

Partnering Opportunity

Profile Status: Published

Research & Development Request

UK university looking for research cooperation partners for H2020 proposal on Low carbon industrial production

Summary

A London based university is preparing an H2020 project proposal. The main project goal is to develop, test and optimise an innovative and cost effective solution able to enhance the capture and utilisation of carbon dioxide (CO2). The university will be the technical coordinator of the project and is looking for partners under a research cooperation agreement that can take care of the administrative coordination of the project, end users for testing, and a partner for CO2 storage.

Creation Date	04 June 2019
Last Update	05 June 2019
Expiration Date	19 August 2019
Reference	RDUK20190531001
Public Link	https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/b7dbf753-97e3-4f23-bd61-89debee35714

Details

Description

The direct correlation of the increase of greenhouse gases, particularly CO₂, with global warming and climate change is one of the most urgent problems humanity faces today. The ability, therefore, to develop effective processes that will assist in reducing the CO₂ content within the atmosphere is crucial as it will have a massive impact on the atmospheric environment, and subsequently the overall ecosystem and both rural and urban communities. Despite existing "Carbon Capture, Utilization, and Storage" (CCUS) technologies being considered mature, this is still an emerging market where significant commercial uptake has not yet been achieved.

This project aims at developing and testing an innovative carbon capture solution for the industrial sector in a relevant environment, specifically for cement manufacturers and to transform the CO₂ captured in useful products and/or bioproducts.

More specifically the university's objectives are:

- 1) To develop and implement multiphase continuous intensified reactors/ photo bioreactors for the intensive capture of CO₂ and the subsequent utilisation of it to useful products.
- 2) To demonstrate impactful economic and quality (low contamination of syngas by the absorbent) benefits by the use of ionic liquids/ microalgae in the context of industrially-relevant problems.
- 3) To exemplify the general approach in the context of industrial need (intensifying CO₂ capture).

The university team is diverse, creative and focused, thus resulting in an ideal partnership/synergy for delivering the project outcomes.
Specifically, the main sector the university is looking for are cement or oil refineries or heavy industries.

The deadline for Expression of Interests (EOIs) is 19 August 2019
The deadline for the call is 26 August 2019

Advantages and Innovations

For the EU: It will strengthen the EU collaborations and will result in the EU becoming a world leader in reducing CO₂ in the atmosphere.

For the commercial partners: there will be commercial impact/opportunities as a result of the success of the project for European partners.

For the academic partners: the project will lead to new research ideas and opportunities and enhancing knowledge and understanding in this new field. It will inform the younger generation of researchers in the processes for reducing CO₂ emissions and avoiding climate change and it will introduce new ideas in the respective research fields (e.g. chemical reactions in process systems and process design; new methodologies in computational modelling). New innovative solutions will directly feed back to the industrial and commercial partners.

Keywords

Technology

10002003 Capture and Storage of CO₂

Market

06001002 Production services
06001005 Storage and transportation
06001006 Chemicals and materials

NACE

P.85.4.1 Post-secondary non-tertiary education

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person

Pawel Zebrowski

Phone Number

+48 91 449 43 64

Email

pzebrowski@zut.edu.pl

Open for EOI : **Yes**

Client

Type and Size of Organisation Behind the Profile

University

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English

Client Country

United Kingdom

Partner Sought

Type and Role of Partner Sought

The London-based university is looking for industrial partners belonging to the following sectors: steel, iron and cement making, oil refining, gas processing, hydrogen production, biofuel

Ref: RDUK20190531001

production and waste incineration plants.

They are looking for an administrative coordinator, while they prefer to be the technical coordinator.

For end-users: They need industries (SMEs and/or large enterprises) to test the solution to Technology Readiness Level 6 (TRL6).

For CO2 storage: one of the Working Programmes (WPs) is related to the storage of CO2, they need a partner who has experience in this.

Type and Size of Partner Sought

>500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

H2020

Call title and identifier

Low carbon industrial production using CCUS

Submission and evaluation scheme

single stage

Anticipated Project Budget

between 10 and 12M euros

Coordinator Required

Yes

Deadline for EOI

19 Aug 2019

Deadline of the Call

26 Aug 2019

Weblink to the Call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-nze-5-2019-2020>