



**NASA's**  
**BREAK**  
**THE ICE**  
**LUNAR CHALLENGE**



1  
00:00:01,226 --> 00:00:08,901

Our Moon — the next step in human exploration beyond our Earth.

2  
00:00:08,901 --> 00:00:15,609

In order to live there sustainably, we'll need habitats, water, fuel and so much more.

3  
00:00:15,609 --> 00:00:18,601

But we can't bring everything with us when we go.

4  
00:00:18,601 --> 00:00:23,923

We need a way to collect valuable resources already available on the Moon.

5  
00:00:23,923 --> 00:00:28,621

The Moon's regolith — or soil — can be used to construct habitats.

6  
00:00:28,621 --> 00:00:34,940

Water hidden under the surface can be harvested for human use and for future propellant needs.

7  
00:00:34,940 --> 00:00:40,239

But responsibly gathering these resources far away from our home planet will require

8  
00:00:40,239 --> 00:00:43,344

technologies that aren't currently available.

9  
00:00:43,344 --> 00:00:48,940

And with frigid temperatures, low gravity, and challenging shipping conditions, traditional

10  
00:00:48,940 --> 00:00:54,514

Earth-based excavation technologies aren't going to cut it.

11

00:00:54,514 --> 00:00:56,780

That's where you come in.

12

00:00:56,780 --> 00:01:02,819

NASA's Break the Ice Lunar Challenge is looking to industry, students, small businesses

13

00:01:02,819 --> 00:01:08,479

and garage inventors to develop innovative ways to excavate the Moon's icy regolith

14

00:01:08,479 --> 00:01:12,124

and deliver water in extreme lunar conditions.

15

00:01:12,124 --> 00:01:18,290

These technologies and resources will be critical as we learn to live off-world.

16

00:01:18,290 --> 00:01:24,971

And your ideas could help us get there, extending sustainable human exploration to the Moon,