Space and Digital Transformation for Green Energy Utilities

23 February 2022 | 11:00 CET

Davide Coppola | European Space Agency

Mohammad Lari | UK Department for Digital, Culture, Media and Sport

Laura Schade | UK Department for Business, Energy & Industrial Strategy

Davide Coppola

Partner-led & Thematic Initiatives
Downstream Business Applications
European Space Agency

Space and Digital Transformation for Green Energy Utilities

Agenda

1. Introduction
2. ESA Space Solutions
3. ‘Space and Digital Transformation for Green Energy Utilities’ call
4. Mohammad Lari, UK Department for Digital, Culture, Media and Sport
5. Laura Schade, UK Department for Business, Energy & Industrial Strategy
6. How to Apply
7. Q&A

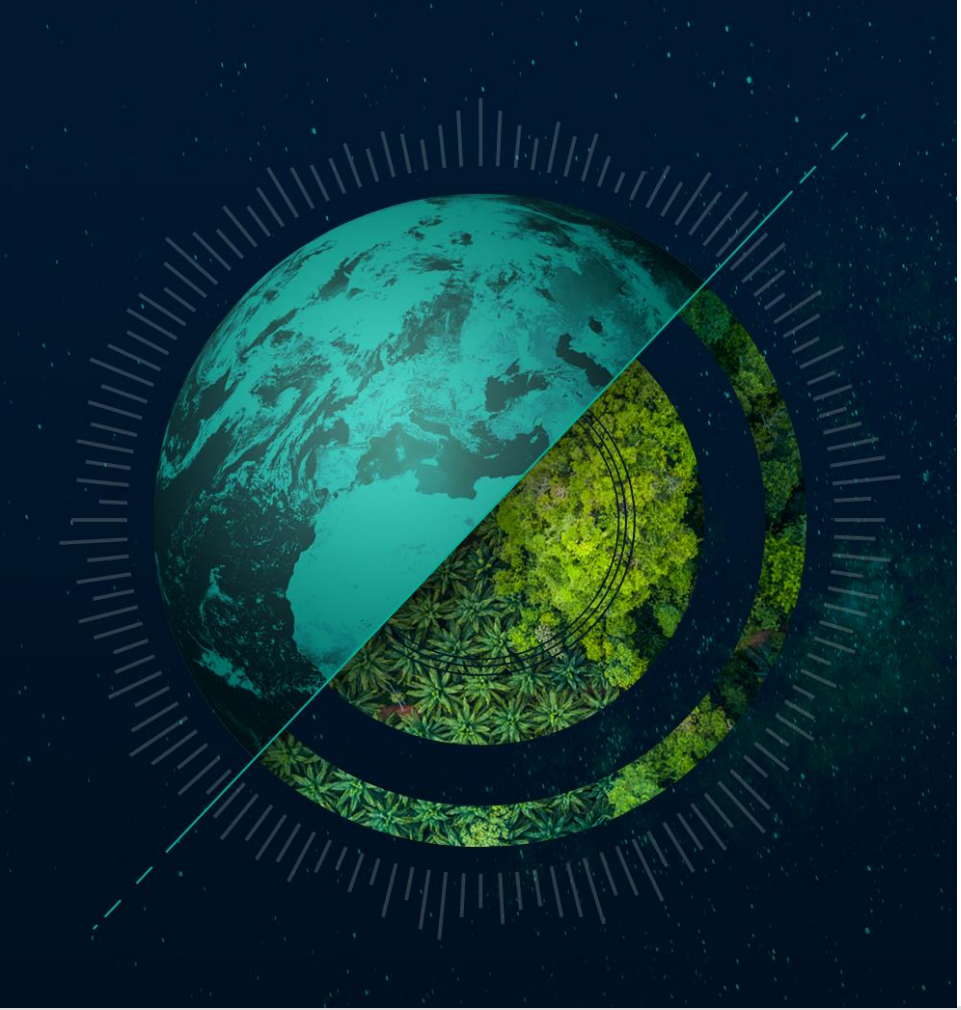
ESA Space Solutions

The largest space innovation network in the world

→The go-to place for great business involving space to improve everyday life.

→Supporting European start-ups and SMEs to develop businesses using space technology and data.

→Offering funding, business and technical support to help to generate successful business and create jobs.



What we offer

- Zero-equity funding (from €50k to €2M+ per activity)
- A personalised ESA consultant
- Technical support and commercial guidance
- Tailored project management support
- Access to our international network of ESA and partners
- Access to our network of investors
- Credibility of the ESA brand

Space tech, users & markets

esa space solutions

Space Technology

- Earth Observation
- Satellite Navigation
- Satellite Communication
- Spaceflight Technologies
- Space Weather

- Big Data analytics
- VR/AR
- Artificial Intelligence
- Mega-constellations
- Crowdsourcing
- IoT
- Cybersecurity
- Blockchain
- 5G

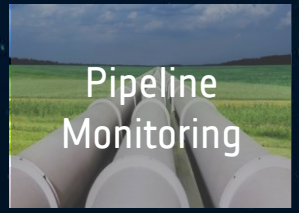
https://artes.esa.int/esa-5g6g-hub

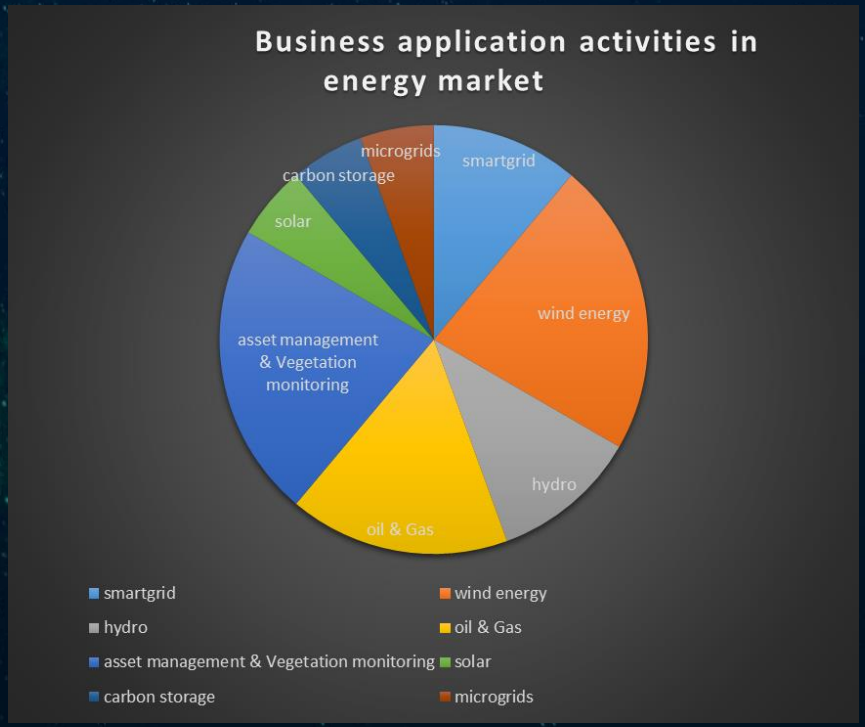
Users & Market

- Maritime
- Environment
- Financial
- Education
- Energy
- Agriculture
- Healthcare
- Transport
- Media
- Aviation

SPACE APPLICATIONS IN THE ENERGY SECTOR

esa space solutions





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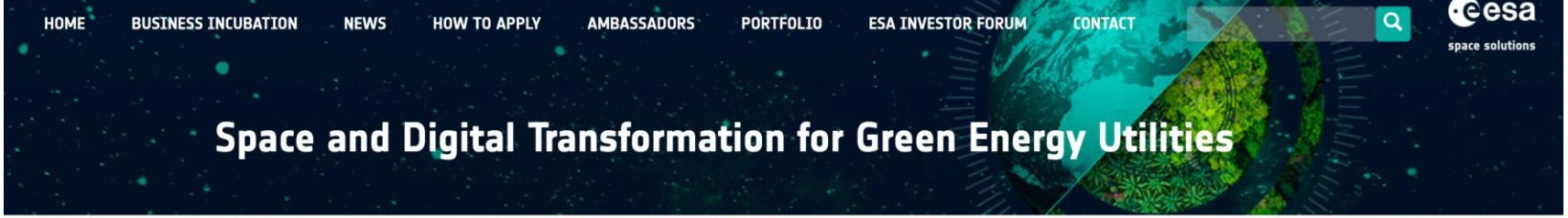

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ACTIVITY	Feasibility Study, Demonstration Project
OPENING DATE	11-03-2022
CLOSING DATE	10-06-2022

Opening date: March 2022

https://business.esa.int/funding/space-and-digital-transformation-for-green-energy-utilities

Space and digital transformation for green energy utilities

- Resulting from the cooperation between ESA and the UK Department for Digital, Culture, Media and Sport (DCMS) in coordination with the UK Department for Business, Energy & Industrial Strategy (BEIS)

- the call aims at developing cutting-edge solutions leveraging 5G terrestrial and satellite communication networks, and potentially other space assets, to address the UK Government's priorities in the energy sector

- Scope: Feasibility Study, Demonstration Project

https://business.esa.int/funding/space-and-digital-transformation-for-green-energy-utilities

Key areas of interest

NET POSITIVE ENVIROMENTAL IMPACT	MONITORING RENEWABLE CAPACITY	RENEWABLE ENERGY DEPLOYMENT	SMART ENERGY SYSTEMS
environmental impact throughout the lifecycle of renewable energy, promoting circular economy, long-term impacts of renewable energy sites, public acceptance	Increasing efficiency of green renewable energy and safety of operations, seamlessly measure, monitor, and manage the status of the infrastructure	Planning and bankability of green renewable energy, infrastructure planning (e.g.: electrical vehicle charging points and new grid connection points to optimise grid stability), green financing	Digitalization of utilities infrastructure, control storage and dispatch of distributed energy resources, monitor major energy flows on the electricity grid in real time, self-healing grids

The power of space

Hybrid terrestrial-SatCom 5G networks: e.g.: low latency communication technologies for real-time network and asset monitoring in remote locations

Satellite Earth Observation – e.g: SatEO data to monitor environmental changes over the lifecycle of deployed renewable generation installations, to monitor onshore wind and solar installation sites and assess key factors like degradation, cleaning, and necessary replacement

Global Navigation Satellite Systems (GNSS) – e.g: UaV operation

ESA-ECSAT 5G/6G Hub

- A collaborative place
- 5G Engineering Lab
- 5G Demonstrations and Applications
- Events and Showcase

ESA-ECSAT 5G/6G Hub

- Benefit from testing your technology solution in a state-of-the-art hybrid satellite-terrestrial 5G lab environment
- Accelerate your technology development
- Showcase your technological solution

5G@esa.int

Mohammad Lari

UK Department for Digital, Culture, Media and Sport

Laura Schade

UK Department for Business, Energy & Industrial Strategy

How to apply

1. Industry pitch submission and early engagement with Delegations

   First batch
   11 Mar '22 to 10 June '22
   Second batch
   13 June '22 to 30 Sept '22

2. ESA reply and consultation with Industry and Delegations for orientation

3. Industry Outline Proposal submission

4. ESA recommendation to Industry on Full proposal submission

5. Industry Full Proposal submission under existing implementation lines.
   Letter of Support from Relevant Delegate(s) shall be provided with Full Proposal

Q&A

Thank you!

For more information visit

→ https://spacesolutions.esa.int/

→ https://business.esa.int/funding/space-and-digital-transformation-for-green-energy-utilities