



STORAGE RESEARCH INFRASTRUCTURE ECO-SYSTEM

RI Information sheet 2022

Tomas Bata University in Zlín, University Institute

Technology(ies) of Energy Storage: [electrochemical](#), [chemical](#), [cross-cutting](#)

Contact person 1:

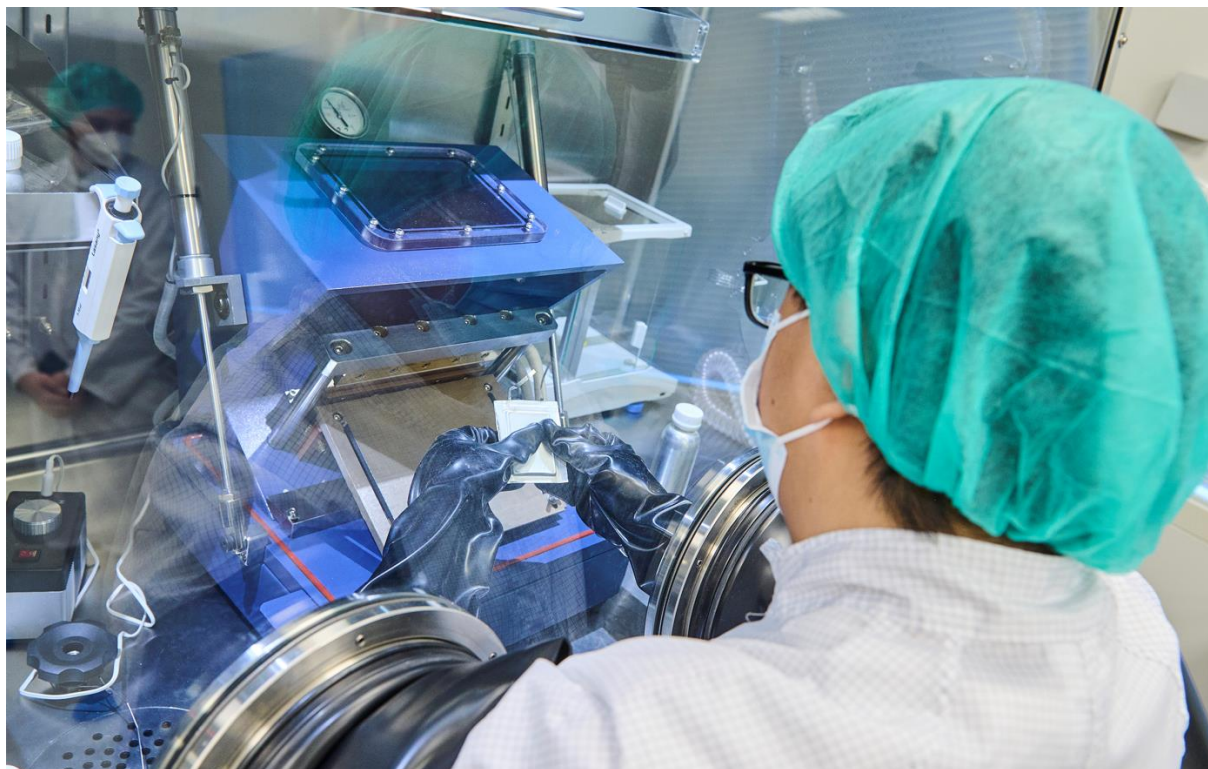
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Project Acronym	StoRIES
Call	H2020-LC-GD-2020
Grant Agreement No.	101036910
Project Start Date	01-11-2021
Project End Date	31-10-2025
Duration	48 months

1. Photo



2. Geographical coordinates (°, ′, ... N/S, E/W)

N 49° 13' 10.1208 E 17° 39' 44.3448

3. Description of the research infrastructure for the webpage

Research infrastructure of the Tomas Bata University in Zlín, Czech Republic (TBU) is composed of the Centre for Technology Transfer (CTT) and the Centre of Polymer Systems (CPS), which obtained the HR Award HRS4R. The energy storage research is developed in several directions related to Li-ion batteries and supercapacitors. Moreover, the relationship between the energy systems and society is being examined from the multidisciplinary viewpoint including life-cycle assessment.

State of the art: CTT has available certified clean rooms with certification No. 20 00010SJ, ČSN EN ISO 13485 and ISO 14644 for the class of purity ISO 7 used for medical and energy components. In the section of energy materials, there is a pilot production line for experimental production of pouch cell batteries available.

CPS has been sharing its research infrastructure within six research groups and the complete infrastructure includes about 500 research equipment items, most of which belong to the state-of-the art equipment.

Services currently offered by the TBU infrastructure include development, testing, and analysis of energy materials for batteries and supercapacitors:

- Development and integration of flexible asymmetric supercapacitors;
- Development of rechargeable lithium-based batteries (Li-ion, Na-ion, Li-S) and environmentally friendly compositions;
- Solid state lithium-based batteries;
- Life-cycle assessments.

4. Availability of the research infrastructure

(Please indicate time periods in which infrastructure will not be available for StoRIES in the next 2 years – if already known)

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5. Special considerations (confidentiality / NDA agreements, insurance requirement, special training, HSE training)

Confidentiality / NDA agreement.

6. Energy storage technology that can be analysed/studied by using the research infrastructure

- Electrochemical
- Chemical
- Thermal
- Mechanical
- Superconducting Magnetic
- Cross-cutting (Specifically: life-cycle assessments)

7. Key words for the webpage

batteries, supercapacitors, life-cycle assessment

8. TRL level (if applicable):

- 1-3

- 4-6
- Above

