

# The Next Giant Leap – Leveraging Lunar Assets for Sustainable Pathways to Space

*November 13, 2014*

## Working Group 1: Opportunities/Goals for Leveraging Lunar Assets



# Approach

Why?

What?

How?

When?

Who?

# Why?

*Develop and Settle Space  
to Advance Humanity*



# Why?

*Develop and Settle Space  
to Advance Humanity*

*Use Space to Benefit  
Life on Earth*

*Make Humanity a Multi-  
Planetary Species*



# Why?

*Develop and Settle Space  
to Advance Humanity*

*Use Space to Benefit  
Life on Earth*

- *Strategic Resources*
- *Economic Expansion*
- *Improved Quality of Life*

*Make Humanity a Multi-  
Planetary Species*

- *Survival of Mankind*
- *Propagation of Life*
- *Promotion of Human Evolution*

# What?

*Affordable  
Transportation*

*Power, Comm  
& Nav*

*Habitation and  
Life Support*

*Analogs &  
Precursors*

*Cross  
Cutting*

*ISRU, Additive  
Man., Robotics*

*Regulatory  
& Legal*

*Earth  
Observation*

*Social &  
Economic*

# How?

## *Increased Human Capital & Dollars*

### *Market Development Tools*

- *Public/Private Partnerships*
- *Prizes*
- *Gov. Anchor Tenancy*
- *Insurance*
- *Indemnification*
- *Tax incentives*

### *Increase Stakeholders*

- *Massive Participation*
- *Crowding*
- *Effective Public Outreach*
- *Political Education and Advocacy*
- *STEM*

### *Dual Use Systems*

- *Sustainable Energy*
- *Advanced Life Support*
- *ISRU*
- *Add. Manu.*
- *Robotics*
- *Sensible Regulatory*

# When?

***Now!***

*"Think Big,  
Start Small...  
but Start"*



# Who?

?

*"If not you, who?"*



# Some Initial Activity Options

<b>Activity</b>	<b>Who?</b>
<i>Get a NASA endorsement for PISCES and pursue additional SAA's</i>	Rasky, Pittman,
<i>Advocate for a firm launch date and funding for the Lunar Prospector Mission and RESOLVE</i>	?
<i>Advocate for NASA to purchase payloads to the lunar surface to support ISRU, robotics and additive manufacturing (Phase II to ILDD).</i>	?
<i>Develop an advocacy package for lunar precursor missions and terrestrial analogs</i>	?
<i>Approach Google about follow-on initiatives to the Google Lunar Xprize</i>	?