

## **Asteroid Mining**

to become the next trillion dollar industry

Many may think that space programs are an overcome cold war relict, will soon be proven wrong.

Beside of war, excuse me, defense related programs or Richard Branson's luxury tourism concepts, there is a way far more sophisticated program already ongoing.



**Extraterrestrial exploration** is the NEW SPACE RACE that is about to "take off" in a big way! Why is it so interesting? Because yet China controls 97% of rare earths on Earth, but NOT YET in outer space.

The center scope of asteroid mining is literally the digging into asteroids to extract <u>rare earths</u>, ores and other materials.

Thanks to developments in low-cost computing, cheaper rockets, and advanced robotics science fiction stuff, like the smacking Armageddon movie in 1998 where a team lands on an asteroid on a collision course with Earth, becomes now reality.

Asteroids are leftovers since the creation of our solar system, mostly orbiting around sun in the asteroid belt between Jupiter and Mars. And thousands of these asteroids are crossing our solar system near earth every year. Approximately 1,500 of them are crossing earth orbit for more than one year, even more for less than a year.

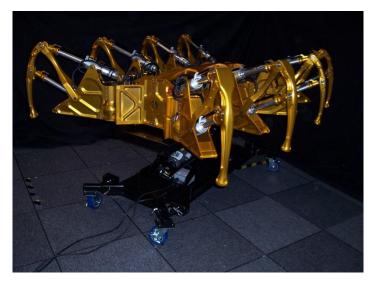


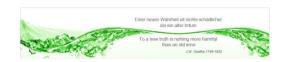
Those NEA's (Near Earth Asteroids) are filthy rich on mineral resources like rare earth's etc. A rock of the size of a football stadium assumingly contains more platinum than ever mined in world history. Hence private industry and governments are eager to extract wide ranges of resources from these NEA's. Imagine how much this stuff is worth. According CNN already little ones, the size of larger Villa, may contain resources worth 100 billion US\$. Multiplied

with the number of easy to access rocks and considering that we may tap only 10% of it, we could gather about 15 trillion US\$ which is the total value of the whole US Economy in 2011(World Rank '1) or 5 times the German Economy (World Rank #4).

The distance they cross is less to little more than Moon. But due to their light gravity, spacecrafts can land and take off easily. NASA wants an unmanned mission to launch in 2016 and land on an asteroid and return by 2023 loaded with resource samples. NASA is going to use <a href="mailto:spidernaut">spidernaut</a>, a nuclear powered robot with remote reprogrammable chips, and the mission is called OSIRIS-REx.

But that's not all. NASA is casting a wide net in the search for valuable space rocks and has asked amateur stargazers to help find even more near-earth asteroids. And it's not just the United States and Russia. Indeed, China, India and Japan are also funding major programs.





## INVESTORS – LOOK OUT:

## PLANETARY RESOURCES TM It's a cutting edge tech firm

The firm has a solid plan on a "mission" to mine asteroids beginning by making and selling very low-cost robotic spacecraft for survey missions. They expect their demo craft in earth orbit within two years.

The phase to find the most valuable spots to drill will take between 5 to 10 years.

Finally, they will develop the most efficient capabilities to deliver these resources – everything from water to platinum – directly to both space-based and Earth-bound customers.

Planetary Resources, is not only backed with tons of money; it also benefits from a team of top-tier leaders. Not just the standard scientists, astronauts, and entrepreneurs you might expect, also a group of billionaires who know firsthand how much focus and energy it takes to succeed. People with a track record for creating wealth – and true visionaries, People who addressed their engagement for the long haul, like:

<u>Eric Anderson</u> and <u>Peter Diamandis</u>, co-founder and co-chairman of Planetary Resources. <u>Larry Page and Eric Schmidt</u>, two Google senior executives.

Charles Simonyi, formerly of Microsoft Corp. and founder of Simonyi Centre

Ross Perot, Jr., son of the high-tech leader who ran for president;

James Cameron, film director, producer, editor, screenwriter (e.g. AVATAR).

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