



Bishops Dal Energy Storage System

Report on Feedback



September 2024

Introduction

Purpose of this report

RES has considerable experience in developing energy storage projects throughout the UK and believes in the importance of community consultation to identify issues and concerns, as well as benefits and opportunities, which can be considered when developing and designing a project.

The purpose of this report is to summarise the written feedback received from the community during the July 2024 public exhibition and subsequent consultation period. It also highlights any changes that have been made to the preliminary design of the proposed development since then.

Each section focuses on a key topic area and summarises the key themes within the feedback, followed by RES’ response.

July 2024 Consultation

RES held a public exhibition in the local area in July 2024, as part of its pre-application consultation on the proposed Bishops Dal energy storage system. The event provided people with the opportunity to learn more about the project, discuss the proposals with the project team, and provide written feedback to RES on the preliminary design.

A range of information was made available, with RES staff on hand to discuss the proposal and answer any questions. A two-week consultation period followed the exhibitions, for people to submit written feedback to RES on the proposal and preliminary design. Furthermore, RES offered two further days during the consultation period in addition to the public exhibition, when people who wished to discuss the proposal, could book an individual telephone or video appointment with the project team.

General overview

Approximately 50 people attended the first consultation event and 10 completed comment forms were received by the time that the consultation period closed – providing 28 individual comments across a variety of topics.

10	28	50+
Individual Comment Forms	Individual Comments	Consultation Attendees

Interest in the proposals was observed across the local area, with most attendees visiting from Birgham. The graph below highlights the local areas the exhibition attendees were from.

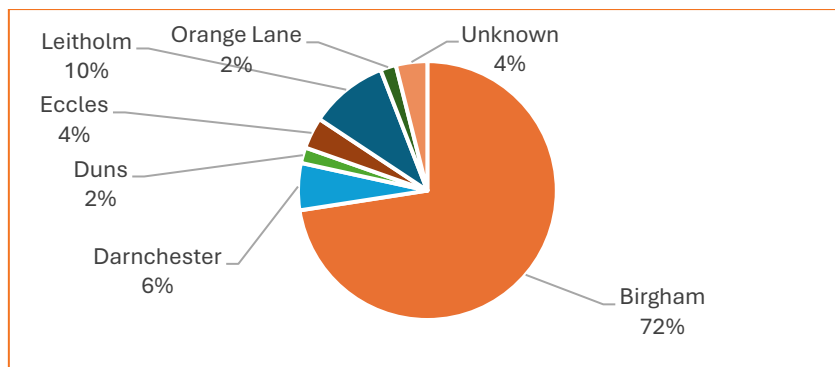


Figure 1 – geographical spread of visitors to the public exhibition

Comment form analysis

The comment form asked a number of multiple-choice questions along with form fields for respondents to make individual comments.

40% of respondents outlined that they increased their understanding about the proposals (Q 1.3) by a lot or quite a lot, following their attendance at the exhibition, whilst 30% outlined that their knowledge had increased by very little or not at all.

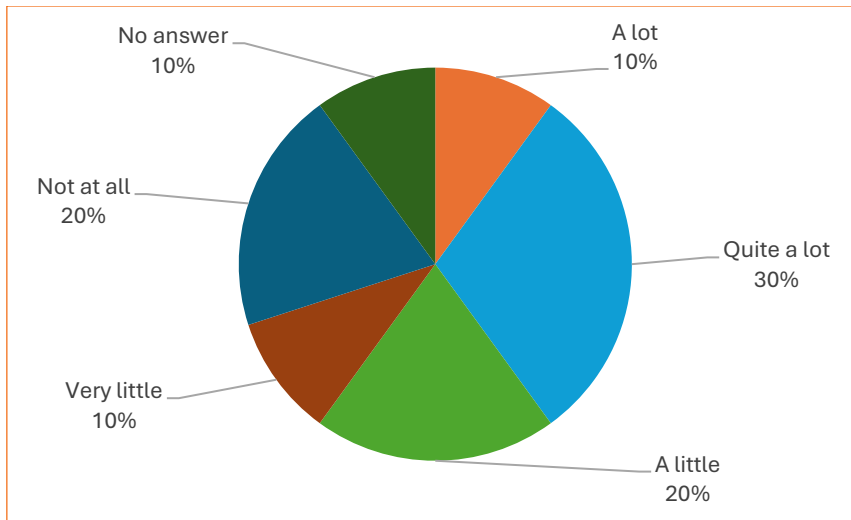


Figure 2 – analysis of responses to comment form question 1.3

50% of respondents offered feedback on how the exhibition could have been improved, for example: a plan showing all developments within the area and visual representation of how the energy storage system would look. RES has acknowledged these comments and have provided a plan showing all other developments and photomontages of the proposed Bishops Dal project, as part of the second public exhibition.

When asked what part of the public exhibition they had found most useful, 60% of respondents stated that the ability to ask RES questions was most useful.

Respondents were invited to provide feedback and ideas for local benefits and priority projects that they would like to see supported or delivered in their community from Bishops Dal Energy Storage System, should it receive consent. Three responses were received, two of which stated that local benefit should be discussed if the scheme is consented. The third response related to compensation for local residents.

RES also included a multiple-choice question on the comments form that asked how the respondent felt about the proposed preliminary layout for the project. The breakdown of responses is as follows: 60% responded that they had concerns about the layout; 20% responded that they didn't like energy storage systems in general; and 20% didn't answer.

When asked whether they agreed or disagreed that we need to develop energy storage projects to create a more stable and secure electricity system, supporting the rollout of zero carbon energy (Q 4.4), 50% stated they strongly agreed or agreed with 20% stating they disagreed or strongly disagreed.

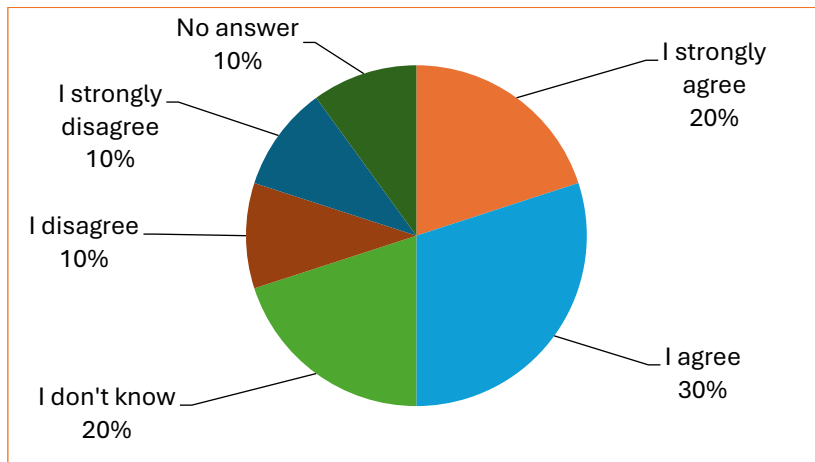


Figure 3 – analysis of responses to comment form question 4.4

A full analysis of the comment form feedback will be provided in the Pre-Application Consultation (PAC) Report which will accompany the planning application.

The consultation feedback submitted to RES has been considered by the project team as part of the design development, in addition to feedback from key consultees and the findings from the detailed technical and environmental studies that have been undertaken. We are grateful to everyone who took the time to engage with us during our first round of consultation.

Topical breakdown of comments

The graph below shows the balance of topical comments received, with the following most salient:

- Cumulative impact/number of developments in the area
- Location

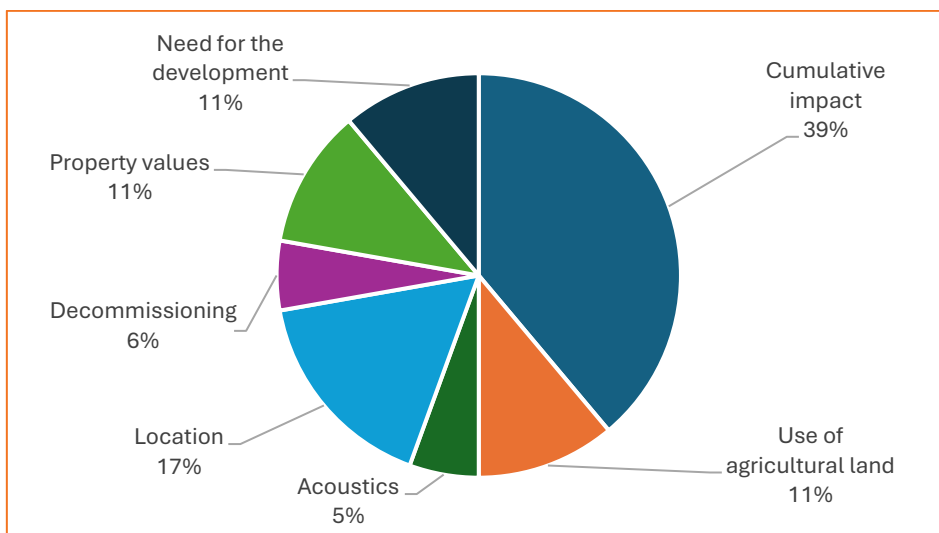


Figure 4 – summary of themes raised within the written feedback

Theme 1: Cumulative impact

Around 39% of the written feedback received was related to the number of developments in the area.

Sample of comments received:

“Stop cluster development”

“I have concerns about another energy storage system, we have enough in our area”

“I am opposed to more storage systems in general however the RES proposed layout seem well considered”

“We have agreed to 3 BESS sites in our area, and you don't seem to comprehend the 'non-proliferation' situation”

RES response

We do understand and are mindful of concerns amongst the local community regarding the number of developments in the area. Due to the limited grid capacity across Scotland, it is common to see developments focus on areas where there is grid capacity, and any potential cumulative impact from other operational, consented and in-planning developments will be carefully considered and assessed.

An energy storage system needs to be able to both import and export energy and whilst the availability of sites with sufficient import and export capacity is extremely limited, the development is situated in an area with sufficient capacity.

The proposal has been specifically located adjacent to the existing Eccles electrical substation where the project will connect to the wider grid network via an underground connection. Energy storage systems need to be located as close as possible to the substation from which its grid connection is provided in order to limit electrical losses and ensure efficiency of the system.

By locating the project here, there is also minimum requirement for additional overhead and/or underground cables to connect the project to the grid network, therefore limiting any environmental impacts.

RES are no longer considering plans for the co-located Paxton Dal solar and energy storage project due to the scale and potential impacts of the scheme.



Image for illustrative purposes only

Theme 2: Location

Around 17% of the written feedback received was related to the location of the project.

Sample of comments received:

“Brown field sites please!”

“These types of storage facilities should be placed at or close to the generation such as in wind farms where the space is already available.”

RES response

The proposal has been specifically located adjacent to the existing Eccles electrical substation where the project will connect to the wider grid network via an underground connection. Energy storage systems need to be located as close as possible to the substation from which its grid connection is provided in order to limit electrical losses and ensure efficiency of the system.

Like most energy storage systems of this size, the Bishops Dal energy storage proposal would not be directly linked to an electricity generating station. The project would be connected directly to the wider grid network and the frequency and timing of when the system charges and discharges is therefore dictated by the status of the grid network. The energy storage system will be utilised by National Grid to balance peaks and troughs in energy demand and generation.

Theme 3: Property values

Around 11% of the written feedback received was related to the potential impact on property value.

Sample of comments received:

“People can't sell up or move. House values have dropped”

“You openly declared that you have no responsibility towards compensating people who live close to the site. They are already traumatised by the local site already agreed and your site would just add to their pain and suffering. They will have no chance of ever selling their property so your 'so what' attitude seems to represent the general uncaring and undesirable stance of your company”

RES response

RES are seeking to develop a project which may sit sensitively within the landscape whilst minimising any potential impact on local residents by ensuring robust surveys and assessments are undertaken and taking into consideration feedback from the local community and stakeholders.

Energy storage is crucial in enabling the rollout of zero carbon energy and supporting Scotland's net-zero carbon emissions. Energy storage is also considered the fastest technology for responding to a sudden spike in demand or an abrupt loss of supply. Property value is subjective and can be affected by a range of factors. At this time, there is no firm evidence on whether energy projects do or do not affect house prices.

Theme 4: Use of agricultural land

Around 11% of the written feedback received was related to the use of agricultural land for the development.

Sample of comments received:

“They should not be placed on agricultural land”

“I am concerned about the use of prime agriculture land for energy storage”

RES response

The compound area containing the battery containers, substation and associated infrastructure, is not expected to exceed 2.4 hectares and the layout and design will minimise the amount of protected land which is required. Land take has also been minimised as much as possible so that the remaining areas of the field can continue to be farmed.

RES will always seek to develop on lower grade land. In the case of Bishops Dal there is specific locational need, close to Eccles substation.

Development on prime agricultural land can also be supported where there will be secure provision for restoration which we intend to be the case for Bishops Dal.

It should be noted that one of the biggest risks to food security is the changing climate. According to the Department for Environment, Food and Rural Affairs (DEFRA), climate change could reduce the UK’s stock of high-grade agricultural land by nearly three-quarters by 2050¹.

Energy storage schemes like Bishops Dal can enable and accelerate the rollout of renewable energy, directly tackling the effects of climate change.



Image for illustrative purposes only

¹ <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-theme-2-uk-food-supply-sources#united-kingdom-food-security-report-2021-theme2-indicator-2-1-15>

Theme 5: Need for the development

Around 11% of the written feedback received was related to the need for the development.

Sample of comments received:

“Scotland is seeking to export electricity, so we are not generating/storing electricity just for Scotland. Our area is becoming a soft touch for the prospectors. Already, the proposed UK BESS sites represent a vast storage capability above what is actually required”

“BESS sites for grid stabilisation is understood but speculators are just seeking to make quick money with little appreciation of its use”

RES response

Battery energy storage provides a range of services to the energy network. As well as playing a key part in balancing the increasingly complex supply and demand needs of the 21st Century, energy storage can also be used to maintain grid stability (frequency of the grid) on a second-by-second basis. Energy storage is also used to provide additional network capacity, particularly at times of network stress or unexpected demand.

Whilst there is a strong pipeline of battery energy storage projects, it is important to note that some projects both at planning and consented phases may not be built.

Theme 6: Decommissioning

Around 6% of the written feedback received was related to the decommissioning of the development.

Sample of comments received:

“You offered no solution towards returning the site to its original condition”

RES response

RES has proven experience in the decommissioning of battery storage projects, returning the site to its original use in a safe and efficient manner.

The Bishops Dal site would be returned to its original use at the end of its life. Once all materials and components have been removed, topsoil which will be retained following construction, will be reseeded, according to the landowner’s requirements.

During the decommissioning and restoration of two recent battery energy storage projects, RES was able to achieve a 98% waste-free process and returned the sites to their original use.

By demonstrating the feasibility of a nearly waste-free decommissioning process and meeting our goal of recycling 98% of all materials of the project, we hope to set a precedent for sustainable practices in the industry.

This aligns with our commitment to environmental stewardship but also serves as a blueprint for future decommissioning projects, paving the way towards a more sustainable energy landscape.

Theme 7: Acoustics

Around 5% of the written feedback received was related to the potential noise impact of the development.

Sample of comments received:

“Give realistic assessment of the generated noise including the pulsating tonal effects from the combined effects of fans etc.”

RES response

Our exhibition board titled Other environmental considerations, available at the second public exhibition, shows the expected noise footprint of the development. The final report and assessment will also consider the cumulative impact of all neighbouring sites.

We are working with the Scottish Borders Environmental Health Officer to ensure that existing residential amenity is protected and are proactively developing solutions to ensure that cumulative noise does not reach threshold levels. This includes total volume and specific frequencies.

Strict guidelines exist concerning noise emissions from battery energy storage developments and the final design of the project will take full account of these guidelines. Acoustic assessments are undertaken in accordance with the relevant standards, current assessment methodologies and best practice as determined by the regulatory bodies, which include Scottish Borders Council and the Scottish Government.

The acoustic impact of the BESS will be modelled, and the output of this work will be presented in the acoustic assessment report which will accompany the planning application. The acoustic assessment will demonstrate that RES has considered all appropriate measures in the design and operation phases to minimise the acoustic impact. Initial results as shown in the figure referred to above, demonstrate that the operational noise is not expected to lead to any adverse impact.



Image for illustrative purposes only

Other feedback

Whilst the section below addresses subjects which were not raised in the written feedback to RES, we have covered off other common questions and concerns discussed verbally with visitors to the public exhibition below.

Imagery and visual representation

We acknowledge that some of the illustrative imagery used on the exhibition material at the first exhibition was not wholly representative of the Bishops Dal proposal. We have endeavoured to use illustrative imagery which better reflects the proposal in exhibition material for the second public exhibition.

In response to comments on the need for pictorial representation, we have included a Zone of Theoretical Visibility and photomontages from three viewpoints as part of the exhibition materials for the second exhibition. We have also included a plan showing all consented and proposed developments in the area, as discussed with a number of visitors to the first public exhibition.

Pollution

To minimise any potential pollution risk related to the construction activities of the project, if it is consented, we are developing a Construction Environmental Management Plan (CEMP) as part of the planning application. The CEMP will include how noise, vibration, dust and other airborne pollutants, smoke, and odour from construction work will be controlled and mitigated. The CEMP shall also include monitoring, recording and reporting requirements.

In the unlikely event of a fire, and if water is needed to cool equipment, the project design includes a space beneath the battery containers allocated for the storage of potentially contaminated water, utilising high void ratio stones. This area will be sealed with an impermeable barrier to prevent the spread of any contaminated water. Additionally, a cut-off valve has been installed at the outlet of this storage area, connecting to the main drainage system, to allow for the containment of run-off during a fire event.

Flood risk and surface water management

The project will be designed to avoid flooding in the area. The design strategy that we will follow is to keep the discharge flows limited to the existing discharge flows. This will be achieved by collecting surface water flows in a series of filter drains before discharging into an above ground attenuation basin which has been sized to allow for a 1 in 200-year storm plus an allowance for climate change. Flows discharging out of the attenuation basin will be restricted by means of a flow control device, and restricted flows will discharge to the existing field drain, as per the pre-development hydrological regime.

In addition, an infiltration test is to be carried out to assist us with the design. If infiltration proves suitable for site, the design strategy would be changed to incorporate it. Detailed calculations and information will be available in the drainage report which will accompany the planning application.

As part of any full planning application, a Flood Risk Assessment and Surface Water Management Plan will be submitted, incorporating sustainable drainage systems (SuDS) best practise principles, to ensure no significant impacts are caused by the project.