
Request for Information (RFI) U.S.-Israel Collaboration on Innovative Natural Gas (NG) Technologies

Date: February 2, 2016

Description

U.S.-Israel collaboration in R&D and innovation is mutually beneficial. In general, for Israeli companies, the U.S. is their leading source for business partners and market for sales. By collaborating with Israeli companies, U.S. companies gain access to cost-effective and in many instances state-of-the-art innovations, enhancing their competitive advantage.

The Israel-U.S. Binational Industrial Research and Development (BIRD) Foundation has been supporting U.S.-Israel innovation partnerships for almost four decades. Since its establishment in 1977, BIRD has approved more than 900 joint U.S.-Israeli projects, leading to some major innovations, some of which have had considerable impact, and which have produced revenues of more than \$10B. The BIRD program supports joint Israel-U.S. technology development on many topics: life sciences, homeland security, communications, electronics, healthcare, software, and energy and water.

In 2009, a new program named BIRD Energy was initiated, sponsored and funded by the U.S. Department of Energy/ Office of Renewable Energy and Energy Efficiency (DOE/EERE) jointly with the Israel Ministry of National Infrastructure, Energy and Water Resources (MIEW). The program has been separately funded annually by each government, for cooperation between U.S. and Israeli entities on Renewable Energy and Energy Efficiency. In 2015, a BIRD Energy Call for Proposals was issued for the 7th time. Some of the joint projects and innovations, funded by BIRD Energy, are already realizing their commercial potential.

Natural Gas (NG) technologies are already eligible for consideration under the BIRD program.

Now, DOE and MIEW are considering whether to expand the [BIRD Energy](#) program to also include NG technologies.

This RFI is issued to gain information from companies and research institutions from both the U.S. and Israel, on the potential demand, utility, and mutual benefits for R&D collaboration in NG technologies.

Background

In 2007, Congress passed the U.S. - Israel Cooperation Act as part of the Energy Independence and Security Act of 2007 (Sec 917). The law established a grant program for joint research and development programs in the fields of renewable energy and energy efficiency. In May 2008, the U.S. Department of Energy and the Israeli Ministry of National Infrastructure, Energy and Water Resources signed an implementation agreement. The program, named BIRD Energy, is managed by the BIRD Foundation, according to its rules and procedures (see www.birdf.com).

The first round of funding was provided by the two governments in FY2009. Since then, 22 collaborative projects have been initiated. Six additional projects were selected in October 2015.

As specified by the original 2007 legislation, BIRD Energy focused on Renewable Energy and Energy Efficiency and is managed from the U.S. side by the Office of Energy Efficiency and Renewable Energy (EERE).

In December 2014, the U.S. President signed into law the U.S.-Israel Strategic Partnership Act. Section 12 amends the 2007 legislation, expanding its scope to include Natural Gas (NG) technologies. It also extends its validity until September 30, 2024.

BIRD Principles

- BIRD offers conditional grants for joint development on a risk sharing basis (private sector cost-share).
- BIRD supports cooperation between companies, one from the U.S. and one from Israel. The BIRD Energy program also accepts cooperation between a company and a research institution, one from the U.S. and one from Israel.
- BIRD funds up to 50% of each partner's R&D expenses associated with the joint project. The maximum conditional grant is \$1M.
- BIRD claims repayments as royalties only if commercial revenues are generated from the project (repayments: up to 150% of the original conditional grant, CPI adjusted).

Note: See www.birdf.com for all the information required on the BIRD model and how to submit a project to BIRD or BIRD Energy.

Purpose

The purpose of this RFI is to solicit feedback from industry, academia, research laboratories, etc. on their interest to pursue joint R&D activities between U.S. and Israeli entities on NG related technologies, including the possibility of applying to BIRD for a Conditional Grant to support development of a technology that would be commercialized.

Examples of NG Technologies

The following are examples of relevant NG technologies:

Asset Tracking, Reservoir Properties, Reservoir Characterization, Flow Assurance, Production Technologies and Equipment, Compression Technologies (LNG, CNG), Cybersecurity, Data/Big Data Management, Environmental Services, Geotechnical & Geophysical Technologies, Imaging, Remote Control/Operations, Monitoring & Control, Physical Security, Robotics, Safety, Seismicity, Sensors, Signal Processing, Visualization, Water Technologies, Other technologies relevant to the so-called "Digital Gas Field".

Disclaimer and Important Notes

This RFI is not a funding opportunity announcement. Companies submitting responses may choose to submit proposals to the BIRD Foundation on a competitive basis.

The BIRD Foundation will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that BIRD is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind BIRD to any further actions related to this topic.

Proprietary Information

Respondents are strongly advised to NOT include any information in their responses that might be considered business sensitive, proprietary, or otherwise confidential. If, however, a respondent chooses to submit business sensitive, proprietary, or otherwise confidential information, it must be marked as such in the response, as explained in the electronic submission form. Notwithstanding the above, the BIRD Foundation may be required under law or regulations to disclose certain information and therefore, to the extent required, to be determined solely by the BIRD Foundation, it cannot undertake not to disclose information even if marked confidential.

Information Requested

1. Does your company/institution perform any R&D activities applicable to the NG market? Please elaborate.
2. What technologies and services developed by your company/institution are applicable to the NG market?
3. Has your company/institution initiated R&D collaborations with U.S. (if Israeli respondent) or Israeli (if U.S. respondent) companies/institutions on technologies related to NG? If so, why, and on what topics?
4. Is your company/institution interested in initiating or expanding cooperation with U.S. (if Israeli respondent) or Israeli (if U.S. respondent) companies/institutions on developing NG related technologies? If so, why?
5. Would the funding as provided by BIRD help in developing NG technologies that could be commercialized? If so, how? What strengths and challenges do you see in seeking funding under the BIRD model?

RFI Response Guidelines

Responses to the RFI must be submitted electronically to [\[RFI- Natural Gas \(NG\) Technologies\]](#) not later than **March 4, 2016**.

BIRD will not respond to individual submissions or publish publicly a compendium of responses.

BIRD may summarize general insights from this RFI, but will not provide credit.

BIRD may use names of companies and/or contact information for "matchmaking" purposes (i.e., to connect between parties interested in cooperating). Unless required under any relevant law, names of companies or individuals responding will not be disclosed, if so requested by the respondent in the electronic submission form.

A response to this RFI will not be viewed as a binding commitment to develop or pursue any project or ideas discussed.