

Defense and ESG challenges: why is the financial sector shaking?



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Executive summary

Ukraine's invasion has thrust defense from the margins of sustainable investment strategies to center stage, raising a divisive question: Can security and ESG criteria be reconciled?

For investors, the question is not simply whether or not to include defense in their portfolios, but to integrate a detailed and documented assessment of controversies and their potential impacts.

Concretely, since 2022, European ESG funds¹ exposure to the aerospace and defense sector has increased by a factor of 2.7. This trend has further intensified with the announcement of the "ReArm Europe" plan, and its 800 billion euros in investments scheduled over five years. ESG investors, confronted with geopolitical realities, are redefining their sustainability criteria in the face of security imperatives.

This reallocation requires rigorous sectoral risk assessment. AlphaYoda analyzed the controversy profiles of three European defense leaders, Thales, Dassault Aviation, and Rheinmetall, over 2020-2025 using its solution combining Al and human expertise capable of processing more than 200,000 information flows in real time.

Key findings:

- **Corruption: the dominant risk.** 48% of controversies concern corruption, often transnational, involving multiple jurisdictions.
- Armed conflicts: a major reputational issue. The two French groups were targeted in 2022 by an NGO complaint for potential complicity in war crimes in Yemen, in connection with arms sales.
- **Long timeframe: a latent risk.** Contracts signed today can trigger litigation 10 to 30 years later, reinforcing uncertainty and the difficulty of risk management.

Several controversies reached a threshold considered as a potential violation of the UN Global Compact and OECD guidelines. While no formal conviction has been pronounced during the period studied, the severity, frequency, and absence of corrective measures regarding controversies should be cause for concern.

AlphaYoda thus proposes an approach that, beyond observation, aims to quantify the financial and reputational risk linked to ESG controversies, a project whose results will be detailed in the second part of the study.

¹ Schiffler, A. (2025, 17 juillet). <u>Comment les fonds ESG ont appris à aimer les armes</u>. *Morningstar*.

1. Introduction

The invasion of Ukraine in 2022 profoundly disrupted our perception of security in Europe. Long overlooked, the issue of military power is once again central to political and economic agendas.

What happened?

Since the fall of the Berlin Wall, Europe has reduced its military capabilities by 75%² and cut its defense budgets from 3% of GDP in 1990 to just 1.5% in 2020³.

Faced with a less committed United States within NATO, Europe has come to realize it can no longer rely on others to guarantee its security. Through its "ReArm Europe" initiative, the European Commission estimates that the defense sector will require €800 billion⁴ in funding over the next five years. This shift places defense financing at the intersection of major tensions: between national security and ethical imperatives, between industrial sovereignty and ESG standards.

² De Laforcade, X. (2024, 12 juin). <u>Investing in the Defence sector: challenge in striking a balance between strategic interests and ethics</u>. Rothschildandco.

³ Cohen, J. (2025, 7 avril). <u>Un changement de paradigme pour la défense européenne</u>. CPRAM.

⁴ Tobelem, B. (2025, 6 mars). <u>La défense européenne n'est-elle rien sans l'Otan ?</u> Touteleurope.eu.

1.1. A polarized debate on sustainable finance

The inclusion of the defense sector in the sustainable investment universe is a deeply divisive issue among financial stakeholders.

Stakeholder positions on the inclusion of defense in sustainable finance

Against Reclaim Finance's position (ONG) Defense cannot be considered a "sustainable" sector. Their position is based on ethical, environmental, and transparency arguments. Mirova's position Defense can be compatible with ESG, under strict conditions: exclusion of prohibited weapons, traceability, and transparency on the use of invested capital. Proposal for dedicated mechanisms (specific funds) to frame investment. Protecting democracies is seen a prerequisite for sustainable development. Ministry of Economy's position Defense is fully compatible with sustainable finance. It is even its "protector", by guaranteeing freedom and sovereignty.

1.2. What the ESG regulatory framework says and doesn't say

In a recent opinion last June, Brussels confirmed the alignment between defense investments and European ESG regulation. According to the Commission, the sustainable finance framework applies across all economic sectors. As Morningstar reminds us, "each investment must be evaluated individually, and not rejected based solely on sectoral classification."⁵

"Investment in the defense sector is not prohibited by ESG texts"

Autorité des marchés financiers to AEF info

In reality, restrictions are strictly limited to weapons banned under international conventions: cluster munitions (Oslo Convention), anti-personnel mines (Ottawa Convention), and chemical or biological weapons. These prohibitions apply uniformly to all funds, whether ESG-labeled or not.

Many financial institutions, particularly in Europe, go further through sectoral policies that exclude or restrict investment in the arms industry. These policies often target banned weapons, companies implicated in human rights violations, those operating in embargoed regions, or those with significant revenue exposure to weapons.

The European SFDR regulation is frequently cited, notably because its delegated act requires disclosure on exposure to controversial weapons (a Principal Adverse Impact indicator).

So why is defense still excluded? The debate goes beyond legal constraints: ethics, transparency, impacts, and reputational risks lie at the heart of these decisions.

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⁵ Schiffler, A. (2025, 17 juillet). <u>Comment les fonds ESG ont appris à aimer les armes</u>. *Morningstar*.

Whether one chooses to invest in defense or not, understanding the sector's governance dynamics, exposure to controversies, and ESG-specific risks is essential. That is the aim of this analysis: to map weak signals, blind spots, and grey areas — using concrete case studies.

1.3. Scope of the analysis

As highlighted by AF2i in its report "ESG and Defense Industry Financing"⁶, the definition and delimitation of the defense sector is complex, with boundaries that remain vague and subjective. Between total exclusion of nuclear and tolerance for countries signatory to the Nuclear Non-Proliferation Treaty (NPT), between weapons manufacturing and simple component supply, each manager defines their scope. Dual-use technologies (artificial intelligence, satellite systems, etc.) amplify this definitional complexity.

For this study, the defense sector is defined as encompassing all activities and companies involved in the design, production, and maintenance of equipment, technologies, and systems used by armed forces and security agencies. This industry spans a wide range of products, from small arms and ammunition to armored vehicles, aircraft, warships, satellites, and cyber defense systems.

AlphaYoda analyzed **three major European defense groups**, all of which rank among the top 100 arms-producing companies listed by the Stockholm International Peace Research Institute (SIPRI)⁷ over the 2020–2025 period:

O Defense Companies Overview (2023)

Company	Country	SIPRI Rank	Defense Revenue Share
Thales	■ France	#16	52%
Rheinmetall	Germany	#26	71%
Dassault Aviation	■ France	#46	62%

Source: SIPRI 2023

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⁶ Association française des investisseurs institutionnels. (2023). <u>Les Dossiers de l'Af2i : ESG et financement de l'industrie de défense</u>, Association française des investisseurs institutionnels

⁷ <u>The SIPRI Top 100 arms-producing and military services companies in the world, 2023.</u> (s. d.). SIPRI.

For this initial phase, we chose to focus our analysis on three emblematic groups to lay the groundwork for our methodology before expanding it to the entire sector.

These three companies offer sufficient sectoral and geographical representativeness to identify meaningful trends, particularly:

- significant exposure to defense-related activities (all above 50%),
- coverage of critical segments (aerospace, electronics, land systems),
- proven involvement in high-risk markets (exports outside the EU, conflict zones, long-term contracts, etc.).

The objective of this study is not to generalize, but to shed light, through concrete case studies, on the specific governance and controversy dynamics of the defense sector, which can be extrapolated to other similar players.

2. The defense sector: a fertile ground for controversies

2.1. An expanding industry, but structurally at risk

№ European Defense Sector Overview (2023)

Metric	Value	Change/Note
✓ Sector Revenue	€158.8 billion	+16.9% (2022)
? Total Employment	581,000 people	+8.9% (2022)
SMEs in Value Chains	2,500 companies	Heavy subcontracting dependence

Source: European Defense Industry Data 2023

This growth relies on one of the sectors most sensitive to ESG risks, due to:

- its public monopsony status (exclusively state clients);
- contract confidentiality (defense secrecy);
- legal and logistical complexity of export sales.

2.2. Controversies: corruption, conflicts, sluggishness - recurring signals

AlphaYoda, **through its methodology combining artificial intelligence and human expertise,** analyzed controversies affecting three major defense sector players - Thales, Rheinmetall, and Dassault Aviation - over the 2020-2025 period.

Here's what AlphaYoda data reveals:

→ Corruption: A predominant and transnational risk

AlphaYoda's analysis **shows that 48% of the controversies** identified among these three companies concern corruption facts. These allegations are not limited to a specific geographical area but extend worldwide: India, African countries, Malaysia, Brazil, France, United Kingdom -- confirming the global dimension of the risk.

Thales appears particularly exposed: searches in 2024 in several European countries for corruption; ongoing judicial procedures concerning a submarine contract in Malaysia (2002); prosecutions involving former South African president Jacob Zuma for facts dating back to the 1990s.

Dassault Aviation is not spared: the Rafale contract in India (2016) continues to generate controversies and investigations.

Rheinmetall presents a different profile:

- No documented corruption scandal during the analyzed period.
- However, this absence of public revelations in no way guarantees the absence of underlying risks -- an essential point in ESG risk analysis of the sector.

This risk mapping takes place in a global context where **62% of countries**⁸ are considered at high risk for corruption in the defense sector, according to Transparency International.

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⁸ Government Defence Integrity Index 2020. (2021). Transparency International.

→ Armed conflicts: a major reputational risk

Beyond corruption, our analysis also documents controversies related to armed conflicts affecting defense sector companies.

In June 2022, Thales and Dassault Aviation were the subject of a complaint filed by NGOs Sherpa, ECCHR, and the Yemeni Center for Human Rights before the Paris Judicial Court. This complaint accuses them of potential complicity in war crimes in Yemen, due to arms sales to Saudi Arabia and the United Arab Emirates, used in the Yemeni conflict since 2015.

Although these complaints have not yet resulted in convictions, they constitute a significant example of reputational risk for these companies.

In 2024, the Rheinmetall group is accused of exploiting regulatory disparities by relocating its production to countries with less stringent controls (South Africa, Indonesia, Malaysia, Saudi Arabia). This strategy is suspected of circumventing European restrictions, with its munitions potentially ending up in conflicts in Yemen, Sudan, and Israel despite embargoes.

→ A long timeframe: an invisible risk... until the explosion

A key characteristic highlighted by AlphaYoda is the long timeframe of these controversies, **often revealed 10 to 30 years** after the facts, due to defense secrecy, complex judicial procedures, and opacity of responsibility chains.

Example: The Thales case perfectly illustrates this extended timeframe. In 2024, the group was subject to searches in France, the Netherlands, and Spain as part of investigations opened in 2016 and 2023 concerning sales of military equipment abroad. Simultaneously, a preliminary investigation in May 2023 examines possible acts of corruption for obtaining a contract to renovate Mirage-2000 aircraft in India.

Even more significantly, a trial could be ordered concerning suspected corruption in the sale of submarines to Malaysia dating from 2002, more than 20 years after the facts.

The absence of public controversy does not mean the absence of risk, but potentially the absence of temporary exposure. Contracts signed today could become sources of litigation in decades to come.

Defense sector controversies are not anecdotal but structurally linked to the sector's functioning.

2.3. Cases aligned with UNGC/OECD violation criteria

For investors, this reality has concrete implications: the controversies identified at Thales and Dassault Aviation present such a level of severity that they are considered by AlphaYoda as potentially in violation of the principles of the United Nations Global Compact (UNGC) and OECD guidelines.

The United Nations Global Compact (UNGC) is a United Nations initiative launched in 2000 aimed at encouraging companies to adopt sustainable and socially responsible policies. It comprises ten principles covering human rights, labor standards, the environment, and anti-corruption.

The OECD Guidelines for Multinational Enterprises are recommendations addressed by governments to multinational enterprises operating in or from countries that adhere to them. They provide non-binding principles and standards for responsible business conduct in a global context.

Measuring violations of United Nations Global Compact principles and OECD guidelines is now a key requirement for investors. It responds to European regulations such as SFDR and ESMA guidelines on the use of ESG terms.

It is essential to note that no standardized definition formally exists for what constitutes a "violation" of UNGC/OECD principles, which can lead to variable interpretations among ESG analysts.

Through its methodology, AlphaYoda enables precise and documented identification of these potential violations, notably by evaluating: the credibility of facts, the status of official investigations, frequency, the materiality of accusations, and the absence of credible corrective responses.

According to our analysis, several controversies reach a sufficient threshold of severity to be considered as potentially in violation of principle 10, which calls for fighting corruption in all its forms.

At AlphaYoda, we clearly distinguish between potential and proven violations of UNGC/OECD principles. This distinction is essential for precise and nuanced ESG analysis, offering investors a complete and proactive vision of risks related to compliance with international standards.

A potential violation can be recognized if:

- The severity of the controversy is high or very high
- The accusations are frequent and repeated
- The facts are credible and documented
- Investigations are ongoing
- The company has not provided a credible corrective response

In the analyzed cases:

- Multiple investigations for transnational corruption,
- Persistence of cases over time without resolution,
- Significant financial scale (several billion euros of contracts concerned),
- Systematic denial or absence of documented public corrective measures.

While none of these companies has, to date, been formally convicted over the 2020-2025 period, their controversial exposure is sufficiently serious, recurrent, and documented to justify classification as "potential violation".

Conclusion

The war in Ukraine has revived strategic interest in defense, but also the necessity to better understand its ESG issues. Investing or not is a choice, but understanding controversies, mapping risks, and evaluating governance is an obligation for any actor.

Sector controversies remain complex to anticipate: opacity, long timeframe, and transnational risks. AlphaYoda technology makes it possible to objectify these risks by identifying controversies and their evolution. This approach offers investors a factual, documented, and evolving vision.

Beyond this mapping, AlphaYoda goes further by proposing a quantification of the financial impacts of these controversies. Through a proprietary method based on a corpus of financial and reputational indicators, developed in partnership with researchers, the objective is to better inform investment decisions by integrating a financial reading of ESG controversies.

The second part of this study, dedicated to quantifying the financial and reputational impacts of controversies in the defense sector, is coming.

Stay connected to discover how to concretely quantify these risks.

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Photo credits:

Olena_Z. (2022, 15 novembre). <u>Des soldats ukrainiens lors d'un défilé militaire</u>. [Photographie]. iStock.



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