



Possible Alien Consumer  
Drivers & Ambitions



## **“GREEN” MISSELLING**

**HOW ALIENS’ GOAL TO INCREASE GLOBAL WARMING AND REDUCE SUSTAINABILITY IS IGNORED BY FINANCIAL MARKETS**

*“Aliens are entitled to equal protection by the law. There shall be no discrimination between aliens and citizens in the application of these rights. These rights of aliens may be qualified only by such limitations as may be lawfully imposed under the Covenant.” UNITED NATIONS HUMAN RIGHTS COMMITTEE 1986*

*“Don’t be left out of the Lunar Land Rush, buy a piece of the Moon now and start enjoying Your Moon Estate.” LUNAR EMBASSY CORPORATION*

*“To outline progress in space from both public and private companies, as well as government efforts, the Space team at Morgan Stanley Research has been examining these developments to detail the constellation of potential opportunities for investors.” MORGAN STANLEY – INVESTING IN SPACE*

*“And most cruelty statutes traditionally exclude invertebrate animals (e.g., Cruelty to Animals Act of 1876, Great Britain). If the ExtraTerrestrial resembles a cross between a sea scorpion and a grasshopper, he will have no legal protection whatsoever.” ROBERT FREITAS - Xenology: An Introduction to the Scientific Study of Extraterrestrial Life, Intelligence, and Civilization*

**This report is the first report of the newly created PACDA program (*Possible Alien Consumer Drivers & Ambitions*), a spin-off launched by the PACTA research stream. It is the second spin-off of the 2<sup>o</sup> Investing Initiative network, following the launch of the FERMI’vesting Initiative (Fii) in 2017, designed to track financial risks and opportunities related to the invasion of aliens. Both programs are developed in partnership with Extra Terrestrial Advisors (ET Advisors), the leading consultancy on aliens risks.**

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## INTRODUCTION

The need for consumer protection in retail investor markets is a core part of the EU Action Plan on Sustainable Finance. A number of these actions seek to mitigate potential misselling as it relates to sustainable products. Missing however from this debate is the “misselling bubble” on the horizon related to extra-terrestrials, where evidence suggests these clients’ financial and non-financial preferences include increasing global warming, reducing planetary sustainability, and realizing optimal portfolio diversification through expanding to non-terrestrial assets (e.g. moon real estate).

**ALIEN CONTACT LIKELY SOON AND PERHAPS ALREADY HAPPENED.** As outlined in our first report (“Stress-Testing an Alien Invasion”), extra-terrestrial contact is likely to happen soon and may have already happened. In the first case, it is imperative for financial markets to be prepared for such an encounter, in the second case, the urgency is even more pronounced. It may be possible that aliens among us are already investing their money, engaging with financial product, all while seeing their objectives ignored.

**RETAIL INVESTING MARKET NOT PREPARED.** This report reviews the preparedness of retail investing markets for alien encounters. It demonstrates that a systematic risk of misselling exists in the market, driven primarily by the integration of ESG (notably climate risk management and green bonds), and the lack of adaptation of products (notably through lack of diversification and structure of marketing documents). The report demonstrates key barriers to considering aliens (lack of data, lack of legal certainty in both alien legislation and MiFiD II), and maps the way to improving market practice. Crucially, the inability of financial markets to adapt to alien preferences is both a human rights issue – as first identified  
3 by German philosopher Immanuel Kant - and a financial risk issue.

*“It is remarkable that we cannot think of any other suitable form for a rational being than that of a human being. Any other would at best be a symbol of a certain human characteristic - e.g. B. the snake as an image of malicious cunning - but do not represent the rational being itself. So we populate all other celestial bodies in our imagination with nothing but human figures, although it is probable that they may be very differently shaped according to the differences in the soil that supports and nourishes them and the elements of which they consist.” – IMMANUEL KANT (“ANTHROPOLOGIE VON EINER PRAGMATISCHEN HINSICHT”)*



## ISSUE #1: CLIMATE RISK MANAGEMENT & REAL ESTATE

**THE RISE OF CLIMATE RISK MANAGEMENT.** As evidenced by the announcements of institutional investors, climate-related financial risk is now fully managed and considered by financial markets. Climate risks are fully priced and climate-related issues inform every single investment and lending decision. “ESG integration” – which concretely means the full and comprehensive management of sustainability issues – is now practiced by every leading investor in the world. The UN Principles for Responsible Investment (PRI) now count over 3,000 signatories. As identified by a German working group on retail investing led by our sister organization 2° Investing Initiative, it is not possible to ask retail investors whether they want climate risk integration, since all financial products provide for some form of “ESG integration”, including climate.

**CLIMATE RISK MANAGEMENT GOES AGAINST ALIENS INTEREST.** At the same time, a range of evidence demonstrates that the rise of climate risk management directly contravenes aliens interest. First, NASA has identified climate change as a potential indicator used by aliens for the threat humans represent and thus may trigger an alien invasion (see our sister paper on “Stress-Testing Alien Invasion”). Mitigating climate change may thus allow humans to hide technology progress and reduce aliens’ visibility on this issue. Second, the need to find new habitable planets following Earth’s destruction from climate change will increase extra-terrestrial real estate prices.

***“Humanity may just now be entering the period in which its rapid civilizational expansion could be detected by an ETI because our expansion is changing the composition of Earth’s atmosphere (e.g. via greenhouse gas emissions), which therefore changes the spectral signature of Earth (...). While it is difficult to estimate the likelihood of this scenario, it should at a minimum give us pause as we evaluate our expansive tendencies.” - NASA***

**Fig. 🐾 :** Changes to real estate prices on various planet under a 15° C climate change scenario





## ISSUE #2: THE DEFINITION OF GREEN BONDS

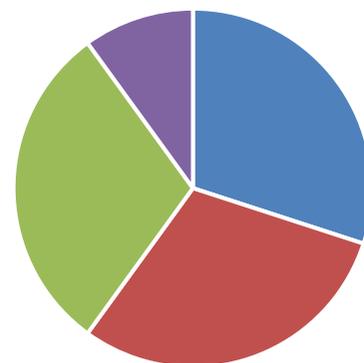
**GROWTH OF GREEN BONDS.** Labelled green bonds have grown exponentially over the past years. Most major investors now manage and advertise green bond funds. While growth has been dramatic, a number of disagreements and issues remain about the taxonomy and definition of what constitutes a “green bond”. To date, this conflict has largely focused on questions of climate ambition or whether the underlying issuer must have a green strategy (see 2DII report: “Shooting for the Moon in a Hot Air Balloon”).

**GREEN = ALIEN.** Missing from this conversation is the alien interpretation of what constitutes a green bond. A survey conducted by PACDA demonstrates that 30% of aliens thought green bonds were bonds whose use of proceeds were tied to green people, 30% considered the underlying issuer to be “green” (i.e. dedicated to products and services for green people) and another 30% considered the organization led by an alien. Only 10% of alien respondents correctly identified the current definition of a green bond

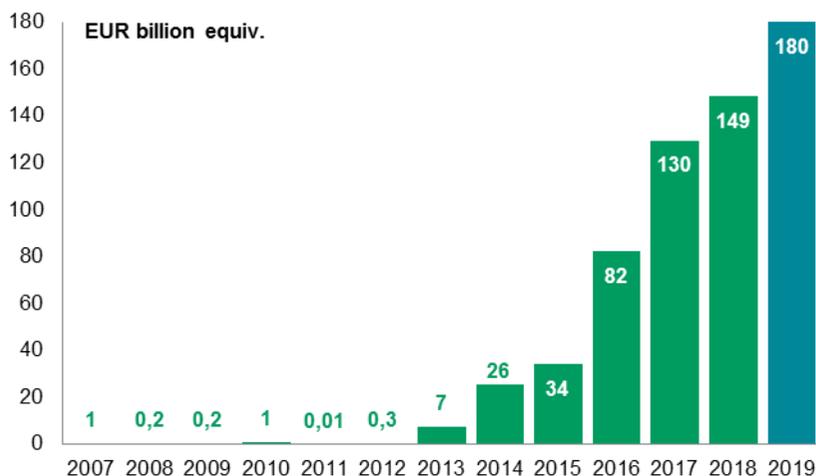
*“When I go to my retail advisor and am advertised green bonds, I automatically assume they are bonds for green people i.e. aliens like me”*

*- Anonymous alien in one of our focus groups conducted as part of the French AL’ACT project*

Survey: What is a green bond?



- UoP goes to green people
- Underlying issuer is developing alien-oriented products
- Issuer is managed by an alien
- UoP goes to green projects



Source: Dealogic, Crédit Agricole CIB Sustainable Banking (as of December 31st, 2018)  
Forecast: Crédit Agricole CIB Research – Green Bond Analyst Erwan Créhalet



## ISSUE #3: FINANCIAL LITERACY IN MARKETING CLAIMS

**FOCUS OF MARKETING CLAIMS.** Financial products' marketing documents are dominated by references and literature oriented to humans. This makes sense given that today, humans are the primary if not exclusive audience of financial products. However, at least in Europe Mifid II regulation provides clear protections, notably in Art. 24(3) with regard to the need for „all information, including marketing communications, addressed by the investment firm to clients or potential clients shall be fair, clear and not misleading.“ This clause does not provide for any carve-outs or exceptions for certain sub-groups.

**ALIENS ARE NOT CONSIDERED IN MARKETING DOCUMENTS.** A review of over 200 investment products suggests that aliens are both entirely ignored in these documents as a target audience and the language of these documents is in many cases not intelligible for a non-human audience.

Case in point are environmental claims. A number of environmental claims compare their impact to *taking cars off the road*. This effect is nonsensical for aliens whose primary mode of transport are spaceships or racing pods and cruisers. Describing impact in this way makes it hard for aliens to understand the real world impact of their investments. Other issues relate to the use of currencies and lack of holographic communication techniques.



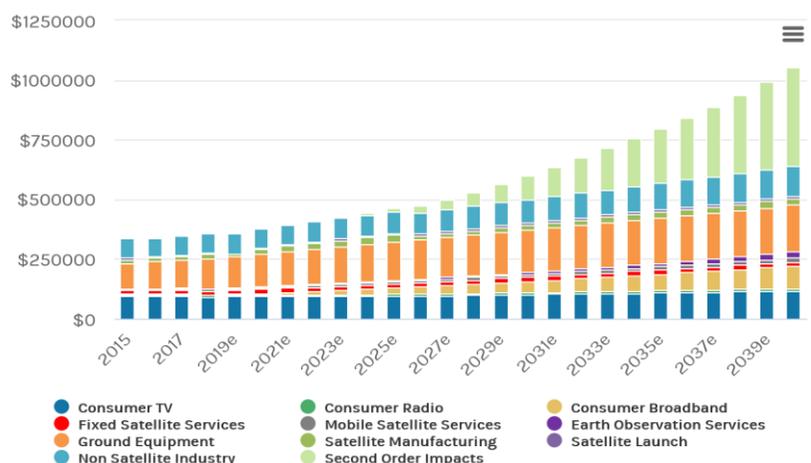
## ISSUE #4: PORTFOLIO DIVERSIFICATION & NON-PLANETARY ASSETS

**MODERN PORTFOLIO THEORY AND THE MARKET PORTFOLIO.** Most financial products advertised to retail investors make reference to the market portfolio in some form. They either directly seek to represent a „market portfolio“, track a market portfolio’s performance, or at the very least measure their performance relative to a market benchmark index. However, as outlined in Roll’s Critique of Modern Portfolio Theory, it is impossible to actually buy the market portfolio. This issue is amplified for aliens, since most if not all market portfolios do not contain financial assets from other planets, solar systems, or even galaxies. In that sense, financial portfolios on Earth are among the least diversified in the universe.

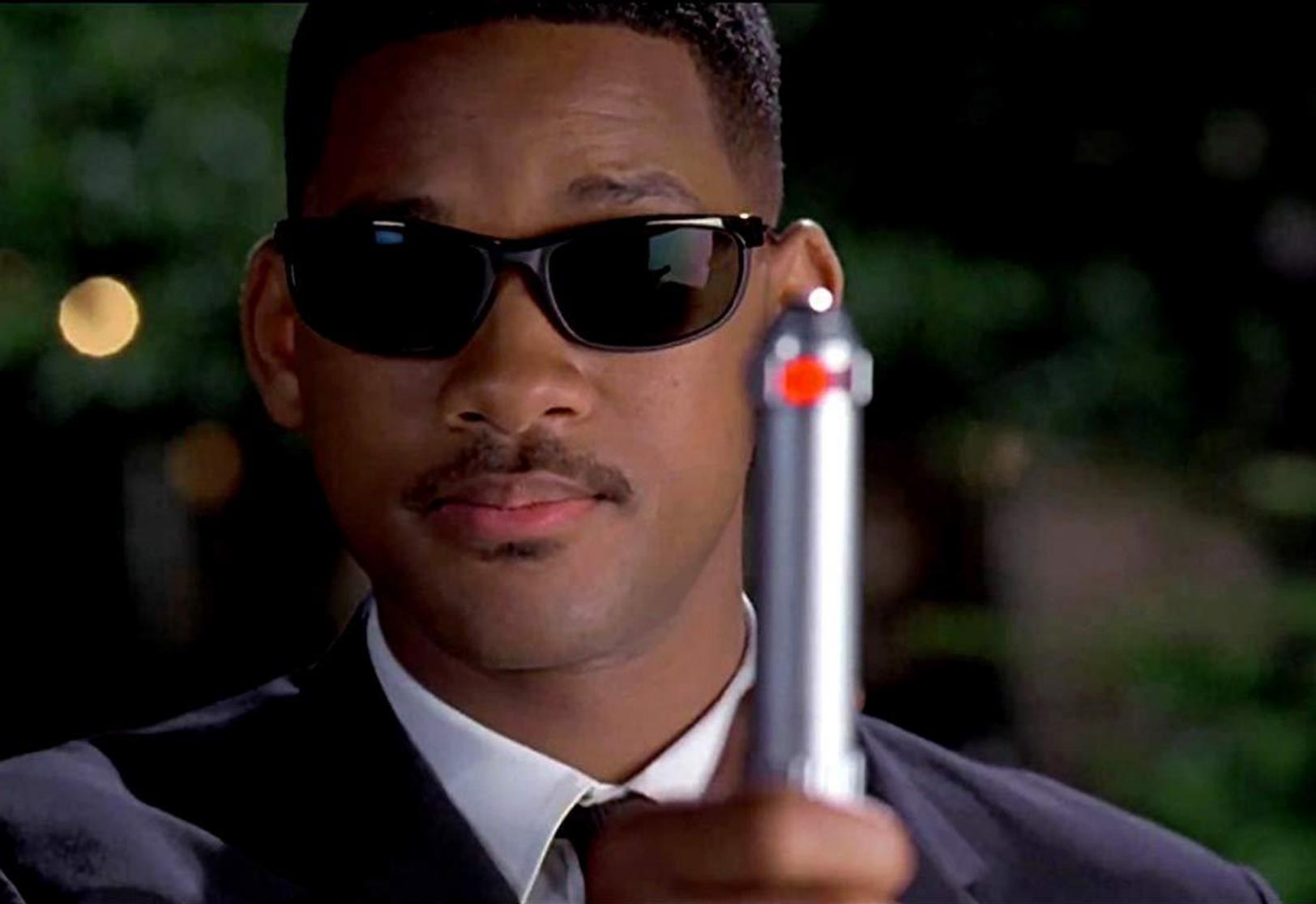
**CONCENTRATION RISK DUE TO DEATH STAR TECHNOLOGIES.** With the advent of the new alien technologies like the Starkiller Base or even the Death Star, concentrating all assets on one planet represents an incredible concentration risk. While analysis from MorganStanley demonstrates the growing potential of the space economy in portfolios, with potential market cap exceeding \$1 trillion by 2040, this still will only represent a fraction of portfolios. Moreover, it doesn’t address the diversification issues, as these space-related companies are still all headquartered on planet Earth.



The Global Space Economy (\$t)



Source: Haver Analytics, Morgan Stanley Research forecasts



## **BARRIERS TO ALIGNING ALIEN' INVESTING PREFERENCES WITH MARKET PRACTICE**

As outlined above, a number of key issues related to climate risk management, green bonds, marketing claims, and portfolio diversification practices are creating an environment leading to systematic misselling. The following will outline key barriers to overcoming this crisis

**USE OF NEURALYZERS UNDERMINES ACCOUNTABILITY.** The use of neuralyzers (“mind-swiping” technology) is arguably the biggest driver in undermining better market practice. Neuralyzers are used by the Men in Black to cause humans to forget alien interactions. The use of this technology leads humans to continue to believe aliens don't exist and thus undermine initiatives to ensure their rights and investment preferences are considered in investment decision-making. While unclear, there is some anecdotal evidence that neuralyzers may also be used on aliens (e.g. use of sunglasses by the Arquilian Ambassador in presence of the Neuralyzer). There may be a risk that the technology is used by retail investment advisors to reprogram memories of the suitability assessment conducted with aliens.

**LACK OF CLARITY ON RIGHTS.** As outlined by Robert Freitas, there is a lack of clarity on the civil rights of extra-terrestrials. That ambiguity may cause alien rights to be equivalent to animals. This ambiguity makes their rights in the context of MiFID II unclear.

**UNDUE INFLUENCE BY CIVIL SOCIETY.** Organizations like the 2<sup>o</sup> Investing Initiative, Carbon Tracker Initiative, Climate Bonds Initiative and others have played a major role in driving climate risk assessments and the use of green bonds. These organizations do not represent alien interests, which are generally under-represented in the market. As a result, their concerns are not considered.

**LACK OF TAKING IT SERIOUS.** Interviews, surveys, and focus groups with humans suggest nobody takes the issue raised in this report serious, thinks its something we should worry about, or even thinks we are serious when we write 8 this. Human practices around “fooling one another” on a specific day in the year further undermine this.



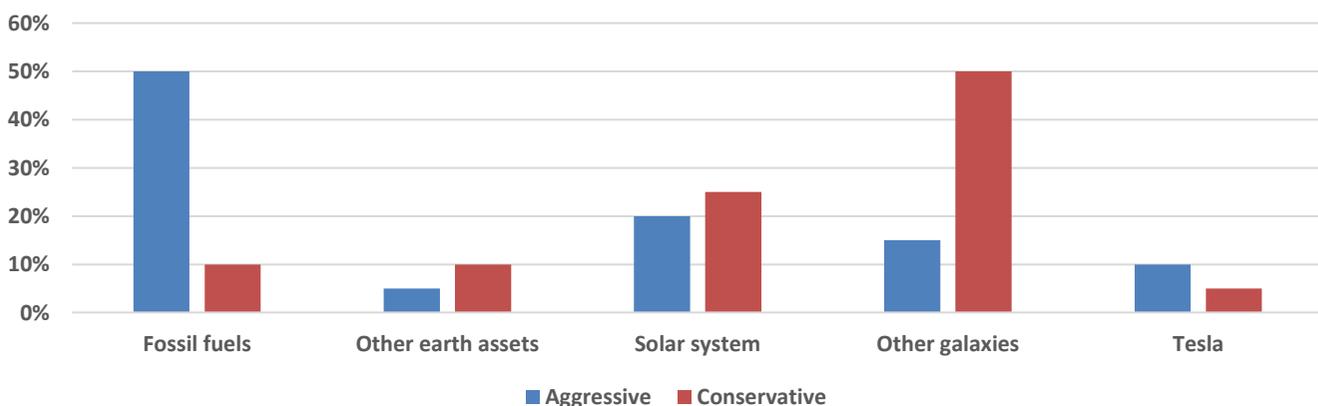
## DESIGNING AN OPTIMAL ALIEN PORTFOLIO

This report represents the first attempt to identify the gap between aliens' investing preferences and the current market practice in the retail investor market. It identifies key issues and barriers to aligning these preferences with practice.

However, there are significant opportunities to improve practice. PACDA has developed two investing strategies for a conservative and aggressive investment strategy for an extra-terrestrial. An aggressive strategy continues to reflect high concentration opportunity in the fossil fuel sector, reflecting its role in driving climate change and thus allowing for a further improvement of asset value for other galaxies (we call these types of investors "Alien Makers" since they help create the world they want to prevent us from living in). A more conservative strategy ("Alien Taker") in turn focuses the majority of its investments in non-solar system assets. While there may be some question around the liquidity of the other galaxy universe, companies like the Lunar Embassy Corporation are involved in selling non-earth assets ([Link](#)).

Of course, in addition to the traditional strategy, optimal portfolios also will improve on their marketing and definition and ensure the investment process more broadly ignores climate risks. Finally, there may also be opportunities to short stocks, like companies setting science-based targets, as an additional layer.

### Optimal portfolio allocation





## RECOMMENDATIONS

In response to these barriers, PACDA proposes the following recommendations for policymakers and further research:

1. Encourage the use of **carbon footprinting** of investment portfolios as a way to identify potential investment opportunities for aliens looking to target “high-carbon” portfolios and to “recarbonize” their portfolios
2. Clarify the fiduciary duty obligations related managing assets for extra-terrestrials and more broadly the legal framework and civil rights of extra-terrestrials within financial product legislation and human rights charters more broadly.
3. Support the redefinition of **Green bonds** in line with aliens’ expectations to mean bonds with Use of Proceeds directed to extra-terrestrial products and services
4. Develop an **Implied Alien Warning (IAW)** indicator to measure the alignment of a portfolio with alien investment objectives’ outcomes. We suggest that such an indicator be science-based and expressed in a temperature warming symbol for ease of reading.
5. Roll-back the current mandatory **ESG integration** policies being scaled in a number of jurisdictions to allow for alien-compatible investment products.
6. Enhance **diversification** requirements to move away from large-cap, market-capitalization weighted indexes towards more truly diversified financial portfolios.
7. In order to anticipate the potential punishment of planetary destructions in response to extra-terrestrials being upset at having been missold products, enhance alien risk management systems, develop mandatory **alien stress-tests** (as recommended in our previous report) and more broadly ensure the integration of these risks in capital requirements.
8. Provide financial support to the **PACDA** to further improve our understanding and knowledge of these risks and issues.



## Possible Alien Consumer Drivers & Ambitions



### ABOUT PACDA

The PACDA program is a new 1,000-year, 100 million Imperial Credit funded program of 2° Investing Initiative [2Dii] supported by Aliens Global Invaders. 2Dii is a multi-stakeholder think tank working to align the financial sector with climate goals. The association was founded in 2012 and has offices in Paris, London, Berlin, and New York City.

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