

# Decision

# Decision on the Project Assessment framework for Window 1 LDES cap and floor regime

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This document describes the approach that Ofgem, working with the National Energy System Operator (NESO), will take to decide which Long Duration Electricity Storage (LDES) projects are offered a cap and floor (C&F) regime in Window 1. It explains our decisions following the Consultation on Long Duration Electricity Storage Project

Assessment reflecting feedback from that consultation. This Decision marks a key milestone in the implementation of the first regulatory support mechanism for LDES, designed to accelerate investment in flexible, low-carbon energy infrastructure aligned with the Clean Power 2030 target.

Alongside this Decision document we are publishing the Multi-Criteria Assessment (MCA) Framework, the Cost Assessment Guidance, the Financial Framework for the C&F regime and NESO's Cost Benefit Analysis (CBA) methodology. We also set out the information that eligible LDES projects (Projects) will need to provide to enable us to carry out the Project Assessment. The MCA framework explains how we will process that information, including how we will assess submitted Project costs to support decision making.

Ofgem will ensure transparency in its decision-making and intends to publish the results of the Project Assessment including the Initial Decision List of Projects to be offered a C&F, along with the analysis and reasoning behind our decisions where appropriate. We will consult on our proposed decisions before making a final determination on which Projects will be awarded a C&F regime, expected in Summer 2026.

References to the "Authority", "Ofgem", "we", and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work.

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# **Executive summary**

Ofgem, working with the National Energy System Operator (NESO), has completed its <u>Consultation</u> on how to assess Long Duration Electricity Storage (LDES) Projects applying under Window 1 of the Cap and Floor (C&F) regime. This Decision directly addresses the further action set out in the <u>Technical Decision Document (TDD)</u>, published in March 2025. It also aligns with the <u>Ofgem Forward Work Programme 2025/26</u>, which prioritises enabling a flexible, decarbonised energy system and delivering the UK government's Clean Power 2030 target.

## **Purpose and scope**

Ofgem ran a Consultation from 28 May to 25 June 2025 to gather feedback on its proposed Multi-Criteria Assessment (MCA) Framework for assessment of Projects in Window 1. The MCA Framework will be used in the second Project Assessment stage, following the Eligibility Assessment stage.

This document explains Ofgem's decisions following the Consultation. It is being published alongside:

- **Eligibility Decision**: showing which Window 1 Projects will proceed from Eligibility Assessment (Stage 1) to Project Assessment (Stage 2).
- The MCA Framework: the detail explaining how we will assess Projects and reach our decisions on which Projects are awarded a C&F regime during Project Assessment (Stage 2).
- NESO's CBA Methodology: explains how NESO will conduct the Cost Benefit Analysis (CBA) and market modelling which will provide key inputs to the MCA Framework.
- Cost Assessment Guidance: explains how Ofgem will assess the costs submitted by Projects.
- **Data Submission Form**: the Excel template that Projects will use to submit data, including costs which we will use for Project Assessment.
- **Financial Framework**: sets out our decisions following the consultation on the detail of the financial framework of the LDES C&F regime.

#### What stakeholders said

Stakeholders broadly supported the proposed MCA Framework. Many welcomed its structured approach but highlighted areas for improvement to ensure fairness, transparency, and robustness:

- Support for the MCA Framework Respondents backed the overall
  approach but stressed the need for transparency in how Economic, Financial,
  and Strategic Assessments are combined. Many also said it is important to
  take a balanced view that considers both monetised and non-monetised
  benefits of Projects.
- Deliverability and Project maturity There was strong support for formally
  assessing how ready and credible Projects are. Stakeholders said this would
  help reduce the risk of non-delivery and improve the overall quality of
  Projects.
- Scoring and weighting clarity Many asked for clear, evidence-based scoring across all areas. There was particular interest in publishing weightings and structured criteria, especially for strategic impacts that are harder to quantify.
- System benefits and strategic value Respondents highlighted the need
  to better capture wider system benefits, such as grid upgrade deferral, realtime flexibility, and ancillary services. They also stressed the importance of
  monetising benefits like energy security, economic growth, and UK supply
  chain development.
- Revenue assumptions Most stakeholders disagreed with assuming revenue neutrality in the Balancing Mechanism (BM). They recommended using developer forecasts and historical or scenario-based modelling to better reflect real-world revenue potential.
- Competitive bidding and Financial Assessment There was general support for using competitive bidding to set C&F levels. However, many respondents felt it would be better to introduce this in future windows rather than in Window 1, to avoid adding more uncertainty to this regime process. The Financial Assessment was seen more as a viability check than a way to rank Projects.
- Modelling and counterfactuals There was support for refining the
  counterfactual to reflect a realistic system state without the specific Project
  being assessed, rather than relying on a blanket, uninformative notional 'no
  LDES' scenario. Stakeholders also suggested modelling stress conditions and
  low flexibility futures, and extending the time horizon to match the long life of
  assets like Pumped Storage Hydro (PSH).

# Ofgem's response – key points

- Project Assessment approach Projects will be evaluated on their economic, strategic, and financial merits, without weightings being set in advance. This approach aligns with the interconnectors cap and floor regime. By ensuring that our decisions are informed by a broad perspective, rather than a narrow and siloed approach of prioritising one impact over others, consumers will benefit from decisions that acknowledge the trade-offs that may arise between the different impacts of a Project.
- Deliverability and Project maturity Deliverability is now part of Project Assessment. We will consider how realistic each Project's plans are and how these have developed since being assessed by Ofgem at the Eligibility Assessment stage, including progress on planning consent and expected connection offer dates, noting that there may be uncertainty due to connections queue reform which we will take into account. We will also review evidence that Projects submit to demonstrate the developers' track record in developing similar projects. This helps ensure selected Projects can be delivered in practice, not just in principle.
- Revenue assessment We will ask Projects to submit evidence-based forecasts for specific revenue components. We will develop our own projections of revenues to use in the assessment. This will be done by using NESO's modelled outputs and, for revenues not captured by NESO modelling, by looking at a combination of estimates submitted by Projects, NESO's expert advice, and external evidence where available.
- The revenue assessment may take into account factors such as technology type, location, and other relevant characteristics. Where appropriate, benchmarking across similar Projects or technologies may be applied to ensure consistency and fairness.
- System benefits and strategic value Our assessment will now include a wider range of System Operability benefits that LDES assets bring. In the Economic Assessment this will be a non-monetised assessment of these benefits. In the Financial Assessment, we will develop projections of revenues that Projects will earn from ancillary services.
- While grid reinforcement deferral will not be monetised, the reduction in constraint management costs will act as a proxy for this second-order effect.

- **Technology comparison** All Projects will be modelled over a 25-year horizon, with adjustments made for longer-lived assets to ensure a fair and balanced comparison across technologies.
- Competitive bidding and Financial Assessment Projects will now be
  able to bid only on 2 parameters: regime length and residual value. The
  Financial Framework, being published alongside this document explains this in
  more detail.
- Modelling and counterfactuals The counterfactual design used to assess
  the Projects against has been improved as explained in NESO's CBA
  Methodology. All technologies will be assessed using consistent assumptions,
  ensuring a level playing field.

#### **Next steps**

Ofgem will proceed to assess all eligible Projects as listed in the Eligibility Decision. Eligible Projects are required to submit information for the Project Assessment phase, the details of which are included in the MCA Framework. Ofgem and NESO will undertake the Project Assessment in Q4 2025, aiming to publish the Initial Decision List of Projects offered a C&F in Spring 2026 with final decisions on C&F awards expected in **Summer 2026**.

# 1.Introduction

This section explains the structure of this document and associated documents. It then gives an overview of the response to Ofgem's May 2025 consultation on the Project Assessment process for LDES Window 1.

## The Decision we are making

- 1.1 We received 43 responses to the <u>Consultation on Project Assessment for LDES</u>

  <u>Window 1</u>, which we will refer to in this document as the "Consultation". We have now decided on the final methodology and process for conducting the Project Assessment which will select Projects to be offered a LDES Window 1 C&F regime.
- 1.2 This Decision document analyses the Consultation responses and establishes Ofgem's finalised approach to the Project Assessment Framework having considered the responses received.
- 1.3 We have made this Decision and finalised our approach in line with our statutory duties including Ofgem's principal objective to protect the interests of existing and future consumers.

#### Overview of this document and associated documents

- 1.4 This document follows the structure of the Consultation document:
  - Overall Assessment Process
  - Economic Assessment
  - Strategic Assessment
  - Financial Assessment
  - Approach to Market Modelling
  - Next Steps
- 1.5 Each section begins with a summary of stakeholder responses, followed by Ofgem's view, including any changes from our Consultation position, and ends with our final Decision.
- 1.6 Alongside this Decision document we are publishing the following documents:
  - **Eligibility Decision**: showing which Window 1 Projects will proceed from Eligibility Assessment (Stage 1) to Project Assessment (Stage 2).
  - MCA Framework: this explains in detail how Ofgem, working with NESO, will conduct its analysis and select Projects for the LDES Window 1 C&F regime.

- NESO Cost Benefit Analysis (CBA) Methodology for System and Welfare Impacts: this is an update to the <u>NESO document</u> published as part of the Consultation. It explains how NESO will conduct the market modelling which will provide key inputs to the MCA Framework.
- **Cost Guidance**: this explains how Ofgem will assess the costs submitted by Projects. It outlines how costs will be assessed at the Project Assessment stage as well as during the implementation of the C&F regime.
- Project Assessment Data Submission Form (DSF): the Excel template
  that Projects will use to submit data as described in the MCA Framework. This
  includes project cost submissions.
- **Financial Framework**: Ofgem's response to the <u>Consultation on LDES</u>
  <u>Financial Framework</u> setting out the decisions made.

## **Background**

- 1.7 In October 2024, following a public consultation, the government decided to introduce a C&F regime to encourage investment in LDES. The C&F regime will be broadly based on Ofgem's existing regime for electricity interconnectors, but with changes to make sure it works for LDES and its range of technology types.
- In March 2025, Ofgem and DESNZ jointly published a <u>Technical Decision</u> <u>Document</u> (**TDD**), which outlined key design features of the C&F regime and provided an indicative implementation timeline. Subsequently, on 8 April 2025, the first application window ("Window 1") for Projects was opened.
- 1.9 The first stage of selecting Projects was completed in Q3 2025 through the Eligibility Assessment. Applications were assessed against the relevant criteria listed in the TDD and set out in more detail in the <a href="Application Guidance">Application Guidance</a> and the <a href="Eligibility Criteria Assessment Framework">Eligibility Criteria Assessment Framework</a> (ECAF) on Ofgem's website.
- 1.10 The second stage will assess the Projects which have passed the Eligibility
  Assessment. This is called Project Assessment and will determine which Projects
  are offered a C&F regime.

#### **Response categories**

1.11 We heard from a wide range of stakeholders, including developers of LDES technologies, trade associations, investors, and individuals. We are grateful to everyone who took the time to share their views, your input has helped shape the positions set out in this document.

- 1.12 To help with analysis, we grouped responses into the following categories:
  - (1) Project developers Companies involved in building or operating LDES projects, such as Battery Energy Storage Systems (**BESS**), Compressed Air Energy Storage (**CAES**), Vanadium Flow Batteries, Hydrogen Batteries, and Pumped Storage Hydro (**PSH**).
  - (2) Trade Associations and Representative Bodies Organisations that represent the interests of the energy and storage sectors.
  - (3) Other Stakeholders not directly involved in developing or investing in Projects, including advisory bodies and non-applicant contributors.
  - (4) Individuals People who submitted responses independently.

## Confidentiality and publication

1.13 Of the 43 responses, 16 were marked as confidential so we have not published them. 27 responses were not, so we have published them. However, three of those responses had sections that were marked as confidential. We have redacted / removed those sections. This approach ensures transparency while allowing us to accommodate the confidentiality requests of stakeholders.

# Stakeholders who responded

- 1.14 The following Trade Associations provided responses: Scottish Renewables, RenewableUK, British Hydropower Association, Electricity Storage Network, Energy UK.
- 1.15 LDES Project developers that responded stating their technology type were:
  - **BESS**: Statera, Gresham House, Bluestone Energy, QBC Ltd, Volt Wise, Centrica, Conrad Energy, EcoDev Group, Ecotricity, Field Energy, EDF, Electricity Storage Network, NatPower, Gore Street Capital (MESL), Highview Power, Zenobe, Frontier Power, Innova, Statkraft
  - CAES: Cleanergi, Hydrostar, EKU Energy, Highview Power
  - PSH: SSE Renewables, Earba Storage, Glen Earrach Energy, ILI Group,
     Statkraft, Equinor, EP UK Investments, Foresight Group, QBC Ltd
  - Flow Batteries: Cell Cube, Invinity Energy Systems, Foresight Group
  - Hydrogen Batteries: Haldane Energy
  - Other: LDES Ltd, Mutual Energy

### 1.16 Summary of stakeholder type:

Stakeholder type	Number of responses
Applicant	27
Non-applicant	9
Individual	2
Trade Association	5

#### **Next steps**

- 1.17 Ofgem will proceed to assess all eligible Projects as listed in the Eligibility Decision. Eligible Projects need to submit information for the Project Assessment phase, details of which are included in the MCA Framework.
- 1.18 In the TDD, published in March 2025, we set out a timetable that led to us making our final decisions on C&F awards in Q2 2026.
- 1.19 Whilst we have met all milestones in that timetable so far, we are allowing slightly more time for a revised Project Assessment process following feedback from stakeholders. We believe this strikes the right balance between pace and robust decision making.
- 1.20 Ofgem and NESO will undertake the Project Assessment in Q4 2025 Q1 2026, aiming to publish the Initial Decision List of Projects offered a C&F in Spring 2026 with final decisions on C&F awards expected in **Summer 2026.**

#### **Decision-making stages**

Date	Stage description
28/05/2025	Consultation on Long Duration Electricity Storage Project  Assessment opened
26/06/2025	Consultation closed (awaiting decision)
23/09/2025	Decision on LDES Project Assessment Framework (this document) published with non-confidential Consultation responses.

### Related publications

- 1.1. <u>Consultation on LDES Project Assessment</u> (May 2025)
- 1.2. <u>Consultation on LDES Financial Framework</u> (June 2025)
- 1.3. <u>Long duration electricity storage application guidance</u> (April 2025)
- 1.4. <u>Long duration electricity storage technical decision document</u> (March 2025)

- 1.5. <u>Long duration electricity storage consultation: Government Response</u> (October 2024)
- 1.6. <u>Long duration electricity storage consultation</u> (January 2024)

#### **General feedback**

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We'd also like to get your answers to these questions:

- 1. Do you have any comments about the overall quality of this document?
- 2. Do you have any comments about its tone and content?
- 3. Was it easy to read and understand? Or could it have been better written?
- 4. Are its conclusions balanced?
- 5. Did it make reasoned recommendations?
- 6. Any further comments

Please send any general feedback comments <a href="mailto:LDES@ofgem.gov.uk">LDES@ofgem.gov.uk</a>.

# 2. Overall assessment process

This section summarises stakeholder feedback on Ofgem's proposed approach to assessing eligible Projects and explains how Ofgem will apply Economic, Strategic, and Financial Assessments to determine which Projects are offered a C&F. It also confirms Ofgem's position on setting a target capacity range (in MW) for Window 1, which will be informed by updated LDES optimal range advice from NESO.

# Stakeholder responses to the Consultation questions Question 1: MCA approach

Q1. Do you have any views on our overall approach to the MCA, including specifically the proposal to assess the three main areas?

Response	Description	Number of respondents
Supported the MCA Framework with recommendations	Respondents largely supported the inclusion of Economic, Strategic, and Financial Assessments as a structured and balanced approach to evaluating Projects. They recognised the broader value of LDES beyond financial metrics and supported the inclusion of non-monetised benefits such as energy security, economic growth, system resilience and domestic supply chain development. Some respondents suggested that qualitative benefits could be monetised using established methodologies. There was also a recommendation to normalise metrics to reflect technology-specific characteristics. A few also supported separating Stream 1 and Stream 2 Projects in rankings to reflect differences in readiness.	35
Broadly Rejected with recommendations	A few of the stakeholders raised concerns about the lack of transparency in how scores would be weighted and combined across the three assessment areas. These called for clearly defined scoring criteria, published weightings and	4

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Response	Description	Number of respondents
	a structured sub-criteria to ensure fairness.  Some stakeholders also argued that the selection process should rely primarily on rigorous  Economic Assessment only to ensure value for money. Stakeholder suggestions also included incorporating deliverability, Project maturity and cybersecurity into the framework, as well as recognising benefits such as local manufacturing, export potential, and network reinforcement deferral.	
Rejected MCA Framework	Two respondents opposed the MCA Framework approach arguing that Project selection should be based solely on Financial or Economic Assessments. They warned that including Economic and Strategic Assessments introduces subjectivity, distorts competition. They also hold the Strategic Assessment to be premature and undermining the credibility of the process. They considered this the only way to ensure value for money for consumers.	2
Did not answer or did not know	Some respondents did not provide a view on the overall MCA Framework.	2

2.1 Most respondents supported our proposal to assess Projects across three main pillars: Economic, Strategic, and Financial. This MCA Framework enables us to capture both quantifiable, monetised impacts and broader, non-monetised benefits, similar to the methodology used in <u>our Offshore Hybrid Asset (OHA)</u>
<u>Pilot C&F regime</u>, where strategic benefits were also considered alongside economic and financial metrics.

### **Changes made in response to Consultation responses**

2.2 **Deliverability:** Deliverability will now be assessed at the Project Assessment stage, building on its role as a key eligibility criterion at the Eligibility Assessment stage. This will be assessed in the Strategic Assessment – see 4.12

#### **Maintaining Consultation position**

- 2.3 Assessing Projects based on three assessments We maintain our position of assessing each Project based on the results of an Economic Assessment, Financial Assessment and Strategic Assessment. Each assessment within the Project Assessment Framework serves a distinct purpose, and we do not consider it in the interests of consumers, nor in accordance with our duties, to focus on a single assessment. We will monitor the progress of the Project Assessment and will retain the discretion to adjust the process if required in response to the evidence provided by Projects or the volume of Projects that emerge favourably from the application of our MCA Framework.
- 2.4 The purpose of the Economic Assessment is to estimate the benefits each Project will deliver. This includes monetised impacts on the electricity system, non-monetised system impacts, and wider social and economic impacts. It is important that we capture these where they are material, recognising that they may not always be captured by market outcomes.
- 2.5 The purpose of the Financial Assessment is to ensure that we select Projects that do not risk significant costs to consumers in the form of excessive floor payments. While we expect that there will be a correlation between Projects that perform highly in the Economic Assessment and those that perform highly in the Financial Assessment, this may not be the case for all Projects. The C&F regime is designed to improve Project investability by reducing risk, but Projects are expected to operate within the C&F corridor under normal conditions, not consistently below the floor.
- 2.6 Focusing solely on the Economic Assessment may select Projects that deliver strong system and/or SEW benefits, but at high risk of consumers needing to fund excessive floor payments. In such cases where a Project's economic benefits are outweighed by disproportionate financial risks, it may be more appropriate, given our principle objective to protect the interests of existing and future consumers, to use our discretion to prioritise Projects that offer a more balanced trade-off between SEW and risk of consumer cost.
- 2.7 The Strategic Assessment uses scenario analysis to look at the risks and opportunities involved in selecting a Project beyond the immediate social and economic impacts. This includes considerations around Project-specific risks and interdependencies, and around the overall portfolio of Window 1 Projects which will be selected. It is intended to reflect wider strategic and policy objectives that

- cannot be fully accounted for in the Economic and Financial Assessments, which are based on a relative assessment of each Project individually.
- 2.8 We note the concerns of stakeholders around the risk of subjectivity and their perception of a lack of transparency in the Strategic Assessment. We have, therefore, provided further detail on how we will carry out the Strategic Assessment section in the MCA Framework.
- Weighting of three assessments. We are maintaining our position not to follow a mechanistic approach of setting explicit weightings to the Economic, Financial, and Strategic Assessments. As each assessment will consider multiple Project impacts, we will take our decisions on offering C&F regimes based upon an in-the-round assessment. This aligns with our principal objective to protect the interests of existing and future consumers. A strong Economic Assessment may carry significant influence, though Financial or Strategic Assessments may also reveal material risks that could affect the final decision. This will depend on the information provided by Projects. We will adopt a flexible approach that allows us to consider each Project individually enabling us to make better-informed decisions.
- 2.10 This approach is consistent with our Initial Project Assessment (IPA) decision for OHA Pilot projects, where the assessment was not explicitly weighted nor mechanistic.
- 2.11 We recognise the benefits of providing additional clarity on the role of each of the three assessments, and how we expect them to influence our final decision. This additional detail is provided in the MCA Framework.
- 2.12 Ofgem will set a **target LDES capacity range** which will guide the total capacity of Projects offered a C&F regime in Window 1. The range will be based upon updated advice to be provided by NESO. The MCA Framework explains in further detail how this is applied.
- 2.13 Our decision-making will be guided by our statutory duties, including protecting consumer interests and ensuring value for money. All decisions will be evidence-based, transparent, and will be consulted upon when we publish the Initial Decision List. This will include a clear explanation of how each Project was assessed and how the different assessments were considered together in reaching our decisions.

# **Question 2: In the round assessment**

Q2. Do you have any views on our proposed in-the-round assessment that will rank projects based on NPV and then adjust with non-monetary impacts?

Response	Description	Number of respondents
Broadly supported with recommendations	Many respondents supported the in-the-round approach in principle, recognising its potential to balance monetised and non-monetised impacts. They saw value in using Net Present Value (NPV) as a starting point, followed by adjustments to reflect strategic and qualitative benefits. Some highlighted the importance of capturing long-term benefits such as system resilience, strategic flexibility and domestic manufacturing potential. Others supported the use of minimum thresholds across assessment categories to ensure balanced evaluation. Concerns were raised about subjectivity in weighting and unclear frameworks, prompting calls for transparent criteria, grouping by technology type and monetising more impacts for consistency.	28
Broadly opposed with recommendations	Some stakeholders raised concerns about the lack of transparency and clarity in how non-monetised impacts would be weighted and incorporated into final rankings. Some questioned the robustness of economic modelling, particularly for technologies with long asset lives or uncertain market conditions. There were mixed views on whether to prioritise £/MW or £/MWh. Some respondents favoured £/MW to avoid bias against long-duration technologies, while others preferred £/MWh. A few suggested that both MW and MWh contributions should be captured. Additionally, grouping Projects by technology type or discharge duration was also recommended.	9

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Response	Description	Number of respondents
Rejected in-the-	Two stakeholders opposed adjusting NPV rankings	2
round	without a formal scoring system, citing risks of	
assessment	bias and lack of auditability. These respondents	
	preferred a more rigid, price-based ranking	
	system similar to the Capacity Market. They add	
	that if non-monetary adjustments are used, they	
	should be clearly defined, limited to essential	
	attributes like strategic flexibility or resilience and	
	transparently weighted.	
Did not answer or did not know	Some respondents did not provide a view on the in-the-round assessment or indicated uncertainty	4
	about the proposed approach.	

2.14 We continue to support the in-the-round assessment approach, which starts with monetised impacts and then adjusts these to account for non-monetised impacts. This ensures that strategic and long-term system benefits are considered alongside financial metrics. It is important that we capture these where they are material, recognising that they may not always be captured in market outcomes.

#### **Changes made in response to Consultation responses**

2.15 Clarity of non-monetised impacts – In response to stakeholder feedback, we have clarified how non-monetised components of the Economic Assessment will be evaluated and how they may influence the overall NPV-based ranking. This ensures that important system and societal benefits not easily captured in monetary terms are still meaningfully considered. Further detail is provided in the MCA Framework and NESO's CBA methodology documents.

#### **Maintaining Consultation position**

- 2.16 Setting of weightings We maintain our position not to set weightings of non-monetised impacts in advance. There is no credible basis for setting these weights in advance of reviewing Project submissions. Instead, we will use a "swing-weighting" approach which is described in the MCA Framework.
- 2.17 While we are taking a flexible approach, we recognise the importance of objectivity and transparency in how non-monetised and strategic impacts are assessed. The MCA Framework outlines our approach to considering these

impacts, including the criteria we will apply and how they may influence the overall assessment.

2.18 We will publish our decision rationale when we publish the Initial Decision List of Projects. This will provide stakeholders with a clear understanding of how each Project was assessed and how different impacts were considered in the final decision.

### **Question 3: Competitive Bids**

Q3. Do you have any views on using competitive bids - based on project-specific parameters - to inform the financial assumptions and C&F levels in each project's assessment? How might this approach work on a technology-neutral basis?

Response	Description	Number of respondents
Broadly supported competitive bidding with suggestions	Many respondents supported the principle of using Project-specific competitive bids, citing benefits such as cost efficiency, commercial discipline, and consumer value. They argued that tailored bids could better reflect individual Project risks and characteristics. Some recommended safeguards such as minimum floor thresholds, benchmarking against independent cost data and clear definitions of "good value" to prevent gaming or underestimation of capex. Concerns included complexity, potential delays and risks of crosstechnology bidding disadvantaging certain solutions.	14
Broadly opposed competitive bidding with recommendations	A significant number of stakeholders raised concerns about the fairness and feasibility of competitive bidding, especially in Window 1. They warned that a purely technology-neutral approach could disadvantage innovative or long-duration technologies unless lifecycle costs, flexibility and degradation are properly accounted for. They highlighted uncertainty in project costs, financing terms and regime design, arguing that early competition risks undeliverable bids and market	12

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Response	Description	Number of respondents
	distortion. They recommend using administrative benchmarks by technology class along with incentives for optimisation.	
Rejected competitive bidding	Two respondents rejected the use of competitive bidding at this stage, arguing that it is premature due to uncertainties in regime design and Project maturity. They preferred an administrative or benchmarked approach for Window 1.	2
Did not answer or did not know	15 respondents did not provide a view on competitive bidding or indicated uncertainty about how it would work in practice.	15

2.19 Allowing Projects to flexibly propose changes to regime duration and residual value is a practical way to support the government's technology-neutral approach for LDES Window 1. It gives developers the opportunity to reflect the specific risks, costs, and features of their Projects, which is especially important given the wide range of LDES technologies and the large number of applications. However, we recognise the risk of strategic bidding and adverse outcomes with an overly complex bidding mechanism.

#### **Changes made in response to Consultation responses**

- 2.20 In response to stakeholder concerns, we have changed how the competitive process will work in practice in our Financial Framework for LDES Window 1. The substantive change is the move from five parameters to two: regime duration and residual value. Stakeholder feedback to the Financial Framework Consultation highlighted risks that the original five parameters were too complex and that strategic underbidding could undermine the policy goals.
- 2.21 By proposing adjustments to regime duration and residual value, Projects are able to lower their risk of floor payments and hence achieve a better score in the Financial Assessment.
- 2.22 All Projects will receive the administrative rates for the cap and floor, unless in exceptional circumstances a request for a floor variation is approved (further detail on this is provided in the Financial Framework).

#### **Maintaining the Consultation position**

2.23 We believe that introducing some form of competition from the outset is important for setting the right direction of travel, by signalling to stakeholders that competition is part of this regime and may play a role in any potential future windows. It will also help drive efficiency and innovation, particularly given the large number of applications (171) and the wide range of technologies in Window 1. While we recognise the uncertainties in this first window, we think it is right to give Projects flexibility to propose changes to regime duration and residual value. This will help create a fair and responsive process that supports the most promising technology solutions.

#### **Question 4: Capturing all revenue streams**

Q4. Do you agree that some revenue streams - such as from re-optimisation or ancillary services - cannot be fully captured in the Economic Assessment? How could NESO or Ofgem better account for or validate these in the assessment process?

Response	Description	Number of respondents
Supported	Respondents strongly agreed that re-optimisation	19
improved	and ancillary service revenues are critical to LDES	
treatment of	viability and system value but are	
revenue streams	underrepresented in current modelling, particularly	
	for BM-active and PSH assets. Many warned that	
	excluding these revenues risks undervaluing	
	projects and reducing awarded capacity. While	
	modelling is challenging, stakeholders	
	recommended scenario-based or stochastic	
	approaches, third-party forecasting tools, and	
	clear assumptions to improve accuracy. Several	
	suggested allowing developers to submit evidence-	
	based forecasts, supported by historical	
	benchmarks, and using operability tags (e.g.,	
	inertia, restoration services) to recognise system	
	benefits. Others proposed flat-rate uplifts (£/MW)	
	and integrating technical attributes into	
	assessments.	

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Response	Description	Number of respondents
Rejected the	Stakeholders warned that NESO's current	17
premise or	modelling underestimates BM and ancillary	
preferred current	revenues, risking undervaluation of flexible	
approach	technologies. They called for scenario-based or	
	stochastic modelling, third-party tools, and clear	
	assumptions, or allowing developer evidence with	
	validation. Concerns included double counting,	
	trade-offs between markets and overstatement	
	risks. Respondents urged a common forecasting	
	framework, transparency on qualitative scoring,	
	and alignment with system needs and policy goals	
	to ensure fairness and credibility.	
Did not answer or did not know	Some respondents did not provide a view or indicated uncertainty about how these revenue streams should be treated in the assessment	7
	process.	

2.24 We recognise the value that LDES assets provide to the system through their participation in the intra-day and balancing markets "real-time flexibility benefits". We also confirm that estimates of revenues generated by LDES assets participating in Intra-Day and Balancing Market (energy) trading will be captured in the Financial Assessment.

#### **Changes made in response to Consultation responses**

- 2.25 **Real-time Flexibility** we explain the changes made to our approach in question 5 from 3.5 to 3.8.
- 2.26 Ancillary services / System Operability we have broadened our approach and changed our terminology. The Economic Assessment will now include a non-monetised, qualitative assessment of a wider range of System Operability benefits that LDES assets could bring. In the Economic Assessment this will be a non-monetised score for each service. In the Financial Assessment, we will develop projections of revenues that Projects will earn from ancillary services.

# **Maintaining the Consultation position**

2.27 Risk of double counting – While we acknowledge concerns about the risk of double counting and overestimation, our non-monetised approach is intended to account for this. In both the Economic and Financial Assessment, we will account for the opportunity cost of providing ancillary services given the potential for the same asset to participate in wholesale markets.

# 3. Economic Assessment

This section summarises stakeholder feedback on the Economic Assessment and explains how Ofgem has responded by refining its approach to assessing the economic and system-level impacts of eligible LDES Window 1 Projects. It confirms Ofgem's decision to continue using the Economic Assessment.

# Stakeholder responses to the Consultation questions

#### **Question 5: Economic impacts**

Q5. Are we considering the right impacts for the Economic Assessment, and have we correctly characterised both monetised and non-monetised impacts?

Response	Description	Number of Respondents
Broadly supported impact categories with recommendations	Most respondents agreed that the proposed impact categories were broadly appropriate. They welcomed the inclusion of both monetised and non-monetised impacts and recognised the value of a comprehensive framework. However, many felt that key benefits, such as ancillary services, capacity market revenues and avoided curtailment were missing or under-monetised. Respondents also call for the inclusion of network reinforcement deferral, long-term resilience and residual value, especially for long-lived assets.	24
Broadly opposed with recommendations	Stakeholders raised concerns about the exclusion or undervaluation of important revenue streams, including re-optimisation, BM revenues, and real-time flexibility. There is strong concern over the subjectivity of non-monetised impacts such as natural capital and community effects, with calls for clearer scoring criteria. Respondents highlight that the current Economic Assessment fails to capture key value drivers including real-time flexibility, re-optimisation, intra-day trading and ancillary services. Also, they suggest capturing	10

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Response	Description	Number of Respondents
	second-order effects on markets and policy uncertainties. On costs, some Projects questioned the use of midpoint cost estimates in the assessment, arguing this could disadvantage mature or capital-intensive technologies.	
Rejected approach	Only one respondent completely rejected the inclusion of certain impacts. They argue that the Economic Assessment is unsuitable and should be replaced by the Financial Assessment.	1
Did not answer or did not know	Some respondents did not provide a clear view on the Economic Assessment or expressed uncertainty about the proposed approach.	8

- 3.1 Most respondents supported our proposed impact categories and the inclusion of both monetised and non-monetised impacts. We agree that a broad and balanced approach is essential to reflect the full value of LDES technologies. We also acknowledge the strong feedback on the need to include additional value streams and to develop an assessment process which fairly assesses capital-intensive assets and assets whose discharge duration significantly exceeds the 8-hour minimum.
- 3.2 We also recognise that whilst "Ancillary Services" refers narrowly to the type of remunerated services that NESO procure (either directly or through market-based competitive mechanisms), the Economic Assessment should aim to assess the wider System Operability benefits that LDES assets provide, beyond those related to trading energy in the Day-Ahead, Intra-Day markets and the Balancing Mechanism. The Financial Assessment, will focus solely on the NESO-procured Ancillary Services as it will aim to estimate the revenue streams that LDES assets will earn from providing those.

#### **Changes made in response to Consultation feedback**

3.3 Based on the feedback we received from stakeholders, the Economic Assessment will now include a wider range System Operability benefits such as balancing services, stability services, restoration, real power and reactive power/voltage support. It is not always possible to robustly monetise the full contribution a

Project makes to System Operability. We will therefore carry out a non-monetised assessment of the System Operability.

- 3.4 In the Consultation we considered whether we should **normalise the NPV for size of Projects** based on MW or MWh. The responses showed that both approaches had problems. Instead, we will calculate a Benefit-Cost Ratio (BCR) which will, in effect, normalise the present value of benefits from each project based on Project lifetime costs which we believe to be a better proxy for size of Project.
- 3.5 Intra-day and balancing mechanism ("real-time flexibility") benefits We recognise that Projects provide flexibility benefits to the system through their participation in the intra-day market and balancing mechanism. We also noted in the Consultation that the market modelling undertaken by NESO will not capture these benefits this is because it assumes perfect foresight over the modelling optimisation horizon, and therefore doesn't model supply-demand imbalances that would be rebalanced through the intra-day and balancing markets.
- 3.6 While some respondents disagreed with our approach of excluding these benefits, they also recognised the limitations of market models currently in existence. No one proposed a solution that we consider to be sufficiently robust in estimating these benefits in monetised terms. While some proposed estimating the revenues received by Projects from intra-day and balancing market trading, this would significantly over-estimate the system benefit. The revenues received by Projects would be a result of such assets displacing more expensive assets in the merit order and so these revenues would not be a reliable proxy for the net system benefit.
- 3.7 In the absence of a robust way of estimating such benefits as a way of comparing between Projects, we maintain our position of not monetising these benefits in Economic Assessment.
- 3.8 We have considered this further and are of the view that some of the characteristics of a Project may make it more beneficial to the system than others in terms of the real-time flexibility benefits it provides through participation in the intra-day and balancing markets. As such, we will now consider evidence from Projects to show why they would consider their Project more likely to deliver large flexibility benefits relative to other Projects. Where we consider this material, we will include it as a non-monetised impact.

#### **Maintaining Consultation position**

- 3.9 Separation of Stream 1 and Stream 2 Projects There was no strong evidence provided to justify treating Stream 1 and Stream 2 Projects differently. All Projects, regardless of stream, have market incentives to begin operations as soon as possible such that consumers can begin to realise the benefits of LDES. Maintaining a unified assessment framework ensures fairness and consistency across all applicants.
- 3.10 **Treatment of long-lived versus short-lived assets** We confirm that our approach to assessing BESS and long-lived assets such as PSH will remain broadly the same. While these technologies may offer different system benefits, our assessment framework is designed to capture these through both monetised and non-monetised impacts. For example, intra-day flexibility and asset degradation in BESS are reflected, as is PSH's long asset life. This ensures that all technologies are assessed fairly based on their overall contribution to system needs.
- 3.11 All Projects will be modelled over a 25-year period, to reflect that socio-economic benefits further out will be less certain. However, for long-lived assets we will reflect the fact that the cost of the asset will be spread over a longer horizon by spreading the cost over its useful economic life rather than over a 25-year horizon. This approach allows for consistent treatment across technologies.

#### **Question 6: System benefits**

Q6. Are there important system-level benefits from LDES that are not well captured in the Economic Assessment but could significantly impact outcomes? If so, what are they, and can they be consistently assessed across projects?

Response	Description	Number of Respondents
Broadly	There was strong agreement that several	14
supported	important system-level benefits are not fully	
inclusion of	captured in the current Economic Assessment.	
system benefits	Many stakeholders recommend the monetisation	
with	of grid reinforcement deferral as a distinct	
recommendations	benefit, separate from constraint savings. Many	
	also call for monetising reduced curtailment,	
	recognising its role in avoiding extra RES build.	
	Other priorities include capturing capacity market	

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Response	Description	Number of Respondents
	impacts, operability services (e.g., inertia, voltage support) and real-time flexibility through better modelling. Some claim stress-testing and whole-system optimisation for resilience, others argue current benefits are generic and long-duration services may not be essential.	
Broadly opposed the inclusion of system benefits with recommendations	Respondents raised concerns about the limitations of current modelling tools, which may not accurately reflect dynamic system behaviour or the value of grid-forming and BM-active assets. Some also warned that subsidised LDES could crowd out unsubsidised short-duration storage, distorting market signals. Others called for clearer frameworks to assess non-monetised system benefits.	17
Rejected approach	One respondent opposes broad economic assessments, arguing key benefits like grid-forming capability, black start, fast ramping, low carbon, and scalability are overlooked and should be reflected via structured strategic scoring.	1
Did not answer or did not know	Some respondents did not express a clear view or were unsure about how system-level benefits should be assessed.	11

3.12 We welcome the strong support for recognising system-level benefits in the assessment of Projects. We agree that LDES technologies provide critical services, like real-time flexibility and inertia that are not always captured through traditional modelling. These contributions are reflected through both monetised and non-monetised elements of our assessment framework.

#### **Maintaining Consultation position**

3.13 Grid reinforcement deferral – The presence of Projects may help reduce or mitigate network constraints. The direct impact of this will be measured within the Economic Assessment. While we recognise the potential second-order benefit

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of grid reinforcement deferral, we do not propose to monetise this benefit. This is due to two reasons:

- It is unlikely that a single Project will significantly avoid or delay a particular grid reinforcement project. Planned grid reinforcements are already being progressed through strategic network planning and so, including such benefits at the Project level is likely to lead to speculative valuation.
- Modelling the impact of the deferral of grid reinforcement would then require NESO to re-model its estimation of network constraint benefits, to avoid double-counting the benefits. This would require additional time and resource for limited additional value.
- 3.14 As a result, we maintain that these types of impacts are better addressed through NESO's wider system planning processes rather than through individual Project Assessments. To the extent that Projects deliver network-related benefits, this is best assessed through our existing approach of using reduced constrained management costs as a proxy for these benefits.

# 4. Strategic Assessment

This section summarises stakeholder feedback on the Strategic Assessment and how Ofgem has responded to these inputs in refining the assessment framework. It confirms Ofgem's Consultation position to continue using the Strategic Assessment, with changes made in some areas in response to stakeholder proposals.

# Stakeholder responses to the Consultation questions

#### **Question 7: Strategic Assessment**

Q7. Do you have any views on the relevance, appropriateness and completeness of the impacts proposed in the Strategic Assessment?

Response	Description	Number of Respondents
Broadly supported strategic criteria with recommendations	Most respondents supported including strategic factors like technological diversity, system resilience and flexibility. These impacts were seen as important for capturing the full value of LDES resilience, flexibility, and socio-economic benefits. They agree the current impact areas are appropriate but call for refinements to better capture long-term value. These include expanding the criteria to reflect grid reinforcement deferral, local resilience, export potential and reduced reliance on non-renewables.	26
Broadly opposed inclusion of strategic criteria with recommendations	Some stakeholders questioned the clarity and fairness of criteria like 'option value' and 'flexibility,' calling for clearer definitions and better alignment with the C&F regime goals. Others warned that overemphasising technological diversity could lead to higher-cost or less deliverable Projects. Suggestions included recognising benefits such as grid deferral, local resilience, export potential and foreign investment. There was strong consensus	10

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Response	Description	Number of Respondents
	to prioritise deliverability of the Project as a criterion in the Strategic Assessment. Some felt that the 'need for cap and floor support' criterion could unfairly disadvantage efficient or merchant-ready projects.	•
Rejected approach	2 respondents rejected the approach, arguing it relies on vague, subjective and unverifiable criteria that risk distorting outcomes. They questioned its legal basis, view technology diversity as inappropriate for a consumerfunded regime and criticise duplication with the Economic Assessment. Concerns include subsidy implications and compliance under the Subsidy Control Act.	2
Did not answer or did not know	Some respondents did not give a view or were unsure about the Strategic Assessment.	5

4.1 We welcome the broad support from stakeholders for including strategic criteria in the assessment of Projects. This highlights the importance of looking beyond economic and financial benefits. We also note concerns about the level of flexibility in the Strategic Assessment compared to the Economic and Financial Assessments and have provided further detail in the MCA Framework on how it will be applied.

#### **Changes made in response to the Consultation feedback**

- 4.2 **Purpose of Strategic Assessment** the Strategic Assessment uses scenario analysis to look at the risks and opportunities involved in selecting a Project beyond the immediate social and economic impacts. This includes considerations around Project-specific risks and interdependencies, and around the overall portfolio of Window 1 Projects which will be selected. It is intended to reflect wider strategic and policy objectives that cannot be fully accounted for in the Economic and Financial Assessments, which are based on a relative assessment of each Project individually.
- 4.3 To improve consistency, we have removed the assessment of **System Security**and **Resilience** from the Strategic Assessment, as it would risk double counting

the monetised impacts assessed under Security of Supply in the Economic Assessment.

- 4.4 **Technology Diversity** We have clarified how we will assess this in the MCA Framework. We will not seek technology diversity at all costs. Where there is an opportunity to include a lower ranked Project of a different technology type with only a limited impact on SEW benefit, we will consider doing so. Our rationale and any such decisions will be published for consultation prior to final decisions being made.
- 4.5 We have included a **Locational Diversity** criterion in the MCA Framework to reflect stakeholders concerns that the scale of System Operability benefits for an individual LDES asset will vary depending on how many other assets are providing similar services in that location vs. how much demand exists for those services.
- 4.6 **Definition of option value and flexibility impacts** We recognise concerns about using qualitative criteria, and agree that option value and flexibility can be harder to measure. To improve transparency, we have provided clearer definitions in the MCA Framework. In refining our approach, we have removed learning-related benefits such as those linked to pilot Projects or early-stage innovation as these are better assessed under Technological Diversity. The updated definition now focuses on features like expansion potential and interdependency.
- 4.7 We have more clearly defined how the **Risk of Cost Overruns** will be assessed by reviewing Projects' cost submissions and undertaking scenario analysis. A Project's high cost case will be used to re-run the Economic and Financial Assessments to evaluate the material uncertainty in outturn costs.
- 4.8 **Need for cap and floor support** We have removed the 'need for cap and floor support' as a separate criterion. We agree with some stakeholders who argued that it does not make sense to penalise Projects with merchant potential that are not yet investable. Feedback also highlighted that merchant potential does not guarantee investability, especially given clear evidence that no major LDES project has come online in the last 40 years. The Project Assessment is undertaken on the assumption that all electricity bought on the market will be sold back to the market and that the Project does not have any separate arrangements (such as a private wire PPA) or any other uses for the electricity that it discharges. Projects will be asked to confirm this or explain any such arrangements on the Data Submission Form.

#### **Maintaining the Consultation position**

4.9 We have made targeted changes in response to stakeholder feedback, but have largely maintained the overall approach set out in the Consultation. We continue to use the Strategic Assessment alongside the Economic and Financial Assessments, treating it as a non-monetised assessment. This approach allows us to consider a broader range of benefits and risks. This will help ensure that the final portfolio of Projects delivers value across economic, system, and policy dimensions.

### **Question 8: Other impacts under Strategic Assessment**

Q8. Are there other impacts that we should be considering in the Strategic Assessment?

Response	Description	Number of Respondents
Supported the approach with only a few additional criteria	Strong support for including Project deliverability, maturity and sponsor credibility. Many also recommended recognising economic growth, job creation, domestic supply chains, energy security, and environmental impacts. Stakeholder priorities also included locational benefits, restoration (black start) capability and future-proofing through scalability and intergenerational value.	25
Opposed the approach without the inclusion of further criteria	Some stakeholders opposed the 'need for cap and floor support' criterion, saying it could unfairly penalise efficient or merchant-viable Projects. Others warned against vague or speculative criteria.	4
Rejected approach	Two respondents opposed the Strategic Assessment through this question, citing concerns about subjectivity and fairness. They argued that the regime should focus on quantifiable system benefits and value for money.	2

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Response	Description	Number of Respondents
Did not answer	Twelve did not express a clear view or were unsure how additional strategic factors should be assessed.	12

- 4.10 Some of the feedback to Question 8 echoed themes from Question 7. These included concerns about the 'need for cap and floor support', and the value of long-term system contributions. These points are addressed in our response to Question 7 and are not repeated in full here.
- 4.11 However, stakeholders also proposed a wide range of additional strategic factors that were not covered under Question 7. These included deliverability, economic growth, domestic supply chain development, environmental sustainability, and regional system value. We address these new themes below.

#### **Changes made in response to the Consultation feedback**

- 4.12 Deliverability We will continue to assess Deliverability as part of the Strategic Assessment, building on the work done during the Eligibility Assessment stage. The assessment will consider how realistic each Project's plans are, including progress on planning consent and expected connection offer dates. It will also review evidence of the developer's track record in delivering similar projects and its proposed cyber security measures.
- 4.13 When assessing the Project's grid connection status, we will take into account the ongoing reform of the grid connections queue being undertaken by NESO. We recognise that a Project's place in the connection queue maybe be uncertain at the time of our decision to offer an LDES C&F. If that is the case, connection status will not influence the deliverability assessment of that Project. Any final award of a C&F regime may include a condition on the Project needing to have a confirmed grid connection date by a specified point in the delivery of the Project.

#### **Maintaining the Consultation position**

- 4.14 We will continue to use the Strategic Assessment, but with a refined structure and definitions to make the process clearer, more transparent, and more consistent.
- 4.15 We recognise the value of broader benefits, including economic growth, job creation, and domestic supply chain development. These are covered in the non-

monetised benefits of the Economic Assessment and will rely on specific evidence Projects can provide.

4.16 We note the suggestion to include grid reinforcement deferral and other additional elements as strategic benefits. However, we have decided not to include these in the Strategic Assessment. See our discussion of this in the Economic Assessment at 3.13.

# 5. Financial Assessment

This section summarises stakeholder feedback on Ofgem's proposed approach to the Financial Assessment of eligible LDES Window 1 Projects. It explains the key decision on the use of competitive bids - more detail on this is provided in the Financial Framework Decision which is published alongside this Decision.

# Stakeholder responses to the Consultation questions

# **Question 9: Financial Assessment role**

Q9. Do you have specific suggestions for how the Financial Assessment output should be considered alongside the Economic Assessment?

Response	Description	Number of Respondents
Broadly supported	Respondents agreed that the Financial	19
the inclusion of	Assessment should be used to check Project	
Financial	viability and delivery risk, rather than as the	
Assessment with	main tool for selecting Projects. Most agreed	
recommendations	the Economic Assessment should remain	
	primary, but the Financial Assessment should	
	provide meaningful input without overriding	
	strategic value. Some stakeholders warned	
	that relying too much on financial metrics	
	could disadvantage Projects with strong	
	economic or strategic value but higher upfront	
	costs. Respondents stressed it was important	
	to test the credibility of revenue projections,	
	factoring in long asset lives (including residual	
	value) and including revenue from ancillary	
	revenues.	

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Response	Description	Number of Respondents
Broadly opposed	Stakeholders raised concerns about missing	12
the inclusion of	revenue streams such as re-optimisation,	
Financial	ancillary services, and balancing revenues,	
Assessment with	especially for BESS and PSH. Some warned	
recommendations	that speculative or early-stage projects may	
	rely on overly optimistic cost assumptions,	
	calling for closer scrutiny of financial plans.	
	Suggestions included validating revenue	
	forecasts, using third-party data and	
	standardising assumptions. Additional	
	recommendations included scoring based on	
	floor reliance, consumer cost volatility, and	
	delivery risk.	
Rejected approach	Two stakeholders rejected the inclusion of the	2
	Financial Assessment. They argued to use the	
	Financial Assessment as a pass/fail filter with	
	third-party validation.	
Did not answer or	Some respondents did not express a clear	10
did not know	view or were unsure on the inclusion of the	
	Financial Assessment into the MCA	
	Framework. Most amongst these preferred to	
	give their feedback in response to the	
	Consultation on LDES Financial Framework	

- 5.1 We welcome strong support for including a Financial Assessment in the evaluation. Whilst we acknowledge the challenge of projecting revenues across multiple markets for each Project, we believe that this is critical to ensure that we select Projects that do not present a high risk of consumers needing to fund excessive floor payments.
- 5.2 The Financial Assessment is also where Projects with long-lived assets can demonstrate their value by including a Residual Value and/or a longer Regime Duration in their submission. Spreading cost recovery over a longer period will likely reduce floor payments leading to a stronger result in the Financial Assessment.

#### Changes made in response to the Consultation feedback

- 5.3 We will set the key metric as: Project revenue as a percentage of the Project's floor level. We expect Projects that fall below a minimum threshold (which will not be defined in advance) on this metric will not be offered a C&F regime.
- 5.4 For projects above the threshold, the results of the Financial Assessment will be considered alongside the Economic and Strategic Assessments. This is in recognition that while a Project may impose some burden on consumers due to risk of floor payments, it may deliver significant SEW and/or provide strategic benefits.
- 5.5 We are requesting that Projects provide us with their own revenue estimates.

  While these inputs will not directly feed into the Financial Assessment, they will be used to calibrate certain inputs and provide a means of comparing the Projects' expectations with our revenue assessment.
- 5.6 If we are satisfied that a Project has provided strong evidence, we may adjust our revenue forecasts accordingly. We will compare evidence across Projects and if we see alignment across a group of Projects we will consider that evidence to be stronger.

#### **Maintaining the Consultation position**

5.7 We will use the Financial Assessment to ensure Projects that rank highly in the Economic Assessment are financially sound and offer good value for consumers. It will also be the main tool for assessing the two bid parameters that Projects decide to propose, in the same way that we have proposed to assess bid parameters in the original consultation.

#### Question 10: Balancing Mechanism revenue assumption

Q10. Do you agree with our proposal to assume that LDES projects will remain revenue neutral following balancing market actions?

Response	Description	Number of Respondents
Disagreed with	These respondents strongly oppose assuming	12
neutrality	revenue neutrality in the Balancing Mechanism	
assumption	(BM), arguing it undervalues LDES and BESS	
	assets that can earn significant BM revenues.	
	They stress this simplification distorts financial	
	assessments, overstates floor payments, and	

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Response	Description	Number of Respondents
	disadvantages flexible technologies. Many highlight BM revenues are location-specific and material to project viability. Ignoring them risks misrepresenting system value and discouraging efficient investment. Several respondents call this a major flaw in modelling that could bias outcomes against high-value, responsive assets.	
Suggested improvements	Respondents recommend replacing neutrality with scenario testing, sensitivity analysis, or modest net-positive revenue assumptions based on data or modelling. Suggestions include allowing developer BM forecasts for validation, using NESO data and recognising locational benefits qualitatively. Transparency and consistency in assumptions are essential to avoid distortions.	9
Technology- specific concerns	Four stakeholders raised concerns specific to their technologies, such as vanadium flow batteries (VFBs) and lithium-ion BESS. They argued that these assets can profitably engage in BM due to their cycling capabilities and fast response, without degrading lifespan. Ignoring BM revenues risks undervaluing these technologies and misrepresenting their financial viability. Some noted that BM participation enables strategic cycling and constraint alleviation, which should be recognised in assessments.	4
Accepted assumption (with caveats)	Six respondents accepted revenue neutrality as a practical simplification but noted it may not reflect actual project revenues. They suggested including BM revenues in financial assessments if developers provide strong evidence and asked for	6

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Response	Description	Number of Respondents
	clarity on how NESO would handle discrepancies	
	between its data and project submissions.	
Other comments/	Some responses suggested including BM value in	12
did not respond	other assessments if it is not captured in the	
	Economic Assessment, and called for clarity on	
	how differences between NESO and developer	
	data will be handled. Others did not form or	
	present a view at this time.	

5.8 In our Consultation, we proposed assuming that where Projects bid into the BM to resolve thermal (network) constraints through system or non-energy actions, the net impact would be revenue neutral. There was strong feedback on this assumption, with many stakeholders noting that it does not reflect the real revenue potential of LDES technologies. In particular, BM revenues can be significant for fast-responding and flexible assets, with bids reflecting the opportunity cost of participation in the BM and the relative liquidity in the market.

## Changes made in response to the Consultation feedback

- 5.9 We acknowledge that while the revenue neutrality assumption is likely to be suitable for generation assets, it is less appropriate for LDES assets. Storage assets can simultaneously bid to turn up and turn down in the Balancing Mechanism, and any bid to turn down allows the storage asset to retain charge that can then be discharged at a later period. This means LDES assets can generate a substantial proportion of their revenue from undertaking both energy and non-energy actions within the Balancing Mechanism.
- 5.10 While our previous approach had already accounted for the revenues generated by LDES assets from undertaking energy actions, we have further considered how best to capture revenues from non-energy actions in the Financial Assessment. We have devised a methodology to estimate these revenues which is described in the MCA Framework.

#### **Linking Bid Parameters / Regime Variations with Financial Assessment**

5.11 As outlined in the Financial Framework Decision for LDES Window 1, published alongside this, the bid parameters have been reduced from the five consulted on to two: regime length and residual value. These allow Projects to flex their rate of

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return at the cap and floor, without increasing the risk of a 'race to the bottom' which was a concern raised in the Consultation. This is discussed further in the Financial Framework Decision.

5.12 Projects are also able to propose regime variations in exceptional circumstances, this will allow Projects to request a right floor rate of return. This is discussed further in the Financial Framework Decision, and will negatively impact a Project's Financial Assessment as the likelihood of floor payments would increase with a higher floor.

# 6. Approach to market modelling

This section summarises stakeholder feedback on the proposed Marginal Additional (MA) method and counterfactual design used in the market modelling of Projects. It confirms Ofgems and NESO's consultation position to retain the MA method as the approach for the Economic Assessment, while outlining refinements to improve it, as set out in the MCA Framework and NESO's CBA Methodology.

# Stakeholder responses to the Consultation questions

## **Question 11: Marginal Additional method**

Q11. Do you have any views on the proposed Marginal Additional method and whether it provides a robust basis for assessment?

Response	Description	Number of Respondents
Broadly supported Marginal Additional method with recommendations	Many respondents supported the Marginal Additional (MA) method for its consistency, transparency, and simplicity, viewing it as a practical foundation for assessing incremental Project value. Several respondents also proposed enhancements to the MA method, including blending it with a First additional approach, introducing technology-specific archetypes and using complementary scenario-based sensitivity analysis to better reflect system dynamics and Project diversity.	21
Broadly opposed Marginal Additional method with recommendations	Some stakeholders raised concerns that the MA method overlooks second-order system benefits such as avoided network reinforcement, regional flexibility and long-term emissions reductions.  Some also argued that the assumptions behind the approach are rather oversimplified. Others noted that the method may disadvantage large, long-lead-time, or high-capex Projects due to diminishing returns assumptions. Additional concerns included the use of a uniform notional	8

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Response	Description	Number of Respondents
	LDES archetype and the risk that the FES Holistic	
	Transition scenario may overstate system	
	flexibility.	
Others / No clear	Some respondents accepted the MA method as a	14
view	pragmatic compromise but urged refinement;	
	others did not express a clear view.	

6.1 We welcome the broad support for the MA method as a consistent and transparent basis for assessing the incremental value of Projects with some of the refinements suggested. We agree that it provides a practical and proportionate foundation for market modelling, particularly in the context of a competitive allocation process.

#### **Changes made in response to the Consultation feedback**

6.2 We acknowledge the concerns raised by stakeholders regarding the limitations of the MA method and have made some adjustments to reflect the feedback received, in particular around the Counterfactual which is discussed in Question 12. The updated MA method is described fully in the NESO CBA Methodology.

#### **Maintaining the Consultation position**

6.3 We continue to believe that the Marginal Additional method is an appropriate and robust foundation for market modelling. When applied alongside a refined counterfactual and supported by Financial and Strategic Assessments, it enables a fair, practical and transparent evaluation of Project-level impacts. We will retain the MA method as the core of our modelling approach, with the refinements described in the NESO CBA Methodology.

#### **Question 12: Counterfactual and sensitivities**

Q12. Do you have any views on the counterfactual to use for this assessment and sensitivities that we could use?

Response	Description	Number of Respondents
Supported	Many stakeholders supported the use of a	20
Refined	counterfactual approach but emphasised the need	
Counterfactual	for refinement. There was support for refining the	

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Response	Description	Number of Respondents
	counterfactual to reflect a realistic system state without the specific Project being assessed, rather than relying on a blanket, uninformative notional 'no LDES' scenario. Many stressed the need for richer sensitivity analysis to reflect system stress and uncertainty. Recommended sensitivities included high renewables, gas price volatility, low renewable output, interconnector outages, network delays and regulatory changes A few respondents also supported the current counterfactual design without major changes.	
Expressed Concerns and suggested improvements for the refined Counterfactual	Respondents raised concerns that the current counterfactual may dilute locational differences and assume unrealistic levels of LDES deployment and flexibility. This could lead to overstated benefits for clustered projects and undervaluation of technologies suited to stress conditions.  Recommendations included modelling regionally concentrated applications, incorporating low-flexibility and high-constraint scenarios, and extending the modelling horizon for long-lived assets. A dynamic, scenario-based counterfactual was preferred to better reflect system diversity and ensure fair valuation.	9
Rejected the overall modelling approach	1 respondent proposed that the counterfactual is unrealistic and unfair. They recommend calibrating LDES levels, realistic locations and multiple scenario modelling.	1
Others / No Clear View	Some respondents did not express a clear view or were unsure about the counterfactual and sensitivity assumptions.	13

6.4 Ofgem and NESO thank stakeholders for their constructive responses and agree that the counterfactual used in the modelling must reflect realistic system

conditions. We also agree that the 25-year modelling horizon does not account for long-lived technologies such as PSH, but we believe that our final approach where Projects are able to propose regime durations now addresses this.

#### Changes made in response to the Consultation feedback

- 6.5 We have refined the counterfactual methodology to address concerns about a blanket, uninformative notional 'no LDES' scenario. A dedicated counterfactual is now created for each Project which reduces potential bias based on a Project's size. Further detail on this is contained in NESO's CBA methodology.
- 6.6 We also acknowledge concerns about the 25-year modelling horizon being too short, particularly for long-lived technologies such as PSH. Whilst we do not believe there is merit in a longer modelling horizon, we will now allow Projects to submit a residual benefit value to reflect the continued operation of assets beyond the regulatory regime period. Further detail on this approach is provided in the MCA Framework and the Financial Framework.

#### **Maintaining the Consultation position**

6.7 We will model three Future Energy Scenarios (FES) pathways from the 2025 dataset, using Holistic Transition as the central case. In addition, we will model a set of weather year scenarios to test Project performance under varying system and meteorological conditions. These scenarios will be applied consistently across all assessments. We will no longer run a zonal pricing scenario as outlined in the Consultation as the government has stated that it will not adopt this approach.

# 7. Next steps

The section outlines the actions that eligible Projects now need to undertake to be considered for a Window 1 C&F.

# **Next steps for Eligible Projects**

- 7.1 The publication of this MCA Framework starts the submission period for eligible Projects to provide additional information to Ofgem to enable the Project Assessment to be carried out.
- 7.2 Please see the Next Steps section of MCA Framework for further information.

# **Next steps for Ofgem and NESO**

- 7.3 In the <u>Technical Decision Document (TDD)</u>, we set out our intention to assess all Projects with 2030 and 2033 start dates in parallel but with the option to use a 'twin track' approach if needed. Ofgem has decided to apply a single assessment process to all eligible Projects and will not follow a 'twin track' approach for its Project Assessment.
- 7.4 Whilst Projects are preparing their Data Submissions, Ofgem and NESO will prepare the Project Assessment stage for eligible Projects. This will involve setting up modelling frameworks and analytical tools to support the acceptance of Project data (including cost data) and the assessment process.
- 7.5 Ofgem will share relevant information from Projects with NESO and its advisors and will commence the Project Assessment immediately after the end of the Submission Period.

#### Finalising LDES Window 1 C&F awards

- 7.6 In Spring 2026, Ofgem aims to publish its minded-to position which will include the Initial Decision List along with underlying analyses that have informed these decisions. This will be subject to a public consultation.
- 7.7 Final Decision: In Summer 2026 Ofgem aims to publish its final decision, including a detailed rationale outlining how Projects were assessed. This will provide transparency around the evaluation process and help stakeholders understand the basis for the outcomes.
- 7.8 Licence Development: Ofgem will begin drafting special licence conditions for successful Projects, with consultation expected in Spring 2026 and finalisation in Summer 2026.

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7.9 Following the award, Ofgem will monitor Project progress against agreed milestones, focusing on deliverability, cost control, and risk management.

# **Decision-making stages**

Date	Stage description
28/05/2025	Consultation on Long Duration Electricity Storage Project  Assessment opened
26/06/2025	Consultation closed (awaiting decision)
23/09/2025	Decision on LDES Project Assessment Framework (this document) published with non-confidential Consultation responses.
18/11/2025	Submission deadline for Projects to submit Project Assessment Data Submission Form, detailed Project costs, and all other relevant data required for the Project Assessment stage.
Q4 2025 to Q1 2026	Ofgem and NESO conduct Project Assessment
Spring 2026	Initial Decision List published & consultation launched
Q2 2026	Projects to submit updated cost estimates (to remain within the range submitted in the Data Submission Form)
Summer 2026	Final Decision on Project Assessment (as well as the C&F regime award, and publication of Licence Conditions)