



Qatar Open Innovation 2022 | Webinar

Welcome! We will start in a few minutes...



Agenda

-) Webinar Introduction
- Introduction to QRDI Program
- Hassad Food Open Innovation Challenges
- Kahramaa Open Innovation Challenge
- Mechanics of Submission
- Q&A Session

End of Session



RDI Program Director at QRDI Council



Haya A. Al-Ghanim

Director of Corporate Strategy & PMO



Jose Iralde



Head of Creativity, Innovation & Scientific Research Incubator



Rashid al-Rahimi



Chief Executive Officer & Cofounder

() Innoget

Jordi Rafols



مجلس قطر للبحـوث والتطوير والابتكار QRDI COUNCIL

Qatar Open Innovation (QOI) connects opportunity owners with local and global innovators to develop innovative technologies and solutions



QOI presents a unique opportunity for local and global innovators to develop and commercialize their solutions

Program Benefits for Innovators







Jose Iralde

Director of Corporate Strategy & PMO







Hassad Food Challenge #1 | Seeking Sustainable, Cost-Effective Solutions to Reduce The Humidity Of Cooling Air Inside Greenhouses In Qatar





Hassad Food Challenge #1 | Seeking Sustainable, Cost-Effective Solutions to Reduce The Humidity Of Cooling Air Inside Greenhouses In Qatar

Total costs (production & distribution) for tomato production methods in Qatar QAR per kg





Estimated cost for R&D trial conducted in	
Hassad farm estimated in 5.95QAR/kg	

KPI	Results
Yield	62.5 kg/m2
Total Production	44,570 kg
Water consumption per kg	26 L/kg
Electricity consumption per m2	1100 KWh/m2/year



Hassad Food Challenge #2 | Seeking Innovative Technologies to Harvest Water From Air (Humidity) in Harsh Conditions

Depletion & Replenishment breakdown Aquifer (million m3 per year –2016)



Depletion & Replenishment breakdown Aquifer



(million m3 per year – estimated 2023)



Hassad Food Challenge #3 | Seeking Innovative Technologies To Convert Agricultural Waste Into Products Of Value







Rashid Al-Rahimi

Head of Creativity, Innovation & Scientific Research Incubator





Seeking Innovative Technologies For Energy Storage In Harsh Environments

Description Of Problem:

To utilize energy more efficiently with the goal of preserving local resources and reducing environmental footprint. KM is looking for innovative high-capacity solutions which address advance storage capacities and technologies operating in the climate conditions where humidity and temperatures can be over 90% RH and 50°C respectively (Not all technologies meet these criteria).

Key Success elements that we think should be in the innovative solution:

Storage systems above 10MW up to 250MW operating in 2 hours up to 12 hours, & is compatible with control systems in air temperatures over 50C during 4-5months per year in humidity over 90% & with life span minimum of 5000 cycles capable of retrofitting to existing or new smart solar farms /grid networks, while being environmentally friendly and Cost efficient (TRL 3 – 8 with potential for pilot development within Qatar).

Possible approaches: might include, but are not limited to:

- Battery Systems (Flow, Molten State, Metal Air, Hybrid, hydrogen & Metal-ion batteries)
- Super-conducting Magnetic Energy Storage
- Hydrogen Based Storage Systems
- Fuel Cells
- Grid forming technologies

Approaches/Technologies Not of Interest:

 Not resistant to extreme weather conditions, require major re-design / reconstruction of the local power supplies or solar farms, harm the environment or generate large amounts of CO2 such as CCU





MECHANICS AND PROPOSAL **SUBMISSION**





Challenge Context

with capacity of 800M

Qatar's National Vision 2030 emphasizes the importance of environmental development as the nation is forced to deal with local environmental issues, such as the impact of diminishing water resources. In line with these ambitions, Hassad Food is aiming to find new, sustainable, and economically viable sources of water in Qatar.

OPEN INNOVATION CHALLENGES



Submission Process

Please make sure you read the Official rules of the challenge before you submit your proposal. Specifically the relatives to:

- Challenge topic and submission criteria
- Technical requirements
- Proposal submission and required information

Preferred Partnership Model

The QRDI Open Innovation Challenge program has up to one million Euros (€1,000,000) to invest in the selected participant proposal to scale-up, jointly develop, acquire or lisence the proposed solution. QRDI and their partners together with the selected participant will discuss on a one to one basis the funds required to develop the selected project in Qatar

Title Of Your Proposal*

Identify your proposal with a self-explanatory title

Executive Summary*

Executive summary

Technology Development Roadmap*

- Current development status and proposed development in Qatar
- Development roadmap including anticipated phases, duration
- Facilities and requirements to support development
- Any problems you anticipate and how you might address them

Technology Readiness Level*

Select the Technology Readiness Level of your proposal

Intellectual Property Status*

Describe the current Intellectual Property Status of your proposal. Indicate whether there is any kind of IP protection. If yes, could you share any details?

Overview Of Company / Team*

- Company profile, past experience, relevant past projects and customers (if you can share this data)
 Development team, organization, roles and responsibilities
- Team profiles & CVs

Proof Of Concept Data (If Any)

Proof or demonstration of concept, pilot/test trials, and/or simulations

Attachments

Drag and drop files, pictures and other attachments to improve the description of your proposal

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PROPOSAL TEMPLATE

ANY QUESTIONS?

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To learn more, visit the QRDI Portal at https://connect.qrdi.org.qa/innovation/p



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- Haya A. Al-Ghanim

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Visit QRDI's Council Open innovation Challenges Site

https://qrdi-councilopeninnovation.innoget.com/