## Sustainability of Lunar and Cislunar Space Activities

The 5th <u>Summit for Space Sustainability</u> in New York City is quickly approaching! This milestone event will host a unique gathering of global stakeholders from government, industry, and civil society. It will feature keynotes, interactive sessions, panels, and networking designed to highlight opportunities and challenges for developing solutions for space sustainability. The event will focus on several critical themes, including reinforcing space sustainability through corporate performance, strengthening space governance, and building a sustainable cislunar space economy. In the next few months leading up to this event, Secure World Foundation will be sharing short topic previews, providing context and probing questions which will be expanded upon at the conference. This piece provides a preview of our first theme: sustainability of lunar and cislunar space activities.

Heightened recent rhetoric surrounding lunar activities has revealed the uncertain nature of cislunar governance and a progressive escalation of tensions as multiple states pursue both robotic and crewed lunar missions. Uncertainty has manifested in two prominent ways: the re-emergence of potentially mischaracterized "space race" discussions, and debates over the Artemis Accords and the Moon Agreement as potentially competing governance structures. Both of these topics will be addressed in panel discussions at the Summit, but the complexity of each topic requires a short primer.

The first topic to be addressed will be the characterization of lunar activities as a new "space race." With the United States looking to return astronauts to the Moon in 2025, India independently attempting to soft-land on the Moon, the United Arab Emirates developing a rover for delivery to the lunar surface this month, and China and Russia planning to build the International Lunar Research Station, there is no shortage of countries making plans for activities on the lunar surface. Private sector entities also play a role here as they partner with governments as well as pursue commercial activities, with several private missions soon expected to arrive on the lunar surface. While framing these independent ambitions in an adversarial light makes for flashy headlines, characterizing it as a race sidelines core questions. Simplifying the current dynamic of lunar activity and interest misframes the true nature of economic and strategic competition (and cooperation) that is inherent in the current wave of lunar development, and does so while simultaneously orienting the narrative in a historical context that might not apply. It also distracts from the technical, policy, and operational efforts needed to make lunar activities sustainable. The "It's Still Not a Lunar Space Race" panel will discuss the reality of current lunar plans (and what's actually feasible), addressing the complex, nuanced, and uncertain conditions of lunar activities.

The longstanding debate over the proper governance of activities on celestial bodies, including safety zones, coordination, interoperability, and use of resources is becoming more tangible as the tempo of lunar activities increases. The 2020 Artemis Accords were praised by some as ushering in a new era of collaborative space governance, while others saw it as directly competing with the 1979 Moon Agreement. The norms and principles espoused by these agreements will be tested as countries and companies move forward with a variety of cislunar missions, many of which will require additional national oversight and international cooperation frameworks that have yet to be negotiated. "The Artemis Accords and the Moon Agreement: Living in Harmony?" panel will discuss whether or not these two agreements are indeed in competition with each other and how they might influence future government and commercial space activities on the Moon.

As space activities expand into cislunar space, including the lunar surface, the global space community will need to figure out how to do so in a sustainable manner. The opportunity exists now to

define and implement responses to those challenges as part of building a sustainable future in lunar exploration and utilization. At the 5th Summit for Space Sustainability, we look forward to engaging with participants in building this future. This forum is designed for the continued exploration of topics like those above. Experts from around the globe will gather to ask questions, have insightful conversations, and take steps towards the long-term sustainable use of space on this and many other space sustainability topics. Learn more about the conference and register here!