



Hydropower solutions for developing and emerging countries

D2.3: Report on cooperation with European hydropower industry



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Name	Organization
<i>Dirk Hendricks, Tasniem Jawaid</i>	<i>EREF</i>
<i>Ingo Ball</i>	<i>WIP</i>

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1 Introduction

HYPOSO is a multi-approach project to tackle several objectives; identification and mapping of the European hydropower industry, hydropower stakeholders in the HYPOSO target countries, education of new hydropower experts through capacity building activities and bringing together relevant actors from the EU hydropower sector with stakeholders in the target countries. Interaction with stakeholders is therefore an integral part of the activities, as workshops, capacity building activities and interviews with national/local stakeholders are envisaged in all target countries which are outside the European Union, namely workshops in Bolivia, Colombia and Ecuador in Latin America, and in Cameroon and Uganda in Africa. Additionally, capacity building courses will be carried out in Bolivia and Ecuador, and in Cameroon and Uganda.

2 Information about Deliverable

The HYPOSO project provided strategic support and tools for the European hydropower industry to boost their export of products and services to markets in Africa and Latin America, especially those with a high market potential hydro sector, i.e. Bolivia, Cameroon, Columbia, Ecuador and Uganda.

Project partners created and maintained close contact to relevant stakeholders of the European hydropower and enhanced their networks and outreach to them throughout the project. They regularly informed established contacts about news and results from the project and possibilities the industry can have by participating in HYPOSO events. Furthermore, project partners fostered collaboration between stakeholders in the target countries and representatives of the European industry.

The consortium brought representatives of the European hydropower industry together with their counterparts and politicians from Africa and Latin America. Project partners provided political, legal, technical and strategic advice while considering the regional specificities, socio-economic, spatial and environmental aspects all along the life-cycle of hydropower projects.

Main tool hereby was the [HYPOSO Platform](#) which lists companies and organisations from Africa, Latin America, and Europe that are active in the hydropower sector. The platform acts as an intercontinental matchmaking tool and provides a meeting platform for hydropower stakeholders to establish joint business activities – also beyond the end of the project.

The key project activity in D2.3 was to promote the use of the HYPOSO Platform among the European hydropower industry as push for their intercontinental cooperation. EREF and WIP closely coordinated these activities with HYPOSO project partners in the target countries, who promoted the platform in their countries to attract relevant hydropower stakeholders.

3 Introductory remarks

The European hydropower industry is regarded as world leader, able to build tailor-made hydropower facilities all around the world. European competence in the production of hydropower facilities accounts for around two-thirds of the global market. The industry offers a full range of solutions and services to harness the potential of hydropower in a sustainable way. Most importantly, European equipment stands out for its exceptional performance and meets even the most stringent environmental rules and regulations.

European know-how can foster the transformation into a sustainable energy system in parts of the world that still want to develop their renewable energy sector. While the European hydropower market does not allow huge developments, some countries present a big potential.

In addition to its leadership position in manufacturing, Europe is home to a number of leading universities and research centres specialising in hydropower. These include professional test centres for equipment ranging in size from miniature research models to full-scale production turbines, tested to optimise the flexibility, operating conditions and costs of the equipment, as well as to improve the R&D capacity of the centres themselves.

4 The HYPOSO industry network

The implementation of hydropower projects on international level includes the involvement of European stakeholder from various backgrounds to cooperate with the respective partners in the HYPOSO target countries. Europe has a strong hydropower industry which can address the complete required value chain to design, develop, finance, implement and operate a hydropower plant. Project partners consequently approached a wide range of hydropower stakeholders including

- Project developers who can support stakeholders in the target countries to support and finance the development process.
- Engineering and service companies, which provide a suitable design to support the feasibility and bankability process and can assist during the operation of the plant.
- Project investors as well as banks and funds, which can provide finance for feasible and bankable projects.
- Equipment producers, which can provide any kind of state-of-the-art equipment required for hydropower projects.

The partners from the target countries are therefore in an excellent position to select their European counterparts in accordance with their requirements and needed competences and services.

The consortium emphasized small and medium-sized enterprises (SMEs) and start-ups as they generally have limited funds and outreach to develop an international hydropower network resulting in project opportunities. Another focus was to encourage women and young persons who are willing and able to work internationally.

For the success of HYPOSO it was important to use a broad multi-channel approach to address and mobilize the identified hydropower stakeholders.

The diverse and broad EREF network of European hydropower stakeholders has been extended by HYPOSO Partner organisations which are active in the European hydropower market for a long time. Examples in this context are partners like the Italian technical consulting company Frosio Next, the Polish small hydropower organisation TRMEW and the Institute for Water Education (IHE) in Delft, the Netherlands.

EREF used regular posts on HYPOSO activities and invitations to join the HYPOSO Platform in its various LinkedIn groups for hydropower stakeholders and multipliers that include up around 15,000 contacts in Europe and worldwide.

EREF addressed relevant multipliers such as the GIZ and the Alliance for Rural Electrification (ARE) and similar initiatives such as the [Get. Invest Finance Catalyst](#) to inform about the HYPOSO aims and activities and to create synergies and a higher outreach.

Members of the HYPOSO Advisory Board supported the promotion of the HYPOSO Platform and activities through their channels and EU projects. In addition, EREF included HYPOSO updates in the dissemination activities of related EU-projects such as [HYDROPOWER-EUROPE](#) and [ETIP Hydropower](#) that address a broad range of European hydropower stakeholders.

Another communication tool included information emails on the HYPOSO Platform and matchmaking events to members of [EREF's Small Hydropower Chapter](#) (national hydropower associations) and EREF's hydropower industry network which includes around 450 project developers and investors, equipment producers and engineering and service companies.

EREF staff complemented these with video calls to representatives of selected SMEs and start-up companies. They included for example manufacturers of fish protection equipment and innovative kinetic and low head turbines.

International and national hydropower conferences and trade fairs provided opportunities to inform stakeholders about the opportunities of the HYPOSO project through special HYPOSO sessions and presentations. EREF and WIP staff members gave presentations during virtual events such as HYDRO 2020 during the COVID-19 pandemic.

They also participated in various physical conferences during which the HYPOSO Platform was presented followed by discussions with participants. As these events were often accompanied

by hydropower fairs, EREF staff members screened the exhibitor and sponsor lists and approached selected companies on the spot. In events, during which HYPOSO could not be included in the programme, HYPOSO was introduced in bilateral talks during networking events and breaks. The activities had been coordinated closely with WP 6 and are outlined in D6.6.

5 Experience and Assessment

Promotion of the newly created HYPOSO Platform was initially difficult at the beginning of the project. At RENEXPO Interhydro in Salzburg in November 2019, for example, European hydropower companies were quite reserved as the HYPOSO project was little known by that time. Even free of charge, they were reluctant to register for the HYPOSO platform as they were unsure about the project and suspected some hidden costs and abuse of data in the background.

The restrictions of the COVID-19-Pandemic at the start of the HYPOSO project led to limited interests of the European Hydropower Industry. However, their engagement increased sharply during the course of the HYPOSO project and the resulting cooperation with stakeholders of the target countries was highly appreciated.

First project results were overshadowed by the COVID-19 pandemic which did not allow for any physical meetings for some time. In addition, HYPOSO activities slowed down as international travel was impossible. It was consequently increasingly difficult to engage the European hydropower industry into the HYPOSO project activities.

Yet, getting acquainted with web events and becoming more receptive to information emails within the COVID-19 pandemic, the consortium could convince stakeholders from both Europe as and African and Latin American target countries to register on the HYPOSO platform.

The first physical international conference and trade fair HYDRO taking place towards the end of the COVID-19 pandemic in Strasbourg in April 2022 was the turning point for the promotion of the HYPOSO platform. HYPOSO was a prominent part of the conference programme and the project partners could highlight the project's work progress to a large audience. Since then, European hydropower stakeholders became more and more interested in the HYPOSO project and increased their engagement.

The registration for the HYPOSO platform continued rising steadily afterwards. The enhanced functionalities and additional information made the HYPOSO platform even more attractive to the European hydropower industry. It included, for example, exclusive access to the HYPOSO Map (including for example hydrological maps of the target countries) as well as the HYPOSO Business Cases (presenting project opportunities).

Consequently European hydropower stakeholder showed a very high interest and engagement in the HYPOSO study tour which brought stakeholders of the African and Latin America target countries to hydropower plants and equipment producers in Europe. They offered, for example, company and plant visits as well as technology introductions. As it was not possible to consider all requests, HYPOSO offered an exhibition space for the European hydropower industry at the final dissemination event in Delft where all participants of the HYPOSO study tour and other stakeholders were present.

The HYPOSO project proved to be of high value for the European hydropower industry as it enabled new direct contacts and concrete business opportunities with relevant stakeholders in Africa and Latin America. Especially smaller companies and start-ups financially benefited from the HYPOSO project activities and the created network.

The hydropower stakeholders from outside Europe welcomed the cooperation with their European counterparts as well. They highly appreciated the European hydropower industry as they can offer the full hydropower value chain and state-of-the-art technologies. The HYPOSO network supported them in identifying European partners to complete their own value chain.

It is important to continue such activities to continuously support the positioning of the excellent European hydropower industry at international level. Intercontinental cooperation should be broadened and enhanced as part of a true European hydropower industry promotion policy. Therefore, EU financed follow-up activities would be very beneficial.