



**ESG Investment
Charter**

Echiquier Space

INTRODUCTION

Echiquier Space – The Ultimate Investment Frontier is LFDE's newest thematic fund, investing in companies contributing to and benefiting from the Space economy. The industry is entering a new era: **Space 2.0** and LFDE is the first European asset manager to launch an active strategy integrating ESG criteria dedicated to this new thematic. Private companies have accelerated fundraising and are setting the stage to enter the public markets while commercial actors are gradually taking over government initiatives and programs. Furthermore, Space is becoming increasingly accessible with the transition from GEO (Geostationary Orbit) to LEO (Low Earth Orbit). As we see a rising number of space missions and technological developments, the Space thematic is clearly abundant with opportunities for **innovation** and **progress**.

Space 2.0 involves a large variety of activities and thus many specific ESG issues to consider in order to invest responsibly. Furthermore, the thematic is only just blooming, therefore regulatory frameworks are constantly evolving and may be subject to changes. With this ESG Investment Charter, Echiquier Space aims to create a responsibility filter for its investments. This charter is the insurance that **extra financial considerations are fully integrated in our investment philosophy**. This document may evolve and will be reviewed at least annually to remain relevant to developments in the sector.

Firstly, Echiquier Space portfolio's stock picking will **respect the "do no significant harm" principle** on the different ESG issues identified for Space industry. In addition to this principle, **some companies within the portfolio may contribute positively to several SDGs**. Access to Space is enabling new possibilities for Earth observation (SDGs 13# Climate action, 14# Life below water, 15# Life on land...). The development of high-speed satellite internet connectivity can support e-learning and education opportunities for remote communities (SDGs 4# Quality education, 8# Decent work & economic growth, 9# Industry, innovation & infrastructure).

This investment charter was subject to evaluation by LFDE's Ethics committee and has been validated on 18/05/2021.

This charter was lastly updated in **May 2021**.

I. LFDE ESG INTEGRATION PRINCIPLES

LFDE's commitment to responsible investment relies on a solid knowledge of the companies, through exchanges and meetings, as well as ESG integration for all fund management teams. LFDE's ESG integration policy enables us to identify the ESG best practices and to better assess the risks faced by companies. The fund management team is invested in this commitment: the team has been trained by LFDE's internal Responsible Investment (RI) Research Team and completes all ESG analyses which are subsequently challenged and validated by the RI Research Team.

The main principles of this ESG Integration approach include:

- **Exclusions:** LFDE excludes companies according to sector criteria, country affiliation and according to normative grounds. Details on our exclusion practices in the II section.
- **ESG analysis:** ESG rating objective of the totality of the stocks in the portfolio (minimum 90%). The governance score is systematically done by the portfolio management team and MSCI ESG Research scores may be used for the Environment and Social pillars (if available, otherwise rated internally). A minimum ESG score of 4.0/10 is required to integrate ESG managed funds. In addition, these funds are committed to ensuring that their weighted average ESG rating is always higher than that of their investment universe.
- **Controversy:** Attention is paid to the existence of ESG controversies. Our ESG analysis methodology has included a controversy malus in the calculation of the ESG rating. For ESG integration, this penalty only sanctions governance controversies and is a maximum of 1 point out of 10. MSCI ESG Research incorporates and penalizes, directly in its environmental and social ratings, any controversy that an issuer may have on these two dimensions. Furthermore, an internal Ethics committee may meet to rule on the most sensitive cases, which could lead to the exclusion of certain companies.
- **Dialogue:** Identification of areas for progress during the ESG analysis of each company. These areas of progress are shared with the companies as much as possible.
- **Voting:** Systematic exercise of voting rights by all fund managers for 100% of the securities in the portfolios.
- **Transparency:** Increased transparency on our ESG Integration approach, with monthly ESG reporting.

In addition to LFDE's ESG Integration commitments, investment decisions for Echiquier Space are governed by this ESG Investment Charter, which focuses on Space ESG issues.

II. OUR EXCLUSION PHILOSOPHY

As part of its investment philosophy, Echiquier Space performs a negative screening of the investment universe in order to exclude companies that do not align with our values and our ambitions for the Space economy.

A. SECTOR EXCLUSIONS

All LFDE funds are following general sector exclusion on controversial industries such as tobacco production, thermal coal, controversial weapons and recreational cannabis. The most relevant additional exclusion to the Space industry would concern weapon-related business. A number of actors in the Aerospace and Defence sector are involved with such activities. These companies represent the legacy Space sector that we call the Space 1.0 industry. Our goal is to participate in the next generation of Space companies that we call the Space 2.0 industry.

In line with the Ottawa (1997) and Oslo (2008) conventions, direct investment in companies that manufacture, sell, store and transfer cluster bombs and anti-personnel landmines, is excluded (no minimum threshold of turnover). Under the same conditions and under the heading of **controversial weapons**, our fund will also exclude companies involved in the following types of weapons: biological and chemical weapons, depleted uranium weapons, blinding laser weapons, incendiary weapons, and weapons with non-detectable fragments.

Beyond controversial weapons, Echiquier Space is **extending the exclusion to all weapons**.

As such the investments in Echiquier Space will exclude companies which derive revenue from the development and/or sale of weapons. This includes any revenue from the manufacture of nuclear weapons (including intercontinental ballistic missiles and submarines launching ballistic missiles), nuclear warheads (including assembly and companies with contracts to operate and manage state-owned facilities that manufacture warheads nuclear and missiles) and components that may be intended for both nuclear and/or conventional weapons. Are also excluded companies generating revenue from the manufacture or assembly of launch platforms used for the delivery of nuclear weapons.

Furthermore, companies of which at least 5% of the revenue is derived from the development and/or sale of weapons will be excluded. This concerns revenue derived from armament systems, components, direct system supports, services, as well as civilian firearms and ammunition. We also exclude companies that own at least 20% of the capital of companies concerned by the criteria mentioned above.

B. COUNTRY EXCLUSIONS

Under LFDE ESG Integration rules, no investment is made in companies domiciled in the countries listed in the following lists, for tax reasons:

- [The French State List of Non-Cooperative States and Territories \(ETNC\)](#)
- [The European Union list of non-cooperative countries and territories for tax purposes](#)

In addition, we exclude companies involved with **sanction regimes** (from the UN Security Council Consolidated List): Somalia, ISIL (Da'esh) and Al-Qaida, Iraq, Democratic Republic of the Congo, Sudan, North Korea, Libya, Guinea-Bissau, Central African Republic, Yemen, South Sudan, Mali, the Taliban.

A particular attention is paid to companies that have close links with non-democratic countries. We are vigilant that our invested companies **do not practice business with controversial governments on controversial projects.** Regarding the level of involvement, we may consider excluding a company if a business activity is provided to those governments on projects, we might find controversial and against our vision of a new generation of Space activities.

C. NORMATIVE EXCLUSIONS

Companies subject to **controversies deemed severe by MSCI ESG Research** are excluded. This list includes companies that have been guilty of violating one or more of **the ten principles of the United Nations Global Compact.**

In addition, we apply **exclusions relative to Executive Order 13 959.** We rely on the US Executive Order of which the aim was to "Address the Threat from Securities Investments That Finance Communist Chinese Military Companies". This is a list of Chinese companies involved with the military, which have been banned by the US.

III. OUR EXPECTATIONS AS SHAREHOLDERS OF COMPANIES RELATED TO THE SPACE INDUSTRY

The Space 2.0 industry actors offer many opportunities for responsible investors such as LFDE, but some ESG risks cannot be disregarded, and areas of improvement can be identified. Through our qualitative investment analysis, and especially our extra-financial analysis carried out prior to any investment, we seek to identify those risks and opportunities. Following our internal ESG analysis methodology, we identify areas of improvement for companies and we engage with them, offering a close monitoring of the situation. To mitigate risks related to ESG, we can also rely on our third-party provider, MSCI ESG Research, to raise our awareness on specific subjects.

You will find below the main topics related to each ESG pillar and how we intend to mitigate them. All these ESG issues must be analysed in regard of their materiality for each company. The requirements and management process are different for each topic. For clarity, we will use the following colour code:

- **[NOT ALLOWED]** : Wrong practices according to our charter and ESG Principles, Echiquier Space cannot invest in related companies.
- **[ENGAGEMENT]** : Engagement with related companies is required either because practices need improvement to align with our charter and ESG Principles or because we lack of information on the related ESG issue to draw sufficient conclusions. We expect to see engaged companies improve on the identified practices over the following 3 years.

A. GOVERNANCE

LFDE pays special attention to the governance of companies. Therefore, with regards to the Space industry, we commit to a number of resolutions regarding our holdings:

- **[ENGAGEMENT] Checks and balances**: Checks and balances are an essential part in any robust corporate governance.
 - We will ensure the presence of these checks and balances, through the presence of a director who is an expert on ESG space-related issues. It permits better challenging of management and improvement of ESG practices.
 - This will be reflected in the ESG scoring.
- **[ENGAGEMENT] Diversity**: As the Space 1.0 industry is predominantly masculine, we will monitor the representation of women/minorities at executive positions or present on the board and the company's efforts to improve inclusivity.
 - This will be reflected in the ESG scoring as we do not grant any point for the related question if companies have less than 40% of gender diversity in boards and 20% in executive committee.
 - Moreover, our voting policy requires a minimum of 30% women on the boards.
 - We will also favour companies that promote accessibility to leadership positions providing equal opportunity access to all genders and ethnicities.
- **[ENGAGEMENT] Transparency**: As responsible investors, our proximity to companies allows us to go beyond their lack of transparency and to obtain an accurate vision of their ESG positioning. Our engagement approach is then essential with the companies we advise and assist in improving their ESG practices.

- As per the UN Treaty of 1975, the **Registration Convention**, states are required to furnish to the UN details about the orbit of each space object. Therefore, we ensure that companies in the portfolio report any object sent to space.
- Furthermore, we expect **transparency on business engagements with governments**, particularly in the context of satellite data, as our ambition is to see that information used for democratic and positive purposes. In case we are not comfortable with the information available we will engage with the management to obtain the appropriate level of transparency.

REGULATORY CONCERNS

Considering new liabilities and new actors in the Space economy (commercial actors in particular), Space laws are expected to change in the coming years. We not only commit to monitoring closely the legal environment, but we also expect companies to pay attention to this theme in their activity. This can be shown for example by:

- The signature of **corporate charters and agreements** (e.g., Collective for Space Care),
- Company policy regarding **the preservation of outer space** (e.g., satellite debris policy, space resource exploitation, etc.),
- Company policy regarding **the social impact** (e.g., data protection, data privacy, astronaut safety, etc.),
- **Exemplary transparency with shareholders** regarding activities taking place in outer space.

[ENGAGEMENT] We will engage discussions with the management to learn more about the regulations and recommendations they follow and if they take on any role to **promote the responsible development of Space regulations**.

B. ENVIRONMENT

Echiquier Space seeks companies deemed to have **good practices** regarding the environmental impact of their products or services. We will **ensure that companies have environmental policies and actions**. If not publicly available, we will **engage with companies** to discuss their approach to environmental matters and understand **how they mitigate their environmental risks**. **If a company does not provide us sufficient information or if we consider their approach is not solid enough regarding its activity, we will not invest in the company.**

Some Space 2.0 companies are developing technologies and businesses that have a positive contribution to environmental issues:

- In the context of satellite data and imaging, we appreciate companies that contribute to **monitoring and predicting environmental and climate change on Earth**. Indeed, **satellites contribute to more than half of the 50 Essential Climate Variables (ECVs)** identified for the United Nations Framework Convention on Climate Change (UNFCCC COP21) by the Global Climate Observing System (GCOS). Satellites provide **unique measurements** that would not otherwise be possible such as: melting ice caps, sea and ocean levels, deforestation, natural disasters detection, etc.

- Satellite technology can help to **improve logistics** such as optimising trucking, flight, and maritime itineraries to improve accessibility to remote areas but most of all **reduce the carbon emissions of transport**.
- Space 2.0 companies are focusing on **reusability of their assets** (rockets notably) which allow to reduce costs and prices but also reduce negative environmental impact.

Echiquier Space also pays attention to area of potential concerns:

- We favour companies that make the Space economy more **sustainable and seek to reduce their negative impact on the environment**.
 - We appreciate companies using **multiple use launchers, extending satellite life span, developing new materials** that require less consumption of resources and energy, gathering data and using advanced analytics to improve operations and optimise resource consumption.
 - **[ENGAGEMENT]** We consequently verify whether companies have implemented a **life cycle assessment program** and we will engage with the companies when this information is not explicit.
 - **[ENGAGEMENT]** We will monitor the carbon footprint of our portfolio as we aim to keep it inferior to the carbon footprint (all scopes) of our benchmark as a long-term objective. To reach this goal we will engage with the more carbonised companies.
- **Propellants** are used to launch rockets or for satellites to correct their trajectory while in orbit:
 - **[ENGAGEMENT]** If a company uses toxic or polluting propellants for spacecraft such as hydrazine or kerosene, we ensure that they have **safety protocols for employees** and plans to **transition to safer and greener alternatives** such as hydrogen or methane.
- We are extremely vigilant regarding **orbital debris**.
 - **[NOT ALLOWED]** We do not wish to promote a spacecraft cemetery in orbit, nor increase collision risk. **If the company does not have a Space debris policy or does not mitigate the risk debris of its products, we will not invest in the company.**
 - **[ENGAGEMENT]** Since there are also **debris risks on Earth**, we are vigilant that the companies have **accurate trajectory simulation tool capacities** for debris and launchers returning to Earth.
 - Conversely, we appreciate companies that manage their satellites' end of life and Space debris in general, or even have Space cleaning businesses.
- **[ENGAGEMENT]** In the process of building spacecrafts or satellites, some components may use rare elements. We are vigilant with the mining, processing and use of **Rare-Earth Elements (REEs)**, and **will seek for companies' voluntary codes** (for example the Extractive Industries Transparency Initiative (EITI), the UN Guiding Principles on Business and the Human Rights, the International Council on Mining & Metal (ICMM) or schemes in respect of emissions) **set out above mandatory ones** (for example Bribery Act in the UK, Corrupt Practice Act (FCPA) in the US). If necessary, we will engage with the company to ensure they source such elements in a fair and ethical way.
- **[NOT ALLOWED]** **Companies subject to controversy on the theme of REEs will be excluded.** In a general sense, we are cautious about the sourcing of raw materials of the companies.
- **[ENGAGEMENT]** The Space industry generates a lot of **data** that are stored in datacentres to then be utilized for value added information. Datacentres consume energy but many

companies in our portfolio rely on clean tech providers, for instance **large datacentre companies with the highest market standards**, which are **carbon neutral**, or other providers that have a **Power Usage Effectiveness (PUE) below 1.5**.

C. SOCIAL

Some Space 2.0 companies are developing technologies and businesses that have **a positive contribution to social issues**:

- Companies promoting better broadband access in remote areas (e.g., rural areas, middle of the ocean...) to **reduce the digital divide**.
- Satellites images can help **fighting censorship**, through improving transparency regarding political events and potential human rights violations putting populations at risk. For example, following the recent military coup in Myanmar, the media was able to broadcast satellite footage of the protests taking place in in the country, amid near-total Internet blackout. Another striking example is the Arab Spring, during which authorities in the countries involved enforced Internet censorship and in certain cases full shutdown. Thanks to satellites, the world was able to see the events from above.
- Space can enable **ground-breaking scientific discoveries** in technology, medicine, biology and more. There is great potential for research conducted at the International Space Station, which has **unique features**: microgravity, extreme conditions (extreme heat, cold cycling, ultra-vacuum, atomic oxygen, and high energy radiation) and Low Earth Orbit situation. This unique environment allows scientific research that would not be possible on Earth.
- Space 2.0 is a new economy, therefore contributing to **economic development**, with new jobs, knowledge, and technology to promote growth at the local, national, and international levels. We see the Space economy as allowing certain industries to benefit from renewed demand thus contributing to aggregate economic growth with progress in both physical and digital activities.

Echiquier Space also pays attention to area of potential concerns:

- **[ENGAGEMENT]** We are concerned with **cybersecurity** for companies in the portfolio, therefore we commit to ensuring **data protection** processes are robust. Certain Space companies keep data in clouds dedicated to Space data, run by multinational companies that put in place the best safety standards.
- **[ENGAGEMENT]** The **ethics of population surveillance** is an important topic. We will verify in company sustainability reports or engage discussion with companies producing and handling satellite data to ensure that **(1) imaging does not breach privacy principles** and **(2) data is not provided to entities that do not align with LFDE's Responsible Investment philosophy**. We will analyse how the companies collect and manipulate data not only to comply with local and regional regulation such as GDPR in the EU, but also to **promote best practices regarding this sensitive topic such as writing ethical guidelines principles or being fully transparent on the nature of contracts**. We will pay particular attention to companies **doing business with non-democratic countries**.

- **[ENGAGEMENT]** Given the male-dominated reputation of the sector, particularly in the Space 1.0. industry, we ensure that companies have measures to improve **diversity** (diversity awareness programs, women in management, hiring processes for disabled persons, inclusion associations...) which will be reflected in our ESG scoring.

The Space 2.0 industry is at an early stage in its development and remains a high-end technological challenge. For this reason, certain services and products may take some time to reduce costs and democratise access to Space.

- **[ENGAGEMENT]** This is the case of **commercial Space lines**, which will enable people to travel faster from point A to point B on Earth, via Space. We will pay particular attention to the carbon emissions of such flights compared to regular flight to monitor. **The fund will ensure companies adopt plans to reduce the environmental and financial cost curve and share these benefits with its customers.**
- **[NOT ALLOWED]** Certain companies are developing Space tourism to offer the opportunity for people to experience Space. We distinguish Space tourism from commercial Space lines, as we consider **Space tourism causes too much negative environmental impact for a small number of beneficiaries.** In line with this distinction, **we do not invest in companies whose core business is Space tourism**, we consider it core business when companies deriving more than **50%** of their revenue from this activity.

D. ESG CONTROVERSIES

Our proprietary ESG analysis methodology includes **a controversy malus** in the calculation of the ESG rating. For ESG integration, this penalty only sanctions governance controversies and can reach a maximum of 1 point out of 10. MSCI ESG Research incorporates and sanctions directly in its environmental and social ratings any controversy that an issuer may have on these two dimensions. In the case that MSCI ESG Research is not available, our ESG analysis methodology includes a controversy malus on governance, environmental and social aspects up to 2 points out of 10. This allows us to sanction more directly companies that we consider deserve to have their ESG rating reduced following one or more significant controversies. In addition, the history of the company's ESG controversies will impact our vision of the company on all three ESG pillars. The most severe cases may lead to exclusion.

E. ENGAGEMENT

Given that the Space 2.0 thematic is only just blooming and that its regulatory frameworks are constantly evolving, **our engagement approach with companies is essential.** This approach is mainly based on the **monitoring of the ESG progress** of the companies in which we are invested. This allows us to **value in priority those companies that are committed to improvement** (the "Best Effort" approach). Echiquier Space pays particular attention to its engagement process and will systematically share areas for improvement linked to Space-related issues identified during the ESG analysis. We are committed to help companies **improve transparency** regarding the criteria described in this charter.

Initial research and analysis should be conducted prior to investment. However, given the low maturity of this blooming industry and the depth of our engagements on related ESG issues, we aim to reach this objective by the end of this year, as the team manages the initial portfolio to begin with. Post

launch, in the event of an entry that does not meet the criteria described in this charter the company concerned will be removed from the portfolio within a reasonable timeframe.

Analysis updates and/or follow-up meetings are mandatory steps to assess the progress achieved by the companies based on the objectives previously formalized (areas of improvement achieved, partially achieved or not achieved), and to redefine the next areas of improvement. To screen requirements and keep track of progress, the team has set up a **monitoring grid based on this charter**. This will not only strengthen our portfolio management but will also improve our ability to address customer ESG inquiries efficiently.

To increase clarity for the investors on the ESG maturity of companies within the portfolio, they will be allocated to two components of Echiquier Space:

- Companies allocated to the “best-in-class” component are aligned with our values displayed in this charter.
- Companies allocated to the “best-effort” component need to improve on certain ESG topics. The management team will engage with them and will monitor closely their improvements over time.

LFDE will report on the size of each component every quarter.

DISCLAIMER

This charter informs investors of the commitments made by La Financière de l'Echiquier in the management of its ECHIQUIER SPACE fund. It does not constitute a contractual or regulatory document.

The information given in the charter comes from the best sources in our possession at the time of writing and may evolve over time.



LA FINANCIERE DE L'ECHIQUIER
53, AVENUE D'IENA - 75 116 PARIS - TEL: 01.47.23.90.90 - www.lfde.com
S.A. WITH SHARE CAPITAL OF 10 060 000 € - SIREN 352 045 454 - PARIS TRADE REGISTER
LICENSED INVESTMENT MANAGEMENT COMPANY ACCREDITED BY THE AMF WITH NO.91 004