

SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FAR FUTURE (D4)
Contribution of Space Activities to Solving Global Societal Challenges (4)

Author: Dr. Giuseppe Reibaldi
International Academy of Astronautics (IAA), France, giuseppe.reibaldi@iaaemail.org

Mr. John C. Mankins
ARTEMIS Innovation Management Solutions, LLC, United States, john.c.mankins@artemisinnovation.com

SPACE SOLAR POWER CONTRIBUTION TO SOLVING WORLD ENERGY CHALLENGES

Abstract

The world is facing serious problems with regards to the availability of electrical power, considering the rate of the world population growth and the related demand increase on the one hand, and the crisis of the nuclear power system and depletion of oil supplies on the other hand.

This paper will present the main results of the International Academy of Astronautics (IAA) Study on Space Solar Power published in 2011 and how this technology can alleviate the worldwide energy challenge. It will also introduce the recently set up IAA Global Space Solar Power Working Group (GSSP WG), whose main aim is to facilitate and accelerate the development of key Space Solar Power technologies in future space systems and the possible implementation of Solar Power Satellites. The Work Plan of the GSSP WG for 2013-2014 will be presented.