Communicating Sustainability – Overcoming Barriers to Implementation in the Space Industry

Company: Green Orbit Digital (https://greenorbit.space/)

Project open to: 3rd/4th year undergraduate, Final year undergraduate, and Masters students

Application closing date: September 30thth 2025

Expected duration of project: 3-6 months

Latest start date: 5th May 2025

Application link: https://forms.gle/HNpTpbJy8BYp1PX69

Organisation description

Green Orbit Digital is a sustainability-driven marketing agency focused on unlocking the potential of space technologies for a greener, more resilient future. We empower forward-thinking organisations to harness space-based insights and innovations to tackle global challenges, drive climate action, and foster sustainability. By integrating eco-conscious strategies into tailored, high-impact campaigns, we help businesses align with their sustainability goals, inspire trust, and engage key stakeholders.

We specialise in simplifying complex sustainability narratives, breaking down barriers to understanding, and fostering collaboration across industries. Our deep expertise in space marketing ensures our clients not only meet but exceed their sustainability objectives through innovative, measurable outcomes. At Green Orbit Digital, we believe space is a critical enabler of both resilience and sustainability, and through strategic communication, we can drive lasting, positive change. Together, we can create a future where innovation benefits both society and the planet.

Green Orbit Digital is supported by a wide range of strategic partners and industry organisations. These include the UK Space Agency Accelerator, the UK Earth Observation Network For Sustainability (UK-EONS), Space4Climate, the Space Communications Alliance, the IAU Centre for the Protection of the Dark and Quiet Sky from Satellite Constellation Interference (IAU CPS), the European Association of Remote Sensing Companies (EARSC), the Designers in Space Community (DiSC), and UKspace.

Project description

Current Situation:

The space industry is increasingly prioritising sustainability, recognising its potential to address global challenges like climate change and resource scarcity. However, despite the growing emphasis on sustainability, many companies within the sector struggle to effectively communicate their sustainability efforts. There is often a disconnect between the ambition of these efforts and how they are understood by key stakeholders, including policymakers, investors, and the general public. This gap results in missed opportunities for investment, slower policy adoption, and a lack of alignment between space companies and their stakeholders.

Problem/Opportunity Identified:

While sustainability is a major priority in the space sector, the communication of sustainability efforts often falls short. Companies face significant challenges in positioning sustainability as a core part of their strategy due to technological constraints, regulatory uncertainty, financial pressures, and misaligned stakeholder interests. This is compounded by the complexity of space technologies and the misconception that space exploration and environmental responsibility are incompatible.

There is a clear opportunity to bridge this communication gap by developing tailored, effective strategies that can resonate with diverse stakeholders. This project aims to explore how space companies can better position their sustainability efforts to overcome these barriers, enhancing their reputation and fostering greater engagement from key audiences.

The desired outcome is a space sector where companies are able to effectively communicate their sustainability efforts, demonstrating how space technologies can contribute to global sustainability goals. By overcoming the existing communication barriers, space companies will be able to build trust, secure investment, influence policy, and drive the adoption of more sustainable practices across the industry. The ultimate goal is to ensure that sustainability becomes a competitive advantage in the space sector, advancing both technological innovation and environmental responsibility.

What Needs to Be Done:

To achieve this, the following steps are necessary:

1. Research & Analysis: Understanding the common barriers to sustainability adoption in the space sector, and analysing current communication strategies.
2. Development of Strategic Framework: Creating a comprehensive strategic communication framework tailored to the space industry's needs.

3. Tailored Messaging: Crafting messaging strategies that resonate with stakeholders such as policymakers, investors, industry professionals, and the public.
4. Effective Communication Channels: Identifying high-impact communication channels to improve transparency and engagement.
5. Actionable Guidelines & Recommendations: Providing space companies with concrete tools to enhance their sustainability communication and drive industry-wide adoption.

The student will play a vital role in researching, analysing, and developing the strategic communication framework. Their tasks will include:

- Conducting research to identify the key barriers to sustainability adoption in the space sector, examining both current communication practices and case studies from adjacent industries (e.g., aviation, renewable energy).
- Assisting in the development of tailored messaging strategies for various stakeholders, ensuring the sustainability narrative resonates with each group.
- Evaluating communication channels to determine the most effective methods for engaging stakeholders and enhancing transparency.
- Contributing to the creation of actionable communication guidelines that can help space companies address misconceptions and better communicate their sustainability efforts.

Project Contents:

- Research & Analysis: A deep dive into the current sustainability communication practices within the space sector and the identification of key barriers to adoption.
- Best Practices from Other Industries: Analysis of successful sustainability communication strategies in adjacent sectors such as aviation and renewable energy.
- Messaging Strategy Development: Creation of stakeholder-specific messaging frameworks, designed to communicate the value of space technologies in promoting sustainability.
- Communication Guidelines: A comprehensive set of actionable guidelines for space companies, including recommendations for communication channels, content strategies, and engagement tactics.

Expected Outcomes:

The project will deliver the following outcomes:

- A strategic communication framework for space companies to effectively communicate their sustainability efforts.

- Tailored messaging strategies for key stakeholders (policymakers, investors, industry professionals, and the public).
- Actionable communication guidelines to help space companies build trust, overcome barriers, and drive greater industry adoption of sustainable practices.
- A white paper or industry report summarising the project's findings, which could contribute to shaping future policies and industry standards.

Data & Information Available to Students:

Students will have access to:

- Previous research and reports on sustainability challenges and communication practices in the space sector.
- Industry insights from Green Orbit Digital's expertise in space marketing and sustainability communication.
- Case studies from adjacent industries that can serve as benchmarks for the space sector.
- Access to industry stakeholders and the opportunity to engage with Green Orbit Digital's network for insights and collaboration.

People Available to Help Students:

- Ryan Laird, Director of Green Orbit Digital, will be the primary point of contact and mentor for students, providing expertise on sustainability communication, space marketing, and strategic messaging. Note Ryan is also a former UKSEDS exec and trustee.
- Industry stakeholders (policymakers, investors, and space professionals) with Green Orbit Digital's network may also be available for interviews or as case study resources.

Person specification

This project is suitable for students studying: Marketing, Communications, Business, Environmental Science, Space Studies, Policy, or related fields.

Skills & Experience Required:

- Strong research and analytical skills.
- Experience or interest in sustainability communication, space technologies, or marketing.
- Ability to work with stakeholders and translate complex topics into clear, engaging narratives.
- Creative thinking and an understanding of how to develop tailored messaging strategies for different audiences.

Desirable:

- A passion for sustainability and space technologies.
- An interest in strategic communications, science communication, and policy advocacy.
- A desire to make an impact on global sustainability efforts through the application of marketing and communication strategies.

This project presents an exciting opportunity for students to contribute to a meaningful initiative that will help shape the future of sustainability communication in the space sector.

Additional Information

To ensure students can access and use the required data, files, and software for the project, Green Orbit Digital will provide the following solutions:

1. Data Access

- All necessary research materials, industry reports, and case studies will be provided via secure cloud storage through Proton Drive, ensuring data privacy and accessibility for students.
- Any proprietary data that cannot be shared will be anonymised or summarised for the students, allowing them to work effectively within the project scope.

2. Software

- For project management, students may utilise our Notion workspace, which will provide a centralised space for collaboration and task tracking.
- Design work will be supported through Canva, which allows students to create visual assets for communication and reporting.
- If the project requires any commercial software, Green Orbit Digital will supply the necessary licenses or accounts for the duration of the project, ensuring compliance with software licensing agreements.

3. Communication and Collaboration Tools:

- Students will have access to Google Meet or Cal Video for virtual meetings and real-time discussions.
- We will use Proton, Notion, and Canva to streamline collaboration, facilitate data sharing, and ensure that students have all the tools they need to complete the project effectively.

By providing access to these tools and resources, we will ensure that students can work effectively on the project while complying with software licensing constraints and maximising their learning experience.