



EUROPEAN INNOVATION COUNCIL AND SMES  
EXECUTIVE AGENCY (EISMEA)

European Innovation Council (EIC)  
**EIC Pathfinder**

# **EIC Pathfinder Challenges Applicants' Day (5 July 2022)**

## **Frequently Asked Questions**

## TABLE OF CONTENTS

EIC Pathfinder Challenge 2: Mid to long term and systems integrated energy storage .....	3
1. What would be the target system size/capacity for decentralized energy storage system solutions? .....	3
2. My project is in long term underground energy storage. Is this in the scope?.....	3
3. System integration with direct value for industry is required, which implies a TRL>4, thus exceeding the usual TRLs of a pathfinder project. Could you clarify?.....	3
4. If our proposal contains 50% TRL1-2 and 50% TRL6 - to market available, but both are required to prove successful storage - is this acceptable?.....	3
5. The challenge is extremely broad as regards the number of involved storage technologies counting on quite different physical principles. Is there a clear focus?.....	3
6. If we develop a method for optimizing battery systems and test the method on a pilot-scale system, would the inclusion of a pilot-scale system be in the scope? .....	3
7. The development of new electrochemical energy storage technologies is within the scope of the call? .....	4
8. Can hydrogen production and storage system using other renewable energy resources (like tidal and wave energy) be within the scope of this call? .....	4
9. Do you have a €/kWh and cycle efficiency target in mind?.....	4

## **EIC Pathfinder Challenge 2: Mid to long term and systems integrated energy storage**

**1. WHAT WOULD BE THE TARGET SYSTEM SIZE/CAPACITY FOR DECENTRALIZED ENERGY STORAGE SYSTEM SOLUTIONS?**

Micro and portable applications are excluded. The focus is on size above 1 kW.

**2. MY PROJECT IS IN LONG TERM UNDERGROUND ENERGY STORAGE. IS THIS IN THE SCOPE?**

Yes, if it addresses thermal or electric energy storage and if it is not only mechanic or gravimetric. Underground thermal energy storage is in scope.

**3. SYSTEM INTEGRATION WITH DIRECT VALUE FOR INDUSTRY IS REQUIRED, WHICH IMPLIES A TRL>4, THUS EXCEEDING THE USUAL TRLS OF A PATHFINDER PROJECT. COULD YOU CLARIFY?**

The proof of concept to be produced should be designed with a clear vision on how the technology will be integrated into energy systems and or in industrial processes. The aim is a proof of concept at lab scale, not a pilot on commercial scale in a real environment

**4. IF OUR PROPOSAL CONTAINS 50% TRL1-2 AND 50% TRL6 - TO MARKET AVAILABLE, BUT BOTH ARE REQUIRED TO PROVE SUCCESSFUL STORAGE - IS THIS ACCEPTABLE?**

This is acceptable but the support will regard in principle the activities at low TRL and not the activities at high TRL for market uptake and scaling up.

**5. THE CHALLENGE IS EXTREMELY BROAD AS REGARDS THE NUMBER OF INVOLVED STORAGE TECHNOLOGIES COUNTING ON QUITE DIFFERENT PHYSICAL PRINCIPLES. IS THERE A CLEAR FOCUS?**

No, the challenge addresses a broad range of competing and alternative storage technologies, it does not focus on a specific technology in order to leave room to novel and breakthrough technologies, using different physical principles and relying on different scientific domains.

**6. IF WE DEVELOP A METHOD FOR OPTIMIZING BATTERY SYSTEMS AND TEST THE METHOD ON A PILOT-SCALE SYSTEM, WOULD THE INCLUSION OF A PILOT-SCALE SYSTEM BE IN THE SCOPE?**

The challenge addresses low TRL research, since this is the nature of the pathfinder. A pilot plant is not excluded per se, to the extent the research is new and explores technologies at low TRL.

**7. THE DEVELOPMENT OF NEW ELECTROCHEMICAL ENERGY STORAGE TECHNOLOGIES IS WITHIN THE SCOPE OF THE CALL?**

yes

**8. CAN HYDROGEN PRODUCTION AND STORAGE SYSTEM USING OTHER RENEWABLE ENERGY RESOURCES (LIKE TIDAL AND WAVE ENERGY) BE WITHIN THE SCOPE OF THIS CALL?**

As explained in the challenge guide, the focus is on storage and, in case of hydrogen production, the proposal should address the storage of the energy carrier as well. Generation of hydrogen from renewable is included, but the proposal should address also how this hydrogen is stored and converted back into thermal or electric energy.

**9. DO YOU HAVE A €/kWh AND CYCLE EFFICIENCY TARGET IN MIND?**

It depends on the technology, being a low TRL research it is difficult to specify quantitative targets in the call, but the proposals should address this and describe the potential impact also in quantitative way with expected performance.