

We're building a Gateway to the Moon.

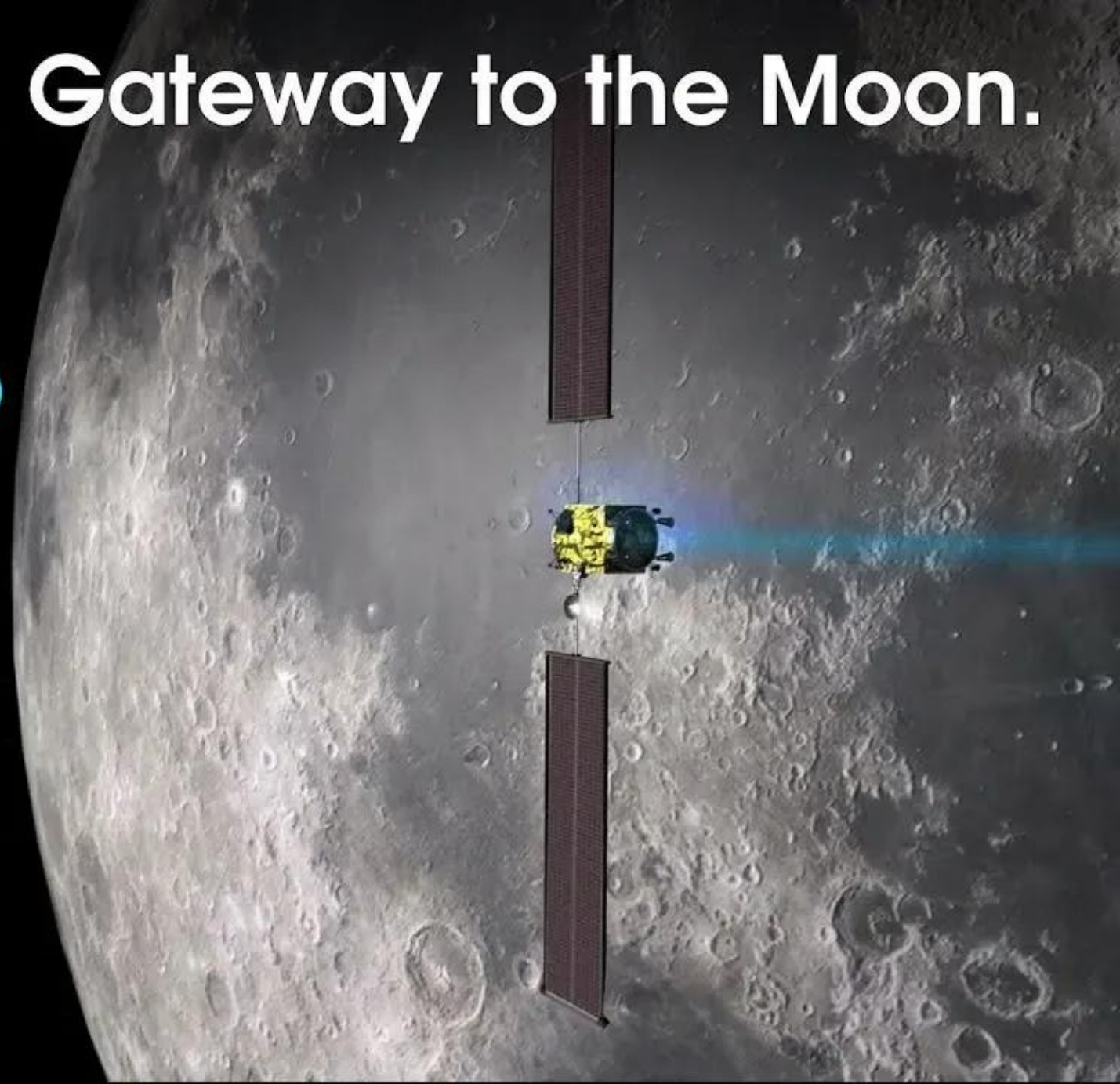
**Introducing a
new partnership**

to develop its

first element:

power and

propulsion.



1
00:00:02,202 --> 00:00:04,904
We are going to the Moon to inspire the next

2
00:00:04,971 --> 00:00:06,005
generation...

3
00:00:06,072 --> 00:00:07,874
to advance our
understanding of the

4
00:00:07,941 --> 00:00:10,643
universe so that we can
share the benefits with

5
00:00:10,710 --> 00:00:12,545
all, here and now.

6
00:00:12,545 --> 00:00:15,515
We are going to use
partners who see the

7
00:00:15,582 --> 00:00:18,251
critical roles they play
as nothing short of

8
00:00:18,318 --> 00:00:20,019
advancing the
cause of humanity.

9
00:00:20,086 --> 00:00:22,088
Today we take the next
step in the Artemis

10
00:00:22,155 --> 00:00:25,959
program towards our
Moon2024 objective with a

11
00:00:26,025 --> 00:00:28,661
partnership that is

the first of its kind!

12

00:00:28,728 --> 00:00:31,664

MAXAR Technologies will
launch and demonstrate the

13

00:00:31,731 --> 00:00:34,634

foundational piece of
GATEWAY, the Power &

14

00:00:34,701 --> 00:00:35,568

Propulsion Element.

15

00:00:35,635 --> 00:00:37,537

We believe in the
need to accelerate the

16

00:00:37,604 --> 00:00:39,706

advancements of science,
technology and human

17

00:00:39,773 --> 00:00:40,373

exploration.

18

00:00:40,440 --> 00:00:43,543

The GATEWAY is our lunar
orbiting station and it is

19

00:00:43,610 --> 00:00:45,845

a critical piece of
<i><u>sustaining</i></u> our presence on

20

00:00:45,912 --> 00:00:46,513

the Moon.

21

00:00:46,579 --> 00:00:48,715

As a hub for science,
technology and human

22

00:00:48,782 --> 00:00:51,551

travel the Gateway will
allow us to reach areas of

23

00:00:51,618 --> 00:00:53,853

the Moon that have never
been accessible before.

24

00:00:53,920 --> 00:00:56,156

The GATEWAY will be
built in two phases.

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00:00:56,222 --> 00:00:58,391

The first is a
minimalistic design that

26

00:00:58,458 --> 00:01:01,194

will prepare the way for
human landings by 2024.

27

00:01:01,261 --> 00:01:04,898

The second phase will see
the addition of modules

28

00:01:04,964 --> 00:01:07,801

that expand the habitation
and long-term science

29

00:01:07,867 --> 00:01:10,270

capabilities by 2028,
thus enabling sustained

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00:01:10,336 --> 00:01:12,005

missions to the Moon.

31

00:01:12,105 --> 00:01:15,074

The initial element of the
Gateway, and the focus of

32

00:01:15,141 --> 00:01:17,477

this partnership, is
the Power & Propulsion

33

00:01:17,544 --> 00:01:19,913

Element, or PPE

as we call it.

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00:01:19,979 --> 00:01:22,749

This element will be the
source of Thrust, Power,

35

00:01:22,816 --> 00:01:26,352

Communications and be the
framework upon which all

36

00:01:26,419 --> 00:01:28,221

other modules are added.

37

00:01:28,288 --> 00:01:31,024

The unique nature of this
partnership allows us to

38

00:01:31,090 --> 00:01:32,625

accelerate our
lunar return!

39

00:01:32,692 --> 00:01:35,829

Together we are poised
to meet a launch date of

40

00:01:35,895 --> 00:01:37,797

2022.

41

00:01:37,864 --> 00:01:40,667

Initially the PPE will
be owned and operated in

42

00:01:40,733 --> 00:01:43,837

orbit around the Moon by
our commercial partner.

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00:01:43,903 --> 00:01:46,172

NASA will take delivery
of the element after a

44

00:01:46,239 --> 00:01:48,241

successful
demonstration.

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00:01:48,308 --> 00:01:51,744

The systems developed here
will drive down the costs

46

00:01:51,811 --> 00:01:54,214

of future lunar
exploration and enable

47

00:01:54,280 --> 00:01:56,850

sustained missions
on the surface.

48

00:01:56,916 --> 00:01:59,219

It will also demonstrate
what is possible for

49

00:01:59,285 --> 00:02:00,753

future missions to Mars!

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00:02:01,488 --> 00:02:03,056

One such example of this
focused development is the

51

00:02:03,122 --> 00:02:06,025

advancement of a proven
technology with the PPE's

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00:02:06,092 --> 00:02:06,693

engine...

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00:02:06,759 --> 00:02:08,394

a Solar Electric
Propulsion thruster.

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00:02:08,461 --> 00:02:11,464

These thrusters were
pioneered in the 1960's

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00:02:11,531 --> 00:02:13,600

and have proven to be
incredibly efficient and

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00:02:13,666 --> 00:02:16,269

reliable, with hundreds
of thousands of hours of

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00:02:16,336 --> 00:02:18,371

successful space
flight operations.

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00:02:18,371 --> 00:02:20,440

Specifically, SEP's are
known for their fine

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00:02:20,507 --> 00:02:23,009

control of spacecraft due
to their low thrust, their

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00:02:23,076 --> 00:02:25,078

ability to fire
continuously for years at

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00:02:25,144 --> 00:02:28,147

a time and their ability
to allow a craft to stop,

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00:02:28,214 --> 00:02:30,483

start, and change
directions to visit

63

00:02:30,550 --> 00:02:31,251
multiple destinations.

64

00:02:31,317 --> 00:02:34,787

This partnership calls for
the demonstration of a new

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00:02:34,854 --> 00:02:37,524

electric propulsion system
on Gateway's PPE using

66

00:02:37,590 --> 00:02:39,192

advanced Hall
Thruster Technology!

67

00:02:39,259 --> 00:02:42,228

The Gateway PPE will
provide 3 times the power

68

00:02:42,295 --> 00:02:45,265

of current Solar Electric
Propulsion systems!

69

00:02:45,265 --> 00:02:47,333

Our return to the
Moon is now well underway.

70

00:02:47,400 --> 00:02:51,971

MAXAR Technologies is now
tasked with bringing their

71

00:02:52,038 --> 00:02:55,542

unique Power Propulsion Element design to life, launching it

72

00:02:55,608 --> 00:02:57,810

into orbit around the Moon and
demonstrating it's

73

00:02:57,877 --> 00:02:59,178

capabilities to NASA.

74

00:02:59,245 --> 00:03:03,750

Their success will put in
to place the first element

75

00:03:03,816 --> 00:03:07,020

of our sustainable
return to the Moon.

76

00:03:07,020 --> 00:03:11,124

We are proud to welcome
them to our mission.

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00:03:11,124 --> 00:03:12,926

Together, we are going.

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00:03:13,192 --> 00:03:15,328

For more information on
the Artemis program and

79

00:03:15,395 --> 00:03:18,164

our plans to land the next
man and the first woman on