

Topics (T)
Interactive Presentations (IP)

Author: Dr. Fionagh Thomson
Durham University, United Kingdom

NOT ALL THAT GLISTENS IS GOLD: OPPORTUNITIES AND CHALLENGES TO
IMPLEMENTING A VIABLE/ETHICAL SPACE SUSTAINABILITY MARK IN THE COLONIAL,
COMPETITIVE ENVIRONMENT OF NEW-SPACE.

Abstract

In June 2022, the Space Sustainability Rating (SSR) was launched in London at the 4th Summit for Space Sustainability (jointly organised by the UK Space Agency and the US-based Secure World Foundation).

The SSR is promoted as an international initiative to encourage voluntary action by satellite operators - to reduce the risk of space debris, on-orbit collisions, and ‘unsustainable’ space operations. This concept was conceived by the World Economic Forum (WEF) through their Global Future Council on Space Technologies. In 2018, the WEF announced a competitive call and chose four western-based organisations to form a consortium to design the technical and programmatic aspects: the European Space Agency, the Massachusetts Institute of Technology, the University of Texas at Austin, and the US-based BryceTech. More recently, the UK has started designing its own sustainability kitemark based around investors’ needs and includes ‘preserving’ the night sky for astronomers and star-gazing indigenous groups. In Scotland, there is nascent talk of another space sustainability mark.

In this paper, I discuss the potential future for any ‘fair-trade’ mark developed to regulate the inherently colonial environment of New-space (commercially-led) - that builds on the foundations of Old-space (military-led) - and where many earth observation applications will become dual-use (military and civil). I review the key benefits and challenges to implementing a viable and ethical space sustainability mark within the human-made ecosystem of space - that differs significantly from Earth’s living ecosystems of land, sea and air.

Finally, I ask the audience: ● will these ‘fair-trade’ criteria become a form of space greenwashing - or can the SSR, the UK kitemark and the (yet unnamed) Scottish criteria, offer realistic and pragmatic pathways towards more responsible and democratic use of LEO and GEO (for all space-faring nations)?