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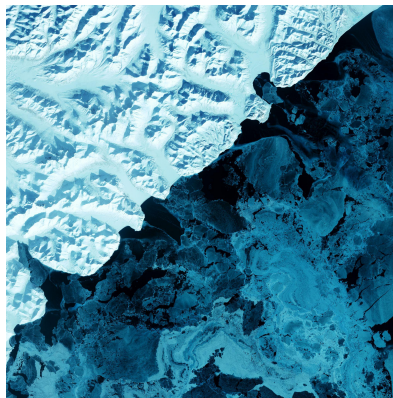
Perspective Blog - September 2022 Space Sustainability: we need to do more

Anja Sheppard

Let's talk about the elephant in the room when it comes to space sustainability. Over the last few years, that term has come to mean the use of space technology (satellites, etc) for observing the effects of climate change on Earth. Companies like [Planet](#) are built on this mission: providing data for monitoring the effects of natural disasters, drought, wildfire, logging, and more. And don't get me wrong—this is important work that helps us inform our climate models and address real problems people are facing. However, the conversation cannot stop here.

The environmental impacts of the space industry are often overlooked, especially with the potential boom of space tourism on the horizon. An [insane amount of material resources go into the construction and launch of rockets](#), from the fuel, to the specialized chemicals and metals, to electrical power for testing and development facilities. And this is just the beginning! Many space CEOs have the vision of an interconnected space economy in the years to come, with extractive mining, manufacturing, and tourism happening off-Earth. We are already facing an energy and resource crisis here on Earth, and it is imperative that we weigh our every move before expanding the boundary of our environmental impact. This starts with re-imagining every single component of the space industry supply chain: from how we source (and recycle) materials, to whose voices we listen to during mission planning, to our willingness to commit to greener technologies.

We can look to the stars for scientific and cultural revelations, but space cannot fully solve our sustainability problems here on Earth. Space exploration is an inherently unsustainable activity: we are utilizing resources from Earth to learn about other planets that (at the moment) cannot support life. These activities do benefit us: we learn more about our planet, its climate, and its history. We just have to ensure that the space industry's environmental cost is calculated, minimized, and continuously improved upon. It's time to reexamine what we mean when we say "space sustainability."



Source: United States Geological Survey

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