

Billionaires plan asteroid mining

Google executives Larry Page and Eric Schmidt and filmmaker James Cameron are among those bankrolling a venture to survey and extract precious metals and rare minerals from asteroids that orbit near Earth, the company said on Tuesday. Planetary Resources will focus on developing and selling extremely low-cost robotic spacecraft for surveying missions. A demonstration mission in orbit around Earth will be launched in two years, said co-founders Peter Diamandis and Eric Anderson.

Its first customers could be science agencies, like NASA, and private research institutes. Within 10 years, the company plans to tap some of the thousands of asteroids that pass relatively close to Earth and extract their raw materials. In addition to mining for platinum and other precious metals, they will tap asteroids' water to supply orbiting fuel depots, which could be used by NASA and others for robotic and



human space missions.

The real payoff, which is decades away, will come from mining asteroids for platinum group metals and rare minerals. "Looking to space, everything we hold of value on Earth -- metals, minerals, energy, real estate, water -- is in near-infinite quantities. The company mission is to identify and access those resources and figure out how to make them available where they are needed," he said.

Diamandis and Anderson declined to discuss how much money has been raised for the venture so far. In addition to Page, Schmidt and Cameron, Planetary Resources investors include former Microsoft chief software architect Charles Simonyi, a two-time visitor to the International Space Station, Google founding director K Ram Shriram and Ross Perot Jr.

Planetary Resources declined to discuss specifics about how and when asteroid mining would begin. A 30-meter long asteroid can hold platinum worth \$25 billion to \$50 billion, Diamandis said.

The company's first step is to develop technologies to cut the cost of deep-space robotic probes to one-tenth to one-hundredth the cost of current space missions, which run hundreds of millions of dollars, Diamandis said. Among the targeted technologies is optical laser communications, which would eliminate the need for large radio antennas aboard spacecraft. *Reuters*