Space Economy

OECD

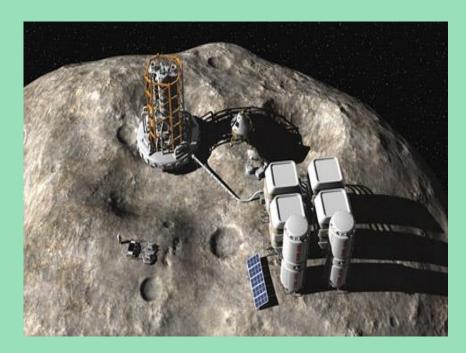


The Space Economy is defined by OECD (Organization for **Economic Co-operation and** Development) as the full range of activities and the use of resources that create value and benefits to human beings in the of exploring, course researching, understanding, managing, and utilizing space.

Tapping Space-Based Clean Energy Sources







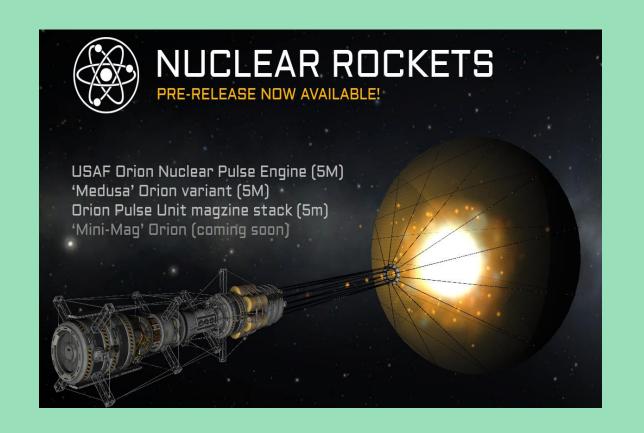
Mining Asteroids For Useful Raw Materials

Asteroid mining is defined as: "The exploitation of raw materials from asteroids and other minor planets, including near-Earth objects.



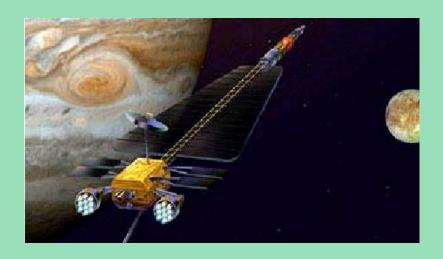
Upcycling /Sequestering Hazardous But Valuable
Debris Currently In Space

Since space has far-reaching applications, all countries should be supported in accessing the benefits of space-based technology that facilitates sustainable development.

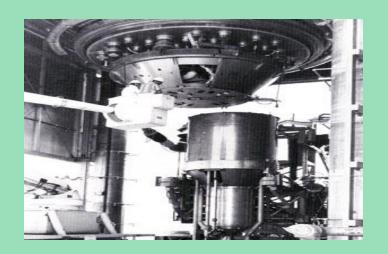




Tapping Sources Of Water Already In Space, To Decouple
Into Oxygen And Hydrogen For Space Fuels And
Oxidizers, And To Provide Radiation Shielding Mass



NASA's Prometheus

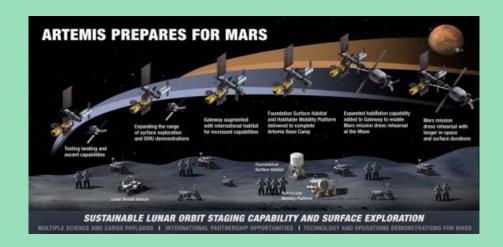


Using The Low-Gravity, Low-Temperature And Other Properties Of Space For Many Activities, Including Manufacturing And Research



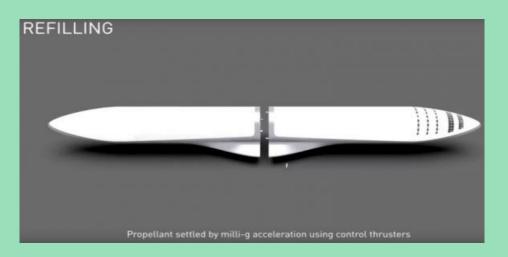
ICON illustration of a conceptual lunar base with 3D printed infrastructure, including landing pads and habitats.

In 2003, NASA's Prometheus program was established to develop technology and conduct advanced studies in the areas of radioisotope power system and nuclear power and propulsion. One intended outcome for this work is the conception of the first reactor powered spacecraft.



The Space Agency Wants To Return To
The Moon In The 2020s (NASA)

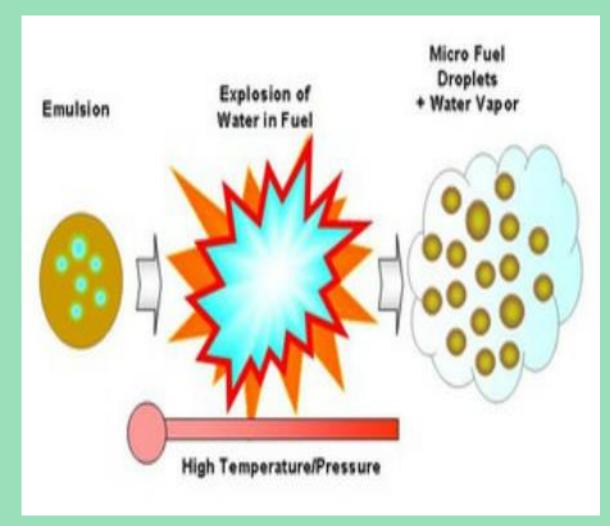
NASA has revealed plans to set up an astronaut base on the moon as part of its Artemis mission to return to the lunar surface. The US space agency has set out plans to return to the moon by 2024 and wants to build 'Artemis Base Camp' to allow humans to live on the desolate surface.



Fuel Depots (Essentially Gas Stations)

In An Appropriate Orbit

An orbital propellant depot is a cache of propellant that is placed in orbit around Earth or another body to allow spacecraft or the transfer stage of the spacecraft to be fueled in space.



Process of Fuel from Water

Unlike carbon-based fossil fuels, which generate carbon dioxide as a byproduct, hydrogen gas is a zero-emission fuel. When it burns, all that's left behind is water.

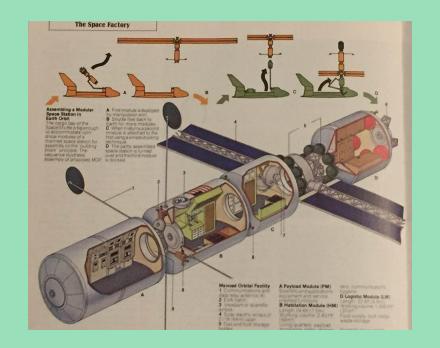


A Shuttle For Travel To The Lunar Surface

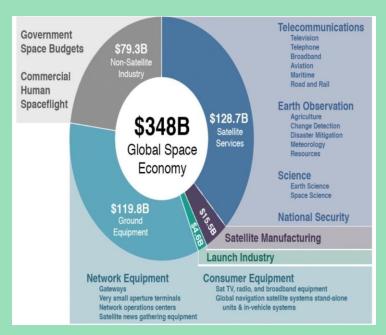


NASA Lunar Outpost concepts

Even in the earliest stages of lunar tourism and settlement, we'll need a passenger bus to shuttle people between the facilities and the spacecraft.







Orbital Facility Complex

Global Space Economy

A space habitat (also called a space colony, space settlement, orbital habitat, orbital settlement or orbital colony) is more than a bare-bones space station in that it is intended as a permanent settlement or green habitat rather than as a simple way-station or other specialized facility.

SPACE HABITAT

