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DEVELOPMENT (D3)

Systems and Infrastructures to Implement Sustainable Space Development and Settlement - Technologies  
(2B)

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A CLASSIFICATION SYSTEM FOR SUSTAINABLE HUMAN SPACEFLIGHT (WORKING TITLE)

**Abstract**

A clear definition of what is sustainable is the key to meet the climate and energy targets and to reach the green objectives. In this paper we discuss the creation of a common classification system for sustainable economic activities for human spaceflight. The EU taxonomy provides companies, investors and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable for the built environment on Earth. Recent best practices and trends from space sector and the building construction sector are discussed through a literature review. LEED -Leadership in Energy and Environmental Design- is the most widely used green building rating system for the built environment available for all building types. LEED provides a framework for healthy, efficient, and cost-saving green buildings. We discuss the 5 categories in LEED certification for certification of buildings categorized in five areas: Sustainable sites; Water efficiency; Energy and atmosphere; Materials and resources; Indoor environmental quality. A novel system for technology transfer is proposed.