

Space Supporting Environmental Claims

European Space Agency

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Welcome to the Webinar!

Before we start...

- Please keep your microphones muted during the webinar and make sure your webcam is switched off.
- You can use the conversation function anytime to submit your questions. They will be addressed during the Q&A at the end of the webinar



ESA Welcome and **Introduction**

About ESA's **Space supporting Environmental Claims** competition

Environmental Claims and **Space**

How to Apply to the competition

Q&A Session



EUROPE'S GATEWAY TO SPACE

WHAT

23 Member States, 5000 employees

WHY

Exploration and use of space for exclusively peaceful purposes

WHERE

HQ in Paris, 7 sites across Europe and a spaceport in French Guiana

HOW MUCH

€7.68 billion in 2025

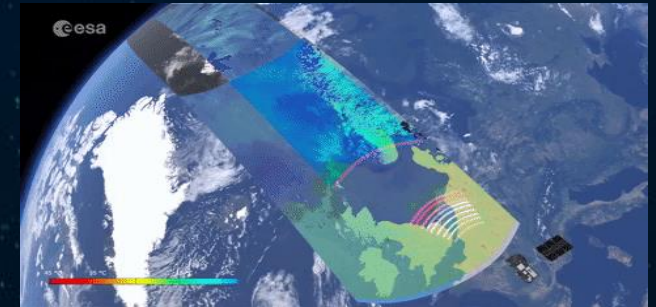
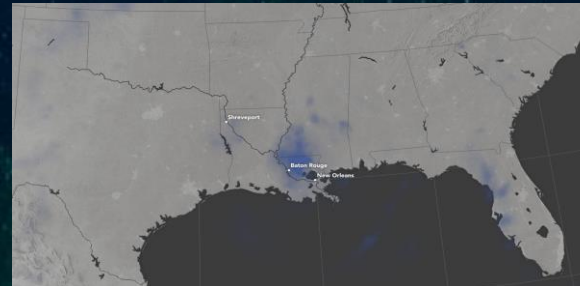
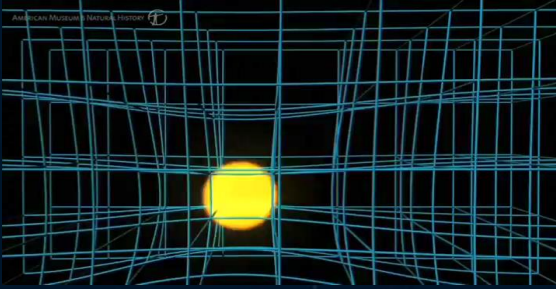


Science and Exploration

Enabling and Support

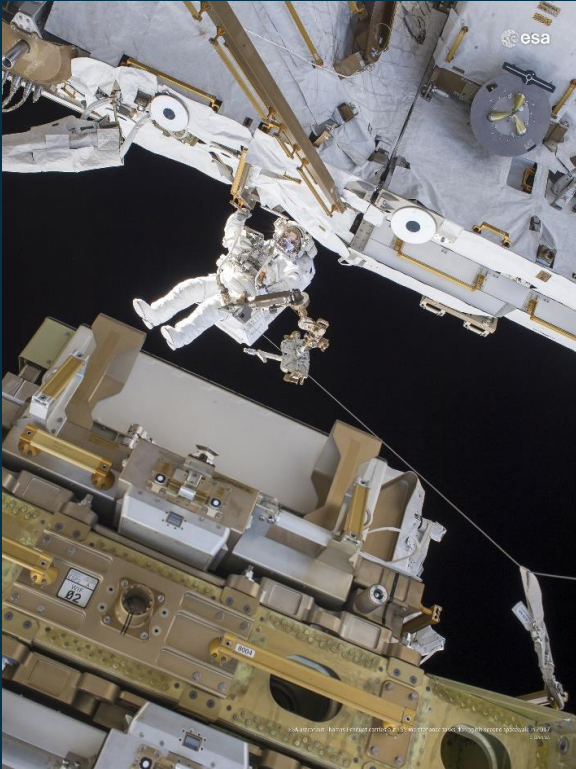
Safety and Security

Applications

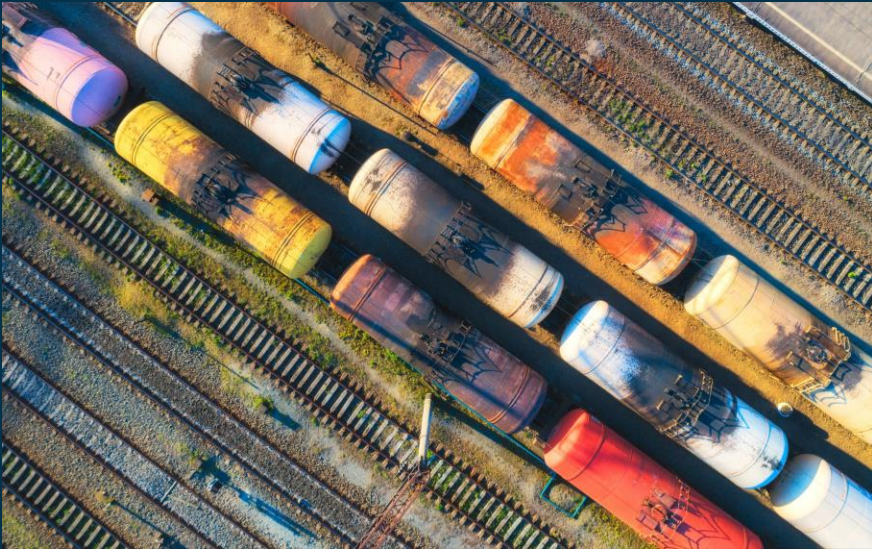


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What do you picture when you think of space?



But space can also be this...



How?

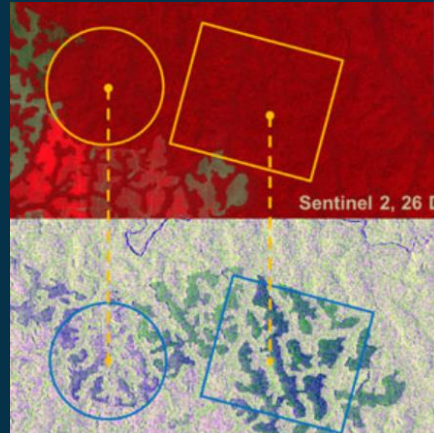
What we can 'see' from space



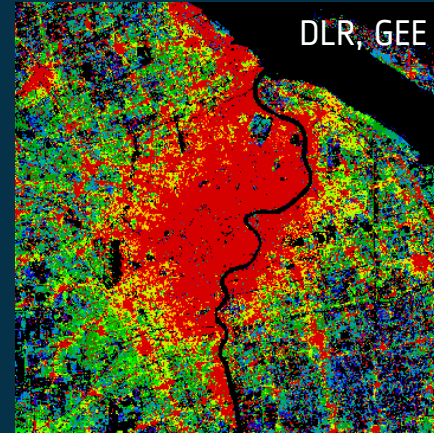
Deforestation monitoring



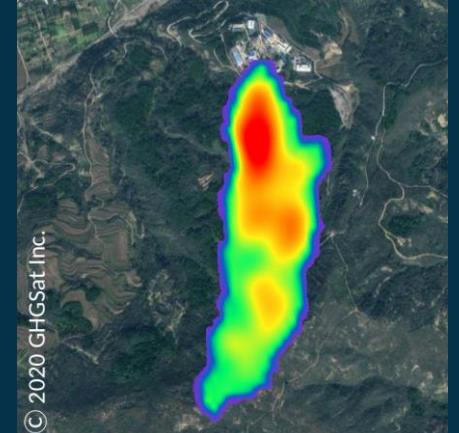
Land cover and vegetation growth



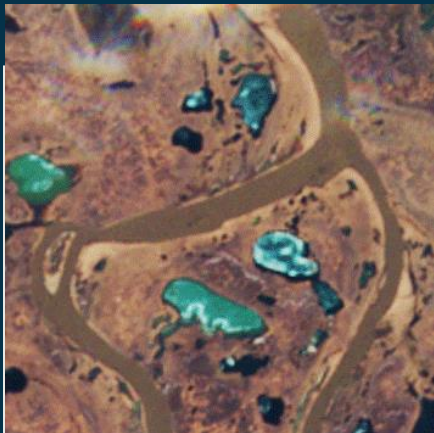
Change detection



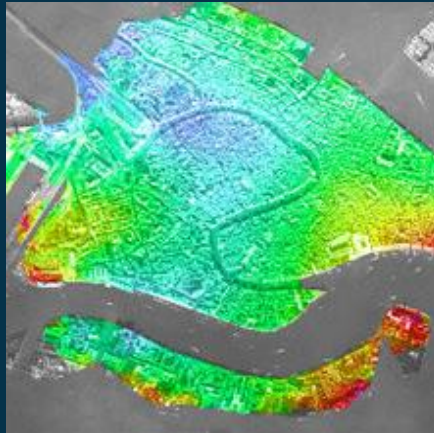
Urbanisation



Methane over coal mine, China



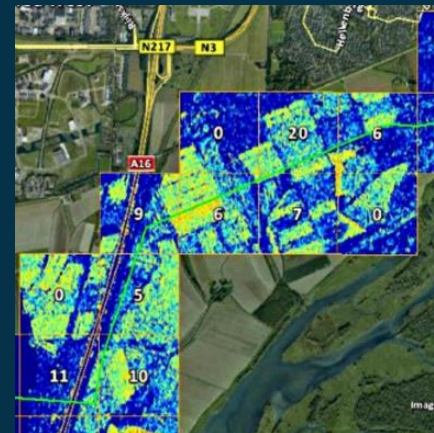
Water pollution



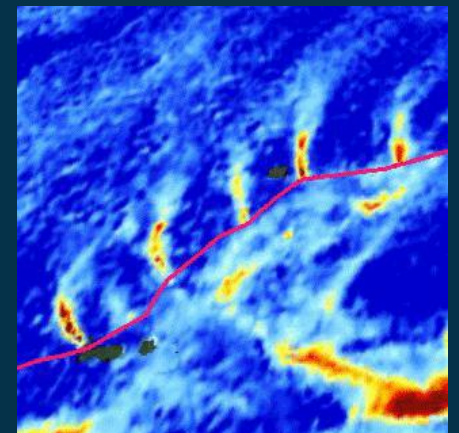
Ground subsidence in Venice



Crop identification

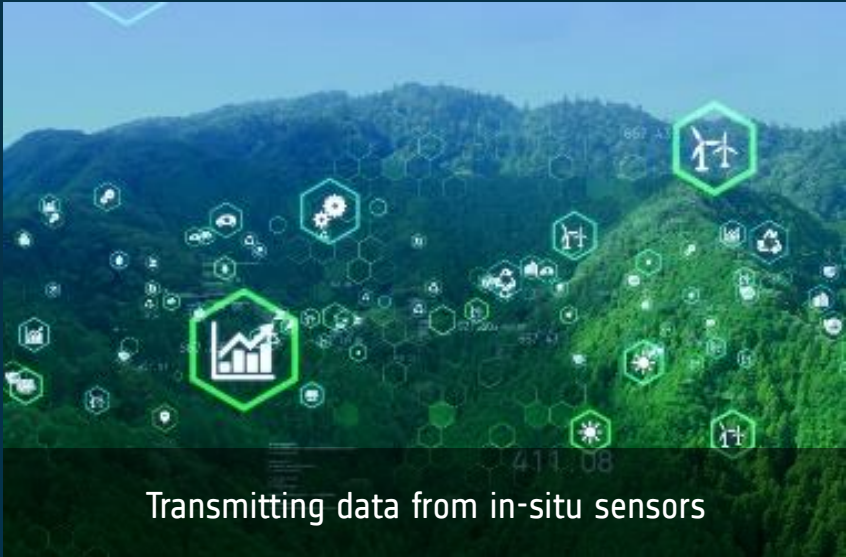


Monitoring pipelines



Nitrogen dioxide over Siberian pipelines

Space as a connectivity solution



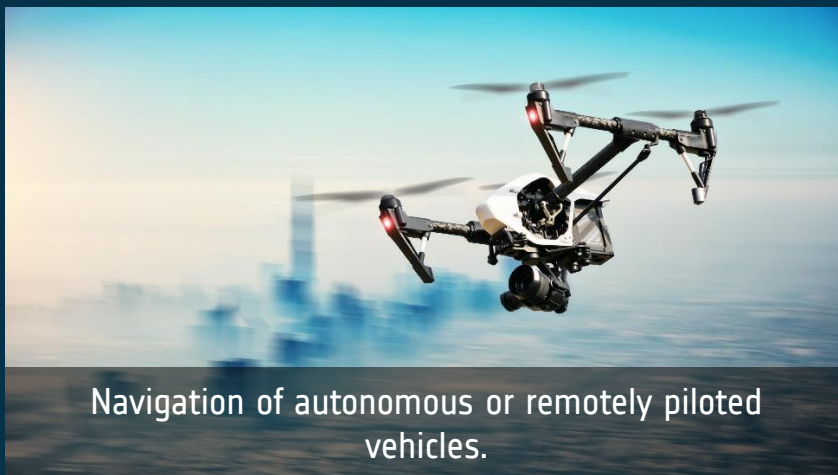
Space as a positioning and tracking solution



Tracking of resources/goods



Mobility and connected cars



Navigation of autonomous or remotely piloted vehicles.



Synchronisation and Time Stamping can be supported by GNSS solutions

Business Applications: space-enabled services



Supporting European companies to develop innovative & commercial services in any market sector, using space.



<https://business.esa.int/>

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What can BASS offer to companies?

Our aim is to work together to make your idea commercially viable, with:



Zero-Equity Funding
(€50K-€2M+)



Tailored Project Management Support



Access to our Network and Partners



Use of ESA Brand for Credibility



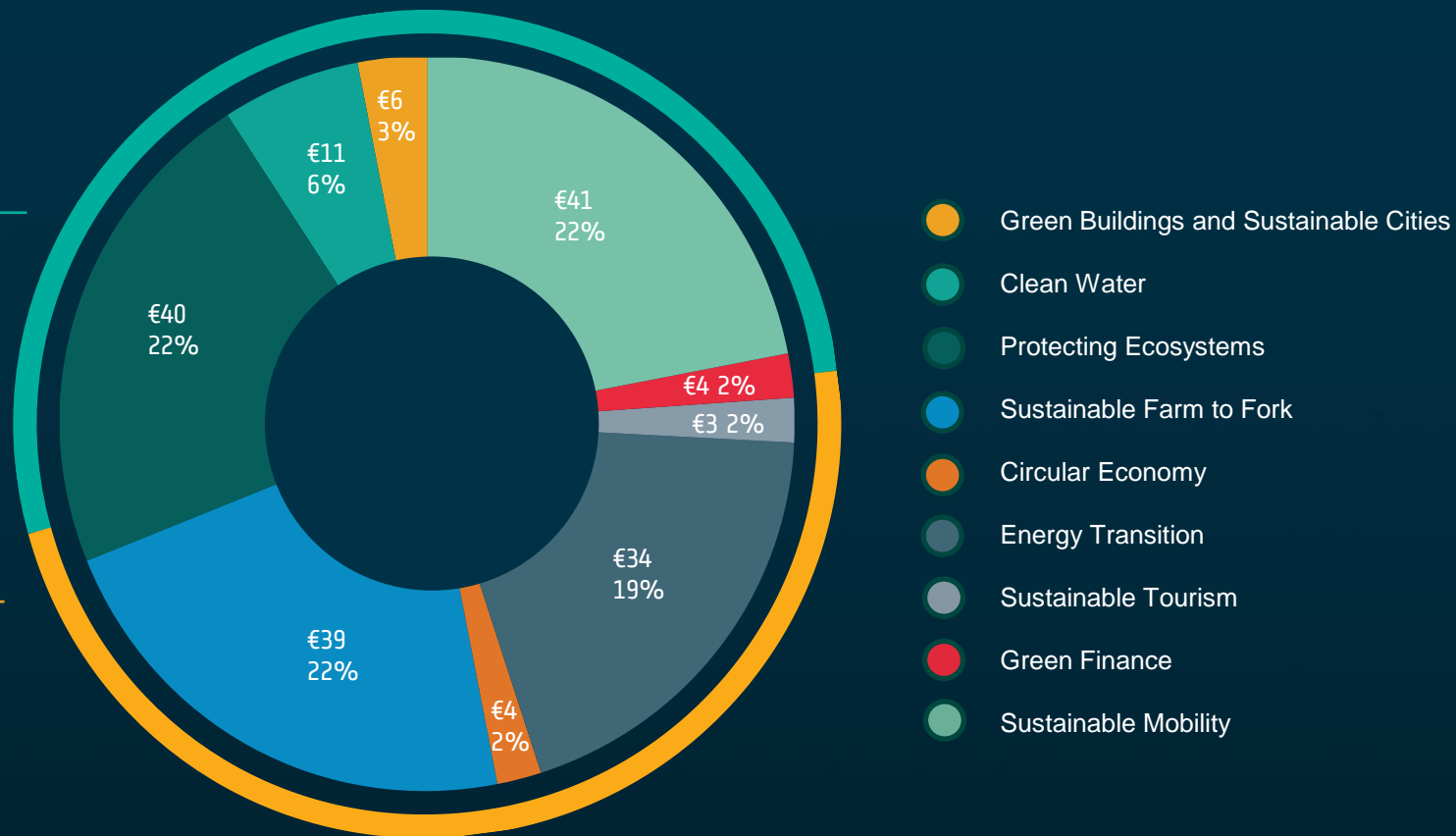
Sustainable applications with green impact

It is estimated that abandoning the current high-carbon pathway in favour of a low-carbon future will bring €26 trillion in economic benefit.

Investment in BASS Green Activities since 2010

Market demand for green solutions, new ESA BASS funding opportunities, and collaborations with industry partners will support future growth in sustainable development investment

With **€183M** invested into **300 ideas** the green transition now drives **48%** of all new ESA Space Solutions.



Space Supporting Environmental Claims Kick-Start



Introduction: Environmental Claims

- Consumers shifting towards ecofriendly products and sustainable alternatives.
- Shift in marketing strategies of companies:
 - Positive brand reputation as differentiator.
 - Side effect: Greenwashing

Greenwashing is when a company makes false or misleading claims about a product or service's environmental benefits. The goal is to make consumers believe the company is more environmentally friendly than it actually is.

Examples of greenwashing

- Misleading labels: Using vague terms like "eco-friendly" or "sustainable"
- Irrelevant claims: Making claims that are not helpful to consumers
- Hidden trade-offs: Promoting sustainability efforts while continuing harmful practices
- Bury bad practices in fine print

Why is greenwashing a problem?

- Greenwashing can make consumers distrustful of businesses
- It can allow companies to continue or expand harmful behaviours
- It can profit off consumers who want to make sustainable choices



- New regulations combatting greenwashing and protect consumers:
 - EU's Green Claim Directive (GCD): becomes effective in late 2026:
 - Environmental Claims and labels must be reliable, comparable and verifiable.
 - Future Performance Claims must be time-bound with measurable and verifiable interim targets.
 - Environmental Labelling requires robust monitoring and evaluation system.
 - UK's anti-greenwashing rule: effective since May 2024:
 - Sustainability claims must be "fair, clear and not misleading" and be consistent with the product's characteristics.
 - Claims must be accurate and substantiated.



1. Greener Value Chains

Supply chains significantly impact the environment, making sustainability essential.

However, shifting to sustainable supply chains requires collaborations and integrating environmental considerations across the value chain.

Efficient management prevents greenwashing and ensures compliance with sustainability standards.

Transparency and accountability are crucial, especially in global supply chains with dispersed partners.



1. Greener Value Chains

- Global value chain:
 - Misbehaviour of a partner can damage a company's reputation
 - Very challenging to prevent greenwashing throughout the whole chain
- EU Supply Chain Law (July 2024):
 - Identify and address adverse human rights and environmental impacts
- ESG compliance
 - ESG certificates provide legal proof that a company follows certain standards. If a company makes false environmental claims, it can lose its certification and face financial losses.
- Require tracing of supply chain



2. Ensuring Carbon Credit Integrity:

Carbon credits align business objectives with environmental conservation by representing one tonne of carbon dioxide (CO₂) emission saved or offset.

Businesses earn these credits by investing in sustainable projects like reforestation or renewable energy.

They act as financial incentives by encourage greener operations and providing an alternative for companies unable to directly reduce emissions.

Carbon credits are expected to rise in demand and value with stricter carbon targets.

- Carbon credits
 - Encourage greener operations
 - Alternative for those unable to reduce their emissions
 - Require reliable data to ensure genuine offset claims

Satellite applications could help to:

- Measure and disclose: Measure and disclose how credits are used, including how they contribute to climate and environmental goals
- Be transparent: Provide public information about mitigation activities and ensure there is no double counting
- Validate and verify: Require independent third parties to validate and verify carbon credits



3. Authenticating Green Finance

Green finance supports environmentally beneficial projects through investments, banking, and insurance.

It focuses on long-term returns, innovation, and social and environmental benefits, which are crucial for a green transition.

However, some banks engage in greenwashing by claiming to be environmentally responsible while continuing to fund fossil fuel projects and other environmentally damaging activities

One report revealed a 70% increase in greenwashing incidents by banks and financial services, with over half of these incidents mentioning fossil fuels or linking a financial institution to an oil and gas company.

Financial institutions must thoroughly investigate and confirm the ESG performance of the projects they support to ensure transparency and accountability



Summary

1. Greener Value Chains

- Global value chain:
 - Misbehaviour of a partner can damage a company's reputation
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 - ESG compliance
- Require tracing of supply chain

2. Ensuring Carbon Credit Integrity

- Carbon credits
 - Encourage greener operations
 - Alternative for those unable to reduce their emissions
 - Require reliable data to ensure genuine offset claims

3. Authenticating Green Finance

- Green finance:
 - Use of financial instruments to support projects with environmental benefits
 - Higher risk of return and lower short-term return
 - Greenwashing: financial institutions, knowingly or unknowingly, claim to invest sustainable projects which are unsustainable
 - Require tracking environmental impact





Satellite Earth Observation

- Monitor GHG emissions across complex supply chains
- Monitoring and quantification of a variety of environmental parameters e.g., methane emissions, water pollution, nitrogen dioxide emissions etc, to validate sustainability labels
- Identify and predict potential adverse environmental impacts of a company's activity
- Higher accuracy in capturing carbon sequestration rates
- Detect illegal activities – like illegal logging, piracy, and illegal mining- in green projects

Global Navigation Satellite System

- PNT for accurate positioning & track and trace along supply chains
- Pinpoint precise location for polluting and illegal events in real-time

Satellite Communication

- Increase a supply chain network's robustness and resilience
- Green projects can rely on SatCom for reporting and communicating their ESG performance

How to Apply

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Environmental Claims

Successful companies will run a **6-month study** to investigate the **technical feasibility** and **commercial viability** of their idea.

Kick-Start activities are funded at 75% by the European Space Agency for a maximum of €75K per contract.

After the study there is the opportunity for **further funding** and support from ESA.

Visit: [Space supporting Environmental Claims](#)



Who can apply?

To be **eligible for funding**, your team must be based in one of the **following countries**:

Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Norway, Netherlands, Poland, Portugal, Romania, Slovenia, Sweden, Switzerland and United Kingdom.

If you are considering applying, you must **inform your National Delegation** to obtain a **letter of authorisation** allowing the funding of the proposed activity. Contact details of each National Delegate can be found here: <https://business.esa.int/national-delegations-0>

However, if your team is based in **Germany**, you do not have to contact your National Delegate



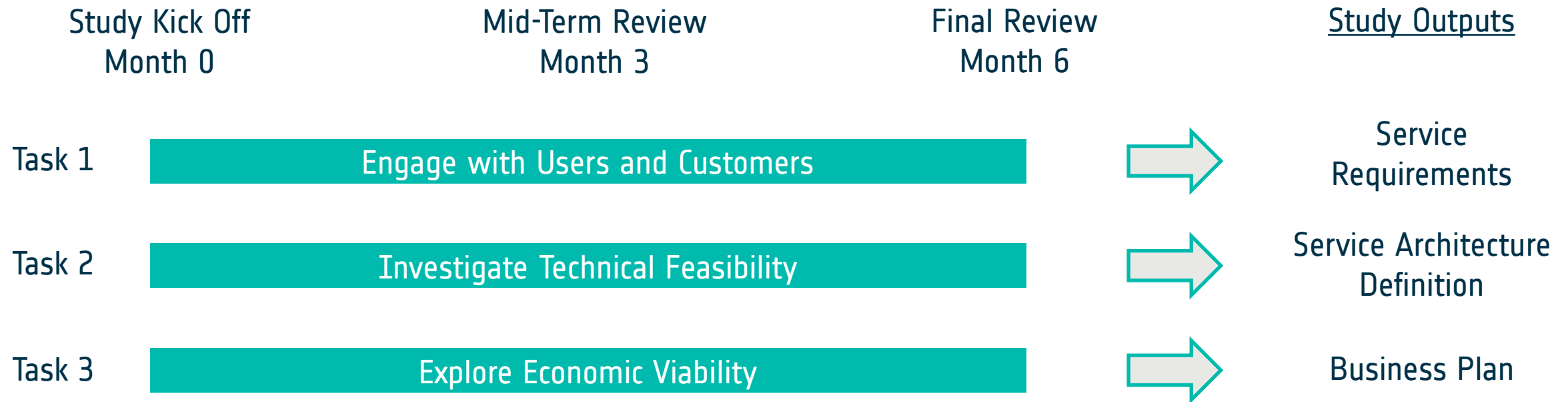
How to apply?



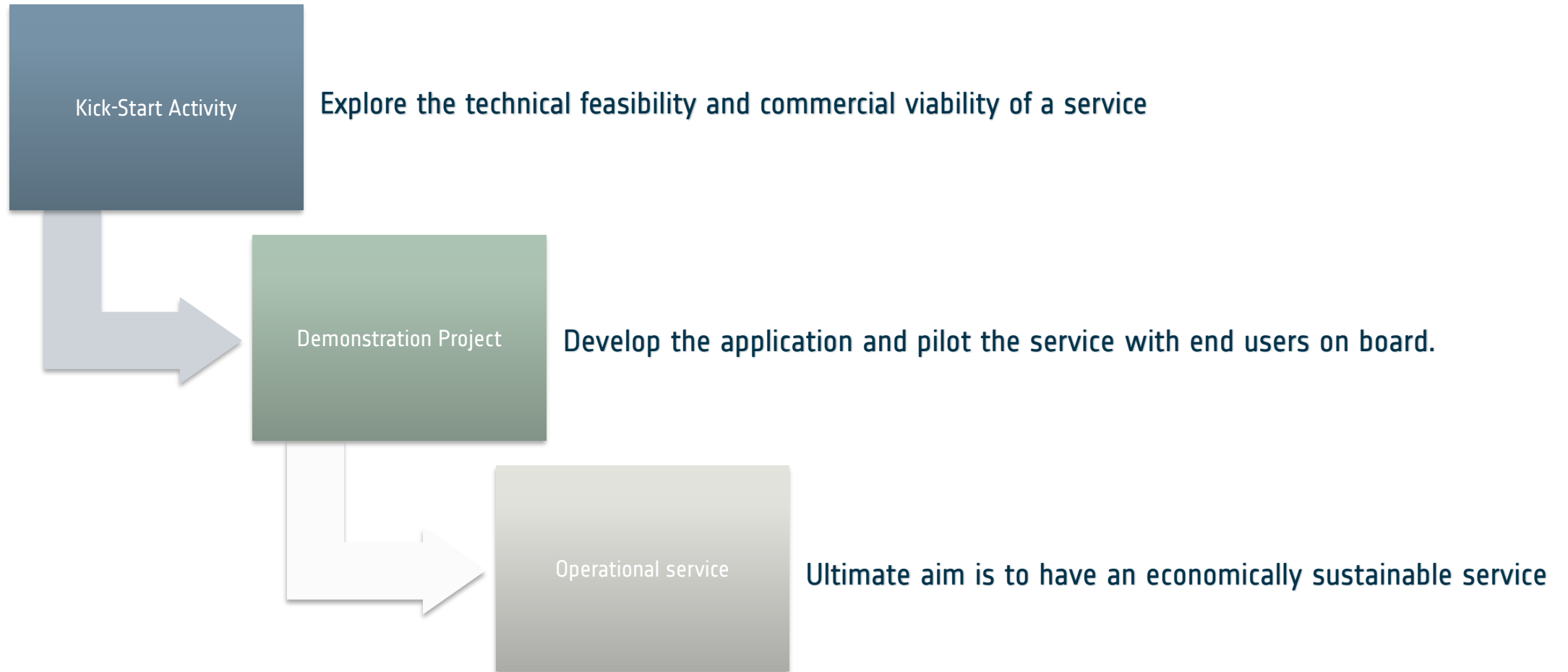
1. **Register your team** on esa-star Registration today!
<https://esastar-emr.sso.esa.int>
2. On **10th of February 2025** visit esa-star Publication and search for this opportunity to download the official competition documents.
<https://esastar-publication.sso.esa.int>
3. Use the official documents to prepare your proposal
4. Contact details of each National Delegate can be found here:
<https://business.esa.int/national-delegations-0>
5. Submit your proposal via esa-star Tendering by **18th of March 2025**.
<https://esastar.sso.esa.int>
6. Your proposal should ideally include a **Letter of Support** from the user/customer representative

Opening dates: 10th February- 18th March 2025





Overall Aim of the Kick-start Activity



Thank you for your attention: Q&A

Opening Date: 10th February 2025
Closing Date: 18th March 2025



Click here and visit
[Space supporting Environmental Claims](#)

