

# Habitation Institute

---





## What is the Habitation Institute?

The Habitation Institute (HI) is a multi-institutional scientific partnership focused on developing and testing new technologies to support human activities within isolated or extreme environments on Earth and in space.

- For space, it is the set of technologies needed to keep astronauts healthy, safe, comfortable and productive during long space missions and in permanent stations such as the International Space Station and future Lunar/Martian colonies.
- It is *also* the set of technologies for *terrestrial applications* in closed, isolated or extreme environments. Such applications include the reduction of carbon dioxide emissions (i.e., carbon dioxide sequestration) for industry; base camp sustainability for the military; food and water security and processing for industry, rural areas and third world countries.
- Such technologies may also help foster energy conservation and contribute to the design and operation of “green buildings“.



Facilitate the development and execution of globally competitive research and technology development activities for advanced human habitation using academic, government, and industry partnerships.

Generate results that will significantly reduce life-cycle costs, improve operational performance, promote self-sufficiency, and minimize expenditure of resources for habitats on earth and in space and promote the development of commercially viable products.



- Develop innovative R&D plans for government and commercial applications
- Assemble partners and resources to develop research and technology solutions
- Build collaborative teams to conduct research and develop technology
- Access early-stage commercialization support (in other words, if there is a potential commercial application, engage the commercial market early on)
- Engage students in the R&D process
- Develop a management strategy that addresses the "gap" between valuable research results and the technological needs of customers, such as NASA's Exploration Program