

2nd MOROCCAN-SPANISH JOINT CALL FOR ENERGY TECHNOLOGICAL CO-OPERATION 2020

JOINT IRESEN-CDTI CALL FOR PROPOSALS UNDER THE MOROCCAN-SPANISH INNOVATION PROGRAMME ON ENERGY TECHNOLOGIES (INNO-ESPAMAROC ENERGY)

On October the 11th 2018, a Joint Programme for Co-operation was established by the Research Institute for Solar Energy and New Energies (IRESEN) and the Centre for the Development of Industrial Technology, E.P.E. (CDTI), to promote and fund market - driven research and technology development as well as to encourage partnerships and business-led R&D&I collaborative projects between entities from both countries. Within this Programme, CDTI and IRESEN agreed to launch joint calls for proposals.

This call for proposals aims to launch ambitious joint R&D projects of a high international standard between Moroccan and Spanish organizations. Potential projects will be funded by IRESEN in Morocco and CDTI in Spain.

CALL GUIDELINES:

1) NODAL IMPLEMENTING AGENCIES

The Research Institute for Solar Energy and New Energies (IRESEN), Ministry of Energy, Mines, Water and Environment, Government of Morocco and the Centre for the Development of Industrial Technology (CDTI), Ministry of Science, Innovation and Universities, Government of Spain, are the nodal implementing agencies from the Moroccan and Spanish sides, respectively.

The Research Institute for Solar Energy and New Energies (IRESEN) was created in 2011 under the initiative of the Ministry in charge of Energy as well as the national, public and private actors of the energy sector in order to support the national energy strategy through applied research and innovation. The aim is to ensure fast-track technology transfer and translation of research results into innovative products in the fields of renewable energies and new energies.

The CDTI is a Public Entity under the Ministry of Science, Innovation and Universities, Government of Spain, which fosters the technological development and innovation of Spanish Companies.

2) THEMATIC AREAS

This Call for proposals is a generic call open to collaborative R&D projects in all areas related to Energy but the priority sectors will be to:

- Renewable energies (new technological developments, new applications aimed at industrial and social integration, new adaptations to climate change),
- Energy efficiency in building, agriculture, transportation and industry,
- Integration of renewable energies into the electricity grid,
- Nexus: Water / Renewable Energies / Agriculture,
- Sustainable mobility (road of tomorrow, vehicle of tomorrow, transformation of road traffic into energy, digitization),
- Energy storage (new sources of energy storage, new storage materials adapted to extreme weather conditions, new forms of energy storage, new methods of reducing the storage cost),
- Moroccan city of the future (neighbourhood of tomorrow, intelligent energy management, smart grids),
- Green industries and mines,
- New energies.

3) TYPE OF PROPOSALS

Industry-driven and market-oriented R&D projects, joint technological co-operation projects between industrial partners (start-ups, SMEs and large companies) and Universities or Research Centers in Morocco and private companies in Spain consisting in the development or substantial improvement of new products, processes or services will be considered.

Duration of projects: from 1 year up to 3 years.

The subject of the project must be part of the themes of the call for projects. The technology readiness level of the proposed project must be greater than 3 (TRL > 3) and lower than TRL7.

4) TIMETABLE

Phase I

- Launch of Call for Proposals: 17th September, 2019
- Deadline for Submission of completed applications: 24th January, 2020
- Evaluation of the project at the international framework: 25th January 2020 – 27th April 2020
- Label concession (estimated): 4th May 2020

Phase II

- National funding procedure for each applicant, since 5th May 2020

5) WHO CAN APPLY?

Minimum eligibility criteria: one Moroccan University or Research Center, one Moroccan industrial partner and one Spanish private company. Consortium partners cannot subcontract each other throughout the R&D project framework.

Eligible Spanish Applicants

Spanish consortia should include at least one company. Participation of research institutes/universities and other organizations is welcome as self-funded participants or subcontractors.

Eligible Moroccan Applicants

The Moroccan side must be managed by a Moroccan university or a Moroccan research institute in partnership with a Moroccan company. The roles and responsibilities of the project partners must be materialized in the Consortium Agreement that must be attached to the Application Form. The project coordinator must have at least 5 indexed international publications in the last 10 years, in relation to the project themes. The involvement of academic partners must be justified by the adequacy of their CVs with the tasks assigned to them in the proposed project.

The involvement of industrial partners must be justified by the adequacy of their activities with the tasks assigned to them under the project, It should specify its role and strategy for the industrialization and commercialization of the new product, service and/or processes that will be reflected in the project in question and must be involved in the project from the beginning, through the tasks entrusted, Besides, it must justify its knowledge and know-how as well as its involvement in his Work Packages,

The thematic research platforms, including the Green Energy Park (GEP) and the Green & Smart Building Park (GSBP), offer technical and scientific support, as well as a multitude of services, through teams of researchers, highly qualified engineers and technicians as well as equipped laboratories and pooling infrastructures in the fields of renewable energies and energy efficiency. GEP and GSBP are at the disposal of all the project teams wishing to involve these structures in their project consortia, according to the themes and subjects of interest, GEP and GSBP can also be integrated, if needed by project teams, to offer characterization, analysis, studies, tests, prototyping, training and validation of concepts, Project teams wishing to benefit from the services of the laboratories set up by IRESEN, within universities and research centers, within the framework of previous calls for projects, may specify this in the project. Detailed fact sheets of these laboratories are available on the website.

6) HOW TO APPLY?

First stage – Common International phase:

- **Joint R&D&I proposals must be submitted to CDTI and IRESEN, by the 24th of January, 2020** in order to consider the eligibility. Unilaterally submitted proposals shall not be considered.
- In Morocco, the participants will have to submit a formal application to IRESEN application tool.
- In Spain the participants will have to submit a formal R&D international project application through CDTI's website (<https://sede.cdti.gob.es/>)

Documents:

- **Moroccan and Spanish co-applicants must elaborate a single project proposal application (Annex 1 – INNO-ESPAMAROC ENERGY Application Form)**. The Bilateral Co-operation Form must emphasize how the proposed collaboration adds value, main technology highlights and innovations, activities to be developed by the Parties involved underlining the collaborative work being carried out on each side, their expertise, etc.

Please note that this INNO-ESPAMAROC ENERGY Application Form must be sealed and signed by all co-applicants at the end of the document, expressly indicating name and designation of the authorized signatory in the organisation. Any other relevant information not expressly mentioned on the form and that the applicants consider relevant may be included as Annexes.

- In addition to the Application Form, co-applicants have to submit the following documents as relevant appendices:
 - **Consortium Agreement in English** whereby the co-applicants should agree upon the ownership, access rights and exploitation of intellectual property generated during the co-operation, to be submitted to CDTI and IRESEN. The Consortium Agreement needs to be sealed and signed by all co-applicants.
 - **Additional specific documents required by IRESEN:** They will be requested in the 2nd Phase according to the IRESEN Procedure.
 - **Additional specific documents required by CDTI:** They will be requested in the 2nd Phase according to CDTI procedure.

Second Stage – National level

Only those proposals which have positive eligibility by CDTI and IRESEN will be able to submit the individual R&D&I proposal in its own language established by each agency.

- **Consortia (Moroccan applicants)** shall submit the common application and all the required documents mentioned above following IRESEN's normal guidelines and using IRESEN's electronic services at <https://aap.iresen.org/> Moroccan applicants are requested to download the submission platform's user guide from the submission website: <https://iresen-aap.org/>
- The funding Proposal in Spanish required by CDTI:

Only industrial partners, individually, are able to submit the funding proposal and other required documents through the electronic services at <https://sede.cdti.gob.es/>. Application must be submitted within 20 working days after receiving the notification of eligibility.

The complete details of the Call are available on IRESEN's and CDTI's websites: <http://www.iresen.org/> and <http://www.cdti.es>

Applicants are recommended to contact the nodal representatives at their national funding organisations whose contact details are given below:

Moroccan side (IRESEN)

Mr. Rachid El Mrabet
Directeur d'Appels à Projet et de l'Innovation - IRESEN
16, rue Amir Sidi Mohamed Souissi - Rabat, Morocco
Tel: +212 (0) 537 68 22 36
Email: elmrabet@iresen.org
Website: <http://www.iresen.org/>

Spanish side (CDTI)

Unit of Foreign Technological Action
Centre for the Development of Industrial Technology - CDTI
Address: Cid 4 – 28001 Madrid, Spain
Phone: +34 91 581 56 07

Mr. José Manuel Durán
Delegate North Africa and Middle East
Address: Av. Chellah 78 – Rabat, Morocco
Phone: +212 80 861 13 80
E-mail: josemanuel.duran@cdti.es
E-mail: marruecos@cdti.es
Website: www.cdti.es

Mr. Daniel González
Phone: +212 05 377 60 741
E-mail: daniel.gonzalez@cdti.es

7) ELIGIBLE COSTS AND FUNDING

The project must clearly specify the costs of each and all the activities pertaining to the project and specify the costs to be respectively borne by the Spanish and Moroccan partners. The cost of the Moroccan and Spanish partners must be eligible under the laws that may be applicable in each country and under internal regulations of CDTI and IRESEN, respectively.

The funding conditions from IRESEN are set in Moroccan MAD Dirhams and the ones from CDTI in €. Budgets must be expressed in the local currency of each applicant. All

figures and budgetary conditions in this Call refer to the value of both currencies on the date of the launch of the Call (17th September).

None of the countries' budget (namely the budget of its entities participating in the proposal) can have more than 70% of the global budget.

The Spanish company will be funded according to the International Technological Cooperation Projects' conditions identified on CDTI's website. CDTI can only provide funding to Spanish companies subject to budget availability.

IRESEN funding conditions are explained in IRESEN Financial Guide. IRESEN can only provide funding to the Moroccan consortia of researchers and specialized industrialists who have already initiated research and development with references of at least five (5) international indexed publications, in the thematic fields proposed in the last ten years.

The maximum financial contribution by IRESEN for each funded collaborative R&D project is 3 million dirhams. The funds provided are given in the form of a grant in accordance with the project specifications. Each partner of the consortium can be supported as follows:

- Eligible expenses of Moroccan universities and research institutes can be funded up to 100%,
- For Moroccan companies, the maximum financial contribution can represent 2/3 of the total amount of eligible expenses. The beneficiary must provide proof of the planned co-financing. This co-financing may be provided in the form of own financial resources, financial transfers from third parties, in kind and/or in human resources.

The project team must produce at least one international indexed publication per researcher per year. The project team must produce at least one patent during the first two years of the project. Failure to comply with these commitments will result in the following year a suspension of the success bonuses as well as doctoral excellence scholarships.

The last year of the project must be dedicated to the innovation part of the project: tests, demonstration, installation of the demonstrator, establishment of the business plan, risk analysis and in-depth market study.

The foreground intellectual property, developed in the framework of the project (including copyrights, patents, trademarks and know-how, etc.) will be the joint property of IRESEN (40%) with the project partners.

The recruitment of a maximum of two PhD students and/or engineers per project for a maximum duration of 36 months each (proposals for the recruitment of doctoral students and/or engineers must be justified by work programs and tasks assigned under the project as well as the expected results). The recruitment of 4 PFE trainees maximum per project, for a maximum duration of 4 months each. Funding for participation in up to three international conferences abroad per project, with as prerequisite an oral intervention. Funding of up to 2 months of internships abroad, in total per project.

The project teams must provide all the necessary technical prescriptions as well as the provisional specifications, in connection with the equipment purchase, so that IRESEN can launch the necessary consultations.

8) REVIEW PROCESS AND EVALUATION

All received proposals are peer reviewed and processed independently by both sides. After having received the recommendations of the respective evaluation panels, IRESEN and CDTI will jointly arrive at a mutual understanding on the projects to be funded.

9) EVALUATION CRITERIA

The joint projects must meet the general requirements of the funding organisations. The evaluation criteria are the following:

- Crucial Criteria
 - Financial capacity of Partner
 - Formal Agreement between Partners

- Basic Assessment Criteria
 - Partnership and Partners
 - Well balanced partnership
 - Added Value through co-operation
 - Technology Capacity of all Partners
 - Managerial Capacity of all Partners
 - Project Structure
 - Methodology and Planning Approach
 - Milestones and deliverables
 - Cost and financing structure
 - Financing commitment of each Partner

- Technology and Innovation
 - Technological Advance
 - Degree of technological maturity and risk
 - Technological Achievements
 - Innovation
 - Degree of innovation
 - Geographical / sector impact

- Market and Competitiveness
 - Market and profitability
 - Market size
 - Market access and risk
 - Return on investment
 - Competitive advantages
 - Strategic importance of the project
 - Enhanced capabilities and visibility

10) FUNDING DECISIONS

IRESEN and CDTI will, after having formed their mutual understanding on the projects to be funded, make their funding decisions according to their normal procedures and rules and on a non-exchange of funds basis. CDTI and IRESEN will inform the beneficiaries about the funding decisions according to their normal practice.

11) REPORTING AND PROJETC OUTPUT

Funding granted by IRESEN and CDTI will be governed by the general terms and conditions of each funding organisation, respectively. Both parties will carry out an international follow-up until the completion of the projects and inform the counterpart about the success or failure of the international cooperation at the end of the project.

If required, each participant should submit financial and technical reports to their national funding organisations, according to national regulations. The progress and final results of each individual contract/letter of grant will be monitored by the respective national funding organisations.