

Power to Mars (by Richard Adams for Spacecom)

There's a new viable option for generating electricity on Mars that is neither solar PV nor nuclear power.

It is Ion Harvesting Technology and designed to convert the abundant supply of electrically-charged ions native to the Martian atmosphere into useable electricity, day and night.

Benjie Balsler, the CEO of Ion Power Group explains it this way. *"Production of electricity on Mars, day and night, can be accomplished by simply elevating Ion Power Group's carbon nanofiber into the Martian atmosphere. The enabling innovation is our nanofiber that is exceptionally effective at harvesting electricity from atmospheric ions."*

Ion Power Group's patented technology is slated to produce electricity not only on Mars, but on up to 10 planets and moons in the solar system possessing an atmosphere.

FORBES uses the word 'elegant' when describing Ion Harvesting Technology. *"... Ion's (Ion Power Group's) solution seems more elegant than – or at least a more elegant companion to – the Kilopower nuclear reactors currently being championed by NASA."*

"Ion Power Group's Ion Harvesting Technology has successfully achieved Technology Readiness Level 3 as defined by NASA in field tests on Earth, and will prove even more effective at producing electricity in Mars's ion-rich atmosphere," says Research Leader, Clint McCowen.

https://www.youtube.com/watch?time_continue=36&v=WpF1RMzKOG4

In May 2019, Ion Harvesting Technology was again selected to NASA iTech's TOP-25 semifinalists, having garnered this honor three times since 2018—iTech being the NASA-sponsored competition that judges the merits of new aerospace technologies.

Senior Scientist and Atmospheric Physicist at the German Aerospace Center, Dr. Andreas Baumgaertner, published in his technical report, "Power to Mars," an evaluation of Ion Harvesting for power generation on Mars. His technical summary concludes, *"Ion Harvesting is thus a strong technology option for power generation. It has been shown here that Ion Power and solar power can be combined to provide a reliable and safe power generation concept."* <https://ionpowergroup.com/how-it-works-on-mars/>

Testing of Ion Harvesting on Mars may occur soon, since in June 2019 Ion Power Group accepted an offer from an aerospace group offering to purchase payload space aboard a future Mars rocket ship to deploy two Ion Power Group Ion Harvesting experiments for functional testing. A formal announcement is anticipated in late 2020.

NASA Kennedy Space Center's 2011 Scientist/Engineer of the Year, Dr. Philip Metzger, authored a technical report entitled "Analysis of Economic Viability of Ion Power Generation". The report states, *"We estimate that the cost of Ion Power generation is \$0.088 per Watt with 20-year replacement, so PV is 65 times more expensive per Watt..."* and *"... would produce somewhere between \$62 Billion and \$150 Billion annual benefit to the US economy. This wide range provides very strong confidence that Ion Power is economically viable."* When extrapolated to other countries, the figure approaches \$500 Billion annually. <https://ionpowergroup.com/how-it-works-on-earth/>

To date, Ion Power Group has been awarded patents in 33 countries for Ion Harvesting Technology, and applications are pending in 50 additional countries. <https://ionpowergroup.com/patents/>

About \$1.2m of private funding launched this project and we're presently raising additional funds through a RegD 506(c) offering", said CEO Balser.

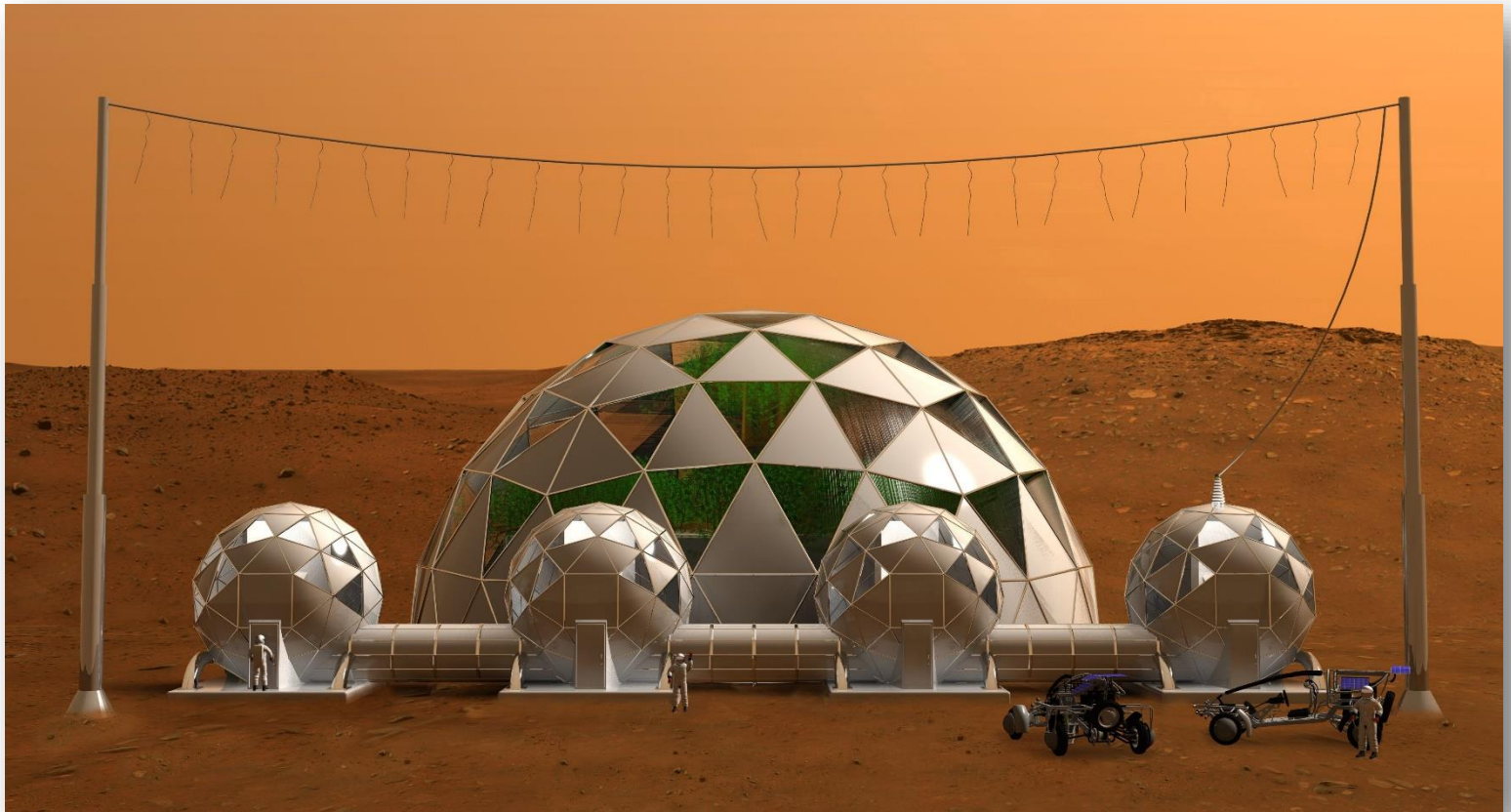
Ion Harvesting Technology offers to expand humanity's energy mix on Earth with cheap renewable electricity and solve some of the most daunting power challenges facing the aerospace industry in exploring and colonizing other planets.

Future historians may judge Ion Power Group's nanomaterial breakthrough enabling Ion Harvesting Technology as one of the key advancements of our time.

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Engineer, Author Technical Writer

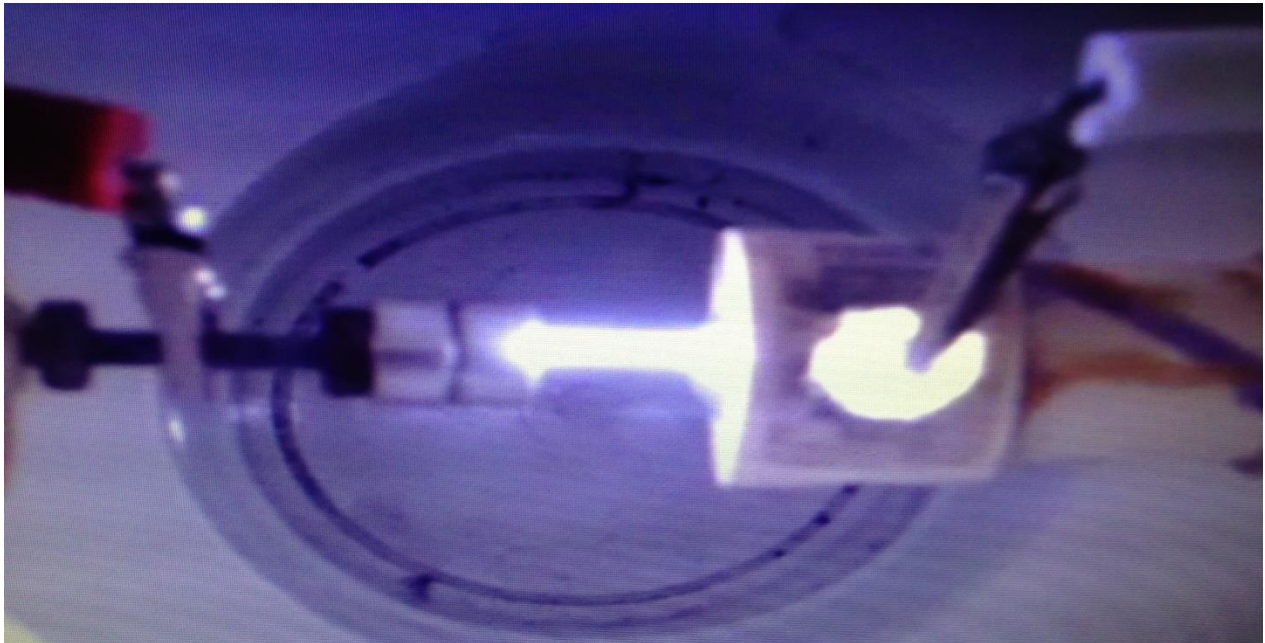
- For more information, including investment, visit <https://ionpowergroup.com/invest/>



Depiction of Ion Harvesting Technology generating clean electricity day and night on Mars



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Actual photo of clean electricity generated by Ion Harvesting Technology during field tests on Earth