compared to the third quarter. Wholesale costs keep climbing, not least because of renewed disruption to shipping through the Strait of Hormuz. But bills would have risen considerably further without the VAT cut. The typical annualised dual-fuel bill is now expected to reach £1,700 in the fourth quarter of 2026, up by about 2% on the third quarter. Without the VAT change, it would have been closer to £1,745, a rise of almost 5% (see chart).

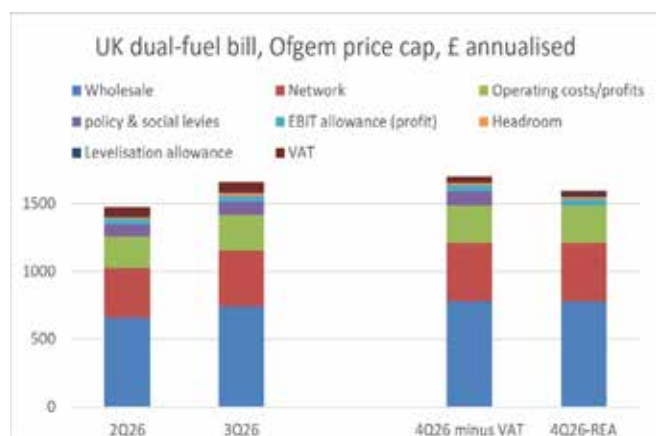


The macroeconomic case is inviting too. The government estimates that removing VAT from electricity bills will trim "CPI inflation by around 0.10 percentage points", i.e. an expected inflation rate of 3.6% for the fourth quarter becomes 3.5% ceteris paribus. Quite how the VAT cut will be funded is a question the REA will leave for others to debate (whether from the budget of the now-abandoned digital-ID scheme or elsewhere); instead, the REA focuses its attention on the economic upside. Taking a UK economy worth just over £3 trillion in 2025 and an elasticity of GDP to electricity prices of between -0.02 and -0.04 (we'll conservatively estimate -0.02), the REA calculates that the VAT cut alone would support an annualised **£1.6 billion of additional economic activity**, largely through higher disposable incomes feeding through into higher consumer spending.

Useful as it is, the VAT cut does not (in our opinion) go far enough.

Dual-fuel bills are still on track to rise by 2% in the fourth quarter, compared to the third, as European natural gas prices were up roughly 60% over the month through July 24th. The REA argues that Mr Burnham's government should go further and remove social and green levies from electricity bills as well, moving them onto general taxation instead.

Doing so would cut around £150 off the typical dual-fuel bill relative to where we would be without either intervention, an additional £105 on top of the VAT removal. The fourth quarter bill would then come in at £68, or 4%, below the third quarter level: a genuine reduction, rather than merely a smaller increase (as the VAT cut alone will achieve), and the kind of ‘breathing room’ Mr Burnham has promised struggling households. The REA’s modelling suggests this second step would generate a further £3.74 billion of economic activity, on top of the gains from the VAT cut.



The fiscal arithmetic is where the proposal gets really interesting. **Moving levies off electricity bills and onto general taxation would cost the exchequer an estimated £2.99 billion up front, based on 28.6 million UK households (ONS data) each saving £105. But the REA’s modelling suggests the resulting £3.74 billion boost to economic activity would generate about £3.7 billion of extra tax revenue** (assuming a tax buoyancy rate of 0.99 according to IMF research).

On these numbers, the move more than pays for itself. It would also amount to a small piece of redistribution: swapping a progressive charge, which weighs more heavily on poorer households as a share of spending, for a progressive one that rises with income.

Cutting levies and VAT from electricity prices would ease the immediate squeeze, but over the longer-term more needs to be done to wean homes off gas altogether.

The Government’s Warm Homes Plan is a step in the right direction, yet rooftop solar, battery storage and heat pumps remain out of reach for most households even with the support on offer. A more powerful lever sits in the payroll system. **Salary sacrifice schemes have already shown, with EVs, that making green technology tax efficient can turn a new technology into the mainstream choice once employees could spread the cost through gross pay (i.e. before tax).** The same tool applied to domestic energy systems would work similarly well. Households that install rooftop solar, heat pumps and battery storage already save nearly £550 a year on their bills, reduce peak demand on the grid (easing the scale, and cost, of planned network investment - another huge chunk of bills) and cut Britain’s reliance on expensive imported gas. Multiplied across millions of UK homes, the impact would be huge.

Taken together, these measures soften this year’s bill rises while building a more resilient system for future fossil-fuel shocks. Neither strategy requires anything like the £44 billion spent on the previous round of energy-bill support. What both need is political will, and given the current state of the world, this may be as good a moment as any to find it.



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Circular, Sustainable Cities and Towns Briefing.



Megan Muller-Girard
Senior Policy & Advocacy Officer, REA

ARTICLE 4

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Circular, Sustainable Cities and Towns Briefing

UK cities and towns sit at the sharp end of our country's biggest challenges: high energy bills, stretched infrastructure, rising waste volumes, housing demand, rising carbon emissions, and increasing demands on finite resources.

We cannot look at these in isolation. Our local governments must make a strategic, coordinated shift towards circularity and sustainability. Here, resources are used efficiently, value is retained locally, and clean energy and circular economy initiatives support and reinforce one another. This is not just better for our local environments, but local communities, infrastructure, and economies.

The Government are undertaking the largest restructuring of English local government in a generation, and England are to launch its own Circular Economy Growth Plan. This briefing presents six principles which are central to the delivery of circular, sustainable cities and towns.

Our cities and towns have the perfect opportunity to act as facilitators of change, working with the private sector to enable investment and to build the services and facilities of tomorrow. The timing could not be better...

The six key principles:

1. Energy systems should be localised, low-carbon, and resilient; integrating renewable generation, flexibility, storage and smart networks.
2. Resource use should follow circular economy principles, prioritising prevention, reuse and high-value recovery in line with the waste hierarchy.
3. Heating solutions should be affordable and decarbonised at scale, prioritising efficient, shared systems such as heat networks.
4. Energy and transport systems should be planned and operated as integrated systems to maximise efficiency and reduce emissions.
5. Food systems should strengthen local economies and minimise waste, supporting sustainable production and redistribution.
6. The built environment should enhance and work with nature, embedding circular design principles across development.

With an estimated 55% of global climate emissions stemming from resource extraction and processing, the decarbonisation strategies the UK has primarily employed to date (electrification, improving energy efficiency, and reducing demand) simply do not go far enough.

Effective decarbonisation also requires us to change our relationship with the resources we use; keeping materials in use for as long as possible to minimise both upstream extraction and processing emissions as well as downstream disposal emissions. In other words, a circular approach to resource use.

Read the full briefing [here](#).



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Plug-in solar panels: 5 top tips to save money and stay safe



Daniel De Wizje

Senior Policy & Advocacy Officer, REA

ARTICLE 5

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Plug-in solar panels: 5 top tips to save money and stay safe

Plug-in solar panels are set to make renewable energy more accessible than ever, offering households a simple and affordable way to generate their own electricity. Here are the REA's five top tips for getting the most from plug-in solar.

1. Do your research before you buy

Not every property will be suitable for a plug-in solar system. To achieve meaningful savings, you will need an outdoor space that receives good levels of sunlight and is not heavily shaded by neighbouring buildings, trees or other obstructions.

Only buy a system that has been approved for the UK market and meets the relevant British safety requirements. The UK's electrical system differs from those used in many other countries, so products sold overseas may not necessarily be suitable or legal to use in British homes.

Buy from a reputable UK retailer and check that the system complies with the UK's 800-watt limit. Households will be limited to one 800-watt plug-in solar unit, regardless of the size or type of property.

2. Put safety first

Before installing a plug-in solar system, have your home's electrical installation checked, particularly if you live in an older property.

An Electrical Installation Condition Report (EICR) can identify potential issues caused by ageing, wear and tear or damage, helping to ensure that your sockets and electrical installation are suitable. If you rent your home, check with your landlord whether a recent EICR is already available. to use a qualified installer.

Always connect the system directly to a suitable outdoor wall socket.

Never plug a solar panel into an extension lead or plug adaptor, as these are designed to supply electricity rather than receive it and could overheat.

Avoid running cables through an open window. Window frames may contain sharp edges that can damage cables, while rain entering through an open window could create an electrical safety risk.

For outdoor installations, an appropriate weatherproof socket is essential. An outdoor socket with an IP66 rating or above is designed to be dust-tight and protected against powerful jets of water.

You should also make sure that cables are secured and do not create a trip hazard. For additional reassurance, households may wish to use a qualified installer.

3. Shop around and choose quality

Prices, product quality and levels of after-sales support are likely to vary as the market develops.

Compare products and suppliers, read independent reviews and look for established brands that offer clear warranties and customer support. Be cautious of claims that promise unusually high savings or extremely short payback periods.

The amount you save will depend on several factors, including the size and position of the system, local weather conditions, household electricity use and energy prices.

4. Check your permissions and rights

If you rent your home or own a leasehold property, check the terms of your tenancy agreement or lease before installing panels on a balcony, exterior wall or other part of the building.

You may need permission from your landlord, freeholder or managing agent, particularly where the installation affects the outside of the property or a shared area.

It is also worth checking your buildings and contents insurance to make sure that the installation does not affect your cover.

If you buy a system online, you may have consumer cancellation rights. Check the retailer's terms and the relevant consumer protections before making a purchase.

5. Optimise your system to maximise savings

Where you place your panels can make a significant difference to the amount of electricity they generate.

For the strongest performance, aim for a south-facing location that receives plenty of direct sunlight and is free from shade. Panels generally perform best when tilted at an angle of around 25-35 degrees rather than positioned completely flat against a balcony railing.

Keep panels clean and free from dust, dirt and debris to maximise the amount of sunlight reaching the surface.

Plug-in solar systems generate the most value when the electricity they produce is used in the home. Running appliances during daylight hours can help households make the most of the power generated. Battery storage could increase the benefits further by allowing excess electricity to be stored and used later, rather than only when the sun is shining.

With no need for a roof, scaffolding or a large-scale installation, these systems could provide a more accessible route into solar energy for renters, flat-dwellers and households with limited space.

By choosing an approved product, checking that your home is suitable and following the relevant safety guidance, households can make the most of this new technology while helping to reduce their electricity costs and support the transition to clean energy.

Plug-in solar could help bring the benefits of renewable energy to households that have previously been unable to install conventional roof tops systems.





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Fossil fuel shortcuts offer long-term risks
- but bioenergy can support real energy
security.



Helen Motwani
Head of Heat and Biomass UK, REA

ARTICLE 5

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Fossil fuel shortcuts offer long-term risks but bioenergy can support real energy security.

Faced with geopolitical instability, the volatile fossil fuel market and rising energy demand, policymakers are increasingly framing the clean energy transition as a trade-off: security versus decarbonisation.

On top of that regressive framing, knee-jerk calls to expand North Sea oil and gas production are often presented as pragmatic responses to immediate pressures - but in reality, this does little to shield consumers from global price volatility and even less to build a genuinely secure energy system.

What is clear is that now is the time to redouble efforts to support a progressive and resilient energy system through a mix of wind and solar backed up by bioenergy - in the form of biomass power - and anaerobic digestion facilities producing low carbon biomethane gas.

Balancing energy supply and demand is becoming more complex, with the electrification of heat and transport as well as the data centre growth and AI-driven infrastructure increasing demand to the grid. In that context, a stable system needs a mix of complementary renewable power sources. To that end, wind and solar will remain the backbone of decarbonisation, while storage and other flexibility technologies will play an increasingly important role in balancing supply and demand - but we also need bioenergy to balance the mix.

Adding more bioenergy to the mix means dispatchable power: energy that can be supplied when it is needed, regardless of whether the wind blows or the sun shines. Bioenergy helps to stabilise the grid and reduce reliance on gas-fired generation.

Today, biomass power already provides the UK with around 5.5GW of reliable capacity or 12 per cent of all energy consumed in the UK. Independent analysis suggests that retaining this capacity could significantly reduce overall system costs, including lowering the need for investment in additional backup generation.

Bioenergy is not a single technology - it is versatile and encompasses a range of technologies, from large-scale biomass power generation to smaller, decentralised systems. One of these systems is anaerobic digestion (AD), which converts organic matter, including agricultural and industrial waste, into biogas, which can then be upgraded to biomethane. That low-carbon gas can be injected directly into the existing gas grid to replace natural gas, providing a practical and affordable contribution to decarbonisation that utilises our existing infrastructure. This circular use of organic resources strengthens domestic energy resilience while also providing fossil fuel-free fertilisers as a by-product.

A key USP for bioenergy is that it supports sectors that are very difficult to electrify, including heavy industry and transport, particularly aviation.

It also has a critical role in meeting long-term decarbonisation goals, with the Climate Change Committee projecting that by 2040 around 80 per cent of engineered carbon removals may need to come from combining bioenergy with carbon capture and storage (BECCS).

Of course, bioenergy is not without its challenges. Questions around sustainability, land use, and supply chains are legitimate and must be addressed transparently. The credibility of the sector depends on robust standards, strong governance, and clear accountability. **The development of a revised, cross cutting coherent sustainability framework currently underway will be essential in ensuring that biomass continues to deliver genuine climate benefits.**

While critical, these parameters should not obscure the system value that bioenergy provides. Nor should they lead to simplistic assumptions about risk. Imported biomass is increasingly criticised through the lens of energy security. Yet in practice, imported biomass - which supplies over a third of UK bioenergy demand - is typically sourced through long-term contracts, often spanning 10 to 20 years in length, and has historically offered more stable pricing than fossil fuels. Supply chains are diversified and based on renewable feedstocks, in contrast to the concentrated and geopolitically exposed nature of international gas markets.

This reframes the question of how energy security should be defined - it cannot be reduced to a narrow focus on domestic production alone; rather, it must incorporate system reliability, supply diversity, and exposure to price volatility. By that standard, fossil fuel dependent systems are inherently less secure than those based on a diverse mix of low-carbon sources.

In the next phase of the energy transition, policymakers must strategically coordinate generation, storage, flexibility, and demand. This means avoiding familiar but flawed solutions - expanding fossil fuel production may appear to offer a shortcut to security, but it risks locking in the very vulnerabilities the transition is meant to resolve.

The UK need not choose between reliability and decarbonisation; the focus should be on building a resilient, low-carbon energy system for the future.



The REA Quarterly

Expert insight and industry perspectives from the REA

The REA Quarterly is a publication from the REA offering thought pieces and timely articles on the renewable energy and associated clean tech industry.

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REA MEMBERSHIP RETURN ON INVESTMENT



Policy advocacy: We press government to ensure there is a progressive policy and regulatory landscape. By doing so we create new markets, scale existing markets and address barriers to investment. This means members can have the confidence to invest and grow. We are also there to head-off unnecessary policy and regulatory burdens thereby avoiding costs to members.



Networking opportunities: We connect REA members with industry leaders, experts, and like-minded professionals at exclusive events. This supports your business development and sales activity.



Resources: Members receive a wealth of tools, including research reports, market insights and best practice designed to enhance capabilities and stay ahead of the competition.



Professional development: Our workshops and educational programmes equip your teams with the skills necessary to excel in an evolving industry landscape.



Recognition and support: We increase our members' brand visibility through our promotional channels, and members benefit from dedicated support designed to help achieve organisational goals.



International: Access to international conferences and events, notably Climate Change COPs where the REA is an official partner to the UNFCCC, hosting a pavilion inside the exclusive Blue Zone.



Market entry: For businesses wishing to enter the UK renewables market, whether already based in the UK or abroad, we help with market analysis, regulatory compliance and brand awareness.



Market assurance: Through our subsidiary company REAL, we deliver certification and consumer protection schemes enabling a well functioning market.



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