

# ASTRA CARTA

## *To Care For The Infinite Wonders Of The Universe*

### INTRODUCTION

In the grand tapestry of human history, we have always sought to push the boundaries of our knowledge, to unravel the mysteries that lie beyond our grasp. Our insatiable curiosity and relentless pursuit of discovery have led us to the threshold of the next frontier. Within the last decades of space exploration, we have seen extraordinary technological advances with benefits that reach far beyond the space domain. As humanity stands on the precipice of this new era of space exploration and development, it is of utmost importance that we approach this endeavour with a profound sense of responsibility and care.

The Astra Carta is a collective call to action that seeks to unite nations, organizations, the private sector and stakeholders in a shared commitment to the responsible and sustainable use of outer space. As we embark on this journey we must not forget to preserve and protect our origins on Earth. Inspired by the original Terra Carta, which continues to chart a path towards a more sustainable future for Nature, people and planet, this transformative document extends those principles to the realms beyond our world. It harnesses the power of collective will, scientific discovery, sustainability and ethical stewardship to guide us in this new frontier of possibilities and, above all, avoid the law of unintended consequences.

Necessity has repeatedly proven to be the mother of invention; as we encounter hurdles in our efforts to extend life to the Moon, Mars, and beyond, what marvellous solutions will humanity develop to overcome them? Advances in propulsion to speed our voyages, advances in communication to maintain a human connection, resilient and bio-available nutrition to sustain our pioneers, or in Artificial Intelligence to extend our capacity to comprehend the vastness of space; solving these problems, among others, will have profound effects on our ambitions in space, but each also has the compounding potential to improve the human condition and quality of life here on Earth.

The Astra Carta stands as a testament to our collective commitment, to preserve the sanctity of the universe and uphold the principles that will safeguard its boundless marvels for generations to come. It is critical to acknowledge that the universe, with its vast cosmic landscapes and near infinite number of celestial bodies, is itself a fragile interconnected ecosystem. Just as we are beginning to care for and nurture our own planet, we must extend these lessons to the ultimate cosmic mystery that surrounds us. In the absence of evidence to the contrary, we remain the sole custodians of the cosmos; as we seek to preserve our spark of life in the vastness of space, we must strive to protect the delicate balance of the unknown.

The exploration and development of space are endeavours that belong to all of humanity and transcend traditional borders. As one people, sharing one planet and pursuing one voyage, we must leverage the collective wisdom and resources of our diverse nations, cultures and industries. The principles enshrined within the Astra Carta serve as our North Star, guiding our path toward a future of genuinely responsible exploration, development and cooperation in space.

If achieving a sustainable future is the growth story of our time, our sustainability-aligned ventures into space offer infinite possibilities. The Astra Carta is our pledge to future generations – a promise that we will navigate the celestial realms with wisdom, foresight, and responsibility; let it be a testament to our shared commitment to preserve the beauty and wonder of outer space, while harnessing its potential to help us unite for the betterment of humanity.

As we embark on this next giant leap, let us be united and resolute in our commitment to care for the infinite wonders and mysterious purpose of the universe.

### THE SUPPORTERS OF THE ASTRA CARTA

*Recognize* the need to be diligent stewards of the universe, striving always to minimize our footprint and nurture the delicate ecosystems we encounter; ever mindful of the profound interconnectedness that binds us to the celestial tapestry.

*Seek* to foster scientific research partnerships and technological innovations that not only deepens our understanding and access to the cosmos, but also supports the sustainable and responsible practices in space exploration as a human imperative, wherever we may be.

*Recognize* the import of rigorous inquiry and knowledge-sharing as the key that will unlock the mysteries of the universe, while safeguarding its integrity.

*Acknowledge* the imperative of sustainable development in space – the harmonious integration of human progress and environmental protection are essential to ensure the wonders of the universe remain bountiful and resilient for future generations.

*Recognize* that space exploration is a global endeavour that transcends national boundaries and should be in the interest of all of humanity.

*Strive* to form robust partnerships and collaborations, with sharing of resources and expertise, we can advance our collective understanding of the universe while promoting peace and harmony among all nations.

*Seek* to foster partnerships with indigenous and local communities that promote mutual understanding, respect, and cooperation in space activities; taking into account centuries of traditional knowledge, wisdom on coexistence with Nature, cultural practices, and spiritual beliefs.

*Embrace* a culture of peace and cooperation in space that builds upon the proven successes of collaborative research, exploration, and discovery, even in times of terrestrial tension.

*Strive* to reduce the barrier to space access, such that peoples of all nations, regardless of economic or political status, can benefit from the unique opportunities and perspectives it offers – diversity of experience and opinion will be essential to a truly global effort in the open pursuit of knowledge.

*Recognize* the importance of inspiring future generations to explore the unknown and cultivate a deep appreciation for the beauty and significance of the universe – using education to nurture a sense of wonder, curiosity, and respect for the next frontier, and the discoveries that await.

*Acknowledge* the value of developing and upholding transparent and accountable global governance frameworks for space that prevent exploitation, maintain ethical standards and safeguard the interests of all.

### STATEMENT OF INTENT

1. As we embark on this next great chapter, moving from the Earth to the stars, the Astra Carta builds on the foundation of the Terra Carta to shape a future of responsible and sustainable space exploration, development and cooperation.
2. The Astra Carta aims to promote the peaceful expansion of humanity into the solar system and beyond by providing a roadmap of ethical and sustainable ambition, cooperation and innovation. Success depends on our commitment to ensure that we take a genuinely sustainable approach, and that all of humanity benefits from the discoveries and technological advances that will inevitably be derived from our efforts.
3. The Astra Carta aims to serve as a roadmap for the global private sector to align their space-related activities with sustainability goals, approaches and standards in partnership with governments, international organizations and other stakeholder.
4. The aims of the Astra Carta will be met by:
  - i. *Aligning with the Terra Carta, existing global sustainability frameworks and recognized space agreements including: the Paris Climate Agreement, the Sustainable Development Goals, the Convention on Biological Diversity, the UN Convention on the Law of the Sea, the UN Declaration on the Rights of Indigenous Peoples, the UN Outer Space Treaty, the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) Guidelines on the Long-term Sustainability of Outer Space Activities and the Artemis Accords.*
  - ii. *Upholding the sanctity of the universe* by respecting the cosmic realm as a precious interconnected ecosystem. Our actions will be guided by a deep respect for the universe's intrinsic value and the diverse life it may hold.
  - iii. *Advancing sustainable practices* by pioneering within industries for space exploration, where every endeavour is founded upon principles of ecological harmony and long-term viability. Through innovative technologies, responsible resource management and regenerative practices, we will ensure that our cosmic ventures leave a minimal footprint.
  - iv. *Creating incentives for sustainable growth* by creating markets that reward sustainable practices and propel sustainable markets for space. By aligning economic interests with responsible development, we will catalyze a thriving and environmentally conscious space industry.
  - v. *Pursuing collaborative endeavours and equitable access* by fostering international partnerships and knowledge-sharing initiatives, transcending borders to harness the collective wisdom and resources of diverse nations and sectors.
  - vi. *Cultivating cosmic innovation* by embracing the spirit of scientific inquiry, technological innovation and human creativity to push the boundaries of our understanding of the universe. By fostering a culture of innovation and inspiration, we will unlock the vast potential of the cosmic frontier.
5. Designed with the private sector in mind, the Astra Carta recognizes that each industry, business and investor needs to chart their own course to a more sustainable approach to space exploration, and that global, regional, local and industry variance exists; it aims to encourage and provide a voluntary framework for each participant to accelerate their respective sustainability journeys.
6. Reaching a sustainable future amongst the stars necessitates a systems-level approach; one that is reliant on the leadership, resourcefulness and synergy of a diverse range of global, regional, and local actors. A truly collective effort will be required to drive the necessary pace of technological advancement.
7. The Astra Carta is to be a living document that will be reported on and updated annually to keep up with global progress, technological evolution and a shifting investment landscape.