



Czech Development Agency

Czech startup H2Operation prepares to introduce its mobile water purification unit to the Jordanian market

Czech startup H2Operation s.r.o. is preparing to introduce its mobile water purification unit, based on vacuum distillation technology, to the Jordanian market. The project is being implemented under the Private Sector Development Partnership Programme (B2B Programme) of the Czech Development Agency and aims to assess the potential for deploying this innovative technology in a country that has long faced severe water scarcity.

Jordan has a strong demand for alternative sources of drinking water and modern water treatment technologies due to its specific geographical conditions and the long-term strain on its existing water infrastructure. The current phase of the project therefore focuses on market research, an analysis of the regulatory environment, and the identification of suitable local business partners. The outcome will be a comprehensive business plan evaluating the potential application of the technology in both the public and private sectors.

The mobile water purification unit is a compact solution designed for locations without access to a reliable source of safe drinking water. The system employs an advanced vacuum distillation process followed by remineralisation, a method that has been successfully used for many years in the maritime sector, particularly on ocean-going vessels. H2Operation has successfully miniaturised this proven technology into a unit the size of a standard car trailer.

The technology is capable of removing common impurities, bacteria, viruses, and chemical contaminants from water. Thanks to its ability to operate using solar power, the unit can function independently of the electricity grid while fully supporting the principles of sustainable development. **Its key advantages are mobility, autonomy, and complete independence from existing water supply infrastructure.**

Unlike large-scale municipal water treatment plants, the unit is primarily intended for decentralised communities, small settlements, or households of up to ten people located beyond the reach of the main water infrastructure. It is characterised by ease of operation,

low maintenance requirements, and high reliability, even under demanding climatic conditions.

The project is not solely focused on introducing the technology to the Jordanian market. It also seeks to establish long-term industrial and commercial partnerships between Czech and Jordanian organisations. Under the proposed business model, local partners will be responsible for both the distribution of the units and the provision of technical support and maintenance services. Looking ahead, the project also envisages the possibility of partial local manufacturing or final assembly of the units in Jordan. This approach will facilitate the transfer of technological know-how and contribute to the development of the local business ecosystem.

About H2Operation

H2Operation s.r.o. is a Czech startup founded by a group of long-standing friends and professionals from diverse fields, united by a strong sense of social responsibility and a shared ambition to address some of the most pressing challenges of the future. The company is dedicated to developing small, mobile, and affordable water treatment solutions for families and communities that remain beyond the reach of large-scale infrastructure projects.

Media contact:

Roman Štěpánek

E-mail: Stepanek@h2operation.cz

Website: <https://h2operation.cz/>