This image of a LDES is attributed to Invinity Energy Systems and is for illustrative purposes only. It does not represent a specific project or final design.

3R Energy

Hagshaw Long Duration Electricity Storage

Making a significant contribution to Scotland's sustainable energy future

Invitation to public consultation events on:

Thursday 13 March 2025

2pm – 7pm at the St Bride's Centre, Braehead, Douglas, ML11 0PT

Thursday 3rd April 2025

2pm – 7pm

at the Coalburn Miner's Welfare, 42 Coalburn Road, Coalburn, ML11 0LH

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Who are we?

Established in 2009, 3R Energy has been developing renewable energy projects across South Lanarkshire for over 15 years.

With our head office situated in Lanark, the company was initially established to help farms and rural businesses benefit from renewable energy, with the mainstay of the business being farm sized wind turbines, Combined Heat and Power (CHP) systems and biomass boilers.

More recently, 3R Energy has diversified into larger-scale renewable energy projects and has now developed over 330 megawatts (MW) of onshore wind projects within the Hagshaw Energy Cluster, with a further 80 MW of energy storage, which together will make a substantial contribution to the local area and to national renewable energy and climate change targets.

3R Energy is a founding partner of the award-winning Hagshaw Energy Cluster Development Framework project, which represents an ambitious vision for the future of the Hagshaw Energy Cluster and surrounding area, identifying opportunities to enhance and invest in the local environment, communities and place.

As a local company, 3R Energy is committed to working with the communities closest to the Hagshaw Energy Cluster for the long term to develop and deliver successful projects which create significant and tangible benefits for the local area.



3R Energy is preparing proposals for a **Long Duration Electricity Storage** (LDES) scheme on land southwest of Junction 11 of the M74 motorway in South Lanarkshire.

The LDES will have a storage capacity of up to 500 MW.



What are we proposing?

3R Energy is working on a new generation of renewable energy projects, which have the potential to further contribute to national renewable energy and climate change targets, as well as the local and regional economy.

We are proposing to build a 500 MW LDES scheme on land southwest of Junction 11 of the M74 in South Lanarkshire.

Why here?

The Haashaw Cluster has long been at the heart of Scotland's renewable energy ambitions. Previously granted consent for a multiuse renewable energy and industrial hub, the strategic importance of this site remains unchanged. Now, as it transitions to become Haashaw LDES, it is evolving to meet Scotland's growing need for electricity storage to achieve our decarbonisation requirements.

Haashaw LDES ensures that this strategically significant renewable energy hub continues to be a cornerstone of Scotland's net zero future while delivering direct benefits to the local community.



Supporting Net-Zero Goals:

Haashaw LDES is fully aligned with national and regional priorities, supporting Scotland's clean energy future.



Sob Creation & Investment:

The project will generate employment opportunities, particularly during construction, and contribute to the local economy through community benefit payments and non-domestic rates.



Strengthening **Grid Stability:**

By providing essential electricity storage, the site will enhance Scotland's renewable infrastructure, making clean power more reliable and cost effective.



Continued Flexibility:

While the site's focus is shifting, it retains consent for commercial use, ensuring long-term adaptability.

KEY Planning Application Boundary DNO Access Site Access — Internal Access **Emergency Access** Perimeter Fenceline Triple Stacked Battery Single PCS Inverter Double PCS Inverter Indicative Substation Area ····· Existing path ····· Proposed path diversion

What is a Long Duration Electricity Storage site?

A LDES site is a facility designed to store and release energy over long periods, anywhere from several hours to days or even weeks. These sites help create a more stable and reliable energy grid by storing surplus renewable energy and delivering it when it is needed most.

Flow Batteries: A Safe, Stable, and Proven Electricity Storage Technology

At this site, we're using flow batteries, a type of LDES technology known for its safety, durability, and efficiency. Unlike lithium ion batteries, flow batteries use a water based, non-flammable electrolyte, significantly reducing fire risk. They also operate quietly and produce no emissions, making them safer and more environmentally friendly.

LDES technologies like these provide much greater capacity and longer discharge durations than traditional battery storage schemes, which typically store energy for only a few hours. With minimal degradation over time, flow batteries are built to last, ensuring a reliable and sustainable energy solution for the future.



Community benefit

As a local company, 3R Energy is committed to working with the communities closest to the Hagshaw Energy Cluster for the long term to develop and deliver successful projects which create significant and tangible benefits for the local area.

Benefits from the Hagshaw Energy Cluster projects we have developed to date include:



Cutting Carbon, Powering the Future – Our projects will prevent over 430,000 tonnes of CO₂ from entering the atmosphere each year, making a significant contribution to Scotland's net-zero ambitions.



Clean Energy for Lanarkshire – Generating green electricity for over 240,000 Scottish households, enough to power all the homes in South Lanarkshire and more.



Direct Investment in Local Communities

 Delivering £1.6 million annually to local communities – that's £4,383 every single day, adding up to an estimated £48 million over 30 years (indexed).



Boosting Jobs and the Economy – Creating over 1,800 job years across Scotland during the construction and development of our projects, supporting local businesses and skilled workers.

We are currently proposing a community benefit contribution of £50,000 per year (index-linked) as part of our Hagshaw LDES proposals. We are keen to hear your views on how the community benefit fund should be used.

Local business opportunities

There are exciting opportunities during the construction and operation of the Hagshaw LDES for local businesses to be involved. Please get in touch if you are interested in working with us: email info@3renergy.co.uk

Stay informed and involved

This brochure forms part of our pre-planning application process.

Please take your time to consider the information within this brochure, and do not hesitate to contact a member of our team should you have any questions.

We would be grateful if you could answer the feedback form and let us have your contact details for the purpose of informing the project design and our planning application. Feedback received will be included within a Pre-Application Consultation (PAC) Report which will accompany the planning application.



Next Steps

→ February 2025 Launch of public consultation

→ 13th March 2025
First consultation event

→ 3rd April 2025 Second consultation event

→ 11th April 2025 End of consultation period

→ April 2025
Prepare S36 application

→ April 2025 Submission of S36 application

→ Autumn 2025

Decision on application expected

Feedback form

Hagshaw LDES

To return your completed feedback form please fill out the below and pop it in the post by **Friday 11th April 2025**. Alternatively, you can return your form via email to info@3renergy.co.uk.

Title: Address: Email:		Name:				Talaukana	Postcode:	
	D. Maila	□ Famada	Oth am			Telephone:		
	☐ Male	☐ Female	☐ Other:					
Age:	☐ Under 18	3 □ 18-24	□ 25-34	□ 35-44	45-5	54 🛭 55-64	\Box 65 and \Box	over
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Please provide your contact details if you wish to get a response. Any information provided will only be used for the purpose of the planning application to the Energy Consents Unit and will not be disclosed with any third parties. Your contact details will not be listed on the planning application documentation. Alpaca Communications Privacy Policy may be found at the following web address: www.alpacacommunications.com/privacy-policy

Freepost ALPACA COMMUNICATIONS LIMITED

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Instructions

To return your feedback form, please fold and put it in the post to us.

written on the front. You don't need any further address or stamp. If you'd like more space to share your thoughts, send us an email, or just write your comments down and pop them in an envelope with 'FREEPOST ALPACA COMMUNICATIONS LIMITED'

Any queries or problems? Get in touch via feedback@alpacacommunications.com.