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SPACE FOR GREEN ECONOMY, COOPERATION AND SUSTAINABILITY

Abstract

Today's space industry is intrinsically linked to human activities that we might define as strictly terrestrial: from agriculture to the energy sector, from utilities to infrastructures. Best practices related to the sustainability of these sectors have developed in recent years, with satellite applications and data from space playing a leading role and helping to create a green revolution in various sectors. According to the Global Future Council on Space, about 50Space technologies and Earth Observation can be a crucial asset in monitoring the Earth's situation, primarily if implemented and applied on Earth for research and commercial purposes. Therefore, the method we intend to be used in this paper is to compare international governmental space initiatives and private satellite constellations that act or could act on the sustainable development of activities on Earth. The aim is to analyse the development in terms of sustainability and green economy in the Earth observation market, in order to understand the economic and commercial aspects and what impact this could have on companies and the space industry. It is also intended, in line with international objectives, to identify space activities that could be encouraged for greater sustainability on Earth. In conclusion the paper will focus on the effects of the green economy on space applications, technologies, and materials, and how these affect the market in the industries where they are used. As a result, the comparison could bring to light different experiences in the use and commercialization of space technologies applied to terrestrial activities for the monitoring of infrastructures, fields, specific areas, or natural events that could be implemented and monitored thanks to space activities.