R99new Green Space Policy

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Motion text

Introduction

As the only species on this earth with the ability to think long-term - even if we are not always so good at using this ability - we have a responsibility to ensure that life goes on, as well as the responsibility to preserve and protect nature and the climate. We can only achieve this, in the really long term, by working together with other countries to spread life to other planets. No matter what Sweden, no matter what Europe does, this will happen. But we can decide if it's the logo of a company on the side of the spacecraft that lands on Mars with humans, or if it's a flag that represents humans and not money.

Space exploration has clear scientific and cultural benefits but we also acknowledge that it is enormously resource-intensive which makes it very attractive to private individuals and companies. All space exploration should only be done when necessary, especially if private companies are involved, and has to serve the public interest. Space is not a playground for billionaires.

Climate

On the other hand, in the short term, space science is a great help in the fight against climate change. It is only through large Earth observation programs such as the Copernicus satellites that we can measure exactly where, when, how and why climate change is taking place, and it is the same satellites that are used to assist with detailed maps and images during natural disasters, which we know have already become more and more usual. Much of the early research on solar panels that has led to the efficiency they have today was done by NASA for use in space. The same applies to hydroponic and vertical agriculture. Space gives us time, breathing space and tools in the fight against the climate crisis. Therefore, we propose:

that more money is spent on climate-related space research.

Reusable rockets

The space industry is much like the electric vehicle industry. Both are mineral and rare earth metals heavy industries. Both are also industries of the future. But if the industries want to be part of the ‘green future’ they will have to stay within the planetary boundaries. To do so they need to become a part of the circular economy. Reusing and recycling EV batteries are now becoming mainstream, the space industry still has a lot of catching up within this area. But last year a breakthrough was made, when the first astronauts were launched on a reused rocket.

“NASA contend that reusable spacecraft are crucial for making the space industry more affordable. The concept is not new; for years, the space agency reused its small fleet of space shuttles, but reusable rockets weren’t a reality until 2021.”

So to make the space industry greener, cheaper and more circular we propose:

that the European Space Agency (ESA) works together with NASA and other international partners to establish a requirement for rockets to be reusable and completely recyclable as soon as possible.

Asteroid mining

Not all asteroids are created equal. By extracting the minerals found in extraterrestrial celestial bodies, we can completely eliminate the need to have environmentally destructive and human rights-violating mines here on earth. It is not something that will happen today, tomorrow or next year, but the technology is evolving and with more money, production could start around 2040. To be able to go through a fair transition, we will need batteries, and superconductors in turn need lithium, gold, platinum and endless other rare earth metals. That is why we propose:

that while we firstly prioritise the sustainable extraction and recycling of resources on Earth, and the reduction of resource use (e.g. the right to repair, the fight against negligent or avoidable obsolescence, sustainable product design), the European Space Agency (ESA) conducts research on asteroid mining, while always taking into consideration its environmental and economic impact, and only pushing for it once it becomes a viable and sustainable alternative in the future.

that the European Space Agency (ESA) develops a strategy for environmentally friendly and carbon neutral (within the atmosphere) space transport.

New international space station

The ISS is old and according to the original plans would have been scrapped as early as 2008. It is important for us to have a part in the work of the new

international space station that is to be built next, we have the power to influence the spacecraft that will spend future decades with groundbreaking orbital research around the earth. That is why we propose:

that the European Space Agency (ESA) continues its work with international partners for a successor to the International Space Station (ISS).

Environmentally friendly space transport

Further to our calls on 'Reusable rockets', zooming through space isn't at all sustainable. As research into space continues, it is inevitable that the flow of 'traffic' from Earth to our stations in space and of our spacecraft within space will increase significantly. The amount of fuel necessary to transport resources and our astronauts from our stations on Earth to our stations in space and possibly vice versa is insurmountable, notwithstanding the amount of minerals and resources necessary to build the rockets and other spacecraft already iterated above.

Even if we manage to develop reusable spacecraft, we must acknowledge the astronomical amount of energy they will consume and the environmental impact of that. Therefore we propose:

Space pollution

Space debris are the objects that we humans have left in orbit around the Earth. These are everything from dust to pens and broken satellites that are as big as buses. In the worst case, it could be that in the future we will not be able to postpone things into space because there is too much rubbish in the way - the so-called Kessler syndrome. Already today you need to plan launches for clusters of space debris. In order to reduce the amount of defunct and functional satellites and, therefore, reduce the current and future space pollution, we must make all scientific data collected from these satellites open-source. That is why we propose:

Corporations should be accountable for the space pollution they are making, as well be accountable for the destruction of space discovery potential, especially with global systems like Starlink. Therefore, we demand that every global scale project is implemented in collaboration with scientists not to reduce the scientific potential in space discovery.

that the European Space Agency (ESA) strengthens the work of cleaning up space debris for a better space environment

International Cooperation

Due to long territorial disputes between different factions and France, ESA is

not part of European cooperation, even when it gets most of its money from it. This stupid and resource-wasting battle must end. We therefore propose:

that the European Space Agency (ESA) is integrated into the European Union.

To summarize, we propose:

- **that** more money is spent on climate-related space research;
- **that** the European Space Agency (ESA) works together with NASA and other international partners to establish a requirement for rockets to be reusable and completely recyclable by 2035;
- **that** the European Space Agency (ESA) develops a strategy for environmentally friendly and carbon neutral (within the atmosphere) space transport;
- **that** the European Space Agency (ESA) continues its work with international partners for a successor to the International Space Station (ISS);
- **that** the European Space Agency (ESA) strengthens the work of cleaning up space debris for a better space environment;
- **that** the European Space Agency (ESA) is integrated into the European Union;
- **that** while we firstly prioritise the sustainable extraction and recycling of resources on Earth, and the reduction of resource use (e.g. the right to repair, the fight against negligent or avoidable obsolescence, sustainable product design), the European Space Agency (ESA) conducts research on asteroid mining, while always taking into consideration its environmental and economic impact, and only pushing for it once it becomes a viable and sustainable alternative in the future.