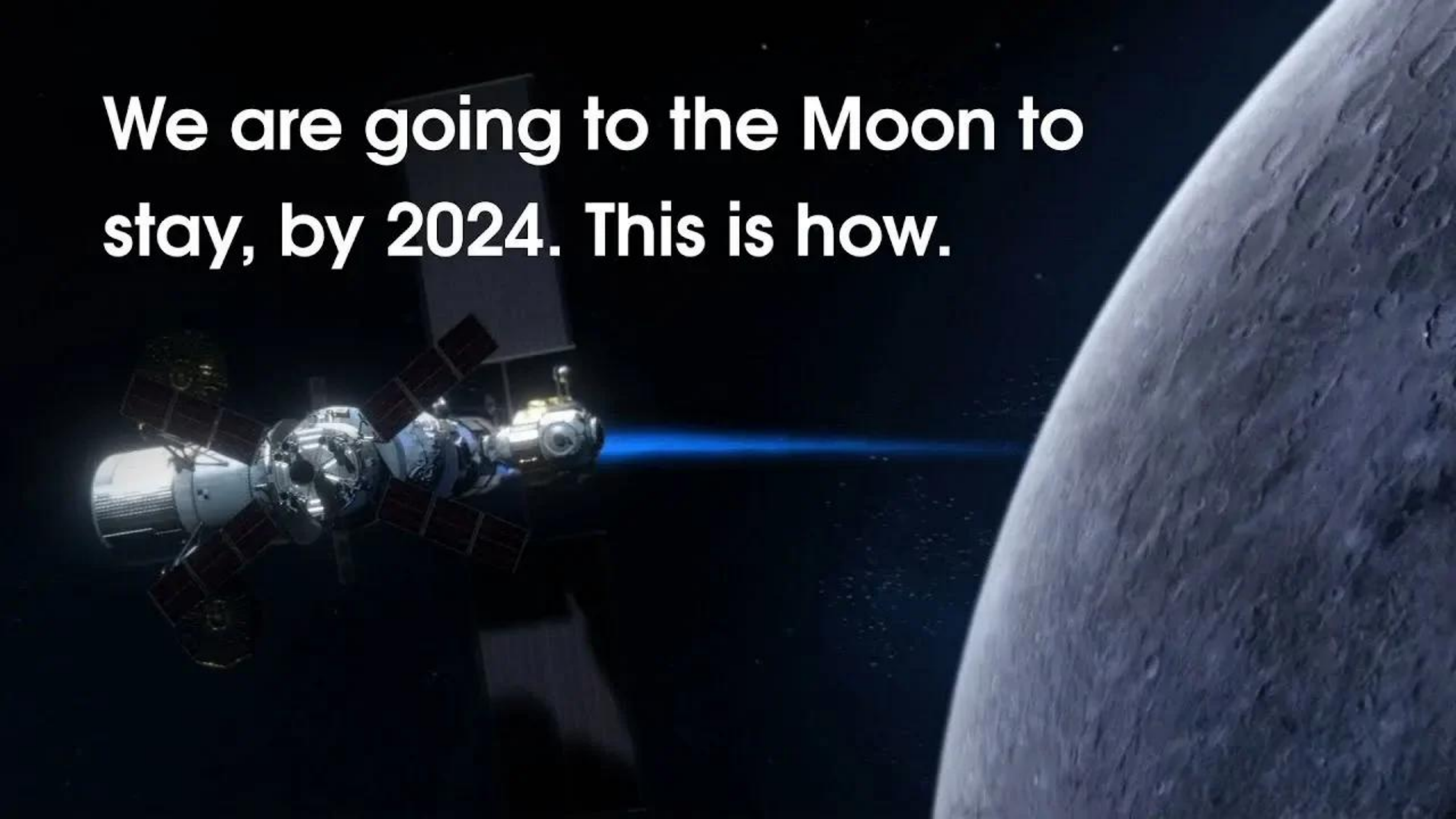
We are going to the Moon to stay, by 2024. This is how.

1
00:00:02,360 --> 00:00:05,260
- [Narrator] 50 years ago we
pioneered a path to the moon.

2
00:00:06,201 --> 00:00:09,820
The trail we blazed cut through
the fictions of science,

3
00:00:09,820 --> 00:00:11,723
and showed us all what was possible.

4
00:00:14,180 --> 00:00:17,113
Today our calling to
explore is even greater.

5
00:00:18,340 --> 00:00:21,180
To go farther, we must be
able to sustain missions

6
00:00:21,180 --> 00:00:23,700
of greater distance and duration.

7
00:00:23,700 --> 00:00:27,047
We must use the resources
we find at our destinations,

8
00:00:27,047 --> 00:00:32,047
we must overcome radiation,
isolation, gravity,

9
00:00:33,120 --> 00:00:36,160
and extreme environments
like never before.

10
00:00:36,160 --> 00:00:38,130
These are the challenges we face

11
00:00:38,130 --> 00:00:39,973
to push the bounds of humanity.

12
00:00:41,650 --> 00:00:46,630
We're going to the moon to stay, by 2024.

13
00:00:46,630 --> 00:00:48,480
And this is how.

14
00:00:48,480 --> 00:00:51,360
- This all starts with
the ability to get larger,

15
00:00:51,360 --> 00:00:55,790
heavier payloads off planet,
and beyond Earth's gravity.

16
00:00:55,790 --> 00:00:58,700
- For this, we designed
an entirely new rocket.

17
00:00:58,700 --> 00:01:00,050
- The Space Launch System.

18
00:01:00,050 --> 00:01:03,020
SLS will be the most powerful
rocket ever developed.

19
00:01:03,020 --> 00:01:04,890
- [Female] And with
components and production

20
00:01:04,890 --> 00:01:06,040
- And more in testing,

21
00:01:06,040 --> 00:01:08,640
- This system is capable
of being the catalyst

22
00:01:08,640 --> 00:01:10,780
for deep space missions.

23
00:01:10,780 --> 00:01:13,270
- [Female] We need a capsule
that can support humans

24
00:01:13,270 --> 00:01:15,930
from launch, through deep space,

25
00:01:15,930 --> 00:01:18,950
and return safely back to earth.

26
00:01:18,950 --> 00:01:21,020
- For this, we've built Orion.

27
00:01:21,020 --> 00:01:23,823
- This is NASA's next
generation human space capsule.

28
00:01:25,030 --> 00:01:27,190
- Using data from lunar orbiters

29
00:01:27,190 --> 00:01:30,840
that continue to reveal the
moon's hazards and resources,

30
00:01:30,840 --> 00:01:33,130
we're currently developing
an entirely new approach

31
00:01:33,130 --> 00:01:35,610
to landing and operating on the moon.

32
00:01:35,610 --> 00:01:37,150
- Using our commercial partners

33
00:01:37,150 --> 00:01:40,660
to deliver science instruments
and robotics to the surface,

34
00:01:40,660 --> 00:01:44,200
we are paving the way for
human missions in 2024.

35
00:01:44,200 --> 00:01:47,950
- [Narrator] Our charge is
to go quickly, and stay.

36
00:01:47,950 --> 00:01:50,670
To press our collective efforts forward,

37
00:01:50,670 --> 00:01:53,810
with a fervor that will
see us return to the moon

38
00:01:53,810 --> 00:01:57,103
in a manner that is wholly
different than 50 years ago.

39
00:01:57,960 --> 00:02:00,000
- We want lunar lander's
that are reusable,

40
00:02:00,000 --> 00:02:02,950
that can land anywhere
on the lunar surface.

41
00:02:02,950 --> 00:02:05,530
The simplest way to do so
is to give them a platform,

42
00:02:05,530 --> 00:02:08,570
in orbit, around the moon,
from which to transition.

43
00:02:08,570 --> 00:02:11,780
- An orbiting platform to
host deep space experiments,

44

00:02:11,780 --> 00:02:13,870
and be a way-point for human capsules.

45
00:02:13,870 --> 00:02:16,480
We call this lunar outpost, Gateway.

46
00:02:16,480 --> 00:02:17,650
- [Female] The beauty of the Gateway

47
00:02:17,650 --> 00:02:20,130
is that it can be moved between orbits.

48
00:02:20,130 --> 00:02:20,963
- [Male Narrator] It will balance

49
00:02:20,963 --> 00:02:22,745
between the earth and moon's gravity,

50
00:02:22,745 --> 00:02:24,464
[Female Narrator] In a position
that is ideal for launching

51
00:02:24,464 --> 00:02:27,560
even deeper space missions.

52
00:02:27,560 --> 00:02:29,510
- In 2009, we learned that the moon

53
00:02:29,510 --> 00:02:32,820
contains millions of tons of water ice.

54
00:02:32,820 --> 00:02:35,360
- This ice could be extracted
and purified for water,

55
00:02:35,360 --> 00:02:36,832
and be separated into
oxygen for breathing,

56
00:02:36,832 --> 00:02:38,610
or hydrogen for rocket fuel.

57
00:02:38,610 --> 00:02:40,480
- The moon is quite uniquely suited

58
00:02:40,480 --> 00:02:44,753
to prepare us and propel
us to Mars and beyond.

59
00:02:46,210 --> 00:02:47,970
- This is what we're building.

60
00:02:47,970 --> 00:02:49,720
- This is what we're training for.

61
00:02:49,720 --> 00:02:52,460
- This we can replicate
throughout the solar system.

62
00:02:52,460 --> 00:02:55,263
- This is the next chapter
of human space exploration.

63
00:02:56,330 --> 00:02:58,150
- [Narrator] Humans are
the most fragile element

64
00:02:58,150 --> 00:02:59,880
of this entire endeavor,

65
00:02:59,880 --> 00:03:02,340
and yet we go for humanity.

66
00:03:02,340 --> 00:03:05,210
They go to the moon and on
to Mars to seek knowledge

67

00:03:05,210 --> 00:03:06,650
and understanding,

68
00:03:06,650 --> 00:03:08,460
and to share it with all.

69
00:03:08,460 --> 00:03:11,670
We go knowing our efforts
will create opportunities

70
00:03:11,670 --> 00:03:13,210
that cannot be foreseen.

71
00:03:13,210 --> 00:03:15,590
We go because we are destined to explore

72
00:03:15,590 --> 00:03:17,370
and see it with our own eyes.

73
00:03:17,370 --> 00:03:19,690
We turn towards the moon now,

74
00:03:19,690 --> 00:03:23,210
not as a conclusion, but as preparation.

75
00:03:23,210 --> 00:03:26,400
As a checkpoint toward
all that lies beyond.

76
00:03:26,400 --> 00:03:29,230
Our greatest adventures
remain ahead of us.

77
00:03:29,230 --> 00:03:31,590
We are going.

78
00:03:31,590 --> 00:03:32,660
- We're going.

79
00:03:32,660 --> 00:03:34,185
- We are going.

80
00:03:34,185 --> 00:03:35,766
[Rocket engine blast]