

CONSUMER-LED CLEAN POWER

How to unlock consumer-led
flexibility for Clean Power 2030

A REPORT BY ADE: DEMAND

ade
Demand



With support from

CATAPULT
Energy Systems

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WE'RE WASTING

£1.2bn 

ANNUALLY ON **TURNING
OFF RENEWABLES
AND TURNING UP GAS**

84% OF CUSTOMERS

**WANT CONTROL
OVER THEIR ENERGY**

 **THE ANSWER:
CONSUMER-LED
FLEXIBILITY**

**UNLOCKING
10GW**

OF CLF IS EQUAL TO
1 OF THE UK'S
3 ENTIRE GAS
POWER STATION CAPACITY

THIS MEANS SAVING £'S
CLF WILL RESULT IN
SAVINGS OF

£115 by 2030 **£375** by 2040

EXECUTIVE SUMMARY

ADE: Demand represents the views of those who are investing in the energy infrastructure we can't see - the systems and software and consumer trials that will lower bills by 2030 and save the Government cold hard cash in the form of avoided pylons, wires, and generation capacity. This does not mean it needs less focus than physical infrastructure. Over the last six months, based on our years of experience advocating for the consumer-led flexibility (CLF) sector, we have identified the foundational pillars, core objectives, and concrete actions needed to unlock at least a fivefold increase in CLF by 2030. With support from Energy Systems Catapult, we have undertaken detailed engagement with industry and non-industry stakeholders to develop the recommendations in this report with the aim of supporting DESNZ, Ofgem, and NESO in their writing of the low-carbon flexibility roadmap.

The consumer-led flexibility sector is somewhat unique in the clean power sector in that we believe we can scale at pace without any need for subsidy. However, we do require an investment of time and a coordinated commitment to expedited

change that has to date eluded the sector. Thus, while there are 5 pillars, 13 objectives, and 74 individual actions, we consider one pillar to be important above all others. Prioritising strong leadership for the sector and public bodies whose actions impact its growth is absolutely critical. We can no longer take an ad hoc and segmented approach to governance. Although all levers towards unlocking flexibility will not move simultaneously, we must ensure we move them with awareness of the interdependencies that exist between them. Therefore, we recommend the establishment of a consumer-led flexibility Delivery Board co-chaired by a senior DESNZ official and an industry representative, or Consumer-Led Flexibility Champion. To ease the implementation burden, the technical secretariat role could be undertaken by a trade body, as was the case for the Connections Reform Delivery Board. Without such a body, consumer-led flexibility is liable to fall victim to mistakes of the past where milestones have been missed, segmentation reigned, and accountability failed.

As ever, industry looks forward to working with Government, Ofgem, System Operators, and Elexon to deliver an energy system that puts consumers at its heart - lowering bills, boosting security and achieving Clean Power by 2030. The following report and recommendations can go a long way to realising that vision, on the condition that we have the ambition to rise to the effort.

INTRODUCTION

Moving from a world where a handful of fossil fuel generators help the power system stay afloat to one where tens of millions of homes and businesses keep the lights on for themselves would have been unimaginable even a decade ago. Now, the UK stands on the cusp of becoming a world leader in having a fully circular energy system where generation, storage, and demand, work in sync with one another. With a mission-driven Government committed to delivering Clean Power by 2030, the essential element to make such an energy system viable is consumer-led flexibility.

Energy bills are a constant source of political debate. Today, we power our transportation through petrol and diesel, we largely power our heat needs through gas, and we power our homes through an electricity grid that is still predominantly gas-driven. All are separate bills for our household and business budgets. However, we are hurtling towards a world where the vast majority of our energy consumption is represented by one source – electricity. When our entire energy consumption is so starkly represented by one source, our role in controlling that source becomes far more important - 87% of consumers agree it is good to have more control over their energy. Consumers leading the future of the energy system represents a transformational change.

Through this report and its recommendations, we hope to offer all stakeholders, including Government, Ofgem,

System Operators, and rule bodies, the steps needed to deliver this transformation, as considered by the consumer-led flexibility industry.

ABOUT ADE: DEMAND

ADE: Demand seeks a complete re-imagining of the role of demand in our energy system so that:

- 1 Demand is given equal consideration to generation
- 2 Every household, commercial business and industrial site has a commercially viable path to decarbonisation
- 3 It is recognised that energy users and their assets have a day job – they shouldn't have to work around the energy system, the energy system should work around them
- 4 Millions of users with automated energy provision can play a major part in keeping the lights on.

As the industry representatives for the consumer-led flexibility sector, ADE: Demand, with the support of [Energy Systems Catapult](#), worked to devise the foundational pillars, objectives, and actions needed to deliver the exponential increase in consumer-led flexibility demanded by the Clean Power Action Plan.

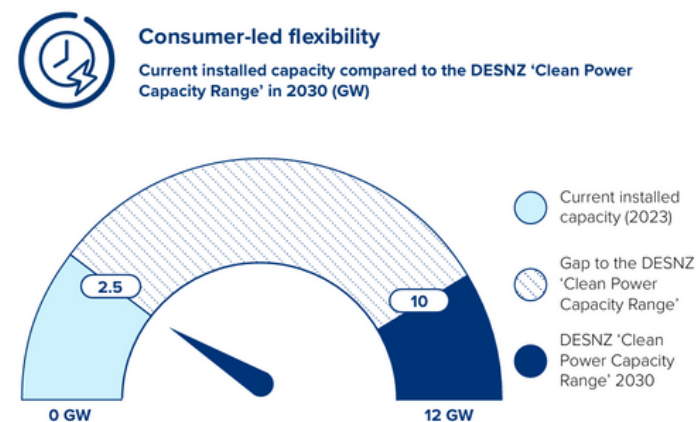
CONTEXT

Our reliance on oil and gas is an inherent vulnerability for consumers and industry in an increasingly unsettled international climate. Clean Power 2030 (CP30) is the UK Government's call to action and roadmap on how it can transition Great Britain away from fossil fuels and focus on renewable generation to meet our electrical demand. The [Clean Power Action Plan](#) sets out clear metrics that assist in defining what a clean power future looks like, where renewable and low-carbon technologies are responsible for the majority of energy production, and gas generation evolves into an 'as-required' backup.

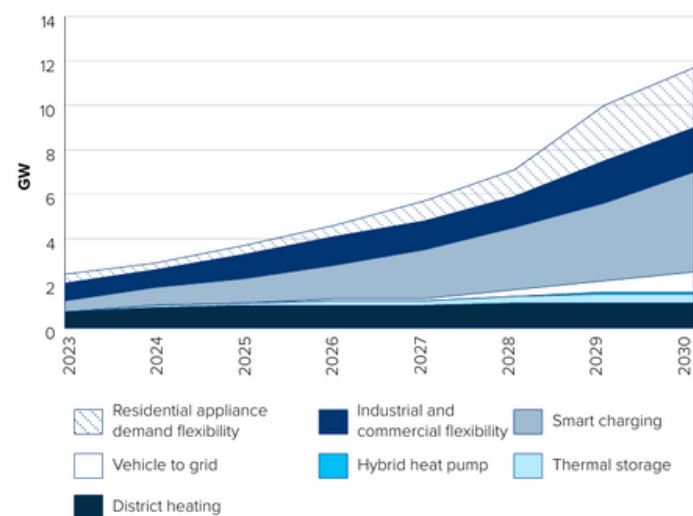
To take advantage of the existing infrastructure and reduce the amount of additional generation and network buildout, CP30 has highlighted the importance of consumer-led flexibility in the electricity system to provide security of supply in both the short- and long-term. Increasing access to renewables requires a shift in how we utilise and supply electricity, and how consumers can realise the benefits, specifically through lower bills. Consumer-led flexibility is at the heart of this effort.

The Clean Power Action Plan sets out the need for at least a fivefold increase in consumer-led flexibility being utilised in the next five years – from 2.5GW today to 10-12GW in 2030. In comparison, expectations for low-carbon dispatchable generation in 2030 are only 2-7GW. While eminently achievable when compared to the capacity of low carbon flexible technologies such as EVs, heat pumps, industrial

electrification and thermal storage that will be on the system by 2030, the scale of increase needs to be matched with an equal scaling of ambition. Industry is confident that with the proper will, this target is a significant underestimate of the true potential.



Source: Department for Energy Security and Net Zero (2024), [Clean Power Action Plan](#).



Note: Data excludes storage heaters that shift around 4 GW. NESO refers to consumer-led flexibility as demand flexibility.

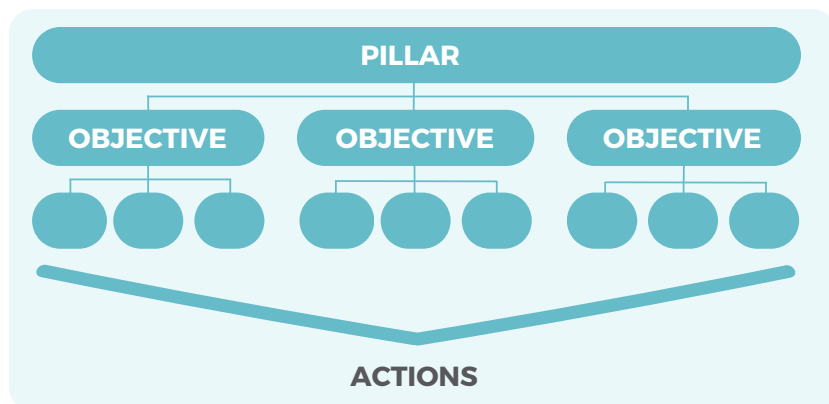
Source: NESO (2024), ['Clean Power 2030'](#)

Source: Department for Energy Security and Net Zero (2024), [Clean Power Action Plan](#).

APPROACH TO THE REPORT

Consumer-led flexibility, and its many other names, have had tens of previous plans – [BEIS' Smart Systems and Flexibility Plan 2017/2021](#), [Ofgem's Full Chain Flexibility programme 2021](#), [ESO Power Responsive 2019](#), [ENA Open Networks 2017](#), [NESO Routes to Market Review 2024](#) – to name a few. Now, we need to act ten times faster and be far more ambitious. When discussing consumer-led flexibility there is a tendency to jump from the sky to the weeds in record time. Therefore, tracking a more gradual journey is incredibly important to ensure that at this juncture, with a new Government, it proceeds differently.

First, the foundational pillars needed for this exponential increase were devised. This was followed by the establishment of core objectives in consultation with industry and then we moved to the concrete actions needed under each objective. Although many are interrelated, we consider this structure is a beneficial framework in which to frame this discussion.



ENDURING REFORM TO 2050

It must be recalled that 2030 simply represents base camp of net zero, as acknowledged by Mission Control. There are longer-term changes and considerations needed to drive consumer-led flexibility to 2050, as considered in Energy Systems Catapult's report [Enabling Distributed Flexibility for Net Zero](#).

Likewise, the Review of Electricity Market Arrangements (REMA) is a critical programme to realise long-term solutions for a radically different energy system than the one designed around centralised fossil-fuel generation. Both ADE: Demand and ESC have been vocal in our support for zonal pricing as the best way to reduce whole system costs and enable a consumer-led energy system. Equally, it is important to note that not all ADE members agree with this position. Given the focus of this report on CP30 ambitions, we do not comment on the longer-term reforms considered under REMA.

“The scale of increase needs to be matched with an equal scaling of ambition.”

FOUNDATIONAL PILLARS

Considering the above, the following pillars have been developed on what would be needed to help achieve this exponential increase in consumer-led flexibility over the next five years.

WHAT ARE THE FOUNDATIONAL PILLARS FOR THIS EXPONENTIAL INCREASE?

- Strong leadership
- Market signals, access and incentivisation
- Priming the market
- Creating the enabling conditions and systems
- Social and economic impact

STRONG LEADERSHIP

Our current system structure has led to CLF having dispersed rather than strong leadership. This is not surprising given the number of players involved, with Government setting the strategic direction, Ofgem

regulating those who procure flexibility services, and System Operators and Code Managers setting the rules for how markets are accessed. It is then up to flexibility service providers to make participation attractive through consumer offerings. The result is a sector that has lacked the governance to ensure that plans and ambitions were consistently delivered with pace and accountability. To ensure the Clean Power Action Plan breaks from this slow and unreliable pace of improvement, we need outcomes and actions that are measurable, deliverable and accountable across relevant organisations and stakeholders. Without anyone to proactively steer the ship – coordinating across these dispersed leadership structures and ensuring they are working in unison towards a shared goal, rather than for their own ends - success is difficult to foresee.

MARKET SIGNALS, ACCESS AND INCENTIVISATION

Market inaccessibility is the primary barrier for many low carbon assets seeking to participate in flexibility services. This has, and is set to continue, to have a detrimental impact on the achievement of Government's 2030 objective and henceforth significantly impact consumers as we develop an increasingly intermittent energy system. It is the responsibility of DESNZ, Ofgem, NESO, DSOs, and the Market Facilitator to design and maintain fair and open markets, suitable for a net zero future, that will incentivise millions of British homes and businesses to participate in a secure and affordable electricity system and be rewarded

for doing so. Importantly, the level of pace and ambition under this pillar must increase from key organisations in order to match Government's mission. As above, strong leadership will be pivotal to achieving this change in pace and avoiding the passing of responsibility between different bodies.

“Strong leadership will be pivotal to achieving this change in pace.”

PRIMING THE MARKET

As we establish an energy system that is reliant on clean, cheap power, we must prepare the landscape for how the system will work for both demand and generation, with both valued equally. Unless we empower consumers to participate in flexibility, generation assets will not be able to function to their maximum efficiency. To facilitate the maximum contribution of flexibility from homes and businesses as smart technologies are deployed at an accelerated pace, groundwork must be laid now so that consumers' experience of energy is improved and that they have more control over their bills and their role in a symbiotic system.

CREATING THE ENABLING CONDITIONS AND SYSTEMS

Any nascent sector needs the proper rules and

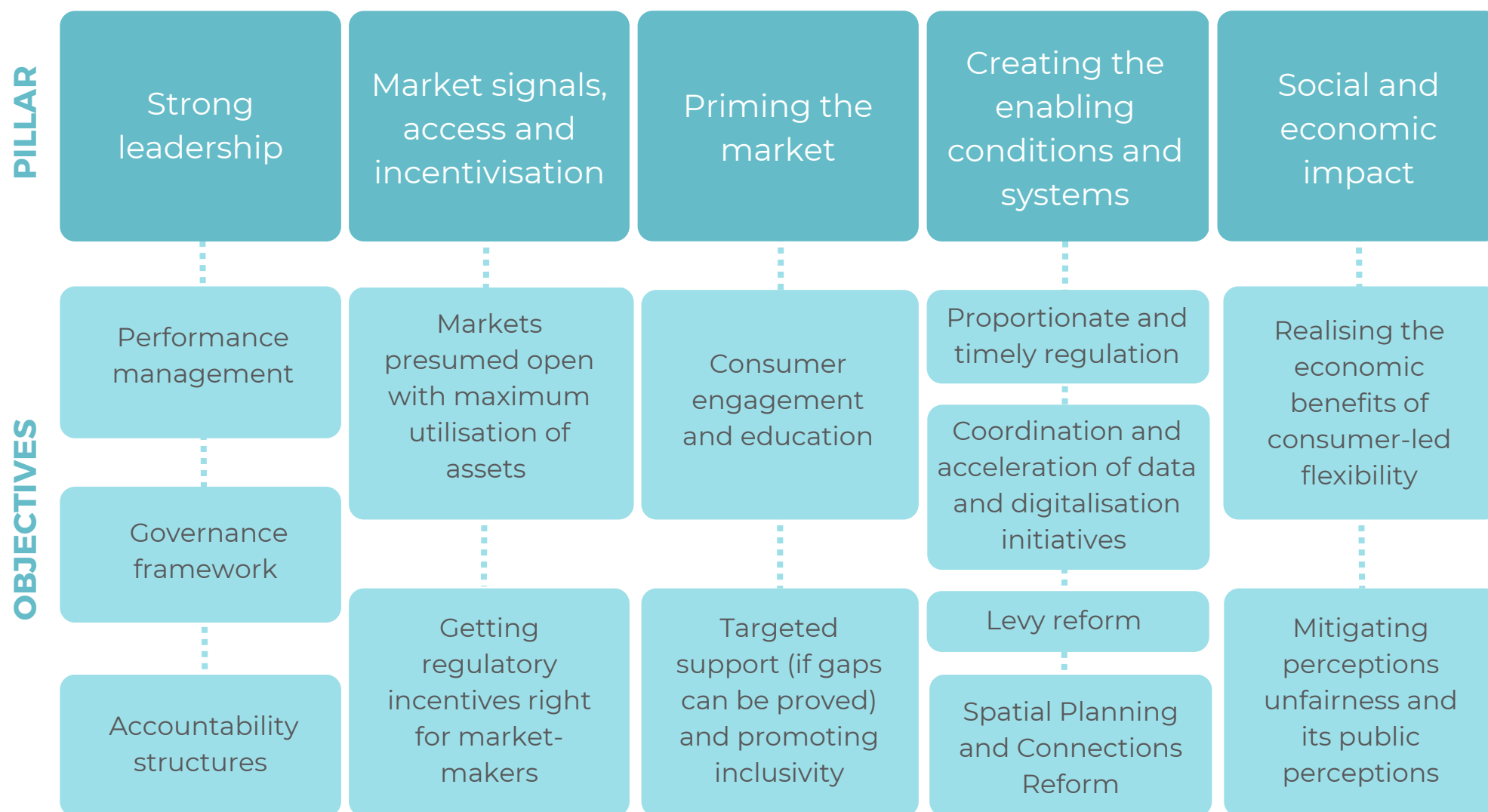
infrastructure to bolster its growth while protecting consumers and system security. Similar to the revolutionary changes seen in telecoms, the energy system needs to rapidly embrace automation and digitalisation in order to capture the full benefits of net zero and affordability for consumers. Secure, scalable, and standardised data sharing infrastructure is needed for the energy system as a whole to drive coordination between different actors. For consumer-led flexibility in particular, proportionate regulation for both service providers and smart devices can inspire consumer confidence and ensure best practice across the industry.

SOCIAL AND ECONOMIC IMPACT

Unlike other clean energy sectors, the social and economic benefits of CLF are far less developed. While good work has been done in the past regarding where the system value of CLF comes from – avoided network reinforcement, generation capex, etc – this is now outdated in light of the new Government and a changing system. For example, these analyses do not take account of the potential of free energy for consumers when renewables are abundant and demand can turn up. Furthermore, there are no figures on jobs and productivity, which is an oversight given GB's standing as forward thinkers on flexibility and our potential to export homegrown skills and technologies. Finally, and related to Priming the Market and promoting an inclusive and equitable rollout of technologies, it is critical that consumers understand the benefits of flexibility even for those who don't actively participate, since lower whole system costs will reduce bills for all.

CORE OBJECTIVES

ADE: Demand propose the following core objectives under each of the foundational pillars to unlock the volume of CLF needed by 2030.



Strong leadership

Performance management

Strong leadership necessitates better and more coordinated quantitative and qualitative targets for stakeholders to measure against progress. A focus on capacity potential and actually utilised MWs would make consumer-led flexibility quantifiable and introduce the ability to track the gap between potential and actual volumes. To achieve this, a key objective is to implement a monitoring framework that sets out clear Key Performance Indicators (KPIs) for the volume of flexibility needed within markets based on where we are today, the industry potential and what will be needed before 2030. Additionally, we need a clear narrative from Government on their intentions for consumer-led flexibility to inform the objectives undertaken by NESO, Ofgem and the Market Facilitator.

Governance framework

To best utilise the performance targets set out above, a robust governance framework will be essential to facilitate collective ownership of objectives related to consumer-led flexibility needed to achieve CP30. This framework should be set out clearly within the Low Carbon Flexibility Roadmap; including KPIs, who is responsible for their delivery and the consequences of delays and non-delivery on other work programmes. Additionally, introducing more robust

requirements within existing governance processes will be equally important. This includes tailoring RIIO incentives (how networks are paid) and licence conditions for both NESO and DNOs to adhere to CP30 targets. In addition, a clear escalation route should be established - setting out how underperformance will be identified, addressed, and rectified.

Accountability structures

Within a governance framework, direct accountability structures must be established. This includes clearer and more immediate consequences for shortcomings against performance targets, that are entirely transparent to the public. There should be full disclosure when targets are not met, including who was responsible and the associated outcomes. Reputational incentives and the importance for the public of hitting our CLF targets must also be incorporated, highlighting the impact on bills. To achieve this, however, a clear body or person must take responsibility for holding relevant stakeholders to account for CLF targets rather than diffuse leadership across bodies with competing agendas.

“A clear body or person must take responsibility for holding relevant stakeholders to account for CLF targets rather than diffuse leadership across bodies with competing agendas.”

Market signals, access and incentivisation

Markets presumed open with maximum utilisation of assets

Markets that have been designed around the capabilities of fossil-fuel generators rather than around the potential of consumer-led participation cannot be maintained. If a rule, design feature or procurement decision process fails to pass even a perfunctory sniff test for discrimination, it should be treated as presumptively invalid and the body responsible for the market must disclose all available evidence for robust public scrutiny. The burden of proving why certain assets should not be allowed to participate must lay with writer of those rules. Furthermore, it is no justification to avoid or delay change simply because it may inconvenience a rule-maker and their historical practices.

Getting regulatory incentives right for market-makers

Related to Strong Leadership, ensuring system operators, code managers, and the market facilitator have the freedom within their regulatory framework to innovate and expedite routes for consumer-led flexibility to come forward must be a core objective for DESNZ and Ofgem. At times in the past, the regulatory framework has seemed somewhat constrictive in what market makers can do to drive flexibility forwards without clashing with licence conditions.

“It is no justification to avoid or delay change simply because it may inconvenience a rule-maker and their historical practices.”

Priming the market

Consumer engagement and education

It is understandable that for many consumers, the idea of flexible energy consumption creates uncertainty and a reluctance to engage when there has been little to no clear messaging on what it is and the impact it will have on energy bills from a central and trusted organisation. There may be a need for a nationwide campaign on the meaning of energy flexibility and the positive impacts that it will bring for consumers in practice and why it should not be considered as only valuable to those with flexible technologies. Equally, it is imperative that lessons are learned from previous campaigns whose uptake and implementation has fallen unequally across the sector. Therefore, a campaign should only be undertaken if the result of the upcoming consultation fully justifies its need.

Targeted support (if gaps can be proved)

The consumer-led flexibility sector does not consider

dedicated subsidy a prerequisite for growth. However, given the significant challenges and delays to market access outlined above, there may be a need for a bridging mechanism should progress fail to accelerate. Furthermore, Government should continue to investigate ways in which it can encourage the uptake of smart technologies with high upfront costs, and identify mechanisms to support lower-income households in accessing these technologies.

Creating the enabling conditions and systems

Proportionate and timely regulation

Timely implementation of the Smart Secure Electricity Systems (SSES) Programme to regulate flexibility providers and set minimum standards for energy smart appliances is welcomed by the sector. Equally, these regulations must be proportionate and cost-effective, promoting interoperability and fairness between different business models, leveraging existing consumer protection mechanisms where appropriate, with any new requirements being justified and streamlined.

Coordination and acceleration of data and digitalisation incentives

The energy industry has made great efforts to visualise a more digitalised, data-driven future which is most welcome. However, over the past year, the industry has been asked to

respond to a plethora of data and digitalisation consultations. Despite supporting the progress made on digitalisation initiatives, there is currently a lack of coordination between these programmes which must be rectified and monitored as the industry develops. As above, interoperability of such programmes will be critical along with proportionate and transparent reporting requirements from service providers.

Levy reform

Final consumption levies (FCLs are part of energy bills and fund renewable and energy efficiency programmes) represent a significant dampener for CLF, as the benefits for changing patterns in energy consumption are not clear to consumers and businesses looking to decarbonise. Despite increasing periods of negative pricing, consumers cannot be paid to soak up excess renewables since FCLs always keep the unit cost above zero. Empowering CLF demands a rethinking of how FCLs interact with flexible energy use. Renewable curtailment and fossil fuel turn-up exceeded £1.2bn in 2024 and already stands at over half a billion for 2025. Curtailment of wind without any demand turn-up is symptomatic of our failure to embed flexibility in demand. Furthermore, consumers must be empowered to seek out and choose the most appropriate offers for them, regardless of whether the service provider is the electricity supplier or not.

Spatial planning and connections reform

To reach the level of CLF needed, equal attention must be paid to distribution connections reform as has been given to transmission reform to date. Significant change has been realised and we must build on that momentum so that distribution connected assets can access the grid expeditiously. In the domestic space, the process can be unwieldy and unpredictable. At commercial and industrial level, connection waiting times form one of the principal barriers to electrification, often exceeding a decade.

Social and economic impact

Realising the economic benefits

The economic benefits that could be passed down to consumers from the growth of consumer-led flexibility incentives should be clearly realised and set out by Government. Without a clear benefits case to represent the scale of the prize on offer in unlocking consumer-led flexibility, it will be difficult for any organisation to quantify how much should be invested in its delivery. While there are estimates from various sources, including the Smart Systems and Flexibility Plan and Carbon Trust and Imperial College's Flexibility in Great Britain Report, they are out of date in light of CP30 goals. The whole system value stack of consumer-led flexibility must be updated to reflect the potential savings from: avoided generation capex, avoided

or deferred network investment, lower balancing costs, and demand turn up.

Mitigating potential unfairness and its public perceptions

It is critical that beyond system benefits in aggregate, all consumers feel the benefit of flexibility. Despite becoming increasingly accessible to a wider variety of homes, there is a risk that the perception of flexibility is that it will only benefit higher income households who historically have been the ones who could afford smart technologies. Related to the above, there must be a clear breakdown on how consumer-led flexibility will lower bills for all, not just those participating directly, because of lower overall system costs. Ensuring equity in technology rollout, as referenced under Priming the Market, is another key aspect of this objective.

CONCRETE ACTIONS

From the foregoing, the following recommendations are made for all relevant parties. While we do not explicitly include the publication of the Low-Carbon Flexibility Roadmap, we hope that all the below actions are included therein.

Actions not yet stated in any other plans/strategies

Actions already committed to and the same timeline as stated

Actions already committed to with an accelerated timeline

PILLAR	OBJECTIVE	ACTION	LEAD	DEADLINE
Strong leadership	Performance management	Set MW targets for consumer-led flexibility per 6-month periods.	DESNZ	Q2 2025
		Set KPIs based on actions below.		
		Establish industry-led monitoring framework.	ADE	Q3 2025
		Establish Government-led monitoring framework.	DESNZ	Q4 2025
	Governance framework	Establish a Delivery Board, ¹ Taskforce or Commission, co-chaired by a senior DESNZ representative and senior CLF Champion with an industry body as the Technical Secretariat to aid delivery.	DESNZ	Q2 2025
		Ensure all regulated entities are incentivised to follow direction of Delivery Board.	Ofgem	
		Consult on, devise and implement enduring regulatory framework for NESO including the introduction of quarterly town hall style events with executive representation from both Ofgem and NESO to report on progress.	Ofgem	Q3 2025 - Q2 2026

¹ This would be akin to the Connections Delivery Board or the Onshore Wind Industry Taskforce.

Strong leadership	Accountability structures	Quarterly Delivery Board meetings with progress reports from all relevant stakeholders.	DB Technical Secretariat	Q2 2025 - onwards
		Public minutes of progress reports to be published.		
Market Signals, Access, and Incentivisation	Markets presumed open with maximum utilisation of assets	Non-BM Quick Reserve moved into the Open Balancing Platform.	NESO	Q2 2025
		The NESO skip rates tracker, first promised in Q4 2023, tracks CLF skips.		
		Absolute numerical targets for skip rates developed and implemented, as per Ofgem’s final determinations on BP3.		
		Within the Capacity Market, better enable bulk uploads and streamline admin via urgent Delivery Body Portal changes.	Ofgem & NESO	
		Enable asset meters not associated with a HHS boundary meter to participate in markets.	Ofgem & Elexon	Q3 2025
		Government decision on measures to increase CLF in the Capacity Market following industry Call for Evidence, and a recommitment from Government on the importance that CLF will play in security of supply through the CM.	DESNZ	
		Delivery of MHHS Milestone 10 with no further delays.	Elexon, Ofgem & industry	
		Sub-1MW and non integer bid options analysis completed.	NESO	
		BM and Non-BM Slow Reserve and Dynamic Services moved over to the Open Balancing Platform.		
		Updated Constraints Collaboration Project workstreams.		

Market
Signals,
Access, and
Incentivisation

Markets
presumed open
with maximum
utilisation of
assets

Amend the compensation methodology used for aggregators/suppliers in the wholesale market to incentivise demand turn up (DTU).

Ofgem &
Elexon

Q3 2025 - Q2
2026

Implement enduring solution for operational metering standards within NESO markets, cohering to committed regulatory ESA standards.

NESO,
DESNZ,
Ofgem &
Elexon

Q4 2025

Market facilitator delivery plan is published and role is fully established.

Ofgem &
Elexon

Completion of stacking and primacy review and establishment of standards.

Elexon

Market Facilitator, and Ofgem through its guidance, ensures that market-makers equally consider system needs and potential customer needs when designing markets ie all market-makers have a duty to consider all potential technologies when designing and implementing their markets.

DESNZ,
Ofgem, NESO
& Elexon

Q2 2026

Within the Capacity Market, allow unrestricted reallocation of CMU components - so long as total derated capacity remains the same.

DESNZ,
Ofgem &
Elexon

Enforce a mutually beneficial Standard Contract for flexibility markets to remove delays and boost participation.

Elexon

Q3 2026

Deliver in full the Open Balancing Platform.

NESO

Within the Capacity Market, introduce a robust secondary trading framework within the Delivery Body Data Portal.

DESNZ,
Ofgem, NESO
& Elexon

Q1 2027

Market Signals, Access, and Incentivisation	Markets presumed open with maximum utilisation of assets	Deliver market-wide half-hourly settlement in full.	Elexon, Ofgem & industry	Q3 2027
		Full alignment of NESO and DSO markets by the Market Facilitator.	Elexon	Q4 2027
		Sub-1MW and non integer bids are allowed in NESO markets.	NESO	
	Linking above to below	Licence condition introduced for all SOs so that all prima facie discriminatory market rules are presumed invalid and the deadline for rebutting this presumption is 6 months, otherwise the rule is removed. To be assessed via proportionality testing.	Ofgem	Q1 2026
	Getting regulatory incentives right for market-makers	Licence conditions are introduced to ensure adherence to Delivery Board.		
		Elexon is empowered to undertake full leadership over removing barriers to demand turn up, joining its BSC and Market Facilitator functions, prior to the full establishment of the Market Facilitator role.	Ofgem & Elexon	Q2 2025
		Regulatory Guidance is issued to Elexon, NESO, and DSOs on the timelines for barrier removal outlined above and the presumption of invalidity.		Q3 2025
		ED3 Draft Business Plans published with clear incentives for CLF on the distribution network, including how flexibility can ease the steep skills/supply chain needs of network reinforcement.	Ofgem	Q4 2025
		NESO Special Licence Condition 9 is amended to ensure true lack of discrimination in market design and delivery, both implicitly and explicitly.		Q1 2026

Market Signals, Access, and Incentivisation	Getting regulatory incentives right for market-makers	The Common Evaluation Methodology (CEM) that DSOs use to assess flexibility versus reinforcement is updated in line with the updated economic benefits case for flexibility (see below).	Elexon & Ofgem	Q2 2026 - Q3 2027
		Market Facilitator ensures that proportionate metering standards and rules are demanded for flexibility markets.		Q2 2027
		Distribution Operators continue to be encouraged to enable flexibility solutions where cost-effective in ED3.	Ofgem	Q2 2028
Priming the Market	Consumer engagement/education	Publish consultation and proposals for consumer engagement.	DESNZ	Q2 2025
		Ensure appointed bodies are equipped to properly advise consumers on CLF matters once service providers and assets become regulated, as per the Energy Act 2023.		Q1 2027
		Depending on results, launch a public awareness campaign to build trust and counter misperceptions.	DESNZ & Ofgem	Q3 2027
		Ensure third-party comparison websites are equipped to properly reflect different flexibility offerings.	DESNZ, Ofgem & industry	Q4 2027
	Technology rollout	Continue to investigate how the uptake of “smart as standard” devices can be encouraged including through the Warm Homes Plan.	DESNZ	Ongoing
		Smart meter rollout promotes pace, consumer-focus, with Guaranteed Standards of Performance ensured.	DESNZ, Ofgem & industry	Q1 2026
	Targeted support	Innovation projects continue to be supported as market barriers are removed.	DESNZ, NESO, Ofgem	Ongoing

Priming the Market	Targeted support	Investigation and decision on whether a bridging market (in the same vein as DFS) is needed to enable CLF while other market barriers are removed.	DESNZ, Ofgem, NESO & Elexon	Q1 2026
Creating the enabling conditions and systems	Proportionate sector regulation	Changes to Measuring Instrument Regulations (MIR) are consulted upon.	DBT	Q2 2025
		Consult on tariff data interoperability.	DESNZ	Q3 2025
		Measuring Instrument Regulations are amended to remove requirement for in-built display with appropriate grandfathering guidance for all devices deployed prior to the implementation of concurrent SSES regulations and implementation dates.	DBT	Q4 2025
		Guidance is issued to all notified bodies that any external hardware requirements beyond those listed explicitly in MIR cannot be required for certification to account for above grandfathering.		
		Develop and consult on DSRSP/Load Controller licence.		
		Energy Smart Appliances Phase 1 regulation is enacted.	DESNZ	Q1 2026
		Regulation does not outpace market signals and access thereby imposing unrecoverable costs on industry while they can still not earn revenue from flexibility.		
		Enact load control licence regulations.		Q2 2026
		Require suppliers to comply with new tariff data interoperability standards.	Ofgem	Q4 2026
		Load control licences are enforced.		Q2 2027

Creating the
enabling
conditions and
systems

Coordination and
acceleration of
data and
digitalisation
initiatives

Create a coordination document outlining interactions, dependencies, key contacts, and the future of asset registration and data platforms for CLF providers and consumers.

DESNZ

Q3 2025

Review appropriateness of the granularity of data demanded by different institutions from CLF providers whilst maintaining a trajectory towards closer to real-time data.

Q4 2025

Deliver the minimum viable product of the Data Sharing Infrastructure.

NESO

Q2 2026

Consumer Consent Solution Minimum Viable Product established.

Ofgem &
RECCo

Wider access to smart meter data for non-suppliers, including improving the process to become a Smart DCC Other User.

Elexon &
Smart DCC

Q2 2027

Design and deliver the Flexibility Market Asset Register.

Ofgem &
Elexon

Q4 2027

Levy reform

Alleviate the challenges Final Consumption Levies pose for flexible volumes, not just for clean heating.

DESNZ &
Ofgem

Q1 2026

Implement an enduring solution to mitigate the dampening effect of FCLs on CLF, in particular for demand turn up facilitated by domestic batteries and vehicle to grid technology.

DESNZ &
Ofgem

Q1 2027

Ensure consumer outcomes are at the heart of flexibility service offerings, rather than prescribing a certain style of delivery model.

Creating the enabling conditions and systems	Spatial planning and connections reform	Distribution connections reform is given the same emphasis and priority as Transmission Connections Reform Action Plan, including how domestic low-carbon technologies are installed and how dispersed industrial and commercial sites can decarbonise via co-location.	DESNZ & Ofgem	Q1 2026
		The Strategic Spatial Energy Plan (SSEP), Centralised Strategic Network Plan (CSNP), and Regional Energy Strategic Plans (RESPs) take greater account of the role of demand in alleviating capital investment in generation, storage, and networks, in line with the refreshed value stack below. This includes an updated statement from NESO on how CLF will be incorporated.	DESNZ, Ofgem & NESO	Q2 2026
		RESPs include local flexibility targets in line with the national targets above.	Ofgem & NESO	Q3 2027
Social and economic impacts	Realising the economic benefits of consumer-led flexibility	Refresh the whole system value stack of consumer-led flexibility including the bill savings to be expected across consumer segments.	DESNZ	Q1 2026
		The above will include a specific annex on non-domestic flexibility potential, consolidating research work done to date from DESNZ and NESO.		Q2 2026
	Mitigating potential unfairness and its public perceptions	Develop a jobs, skills, and productivity case for CLF in GB.		Q3 2027
		Use above refresh as part of any public awareness campaign to sell the value of CLF for all consumers.		

CONCLUSION

As the above list shows, the scale of transformation needed within the next five years cannot be underestimated - there are more actions needed than months left to 2030. That such an effort is achievable without a considerably different approach to leadership than what has been seen to date is unthinkable. We all know what needs to be done, the only remaining question is how we go about doing it. Do we follow the segmented, incremental, reactive approach of the past? Or, do we take ownership of the goal we've committed to and forge a new path?

We sincerely hope that industry's recommendations are properly reflected within the Low Carbon Flexibility Roadmap.

“The scale of transformation needed within the next five years cannot be underestimated - there are more actions needed than months left to 2030.”

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SOURCES FOR INFOGRAPHIC

- Robin Hawkes Analysis - [We're wasting £1.2bn annually on turning off renewables and turning up gas](#)
- E.ON - [84% of customers want control over their energy](#)
- ADE analysis based on Clean Power Action Plan - Unlocking 10GW of CLF is equal to 1/3 of the UK's entire gas power station capacity
- Cornwall Insight - [Savings of £115 and £375](#)

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