

## **DEPARTMENT OF SCIENCE & TECHNOLOGY (DST)**

and

## **RESEARCH COUNCIL OF NORWAY (RCN)**

### **CALL FOR PROPOSALS on Energy research (2018)**

**Last date for submission of proposals:**

**For Norwegian applicants: 14 February 2018**

**For Indian applicants: 21 February 2018**

India and Norway have started a program for joint funding of Indo-Norwegian joint research projects in mutually agreed fields to achieve bilateral world-class scientific results.

### **Guidelines and important considerations relevant to all types of applications in this call for proposals:**

Under the Agreement of Cooperation in Science & Technology concluded between the Government of India and the Government of Norway, the Department of Science and Technology (DST) of the Government of India and the Research Council of Norway (RCN) have started a program for joint funding of Indo-Norwegian joint research projects in mutually agreed fields to achieve world-class scientific results.

Norwegian funding for this call for proposals is part of the two RCN programs INDNOR and ENERGIX, and will be given within the field of environmentally friendly energy research. The main purpose of this call is to increase Indo-Norwegian R&D cooperation in areas of industrial interest.

DST and RCN invite Indian and Norwegian research institutions to submit research proposals within the thematic areas listed below. RCN will support projects of industrial interest and the project proposals should have Letter of Interest (LOI) from at least one Norwegian industrial company. From Indian side, Academic partner will submit the project and the industry participation is voluntary, if required, and not compulsory.

#### **Research areas covered**

The following topics are covered by the call

- Solar Energy – PV
- Energy System – smart grid

More detailed information about the two thematic areas is described in the ENERGIX program plan. The call is not open for other thematic areas covered by the plan than the areas listed above. The program plan can be found [here](#).

#### **What types of activities are eligible for funding**

A budget of up to NOK 10 million (equivalent to EUR 1,05 million) in total will be available from the RCN for allocation in Norway, and an activity matching funding is available from India. The total budget from the Indian Department of Science and Technology will cover activity matching funding and in-kind contributions for a mutually agreed number of projects.

Funding may be sought for researcher type projects of industrial relevance. The projects can have a duration of up to 3 years, including dissemination and network activities (workshops, conferences).

The proposed RCN projects should have funding from RCN of:

- Maximum NOK 2,5 million per project

RCN will cover up to 100% of the total Norwegian cost, RCN will give funding to up to four projects. The proposal type "Annenstøtte" is used (see part 3 – Create application).

The scope of the project should be realistic within the timeframe and budget limitations of the project. It is not anticipated to include PhD education in the projects.

The financial support from DST shall be available for mobility (up to 2 visits per year from each side with sending side provides international travel-related expenses while the receiving side provides the local hospitality as per their national norms) of project participants; one manpower ie JRF/SRF, RA etc; minor equipment (accessories) for up to Rs. 5.0 Lac; and chemicals / consumables/ contingency up to Rs. 5.0 Lac per year. Maximum funding from Indian side project is Rs.50.00 lakhs.

### **The receiving side shall cover the costs of accommodation and the costs of living as follows:**

The Indian scientists visiting Norway will be provided        per day ( plus accommodation). Similarly, Norwegian scientists visiting India will be provided INR 2500 per day. In addition, Indian side will provide reasonably furnished accommodation in Guest Houses for the visiting Norwegian side. Hungarian

The funding from Indian side shall be released through a sanction order issued by DST indicating all terms and conditions of the grant. Any formal clearance/ approval pertaining to any kind of regulation by nodal departments/organizations concerning foreign collaboration must be completed before sanction of the project by DST.

### **Assessment and joint decision-making procedure**

The project proposals will be assessed separately according to the rules of procedure in each country. In RCN, the proposals will be assessed by external experts and the administration.

The DST and the RCN will implement a joint decision-making procedure to determine the outcome of the call as per the existing evaluation procedure at RCN and DST. Projects must receive a high assessment score in both countries to be funded. Final decision on funding from RCN will be taken by the program board of the ENERGIX program.

The criteria will be as follows:

#### **Scientific merit**

The scientific merit of a project will be assessed in relation to the following points:

- Originality in the form of scientific innovation and/or the development of new knowledge.
- Whether the research questions, hypotheses and objectives have been clearly and adequately specified.
- The strength of the theoretical approach, operationalization and use of scientific methods.
- Documented knowledge about the research front.
- The degree to which the scientific basis of the project is realistic.
- The scientific scope in terms of a multi- and interdisciplinary approach, when relevant.

## **The project manager and project group**

The project manager and project group will be assessed in relation to the following points:

- Project management
- Expertise and experience within the field of research
- Publication record
- Experience with national and international collaboration on projects
- Experience with supervision of students and younger researchers
- The degree to which the project manager and project group are part of a research environment that has the competence and resources needed to ensure the success of the project

## **Implementation plan and resource parameters**

This criterion will be based on assessment of the following elements:

- Plans for project implementation, including breakdown into work packages/sub-projects, milestones and deliverables.
- Need for personnel resources, as listed in terms of work time distributed by work packages, sub-projects or milestones.
- Need for other resources (such as equipment, data collection, field work), distributed by work packages/sub-projects or milestones

## **Relevance and benefit to trade and industry**

The relevance and benefit to trade and industry will be assessed in relation to the following points:

- The need for this expertise among the participants from industry
- The need for this expertise within Norwegian industry at large
- The potential of the increased expertise to trigger new growth in Norwegian industry

## **Bilateral cooperation**

- Benefits from collaboration between research institutions in India and Norway
- Added value from collaboration for the institutions participating

## **Who can apply / Application procedure**

Joint proposals must be developed in cooperation between Principal Investigators (PIs) representing a research institution in Norway and a research institution in India. Each partner PI must submit separate research proposal from their institution. There should not be more than one contract partner from each country in each project. The call is not open for participants from other countries than India and Norway. To ensure adequate participation of all project partners and encourage long-term cooperation, the project description should clearly describe specific in-kind and financial contributions by each partner, as well as their role in the joint project. Project proposals sent by Norwegian research institutions to RCN should have at least one LOI (letter of interest) from a Norwegian industrial company.

## **Additional information**

### ***Contracts***

The RCN will enter into a contract with the Norwegian applicant for the Norwegian portion of the project.

### ***Agreement on rights to and use of findings and partner obligations (collaboration agreement)***

A consortium agreement detailing the obligations of each partner must be drawn up before the contract with the RCN is signed. The collaboration agreement should include specification of the rights to and use of findings (IPR). A copy of the consortium agreement between the project partners must also be submitted to DST at the time of submission of the proposal.

## Language

The call for proposal is in English language only which also is legally binding.

The proposals must be written in English.

## Requirements:

In the joint project description, activities should be clearly described according to a timeline, and may be organized into work packages when appropriate.

- Milestones should be identified that can be used to easily follow the progress of the project.
- Budget information should be detailed and clearly presented, and should, when necessary, be specified in the project description.
- Management structure and partner roles must be described.

*Proposals for funding from the DST must be submitted according to the rules and regulations of the DST.*

Proposals for funding from the RCN must be submitted electronically according to the rules and regulations of the RCN. The following specific guidelines apply to RCN proposals submitted under this call:

- The proposal and project description (a maximum of 8 pages, Times New Roman 12-point font, footnotes and references included) must be well-structured and clearly written in English.
- A resource table showing the different sources of funding and in-kind contributions should be part of the project description or a separate attachment. It is important to clearly state the distribution of total funding as well as financial and in-kind contributions from different partners and other sources for assessment purposes.
- There is no specific template for the project description, as this is a bilateral collaboration. However, the template for Research projects can be used as far as it is relevant. **The template can be found [here](#).** It is, anyhow, of crucial importance that all elements mentioned under "Assessment and joint decision-making procedure" (above) are clearly described. Information about the collaboration is of special importance.

Letter of interest from collaborating research partner in the other country (India/Norway) must be included.

Letter of interest from at least one industrial company in Norway must be submitted as attachment to applications to RCN.

Earliest permitted project start:01.08.2018 Maximum duration (months):36
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**Anticipated date for notification of results of application process:**June 2018

## Proposal Submission

Each proposal should have one Norwegian and one Indian Principal Investigator (PI). Norwegian PIs must submit the proposal to the RCN electronically using the My RCN Web.

**For Indian applicants** may use the Application given at Annexure. The application should include a jointly formulated and identical copy of the project description, including acronym, submitted to the RCN by the Norwegian partner. Only one original hard copy of the completed application (by post through proper channels) at the following address. Soft copy in a single soft file (do not include any scan page in the soft copy as signatures are not required in softcopy of the proposal) in ms-word or pdf format as email attachment are required to be submitted. However, only the hard copy of the applications received before the due date will be accepted. DST does not hold any responsibility of not receiving the proposal due to postal delays etc. Incomplete applications will be rejected. Proposals by hand at DST are also not accepted.

Contact at DST:

Dr. Chadaram Sivaji, Scientist-F

International Bilateral Cooperation Division

Department of Science and Technology, Ministry of Science and Technology, Government of India

Technology Bhawan, New Mehrauli Road

New Delhi 110 016 India

Telefax: +91-11-26520714; Phone: +91-11-26590457; Email: [sivaji@nic.in](mailto:sivaji@nic.in)

**For Norwegian applicants**, application as per the procedure indicated above be submitted to RCN via the RCN electronic application system ([www.rcn.no](http://www.rcn.no) for guidelines).

Contact Persons in Norway:

Contact persons at RCN are Merethe Sandberg Moe ([mm@rcn.no](mailto:mm@rcn.no), +4722037159) and Tone Ibenholt ([ti@rcn.no](mailto:ti@rcn.no), +4748084976).

**Last date for submission of proposals:**

**For Norwegian applicants (to RCN): 14 February 2018**

**For Indian applicants (to DST): 21 february 2018**

## APPLICATION FORM

**PART 1: General information**

1. Title of the project:
  
2. (Subject Area, as specified in the announcement)
  
3. Contact details / Address of the project leaders:

	<b>Indian project leader</b>	<b>Norwegian Project leader</b>
Name & Designation		
Department & Institute/ University (address)		
Telephone (Work)		
Telephone (Residence)		
Fax No.		
Email ID		

4. Other participants in the project:

<b>Indian side</b>	<b>Norwegian side</b>


**INSTITUTIONS ENDORSEMENT**

Certified that –

- i) The project participants involved in the project as mentioned above are affiliated to the Institute/ University.
- ii) All information provided in the project proposal is correct; and
- iii) the necessary facilities including scientific equipments etc for implementation of the project are available in the Institution and all necessary administrative support will be extended to the project

Signatures of the Indian PI	Signatures of the <b>Norwegian</b> PI
Signatures of the Head of Indian Institution with seal	Signatures of the Head of <b>Norwegian</b> Institution with seal

## **PART-II**

1. Project title
2. Scientific objectives
3. Current state of the research/ technology of the topic
4. Proposed activities including methodology of the proposed research work
5. Preliminary activities by the Indian side
6. Preliminary activities by the **Norwegian** side
7. Detailed description of the Indo- **Norwegian** co-operation  
(Justification/ Rationale for collaboration)
7. Compatibility of intensions of both sides with regard to individual components of the project, working method etc
8. Expected results and dissemination plan  
*(Describe in detail the expected outcomes of the proposed activities and outline potential follow-on interactions between the involved institutes/institutions. If applicable, explain how you will disseminate your findings to key stakeholders and community and address potential for knowledge transfer to industry)*
9. List of milestones  
*(Outline major milestones of your project on a time-scale of months and list the activities that will be required in order to achieve the milestone)*
10. Ethical, safety and regulatory issues  
*(Does your proposed work raise ethical, safety or regulatory issues? If yes, how will you deal with it? Clearly indicate)*
11. List of the five most important publications of the project participants, which have a bearing on the project (please do not send copies of the publications themselves or lists detailing all publications of the group)

## **PART-III Budget requirement:**

### A. Indian side (In Rupee only)



i. Visit of Indian scientists to **Norway**

Name of Indian Scientists visiting <b>Norway</b>	Tentative dates of proposed visit and duration of stay in <b>Norway</b>	Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head
1.		
2.		
3.		
4.		

ii. Visit of **Norwegian** scientists to India

Name of <b>Norwegian</b> Scientists visiting India	Tentative dates of proposed visit and duration of stay in India	Per-diem charges @ Rs. 2500/- per day	Accommodation charges @ Rs. _____ per day
1.			
2.			
3.			
4.			

iii. . Other project costs:

Item	Details ie name, number, quantity etc	Budget requirement (1 <sup>st</sup> year )	Budget requirement (2 <sup>nd</sup> year)	Budget requirement (3 <sup>rd</sup> year)
Scientific manpower				
Spare parts / Consumables				
Contingency etc				

NOTE: The total project cost (ie A(i), A(ii) and A(iii) must not exceed Rs. 40 Lac)

**B. Norwegian side (In Norwegian currency only)**

i. Visit of German scientists to India

Name of Indian Scientists visiting <b>Norway</b>	Tentative dates of proposed visit and duration of stay in <b>Norway</b>	Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head
1.		
2.		
3.		
4.		

i. Visit of Indian scientists to **Norway**

Name of <b>Norwegian</b> Scientists visiting India	Tentative dates of proposed visit and duration of stay in India	Per-diem charges as per the norms indicated above	Remarks
1.			
2.			
3.			

4.			
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iii. Other project costs:

Item	Details ie name, number, quantity etc	Budget requirement (1 <sup>st</sup> year )	Budget requirement (2 <sup>nd</sup> year)	Budget requirement (3 <sup>rd</sup> year)
Scientific manpower				
Spare parts / Consumables				
Contingency etc				

**PART-IV (For Indian partners only)**

1. List of on-going/completed research projects with the Indian project participant(s):

Title of the project	Brief description	Duration with dates of commencement and completion of the project	Funding available and source of funds

2. Infrastructure available/required to implement the project:

Facilities	List of items required for the project	If not available presently, how it is proposed to be procured/recruited. Please indicate the source of funding
Equipment		
Manpower		

Consumables and Contingencies		
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3. Does the project involve (i) Biological Material Transfer / Use of GMOs / Radioactive materials; (ii) Human / animal trials?  
(If yes, submit necessary clearance of nodal agency / department of Govt in this regard)
  
4. Is the collaborative proposal involves IPR related issues?  
(If yes, the partners need to submit the IPR sharing agreement by the collaborating institutes before sanction of the project by DST and RCN.
  
5. Please mention Name/Address/Contact details including email address/ area of specialization of 3 possible peer-reviewers.

