



Introduction

The REA is working towards a future built on renewable energy and clean technology.

We represent over 500 member companies from across the renewable energy, clean technology and circular bio-resources industry, who are decarbonising the complete energy system across heat, transport, and power as well as moving to a more circular economy.

Our ambition is to work closely with the next government to develop a stable, consistent policy and investment environment so that our members can transition the UK to a 100% renewable energy and clean technology system by 2050, delivering net zero and prosperity for the UK.

The REA Strategy previously set out a decarbonisation pathway for how this ambition can be achieved. By 2035 it will be possible for the majority of energy demand in the heat and transport sectors to be met from renewable and clean technologies, while our power system can be fully decarbonised early in the 2030s.

The REA's strength is our holistic view of the changing resource and energy landscape. This makes us perfectly positioned to support the next government in delivering its legally binding net zero commitments and advise on overcoming the barriers to clean growth.

The REA Manifesto sets out transformational policy that will decarbonise the whole energy system, first considering pan-sectoral issues, before describing how the next government can decarbonise power, heat, transport and circular bioresources in turn.



A FUTURE BUILT ON RENEWABLE ENERGY
AND CLEAN TECHNOLOGY



Pan-Sectoral Strategic Areas for Policy Development

Especially given recent political shifts and the cost of living crisis, the entire energy transition faces significant universal challenges, which are currently delaying the roll out of low carbon technologies across all parts of the energy system and there has rarely been a time for greater clarity and purpose required. The next government must address these issues alongside the more sector specific recommendations made in the following chapters, as part of a comprehensive approach to stable energy policy development.

The next government must:

With support of industry, develop and coordinate a comprehensive programme for green jobs training including re-skilling from existing industries, beyond the North Sea transition deal, which is in place and operational across multiple sectors by 2026 to ensure there are enough skilled staff available to rollout Net Zero technologies at scale in the UK. The REA have projected that jobs in renewable energy alone could reach 210,000¹, while its contribution to the UK economy could double to £46bn, by 2035.

Drive strong standards across all parts of the renewables and clean technology industry, from investments to the operation of assets, as part of policy development. This includes:

- Establish a UK Green Taxonomy by the end of 2024 which will institute strong definitions for UK green financial activities. This will ensure a transparent definition for 'green' investments, as well as further UK global leadership in green financial products.
- Run a government commission to identify any gaps in existing guidance, building on the strength of existing regulations, to ensure best practice in relation to installations, supply chains and maintenance and operations for all technologies. This will deliver high public confidence in the sector and address any existing technical deployment barriers.

¹ Figures from REA and Innovas consulting research - 'REView22' report - this does not include wider supply chains and connected industries, such as the automotive sector.

Pan-Sectoral Strategic Areas for Policy Development

Ensure sustainability is at the heart of policy development by;

- Conducting a Treasury review of the Green Book, which is used to assess government polices, programmes and projects and ensure full integration of the findings from the 2021 Treasury Net Zero Review.
- Aligning guidance to the UN Sustainable Development Goals and requiring sustainability to be built into all government policy Impact Assessments.
- Establish an Office for Net Zero Deployment, as recommended within Chris Skidmore's Net Zero Review, ensuring it has the ability to hold government to account against sustainability and net zero targets.

Power and Flexibility

Technologies: Solar PV, biomass power, energy from waste, advanced conversion technologies, all forms of energy storage, landfill gas, anaerobic digestion, on and offshore wind, wave and tidal, geothermal, hydrogen

To reach Net Zero we need stable policy that will facilitate a fully decarbonised, secure, and affordable electricity system. The REA Strategy has previously stated this can be achieved by 2032, but we will not realise this without urgent action from the next government. Such a system requires both a rapid increase in the deployment of all renewable technologies and flexible assets, such as energy storage, which will help the electricity grid balance both low-carbon electricity generation and increased energy demand. Renewables are now the cheapest forms of generation and remove the UK's dependence on international fossil fuel imports. However, the next government must now ensure the infrastructure for such generation is in place to manage both decentralised generation and increased demand.

The next government must:

- Ensure the Future System Operator (FSO) is operating by the end of 2024, following its establishment via the 2023 Energy Bill. The next government must ensure the FSO's independence and funding, as regulated by Ofgem, so that it can deliver a strategic and centrally coordinated plan for reinforcing the electricity grid and gas network by 2025. This will help address capacity constraints and ensure faster connection periods for all generation.
- Task the National Infrastructure Commission to deliver an annual progress-report on
 efforts to speed up grid connection lead times, monitored against the recommendations
 made by the Electricity Networks Commissioner this year, to be presented to Parliament
 and requiring a government response.

Power and Flexibility

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- Ensure that the current Review of Electricity Market Arrangements (REMA) is concluded in a sensible time frame, with the transition to new electricity wholesale market arrangements by 2026. This includes the establishment of liquid, transparent and nationwide flexibility markets. There must also be a recommitment to 'grandfathering' arrangements for existing assets (not changing existing schemes) and the principle of long-term certainty for investments.
- Establish a rolling 3-year-ahead timetable for new Contract for Difference (CfD) allocation rounds, from 2024 onwards. This should include:
 - A minimum budget so that there is a predictable route to market for investors;
 - Provide ring-fenced funding for less established technologies such as geothermal and marine technologies and;
 - A separate auction to re-power existing generation assets to ensure no loss of renewable capacity.
- Provide capital allowances for investments in new low carbon generation technology, within the new administration's first Spring Budget, akin to those already available for oil and gas sectors.
- Implement a cap and floor support mechanism for long duration energy storage by the end of the first year in government, to support deployment of critical technologies needed to decarbonise and balance the power system.
- Finalise and allocate the Power Bioenergy Carbon Capture and Storage (BECCS) Business Models from 2024, supporting projects at all scales, ensuring the delivery of negative emissions in the power sector by 2030.
- Prioritise completion of reforms to planning guidance by 2025, to halve the time taken for planning decisions on new renewable assets.
- Reform the **Smart Export Guarantee (SEG)** and provide **interest free loans**, by 2025, for households and businesses to install onsite renewables and clean tech, helping them lower their bills. There must be renewed focus on buildings' energy efficiency.

Transport

Technologies: Electric vehicles and renewable transport fuels, including sustainable aviation fuel

Decarbonising the transport sector requires both a rapid increase in electric vehicles (EV) and charging infrastructure - especially for road transport - and renewable transport fuels increasingly decarbonising existing internal combustion engines, as well as hard-to-treat sectors such as heavy goods vehicles (HGV), off-road transport, aviation and shipping. The REA Strategy demonstrated that with decisive action over half of UK transport energy demand could be decarbonised by 2035.

Transport

The next government must:

- Immediately reinstate the initial 2030 phase-out date for sales of new petrol and diesel cars.
- **Introduce a national scrappage scheme by 2025**, financially compensating people with the most polluting cars, and supporting them with interest free credit to buy an EV.
- Provide tax breaks for rural EV infrastructure investment, supported by finance from the UK Infrastructure Bank.
- Introduce a more ambitious Renewable Transport Fuel Obligation targets, increasing
 the obligation beyond 2032, with clear trajectory out to 2050, which is reinforced by lower
 taxes at the fuel pump with higher blends of renewable fuels and make sure vehicles
 are suited to higher sustainable fuel use by bringing in support for E85 vehicles early, for
 example. A market mechanism for Recycled Carbon Fuels must also be secured as soon as
 possible.
- Immediately introduce an EV Infrastructure Bill to ensure effective, inclusive, and widespread infrastructure. This includes mandating industry standards for universal charging and requiring local authorities to have EV charging infrastructure plans.
- Agree to a match-funded industry deal to develop an EV infrastructure apprenticeship scheme led by charge point operators and delivered in conjunction with district network operators, changepoint manufacturers, energy suppliers and motor manufactures to create a pipeline of skilled workers.
- Ensure an ambitious **Sustainable Aviation Fuel Mandate** to start in 2025 and develop equivalent policy for sustainable marine fuels by 2030.

Heat and Cooling

Technologies: Heat pumps, biomass boilers, biofuels, solar thermal, anaerobic digestion, geothermal, hydrogen, associated heat networks

UK domestic and business buildings remain the most energy inefficient buildings in Europe. Successfully decarbonising all UK heat demand will need a wide range of low carbon technologies, ensuring the right technology is used in the right situation and the decarbonisation of our gas network. Current domestic heat support schemes need to be more ambitious, while the huge policy gap for non-domestic heat decarbonisation must be urgently addressed. If done correctly, more than half of UK heat demand could be decarbonised by 2035.

The next government must:

 Incentivise non-domestic heat for small and medium enterprises with a fuel switching tariff, to enable organisations to switch from fossil fuels to a range of low carbon alternatives including heat pumps, biomass, green gas and hydrogen. This should start by the end of 2024 and follow the end of the Green Gas Support Scheme in 2025. Support should depend on strong standards for maintenance and fuel quality.

Heat and Cooling

- Incentivise large scale industrial heat decarbonisation projects through establishment of a **Heat Contracts for Difference** mechanism. Allocation should be open to all low carbon technologies and all industries, with the first allocation round in 2025.
- Expand the Boiler Upgrade Scheme by the end of 2024 and make it more flexible, to cover a wider range of project sizes. This should ensure all technologies are at least able to access the new higher grant level of £7,500, including biomass, and support energy efficiency measures. This should be accompanied by a low interest government-backed loan to pay for the remainder of the installation. Reinstating ambitious fossil fuel boiler phase out dates should also be reconsidered here.
- Work with the finance industry to **deliver low carbon heat financial products** that promote renewable installations, such as green mortgages.
- Deliver a Geothermal Development Incentive by the end of 2025, targeted at shovel ready geothermal heat projects, to get the sector established in the UK.
- Urgently deliver planning reforms to enable Local Area Energy Planning for renewable heat projects such as green gas sites, as well as providing funding to local authorities to appropriately resource and speed up decision-making process, such as enabling heat network zoning.
- Ensure the Future System Operator delivers a strategic plan by the end of 2025 for gas grid development and map out the transitioning of different green gases and their role in a decarbonised grid.

Hydrogen

Technologies: All forms of clean, low carbon electrolytic hydrogen production

Hydrogen is likely to play a role in the decarbonisation of our power, heat and transport systems and can be exported. It is therefore important the next Government ensures an effective environment for hydrogen production, no matter its end use. Hydrogen production must be done in a net zero way in the UK as a key underlying principle.

The next government must:

- Ensure delivery of allocation rounds for the Low Carbon Hydrogen Business Model in 2024, to establish hydrogen production in the UK.
- Ensure this supports all possible hydrogen production pathways, aligned with the Low Carbon Hydrogen Standard, including bio-hydrogen pathways.

Circular Bioresources

Technologies: Biowaste recycling encompassing biodegradable wastes (especially food and green waste), their composting and anaerobic digestion and wider management of biodegradable wastes

The delivery of a circular economy and the energy transition go hand in hand. Waste must be effectively reduced, collected, processed and used to ensure the UK can make the most of its valuable resources and deliver the best possible environmental outcomes. The next government will need to prioritise waste and resource policy while recognising its interaction with the wider energy transition.

The next government must:

- Ensure the Environmental Regulators are adequately funded immediately to address the considerable existing backlog of applications and issues, enabling regulations to be consistently enforced and drive out waste crime. In the longer term, the new Secretary of State must conduct a strategic review of how the environmental regulators function.
- Fully deliver high performing mandatory food waste collections across the UK with the general public recycling 80% of their food waste, and businesses recycling 90% of their food waste, as demonstrated by residual food waste reported to government.
- Mandate that all bags and liners used for food waste, tea bags and fruit & veg stickers are certified as at least industrially compostable.
- Incentivise investment in waste facilities that can biodegrade a wide range of feedstocks so that **nothing goes to landfill in 2030**.
- Commit to funding Local Authorities to deliver local targeted communications for public behaviour change for food and garden waste collections, as well as funding centralised waste management campaigns run by DLUHC and DEFRA to deliver high performing collections.
- Prioritise improving and maintaining the soil health of agricultural land in the UK by acknowledging the benefits of compost and digestates, and mandating soil health metrics in the Environment Land Management Scheme.
- Provide support for **recycling end of life wastes** that would otherwise be sent to landfill into new markets such as transport by chemical recycling.

About the REA

The REA is working towards a future built on renewable energy and clean technology.

We represent over 500 member companies from across the renewable energy, recycling, energy storage and electric vehicle sectors.

We influence and inform whilst we champion and empower our members; so they are profitable, sustainable commercial businesses.

Together we are decarbonising the economy.

With questions or comments please contact;

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