# TRANSITION PLAN

## Sustainable Value Creation

JUNE 2025

LEONARDO

# TRANSITION PLAN

**Leonardo is a Global Security Industrial Group. The Company builds technologies, solutions and services in the Aerospace, Defence & Security.**
**The Group plays a prominent role in major international strategic programmes and is a trusted technological partner of governments, defence agencies, institutions and enterprises.**

Leonardo drives global progress and security through innovative and high-value technological solutions. To strengthen its leadership, the Group invests in advanced technologies that support sustainable environmental and climate action.
Sustainability is a core enabling factor of Leonardo's Industrial Plan, that includes the pillars of decarbonization, circular economy and biodiversity protection.
To create sustainable value, the Group engages its entire ecosystem, integrating sustainability across all phases from research and development to production, supply chain, product use and communities.
Through efficient processes, continuous innovation, and the adoption of cutting-edge technologies such as digitalization and artificial intelligence Leonardo accelerates the transition towards a safer, more resilient, and sustainable future.

**This document outlines Leonardo's commitment to sustainability and provides a clear framework of the strategy, objectives, and actions for the transition towards sustainable business value creation.The primary purpose of the Transition Plan is to provide transparent and comprehensive information to stakeholders - including investors, partners, and institutions - strengthening their awareness about the impacts, risks and opportunities related to our transition journey.**

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# GLOBAL SCENARIO

Globally, 2024 was the hottest year on record[1]. The increase in temperatures and the occurrence of extreme weather events has led to an increase in climate and environmental risks for businesses, and to a consequent need for strategies to mitigate them, while containing the Company's impact on the environment.
On the other hand, the use of materials worldwide has increased more than threefold in the last 50 years and is growing by an average of more than 2.3% per year[2].
The extraction and processing of material resources (fossil fuels, metallic and non-metallic minerals, and biomass) are responsible for more than 55% of greenhouse gas emissions, 40% of health impacts caused by particulate matter, more than 90% of biodiversity loss and the expansion of water-stressed areas. In 2024 circular economy practices generated € 16 billion saving in operating costs in Italian companies, the potential achievable in 2030 is forecasted to be € 100 billion[3]. Circular companies also register a lower probability of default, and a higher innovation potential based on the efficient use of resources and reduction in the risk of disruption to the value chains.

**Leonardo aims to decouple the business growth from the use of resources, pursuing the transition from a pure linear business model towards the adoption of a circular business model that improves the value creation.**

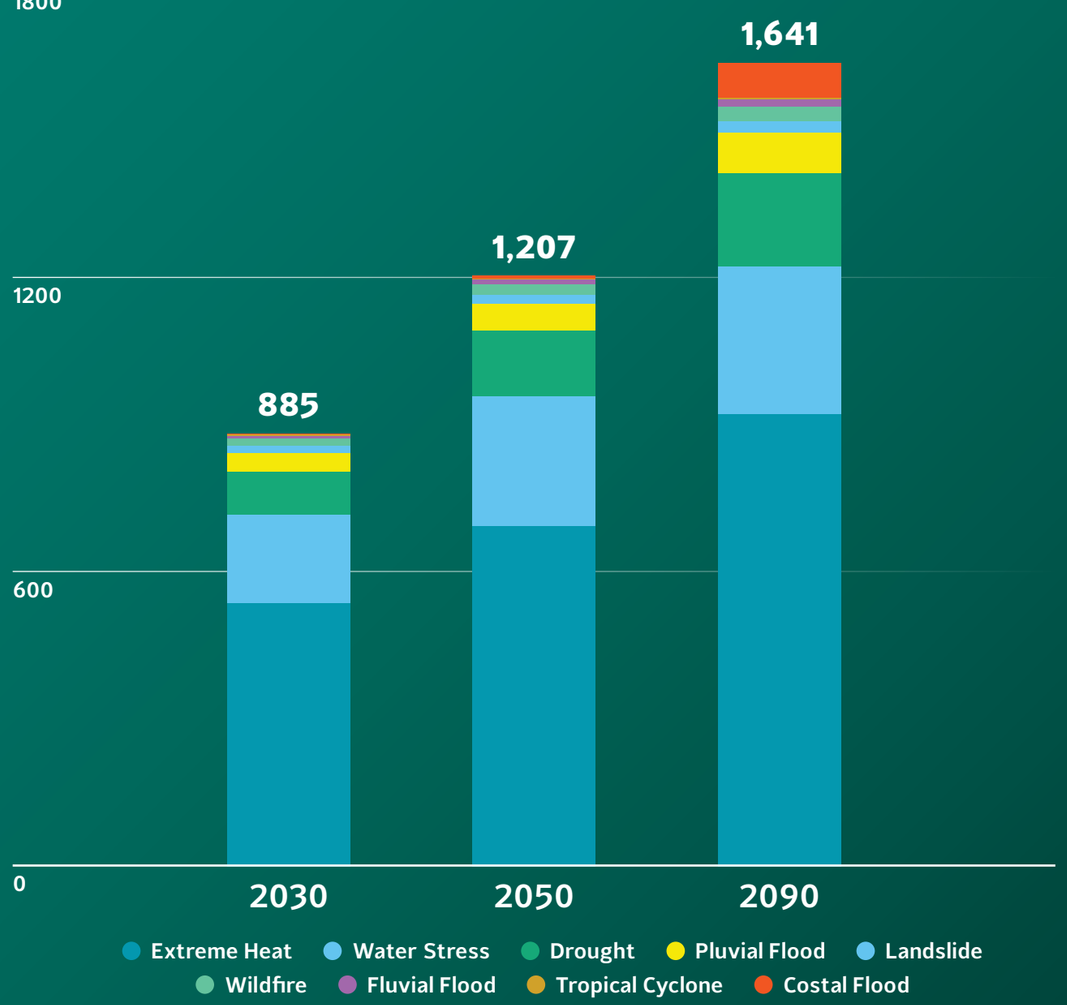
The Group aims to transform the business to achieve measurable improvements in adaptation and resilience to climate change, and reductions in GHG emissions.
It also recognizes the vital importance of natural capital, biodiversity, and ecosystems services conservation as a business opportunity that strengthens our business resilience, including strategies for mitigation and adaptation.

Leonardo supports institutional and private sector clients in providing security instruments, there is an urgent need to integrate climate, environmental and development strategies to support resilient, and inclusive business growth.

The business transformation and transition leverages on the strive for **operational efficiency**, for **multidomain technological excellence** and on the **digital continuum framework**.

Sources:
1. https://climate.copernicus.eu/sites/default/files/custom-ploads/ESOTC-2024/press-resources/ESOTC-2024-report.pdf.
2. Word Bank Group:Climate Change Action Plan 2021-2025, Supporting Green,Resilient and Inclusive development.
3. What is the Triple Planetary Crisis? | UNFCCC.
4. For the world's largest companies, climate physical risks have a $1.2 trillion annual price tag by the 2050s | S&P Global.

Climate risks could cost companies **$1.2 trillion annually by the 2050s**. By the 2050s, annual financial losses from climate physical risks for companies in the S&P Global 1,200 are projected to reach $1.2 trillion, assuming no adaptation measures[4].
Extreme heat and water stress are expected to account for the majority of these costs, even under a scenario where global greenhouse gas emissions stabilize and decline after 2050.



# THE ROLE OF AEROSPACE DEFENCE AND SECURITY SECTOR

The triple crisis - climate change, nature biodiversity loss, pollution and waste - the geopolitical crises and inequality are defining the challenges of our time, and it is crucial that we tackle them together, recognizing the interconnections between people, planet, and economy[1].

In this era of rapid change, the Aerospace, Defense and Security sector is strenghtening its position to address global challenges. At the heart of this approach are technologically advanced products, innovative solutions and extensive digitalization efforts that support a high-tech and data-driven approach to sustainability.
To address these challenges NATO adopted an ambitious Climate Change and Security Action Plan to embed climate change considerations into its political and military agenda[2].

In the 2023 NATO Summit in Vilnius, Allies agreed the establishment of a NATO Centre of Excellence for Climate Change and Security. Leonardo takes part of this commitment by developing our advanced products, innovative solutions, and the Group's extensive digitalization efforts, we are driving a high-tech approach to sustainability.

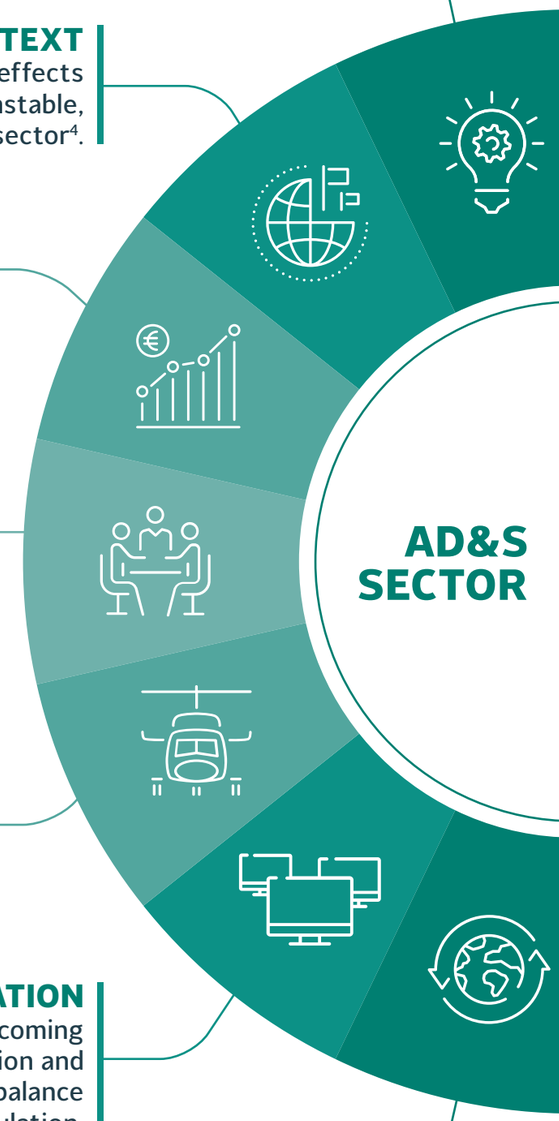
Sources:
1. What is the Triple Planetary Crisis? | UNFCCC.
2. 01_medor_quaderno_clima_ebook.pdf
3. IPCC_AR6_WGIII_TechnicalSummary.pdf
4. GPI-2024-web.pdf
5. WEF_Global Aviation Sustainability Outlook_march 2025.
6. WEF_global risk report press release.

## RESEARCH AND INNOVATION
The development and large-scale deployment of innovative technologies and systems are essential for achieving deep decarbonization[3]. Research and innovation are crucial for ensuring competitiveness and resilience.

## GEOPOLITICAL CONTEXT
With 56 active armed conflicts, worsened by the effects of climate change, global security is increasingly unstable, with direct impacts on the AD&S sector[4].

## FINANCE AND MARKET DEMANDS
Sustainable finance is growing, with green bond issuances expected to reach $ 1 trillion by 2025, signaling the increasing interest of investors in ESG factors.

## POLITICS AND REGULATION
The ESG regulatory framework is strengthening with over 2,400 global regulations in place, making sustainability not only a strategic choice but also a regulatory requirement.
The EU Emission Trading System will expand in 2025 to include non-$CO_2$ emissions, particularly from the aviation sector.[5]



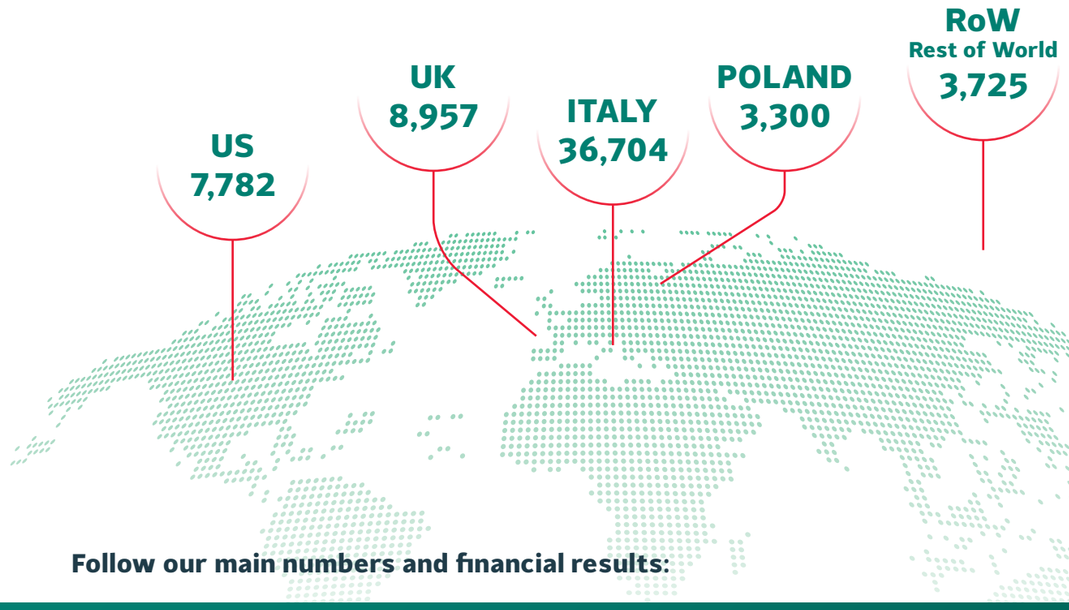

## RESILIENT TECHNOLOGIES
The sector must further enhance the resilience of its technologies, making them even more robust to withstand extremely complex environmental scenarios. Production processes must be designed for higher efficiency, reducing their environmental impact.

## AI AND DIGITALIZATION
The adoption of artificial intelligence is becoming increasingly central to operational optimization and advanced data analysis. However, it requires a balance between innovation, energy consumption, and regulation.

## NATURAL RESOURCES SCARCITY, ENVIRONMENTAL AND CLIMATE RISK
Environmental risks dominate the long-term horizon, with extreme weather events, biodiversity loss and ecosystem collapse, critical changes in Earth systems, and natural resources scarcity topping the list of major risks for the next ten years[6].

# COMPANY PROFILE

In 2024 the workforce increased by 6,902 employees compared to 2023 (+12,9%). Growth is mainly divided between Italy (about +2,000), the United Kingdom (about +700), the United States (about +460) and Poland (about +390). There were more than 7,000 new hires during the year.




**Follow our main numbers and financial results:**

**PEOPLE WORLDWIDE**
**60,468**

**SITE GLOBALLY**
**129**

**SUPPLIERS WORLDWIDE**
**11,000**

**REVENUES**
**€17.8BN**

**ORDERS**
**€20.9BN**

**ORDER BOOK**
**€44.2BN**

**EBITA**
**€1,525MLN**

**INVESTED IN R&D**
**€2.5BN**

2024 Data.



# MULTIDOMAIN CAPACITY

The Company is launching a wave of innovative initiatives, leveraging key enabling technologies and capabilities, to build a new interconnected and interoperable Digital Ecosystem, able to operate across all domains.

# HOW COULD BE THE FUTURE OF DEFENCE AND GLOBAL SECURITY?

## From Defence...

Increase of Defence spending, driven by **geopolitical threats** and urgent need for **EU strategic autonomy**.

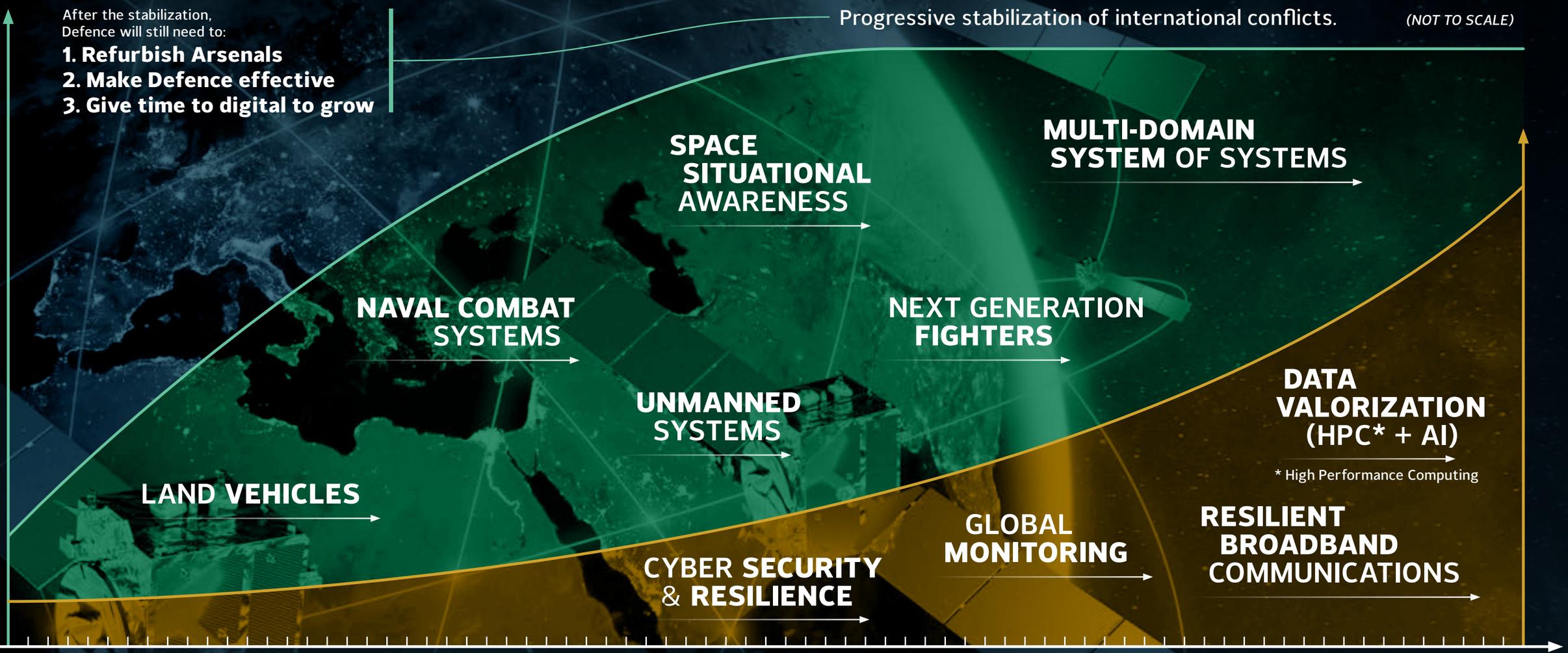
## ...To Dual Use Global Security

The “new normal” will require Governments to reinforce critical infrastructures leveraging innovative technologies.

After the stabilization, Defence will still need to:

1. **Refurbish Arsenals**
2. **Make Defence effective**
3. **Give time to digital to grow**

Progressive stabilization of international conflicts. *(NOT TO SCALE)*




Leonardo is building the foundation of its **future products and service offering**, to face the transition from Traditional Defence to dual-use Global Security that will become the “**New Normal**”.

# COMPANY COMMITMENT

Leonardo positively impacts on society also by **protecting and generating prosperity**, through technological progress, efficiency, partnerships and solutions for global security. Thus, **sustainability underpins Leonardo Industrial Plan** contributing to boost **business** through:

**COMPETITIVENESS**
creation of new business opportunities to protect people, infrastructures, territories - i.e. global security;
capability to meet the new customers' needs; push for innovation.

**PERFORMANCE**
sustainable creation of shared value, improved efficiency and access to financial capital.

**RISKS & OPPORTUNITIES MANAGEMENT**
mitigation of climate, environmental, social and governance risks to make the company more **resilient** to shocks, while heightening the accuracy of our evaluation of ESG opportunities.

## MAIN DRIVERS
for climate and environmental transition

- DIGITALIZATION AND NEW TECHNOLOGIES
- REDUCTION OF EMISSIONS AND ENERGY CONSUMPTION
- RESPONSIBLE USE OF NATURAL RESOURCES
- CIRCULAR ECONOMY
- PROCESS EFFICIENCY IMPROVEMENT
- PROTECTION OF BIODIVERSITY
- MONITORING AND MANAGEMENT OF PRODUCED WASTE

## MAIN SOLUTIONS
for climate change adaptation and environmental monitoring

- GLOBAL MONITORING
- EARTH OBSERVATION
- PRODUCTS FOR "SEARCH & RESCUE" MISSIONS
- PRODUCTS CAPABLE OF OPERATING IN EXTREME CONDITIONS
- MULTIDATA PLATFORMS
- WILD-FIRE SYSTEMS
- EARLY WARNING SYSTEMS



## CLIMATE COMMITMENT

Leonardo is committed to strengthening its leadership in security and technology that **promote sustainability and climate action**. The latter aims to avoid the most impactful effects of climate change and serve as a lever to increase the competitiveness of Leonardo's sustainable business offering.

In line with this strategy, **Leonardo is committed to achieving ambitious decarbonization targets**, validated in 2024 by the Science Based Targets initiative (SBTi).

**The Group is actively committed to reducing its greenhouse gas emissions across the entire value chain**.

## ENVIRONMENTAL and BIODIVERSITY COMMITMENT

The Group has consolidated an **environmental strategy** based on the concept of decoupling between business growth from resource consumption that, by leveraging the Group's **technology** and **innovation**, allows it to contain its **environmental footprint** and **protect ecosystems** in the **territories** in which it operates.

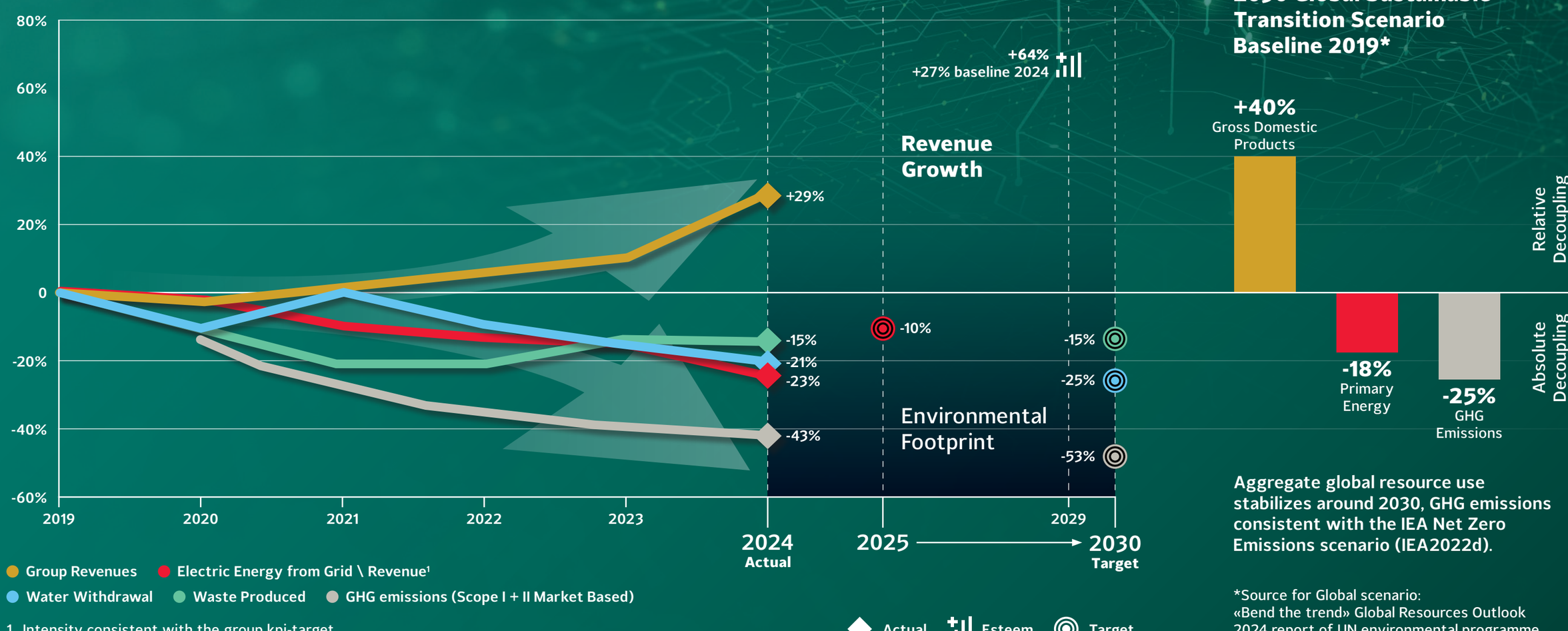
Leonardo aims at the **circular transition** of its business. Starting from critical raw materials, the Group engages its partners and suppliers in **circular value chains** to extend the value proposition of its products, **improve efficiency** and **increase resilience** of industrial production through **massive digitalization**.

Leonardo pursues **water reuse**, **rainwater collection** and **waste upcycling**.

# DECOUPLING STRATEGY FOR TRANSITION

In this era of rapid technological change, Leonardo is redefining its position to tackle global challenges. **A core element of our transition strategy is to foster business growth while minimizing reliance on material resources and reducing environmental impact**.

Leonardo's results highlight how the Group is well positioned to achieve an **absolute decoupling** between business growth and environmental impacts. These results and the targets to which Leonardo is committed exceed global transition scenarios.




**Aggregate global resource use stabilizes around 2030, GHG emissions consistent with the IEA Net Zero Emissions scenario (IEA2022d).**

1. Intensity consistent with the group kpi-target.

*Source for Global scenario:
«Bend the trend» Global Resources Outlook 2024 report of UN environmental programme.

# LEONARDO SUSTAINABILITY JOURNEY

**2009**

First Environmental Report

**2020**

First Integrated Report

First Corporate ISO 14001 and 45001 Certifications

New ESG Targets

New Sustainability Operating Model

**2021**

First Sustainability Plan 2021-2023

First ESG-linked Credit Facility

Starting ESG Digital Planning and Forecasting

First Reasonable Assurance on Scope I & II Emissions

**2022**

SBTi Commitment

First Impact Materiality

Data Driven Approach

First TCFD Report

Sustainability Integrated in ERM

**2023**

New Industrial Plan 2024-2028

First Five-Year Sustainability Plan 2024-28

First Double Materiality Analysis

SBTi Targets Validation

Enhanced Digital Data Analytics

**2024**

Confirmed in the DJSI for the 15th consecutive year

Leonardo for Climate Action (TCFD)

Biodiversity Policy

Gender Equality Certification

Participation in COP 29

First CSRD Compliant Report

**2028**

SBTi - Supplier Engagement Target

**2030**

SBTi Target Year

Water and Waste Target Year

LDO UK Net Zero Scope I & II

New Sustainability Governance

Accelerate on Decarbonization, Waste, Water and Biodiversity

Sustainability Integrated in Leonardo Business Areas

First Participation in COP 28

Mainly related to enviromental and climate aspect

# 02 GOVERNANCE AND ENGAGEMENT

## 2.1 Climate and Environmental Governance

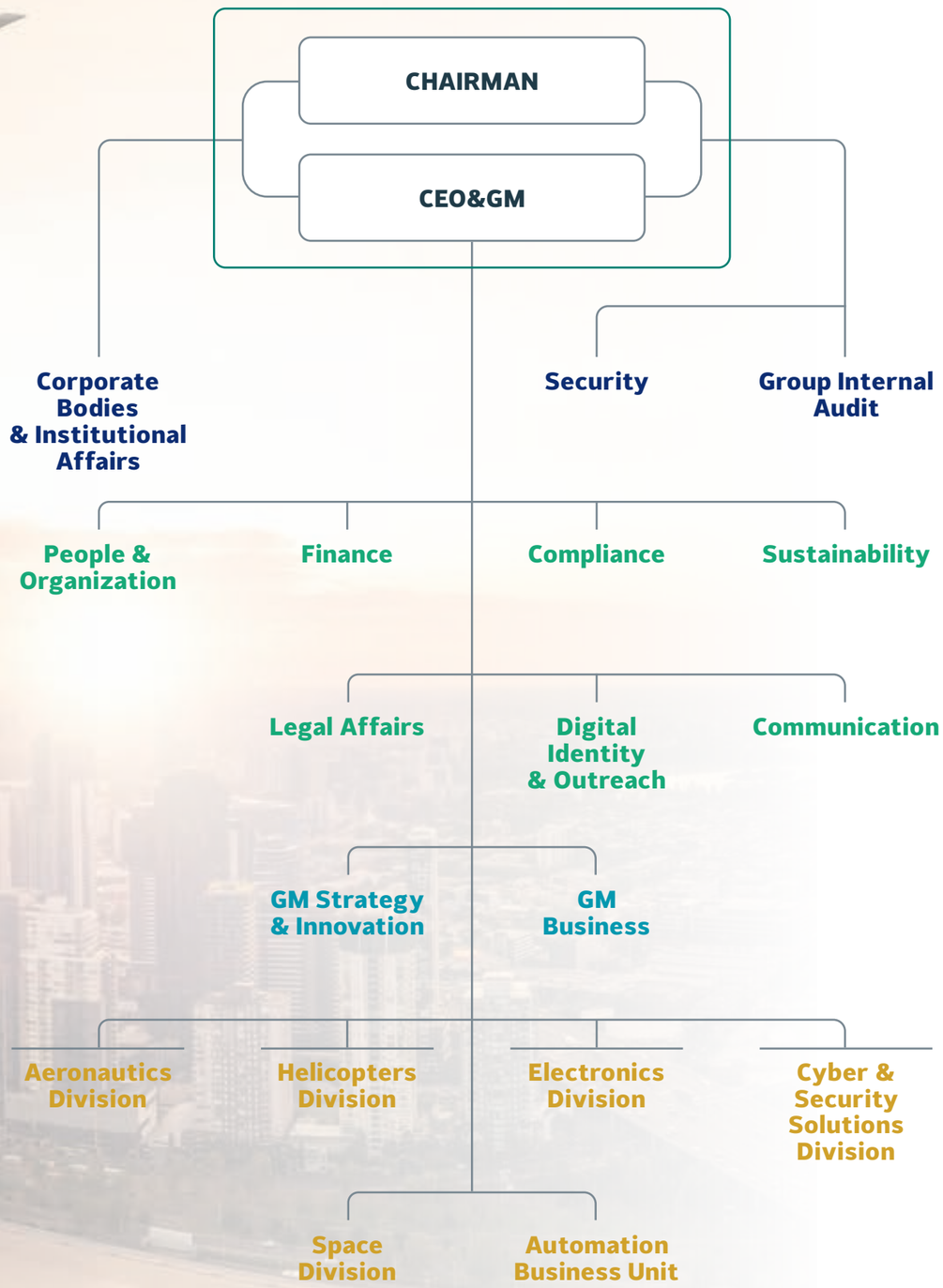
- Organisational Roles and Responsibilities Description
- Top Management Activities, Reporting Flow and its Frequency
- Sustainability Operating Model Impacts on Prosperity, People, Planet and Governance
- Impacts, Risks and Opportunities: Double Materiality

## 2.2 Advocacy and Engagement

# 2.1 CLIMATE AND ENVIRONMENTAL GOVERNANCE

A strong governance structure drives Leonardo's commitment to its decarbonization and environmental transition strategy.

The Board of Directors oversees sustainability strategy, including climate and environment, while Top Management ensures its implementation and integration across the businesses and the value chain, addressing stakeholder expectations.



# ORGANISATIONAL ROLES AND RESPONSIBILITIES DESCRIPTION

## Board of Directors (BoD)

**Key Activities**

- Promote the integration of sustainability in the Group strategies and business in order to pursue the long-term value creation in the interest of the key stakeholders
- Examine and approve the strategic, industrial and financial plans
- Monitor periodically the implementation of the Industrial and Sustainability plan and its objectives

**Key Features**

**12** DIRECTORS

**42%** FEMALE DIRECTORS

**75%** INDEPENDENT DIRECTORS

**12** MEETINGS

**97%** ATTENDANCE RATE

## Steering Committee SBTi

**Key Activities**

Guide and monitor the Group's decarbonization activities related to Scope I, II, and III, with a particular focus on the roadmap aimed at achieving the direct and indirect emissions reduction targets approved by the SBTi.

**Key Features**

**18** EXECUTIVES

**1** MEETING

## Board Committees

The Board Committees, namely the Sustainability and Innovation Committee and the Control and Risks Committee, support the Board of Directors in sustainability strategy and target monitoring.

## Sustainability and Innovation Committee

**Key Activities**

- Monitor sustainability strategy implementation, including climate and environmental strategy
- Verify progress on sustainability and decarbonization targets
- Validate and monitor the Transition Plan
- Report to the Board of Directors at each meeting
- Provide an annual report on activities carried out

**Key Features**

**5** DIRECTORS

**80%** INDEPENDENT DIRECTORS

**13** MEETINGS

**95%** ATTENDANCE RATE

## Control and Risks Committee

**Key Activities**

- Support the BoD in internal control and risk management decisions
- Oversee ESG risks, including climate and environmental related risks
- Report to the BoD at every meeting
- Provide a detailed report on activities at least twice a year

**Key Features**

**5** DIRECTORS

**80%** INDEPENDENT DIRECTORS

**18** MEETINGS

**96%** ATTENDANCE RATE

# TOP MANAGEMENT ACTIVITIES, REPORTING FLOW AND ITS FREQUENCY

## CEO & General Manager

- Approves climate and environmental strategy
- Monitors climate-related risks and opportunities
- Monitors environment-related risks and opportunities
- Validates the Transition Plan

REFERS TO

**Board of Directors**

MORE THAN ANNUALLY

## Chief Sustainability Officer (CSO)

- Defines and manages the Group's climate and environmental strategy
- Defines the Transition Plan
- Defines the Climate Scenario Analysis and related risks and opportunities
- Integrates climate-related topics into the Group's business strategy, as well as water and biodiversity
- Defines and monitors progress against climate-related and environmental corporate targets
- Identifies, assesses and manages climate and environmental related risks and opportunities
- Ensures the involvement of every function, business area and value chain stakeholder in the execution of climate and environmental strategy
- Monitors the themes, projects and activities carried out in specifics environmental working groups (6 currently held)

REPORTS TO

**CEO & General Manager**

MORE THAN MONTHLY

REPORTS TO

**Sustainability and Innovation Committee**

EVERY MONTH

REPORTS TO

**Control and Risks Committee**

AT LEAST ONCE A YEAR

## Chief Financial Officer (CFO)

- Prepares the Consolidated Sustainability Statement of the Group, ensuring disclosures on Transition Plan for climate change mitigation - and the related metrics - are compliant with CSRD and ESRS requests, defining and maintaining a proper internal control model
- Supports the CEO and General Manager in the management of operational and financial risks and opportunities, including environmental and climate-related ones, defining methodologies, metrics and tools for their identification, analysis and monitoring
- Ensures planning and control of Group's investments, including those related to environmental and climate transition while raising necessary financial resources also through ESG and climate change-linked instruments

## Executive Compensation & Incentives

Leonardo's remuneration incentives are designed to support the Group in creating sustainable long-term value. Therefore, the short and long-term incentives for the CEO and General Manager, the Co-General Managers, the Group's executives (MBO and LTI) and managers with strategic responsibility, are linked to ESG metrics, including climate-related ones. During 2024, the number of beneficiaries was 1,070 for the MBO and 250 for the LTI.

| Variable remuneration component | % of variable remuneration linked to ESG objectives |
|---|---|
| Short-Term Variable Component (MBO) | **5%** linked to Leonardo's inclusion in the Dow Jones Sustainability Index<br>**5%** linked to the reduction of the average accident frequency rate index |
| Long-Term Variable Component | **5%*** linked to $CO_2$ emission intensity reduction (Scope I and II market based on revenues).<br>**5%*** linked to the percentage of female new hires with STEM (Science, Technology, Engineering and Mathematics) degrees. |

* Please note: LTI is an average over the 3 years and in the 3-year period 2022-2025 is location based while 25-27 is market based.

The organization aims to further **integrate sustainability into the business** and strengthen the **effectiveness** of a sustainable business transformation, increasing **accountability** and **transnational integration.**

# SUSTAINABILITY OPERATING MODEL IMPACTS ON PROSPERITY, PEOPLE, PLANET AND GOVERNANCE

The Sustainability Plan reflects the Group's vision and objectives through measurable initiatives across the short, medium, and long term, using a data-driven approach to track performance via ESG KPIs. Leonardo's strategic evolution increasingly aligns with energy and digital transitions, developing solutions that enhance global security through the protection of planet, communities, institutions and infrastructures. The Sustainability Plan, integrated with the Group's Industrial Plan, includes over 90 high-impact projects, focusing on key priorities such as ecodesign, digital twin technology, decarbonization, environmental footprint management, circularity, Life Cycle Assessment, sustainable supply chain, innovative solutions for global security and social impact.

**SOCIAL IMPACT**
- Gender Equality Strategic Plan (UNI/PdR 125:2022)
- Attraction & Retention
- Welfare & Wellbeing
- Ad Astra - Costellazione Leonardo
- Aerotech Academy

**R&I AND SUSTAINABLE BY DESIGN PRODUCTS**
- Rotorcraft Digital Twin
- Next Generation Civil Tiltrotor (NGCTR)
- Clean Aviation
- AIrcraft Innovation Center (Città dell'Aerospazio)
- EU programme SESAR for the Single European Sky ATM

**BUSINESS ETHICS & HUMAN RIGHTS**
- Anti-bribery Certification (ISO 37001)

**ENVIRONMENTAL PROTECTION**
- Decarbonization and energy efficiency (Science Based Targets initiative)
- Smart Water (15 sites covered)
- Chrome VI phase out
- Liquid industrial waste reduction in La Spezia

**SPACE, CLIMATE AND EMERGENCY SOLUTIONS**
- C-27J Fire Fighting
- Copernicus Emergency Management Services
- IRIDE projects
- Space Situational Awareness
- Earth Monitoring Services

**CIRCULAR ECONOMY AND DIGITAL FACTORY**
- Factory of the future (digital factory)
- NEMESI (smart factory)
- Reuse and recycle of by-products (CFRP*, aluminum, steel)
- Marketplace for spare parts
- Life Cycle Assessment

**SUSTAINABLE SOLUTIONS, CYBER SECURITY AND DIGITAL**
- Smart city and security solutions for Genova, Milano, Roma
- Simulation training solutions (e.g. IFTS) & Customer Support Digital Services
- Flight simulators

**SUSTAINABLE SUPPLY CHAIN**
- Supplier engagement for training, partnerships and support for digital and sustainable transition
- Digital Hub for AutoMotive and AeroSpace

**SUSTAINABILITY PLAN 2025-2029**

* Carbon Fibre - Reinforced Polymer

Thanks to the 2024-2028 Sustainability Plan, Opex savings of **5 M€**

## 2025-2029
**Sustainability Plan key figures**

**~280 M€**
cumulated CapEx and OpEx of the Sustainabiliy Plan Projects

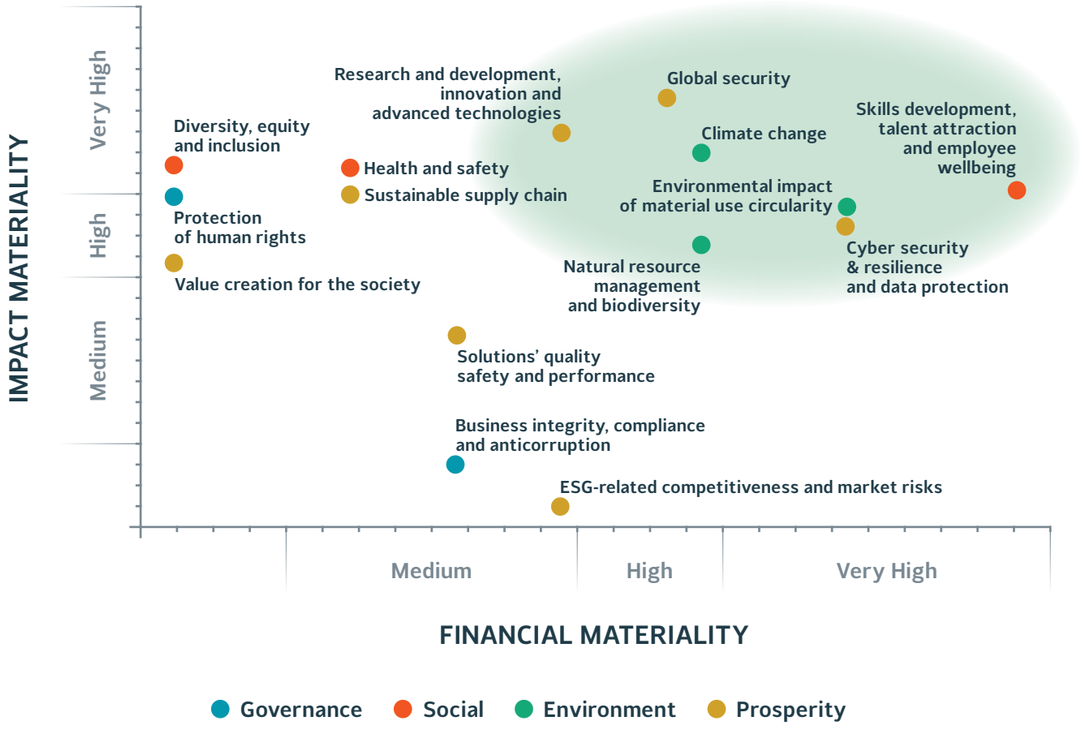
**20 top projects**
account for **>85%** of total CapEx and OpEx planned

**~ 140 M€**
revenues from Space & Cyber sustainable solution in the Plan

# IMPACTS, RISKS AND OPPORTUNITIES: DOUBLE MATERIALITY

**Impact materiality involves identifying, assessing and prioritising the main impacts generated by the Group, along the entire value chain, on environment, society and governance issues, taking into account the perspective of both external stakeholders relevant to the Group and internal stakeholders.** Likewise, **financial materiality identifies, assesses and prioritises ESG risks and opportunities with an impact on the Group's objectives.**
**In line with this principle, Leonardo has carried out impact materiality in continuity with the methodology developed in 2023 while for financial materiality a process leveraging the company's Enterprise Risk Management (ERM) has been adopted.**

The two processes have been carried out following three steps - identification, assessment and prioritisation of impacts (impact materiality) and risks and opportunities (financial materiality). With reference to climate change, Leonardo risk factors embrace all stages of the value chain, as they relate to production activities and processes - primarily operations and the supply chain - and to the customers' products and services demand.




## FINANCIAL MATERIALITY
## 35 ESG RISK & OPPORTUNITY DRIVERS

**RISKS**
- **40%** Planet: including **decarbonization**, **water** and **energy purchasing**.
- **60%** Other: such as **talent attraction** and **retention**, **data privacy** and **security.**

**OPPORTUNITIES**
- **60% Prosperity** and **planet:** including **product decarbonization.**
- 40% Others including **Critical raw material,circularity and global security.**

## MAIN OUTPUTS

The assessment of sustainability impacts contributing to materiality of impact took place through a **stakeholder engagement process involving 516 people**.
In particular, **69 internal stakeholders** (C-levels; Board of Directors; Sustainability Managers) and **447 key external stakeholders** identified by the Sustainability Managers for each area of responsibility in Italy, the UK and the US.

**Global security** is confirmed among the **top priorities**, both in terms of positive impacts on society - namely protection of people, infrastructures, territories and natural assets - and financial risks and opportunities.

**Skills development and talent attraction**, including retention, is the top financial topic as the **enabler of Leonardo Strategic Plan** it represents the importance of acquiring the necessary skills and reinforcing internal know how to face new challenges and achieve business targets.

Other urgent sustainability matters - both for impact and financial materiality - are **Climate Change** and **Environmental impact of material use and circularity** (as for Planet), while **Cyber security & resilience and data protection** for the Prosperity pillar.

# 2.2 ADVOCACY AND ENGAGEMENT

The transition towards a sustainable future is a collective effort and can only be accomplished through the engagement and collaboration with the ecosystem of stakeholders that share the same goal. Leonardo is actively engaged in the challenge against climate change and environmental protection associations, collaborating with several stakeholders, including legislative and administrative bodies, universities and research centers. Its engagement activities are aligned with corporate strategies aimed at contributing also to the goals of the Paris Agreement.

### European Space Agency (ESA)
As a signatory of the ESA “Statement for Sustainable Space“, Leonardo is involved in Taskforces and Working Groups on Ecodesign and Life Cycle Assessment for the space industry.

### CSR Europe
In the context of its membership in CSR Europe, Leonardo is part of Europe Biodiversity alliance to promote best practices sharing and perform advocacy and reporting activities towards European Commission.

### European Round Table (ERT)
Leonardo takes part in Energy Transition and Climate Change table at the same time in Italy.

### Member of United Nations Global Compact since 2018

### COP 29
In November 2024, Leonardo participated in the United Nations Climate Change Conference (COP29) for the second time. As part of the event “Leonardo technologies and solutions for climate transition, territories and communities protection”, the Company showed what advanced technology solutions can offer to the decarbonization of cities and territories in terms of climate change adaptation and mitigation.

### AeroSpace and Defence Industries Association of Europe (ASD)
Leonardo participates actively in ASD’s groups including the Climate and Defence Task Force and the Corporate Social Responsibility working group, as well as the groups related to the Environmental Commission, which includes a sub-group on REACh.

### European Defense Agency (EDA)
The Group takes part in the EDA initiative “Incubator Forum on Circular Economy (IFCEED)” with the goal of developing pilot projects on circular economy, contributing to dedicated Working Groups, particularly on Ecodesign and Critical Raw Materials.

### International Aerospace and Environmental Group (IAEG)
No-profit organization of global aerospace companies created IAEG to collaborate on and share innovative environmental solutions for the industry. Leonardo is a member and part of the Board of Directors, actively participating in the working groups to ensure alignment with strategic trends in the sector on various topics such as circular economy and Life Cycle Assessment.

# 03 TRANSITION

## 3.1 Decarbonization and Climate Action
- Scope I, II and III Decarbonization Targets
- Key Reduction Levers for Scope I & II
- Our Key Steps for a Sustainable Supply Chain
- Key Reduction Levers for Scope III Cat.1-2
- Key Reduction Levers for Scope III Cat. from 3 to 8 and 11

## 3.2 Climate Risks and Opportunities
- Physical Risks Scenario Analysis
- Transition Risks Scenario Analysis
- Transition and Physical Risks: Climate Change Risk Exposure Dimension vs Financial Impact in 2050
- Risk Exposure and Impacts
- Opportunities

## 3.3 Natural Resources, Circularity & Biodiversity
- Pillars of Leonardo Circularity
- Leonardo Circular Economy Approach along the Value Chain
- Impacts and Dependencies from Biodiversity for Leonardo Business

## 3.4 Just Transition

# 3.1 DECARBONIZATION AND CLIMATE ACTION

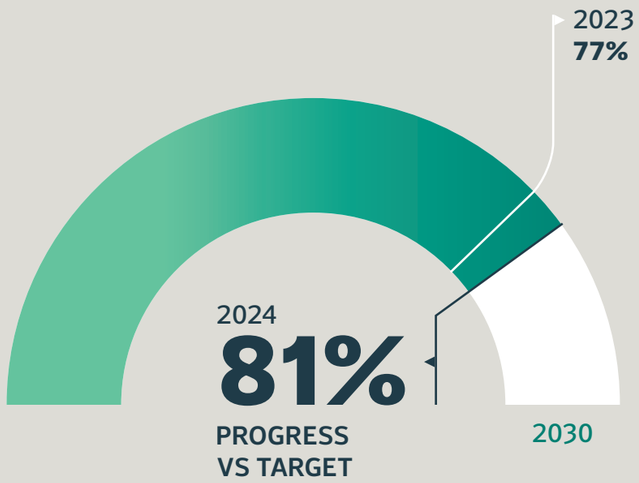
## SCOPE I, II AND III DECARBONIZATION TARGETS

Leonardo has committed on 3 Near-Term emission reduction targets, which **have been validated by Science Based Targets initiative (SBTi)[1] in 2024**, being Scope I & II Target in line with a 1,5°C trajectory:

SCIENCE BASED TARGETS

### SCOPE I & II MB[2]

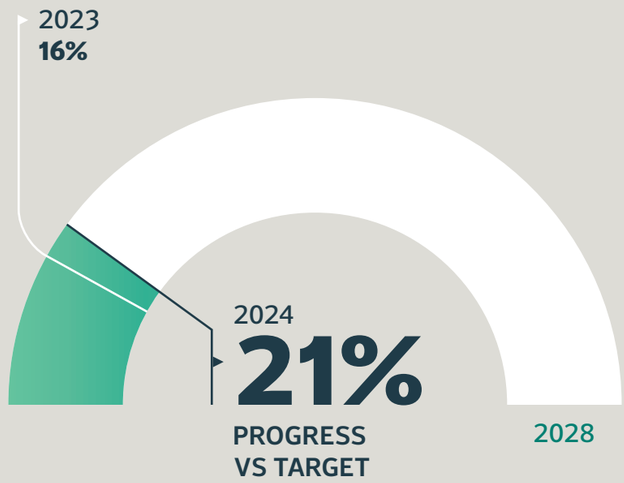
Target: **53%** reduction of absolute Scope I & II MB GHG emissions by 2030 from a 2020 base year.




The target covers 100% of Scope I & II MB emissions, with the intent to improve business efficiency, reduce energy consumption and direct and indirect emissions.

### SCOPE III – Cat. 1 & 2

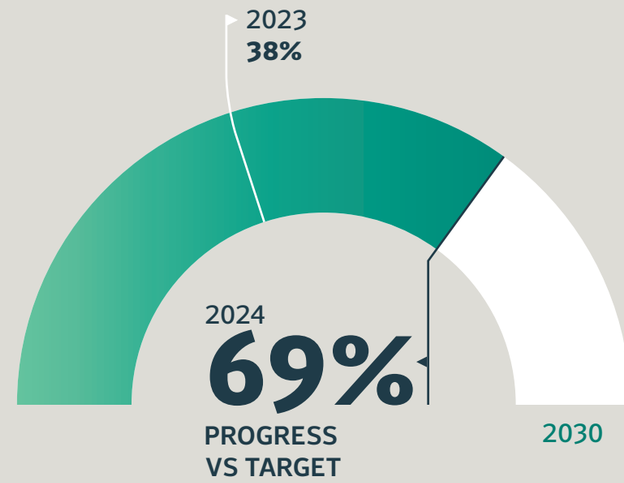
Target: **58%** of Leonardo's suppliers by emissions covering Scope III – Cat. 1&2* will have science-based target by 2028.




Leonardo promotes supply chain decarbonization through the creation of a community involving more than 500 suppliers on a global basis.

### SCOPE III – Cat. 3 → 8 & 11

Target: **52%** reduction of Scope III – Cat. 3 → 8 & 11** GHG emissions per equivalent flight hour by 2030 from a 2020 base year.




Leonardo aims to achieve this target through the development and market introduction of low-impact products, virtualization of its offerings, (next-generation simulators) and decarbonization pathways for other indirect emissions.

Note:
1 https://sciencebasedtargets.org/
2 MB: Market Based

* purchased goods and services and capital goods.

** fuels and energy-related activities, upstream transportation and distribution, waste generated in operations, businesses travel, employee commuting, upstream leased assets, and the use of sold products.

# KEY REDUCTION LEVERS FOR SCOPE I & II

Leonardo is deploying an organic approach towards the achievement of Scope I & II MB target centered around 4 key pillars.


**Energy Self-Production Program**
Installation of renewable energy generation systems at Leonardo production sites.

**Renewable Electricity**
Leonardo is actively contributing to supporting the energy transition, including at the country level, powering operations with certified renewable electricity.


**Thermal Energy Consumption Efficiency**
Replacement of current thermal plants with more energy efficient ones.


**LED Full Potential Lightning Program**
Installation of LED lamps at Leonardo sites, maximizing energy efficiency.


**SAF* for Internal Flight Testing**
Adoption of SAF-Blended fuel for internal flight activities.

**Electric and Hybrid Vehicles**
Increase of hybrid & electric vehicles penetration and virtual solutions implementation.

**Virtualization**
Leonardo has developed advanced simulation systems for pilots and operators training. This technology not only improves the effectiveness of training but also reduces the emissions from the actual flight hours required for training.

* Sustainable Aviation Fuel.



## OUR KEY STEPS FOR TRANSITION

**Energy Self-Production**
Complete construction and reach full operational capabilities.

**Renewable Electricity**
Continue with the expansion, adoption and use of electricity from certified renewable sources as a further demonstration of commitment to the transition.

**LED Full Potential Lighting Program**
Accelerate and complete the program by 2025 to achieve abatement of additional 2 kton$CO_{2e}$ / year.

**Thermal Energy Consumption Efficiency**
Progressive approach extension to other Leonardo sites.
In 2025, assessment & detailed design efforts on 2 plants.

**Virtualization**
Continue development and progressively expand its adoption.

**SAF for Internal Flight Testing**
Complete assessment and explorative efforts to proceed with execution.

**Electric and Hybrid Vehicles**
Proceed with the implementation, complemented with other initiatives such as carpooling solutions leveraging on green vehicles.

# OUR KEY STEPS FOR A SUSTAINABLE SUPPLY CHAIN

Leonardo takes a focused approach to ensure the **capacity boost** of its suppliers to guarantee the increasing production volumes of the Industrial Plan, while **reducing the environmental impact and the emissions** throughout the supply chain, fostering the creation of an informed supplier community, committed to increasingly ambitious sustainability goals.

### Evaluate Supply Chain's Emissions

Leonardo estimates the GHG emissions of its supply chain leveraging a toolkit specifically designed by IAEG for the AD&S supply chain. This mapping enable the strategic clustering of the suppliers to identify priorities, opportunities and risks.

### Assess Key Suppliers Maturity

Understand suppliers' ESG maturity is the starting point to define any improvement initiatives. In 2023 we promoted and joined the AD&S ESG sector initiative conducted by IAEG and powered by EcoVadis to assess the AD&S supply chain. In 2024 we introduced a maturity framework dedicated to decarbonization.

### Communicate Ambitions and Targets

Engagement of the key suppliers to share Leonardo decarbonization ambition, the impacts and the targets for the supply chain and to define the suppliers' roadmap to set Science Based target.

### Drive and Accelerate Suppliers' Transition

Support suppliers' capacity & capability building with specific sustainability training programs, workshops and coaching sessions for the SMEs with a focus on how to measure, reduce, and monitor GHG emissions in alignment with SBTi initiatives.

### Incentivate Suppliers

Implementation of incentive systems to reward and stimulate improvement of suppliers' sustainability performance.



# KEY REDUCTION LEVERS FOR SCOPE III CAT.1-2


Since 2020 Leonardo has been assessing the sustainability of its key suppliers increasing the scope of this assessment every year.

**+1,700** italian and international suppliers, assessed in the past 2 years.

**~70%** of Leonardo spend covered.

**12%** of suppliers, by emissions, have SB Targets. Promoter of Sector initiatives to establish voluntary standards for the AD&S supply chain ESG assessment (IAEG, Joscar).


**>500**

**Key suppliers to be engaged by 2027**

in specific sustainability education programs.

**Coaching** **Workshop** **Training**

Dec. 2024 KPI: 198 suppliers trained.


**70%**

**Major bids will include ESG criteria by 2028**

ESG

Dec. 2024 KPI: 20% of major bids, in value.

# KEY REDUCTION LEVERS FOR SCOPE III CAT. FROM 3 TO 8 AND 11

Leonardo works to reduce Scope III emissions associated with the use of its products and services by promoting innovative solutions such as alternative materials and next-generation fuels that help customers reduce emissions during use-phase.


## Virtualization and Training

Leonardo has developed a vast network of Training Academies, characterised by the use of digital platforms, simulation systems and Live-Virtual-Constructive (LVC) learning environments, making use of proprietary methods, augmented reality, artificial intelligence and deep learning, and exploiting the computing power of the davinci-1 HPC.


## Sustainable Aviation Fuels

Leonardo confirms its commitment to reducing emissions from its flying products by ensuring that it can operate with fuel blends containing up to 50% SAF (Sustainable Aviation Fuels).

## Electric and Hybrid Propulsion Systems

Through its Innovation Labs, Leonardo explores advanced technologies and hybrid/electric propulsion.


## Sustainable Employees Mobility

Leonardo supports its employees in making sustainable mobility choices, including: the continuation of smart working, the adoption of an app to encourage carpooling, through a cashback system between colleagues, cycling, walking, company shuttles, service at numerous company sites, installing covered parking spaces for bicycles, providing grants for the purchase of public transport season tickets, and agreements to encourage the use of bicycles and trains.

## Logistics

The Transportation Control Tower improved shipping efficiency and cut Scope III emissions by 5% in 2024 through optimized logistics.



# OUR KEY STEPS FOR TRANSITION

## Virtualization and Training

Leonardo will continue to supplement traditional pilot training with virtual solutions delivered through simulators, significantly reducing the demands of real flight, fuel consumption and emissions.

## Sustainable Aviation Fuels

Pushing SAF usage to reduce $CO_{2e}$ emissions by up to 80% over its life cycle compared to conventional fuel.

## Electric and Hybrid Propulsion Systems

Continuing the study and application of alternative propulsion systems together with storage systems (tanks) on the ground and on aerial platforms, as well as power and control systems.

## Waste Reduction

Leonardo continues to pursue waste reduction targets in line with its environmental commitment and in order to implement its strategy of transition to a circular economy model.

## Logistics

Implementation of the Transportation Control Tower.

## Sustainable Employees Mobility

Implementation of Home-to-Work Travel Plans to 39 italian sites, promoting sustainable mobility.

# 3.2 CLIMATE RISKS AND OPPORTUNITIES

## Assessing climate related risks & opportunities is crucial for meeting compliance requirements, fuelling sustained business resilience and driving future growth.

On the following pages there will be an overview of the analyses carried out by Leonardo on:

- **PHYSICAL CLIMATE RISKS**
- **TRANSITION CLIMATE RISKS**
- **CLIMATE-RELATED OPPORTUNITIES**

**Climate change** is an **escalating risk**, as highlighted by the **Word Economic Forum, posing** a **challenge** for **companies both** from a **transition readiness perspective** and as a **direct threat** to **business continuity** and **companies' assets**.

### COMPLIANCE

As climate risk grows, **regulatory frameworks** are **strengthening transparency requirements**...

...such as **EU CSRD mandates Climate Scenario Analysis** for **risk evaluation & disclosure**, while in past years Task Force on Climate-related Financial Disclosures (TCFD) pushed for standardization of **climate risks integration into financial reporting**.

### BUSINESS RESILIENCE

Unveiling **strategic insights on future climate scenarios**, shaped by **policy and environment shifts**...

...is crucial to promptly **identify risks**, **mitigation levers** and **potential opportunities** for **business expansion** and future **growth**...

...to increase the people's awareness of the exposure to the climate risks, through capacity building initiatives aimed at disseminating the climate risk culture.

# PHYSICAL RISKS SCENARIO ANALYSIS

Leonardo evaluates the resilience of its business strategy to climate change by analyzing physical and transition risks under two global warming scenarios: RCP 8.5 (+3.3°C to +4.5°C) and RCP 2.6 (+1.5°C to +2.0°C). The analysis assesses potential financial impacts - such as property damage, cost increases, and productivity loss - supporting informed strategic decisions.

## SCENARIO ANALYSIS KEY FIGURES AND MAIN OUTCOMES

### Key Figures

**61 sites** have been **identified** as **priorities** for more **in-depth assessment.**

More than **80%** **of the employees are covered in the analysis**.

**8 perils have been** assessed for 2030 projection and over a **20 years horizon (2050)**.

**3 types of potential financial impacts** over manufacturing sites and offices:
- **damage to property;**
- **operational disruption;**
- **increasing costs.**

### Analysis Results

**Heat** is expected to become **the most significant peril over time**, driving the future growth of physical risks.

**Flood** poses the **highest economic threat**, accounting for **the majority of projected direct damage** across all time horizons.

**Potential Economic Losses** are expected to grow **by 2050**, **main drivers** are asset **damage** and business **interruptions**.

### Action Plan

#### LEVERS

- **Insurance coverage**
- **Structured transversal Climate Risk Analysis program**

#### MAIN ACTIONS

- Exploring **new insurance / self-insurance** solutions to mitigate climate risks.
- Strengthening **physical risk** into **risk management** procedures to preserve infrastructures, protect people safety and identify actions on a recurring basis.
- Implementation of **design guidelines** for structural building elements that consider the effects of climate change.

# TRANSITION RISKS SCENARIO ANALYSIS

Transition Risk has been assessed as the potential financial losses that can result, directly or indirectly, from the process of adjustments towards a lower-carbon and more environmentally sustainable economy.. The Transition Risk Assessment evaluated financial and operational impacts in 2030-2050 time horizon driven by regulatory shifts, technological advancements, market dynamics, and reputational factors. The goal was to anticipate challenges, identify opportunities, and support strategic decisions for long-term business resilience.

## SCENARIO ANALYSIS KEY FIGURES AND MAIN OUTCOMES

### Key Figures

**4 key transition drivers** have been considered: **policy and legal**, **market**, **reputational**, and **technological risks**.

**30 years is the time horizon** over which the analysis extends.

**3 future scenarios** are covered in the analysis: **Net Zero**, **Announced Pledges**, and **Stated Policies**.

**3** key macro-**geographical areas,** consisting of **EU, UK,** and **USA** have been considered.

### Analysis Results

Risks coming from the **Policy and Legal** category have the highest impact on the overall transition risks estimated over the considered time-period.

**Carbon taxes** represent the **main cost driver** associated with emerging policies, considering the “Announced Pledges” scenario as the baseline (+1.7°C by 2050).

Assuming a net-zero scenario, the associated costs **will peak in 2030**. Costs will decrease in the following 20 years.

### Action Plan

#### LEVERS

- **SBT strategy & Action Plan**
- **Continuous investments in low-carbon technologies & Top-notch CDP grade and ESG Rating**
- **Market transparency**
- **Green-tech investments**
- **Advocacy**

#### MAIN ACTIONS

- Developing and deploying **SAF compatible aircraft** and **rotorcraft**.
- Investing in technologies to **reduce product emissions** (e.g. innovative materials, virtualization and simulators).
- Investing in solutions to reduce customers’ emissions.

## AD&S TECH FOR CLIMATE: LEONARDO’S ROLE

### Sustainable Propulsion & Energy Systems

- Sustainable (Aviation) Fuel
- Hybrid / Electric Propulsion
- Hydrogen & Alternative Propulsion
- Energy Storage

**Mid / Advanced Stage**

### Advanced Materials & Aerodynamics

- High Performing Multifunctional Material
- Morphing Aircraft Structures
- Unconventional Architectures

**Advanced Stage**

### Electronics & Sensing

- Low-Power AESA Radar
- Quantum / Photonic Based Radars
- SW Defined Technologies

**Mid / Advanced Stage**

### AI & Digital Optimization

- AI for Energy Usage Optimization
- AI-driven Climate Monitoring & Space Obs.
- AI-driven multi sensor data fusion
- HPC & AI for ecodesign & simulation
- Cyber Security

**Advanced Stage**

# TRANSITION AND PHYSICAL RISK: CLIMATE CHANGE RISK EXPOSURE DIMENSION VS FINANCIAL IMPACT IN 2050

## PHYSICAL RISK

- The assessment quantified potential losses caused by flood, wind, heat, drought, and fire across three categories: direct asset damage, business disruption, and additional operating costs.
- As part of the analysis, all assessed sites were classified into four risk categories based on current exposure and future climate projections: Good, Existing Risks, Bad Surprises, and Bad.
- Flood represents the greatest source of projected economic loss, while chronic risks such as increasing heat and persistent drought are expected to drive a significant rise in physical risk over time.

## PHYSICAL RISK MITIGATION ACTIONS

| | | |
|---|---|---|
| **Action plans are developed to mitigate climate-related risks at Leonardo sites based on perils vulnerability.** | **Monitor environmental risks at production sites using centrally defined tools and site-specific solutions.** | **Insurance coverage to mitigate impacts of catastrophic natural events.** |

**Establishment of a Physical Risks Task Force to strengthen risk analysis practices, specifically focusing on climate-related physical risks.**

## TRANSITION RISK

- Changes to the main **regulatory policy** (e.g. ETS I, ETS II, CBAM) are the **primary drivers** of transition risk, although mitigated by Leonardo SBTi commitment. The reference scenarios considered for policy changes are the IEA APS (Announced Pledges Scenario), **APS** (reference baseline) and the IEA NZE (Net Zero Emissions) 2050 scenario (**NZE**).
- **Market risk may rise** if public procurement tenders start requiring **mandatory ESG criteria**, as observed in the UK market. Leonardo has a strong positioning in that regard, and therefore market risk, under certain scenarios assessed, could become an opportunity.
- **Technological risks are limited** due to Leonardo strong positioning. However, a sudden breakthrough in low-emission technologies could still pose a potential challenge.

## TRANSITION RISK MITIGATION ACTIONS

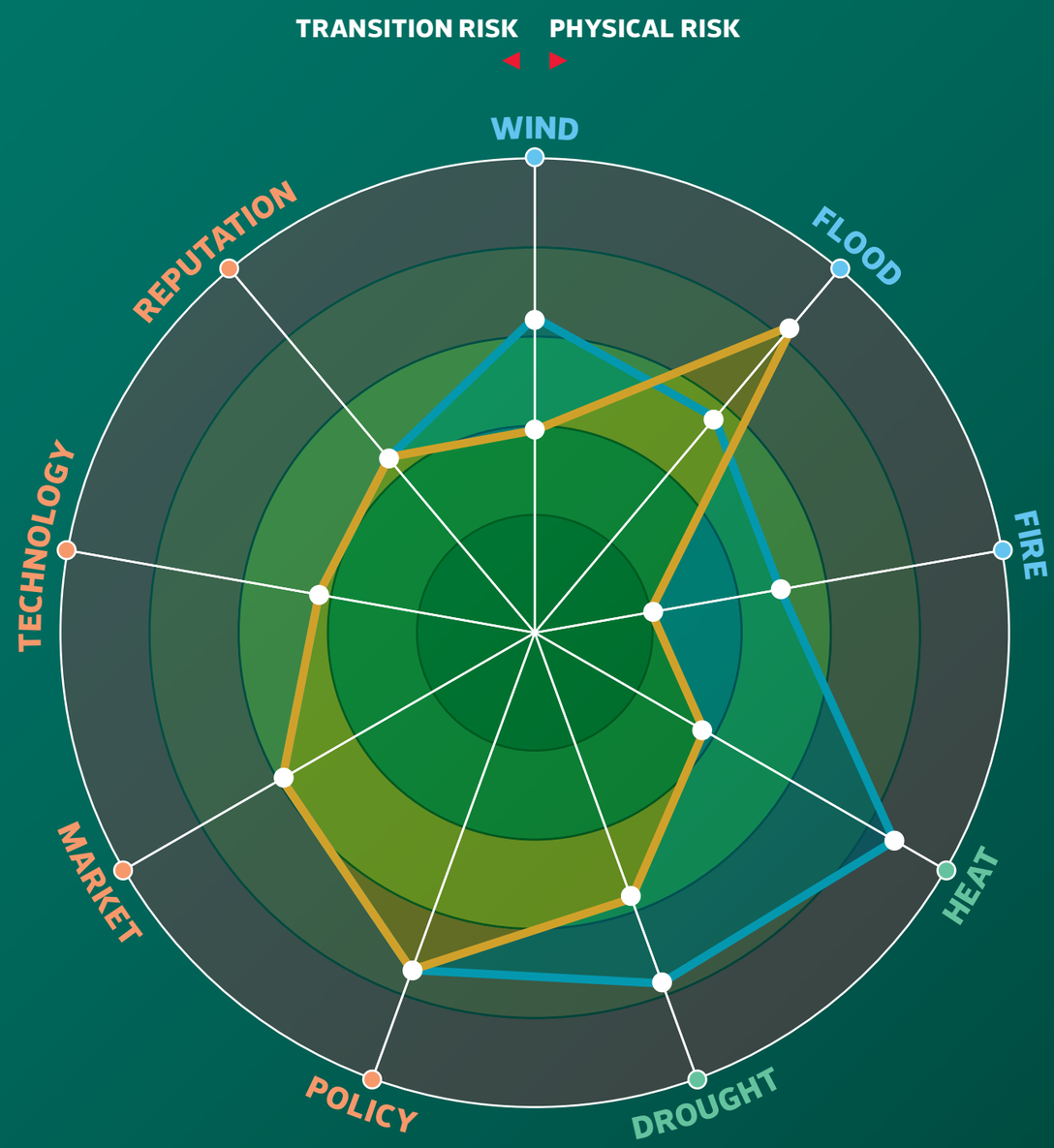
| | | |
|---|---|---|
| **Investments in electrification and energy efficiency to meet SBTi targets, reducing ETS coverage.** | **Introduction of a rigorous approach to orchestrate ESG responses in Tenders to maximize “ESG ROI”.** | **Integrating ESG-related drivers into technological development to capture trends ahead of time.** |
| **Monitoring suppliers’ decarbonization targets, to limit emerging pass-through costs.** | **Maintaining strong ESG scores (e.g. CDP, S&P) to ensure an edge in a market increasingly requiring transparency.** | **Promoting circular economy and ecodesign for lighter, modular products.** |

Note:
Carbon price used to assess the convenience of investments aimed to minimize energy consumption and/or avoid purchase of allowances in the market.
In 2024 Leonardo used a shadow price of €68.63 per ton of $CO_{2e}$.

# RISK EXPOSURE & IMPACTS

Based on the climate scenario analysis conducted we present the results in terms of financial impact and risk exposure at 2050.

| | INDICATOR | FINANCIAL IMPACT | RISK EXPOSURE |
|---|---|---|---|
| Physical Risk Acute Events | WIND | Low | Medium |
| | FLOOD | High | Medium |
| | FIRE | Low | Medium |
| Physical Risk Chronic Events | HEAT | Low | High |
| | DROUGHT | Medium | High |
| Transition Risk | POLICY | High | High |
| | MARKET | Medium | Medium |
| | TECHNOLOGY | Low | Low |
| | REPUTATION | Low | Low |



# OPPORTUNITIES

Low carbon products demand is constantly growing: the ability to develop solutions and products enabling the transition is key to gain a competitive advantage.

## FOSTERING CLIMATE MITIGATION AND ADAPTATION THROUGH THE DEPLOYMENT OF LEONARDO TECHNOLOGIES IN DEVELOPING ECONOMIES


Investments in Space with **multiple potential applications**, including digitalization and automation of platforms, in-space data centers, digital twin and AI, in-Orbit Servicing.

**Impacts**

**Timeline**

**Mid-Term**


**Unmanned aircraft** plays a key role in **monitoring landscapes** and **detecting potential environmental risks** associated to climate (e.g. forecasting the likelihood of perils).

**Impacts**

**Timeline**

**Short / Mid-Term**


Enhance the **security of digital systems** by identifying and minimizing vulnerabilities, and by implementing measures to strengthen **cyber resilience** across all the company's networks, ensuring safety from evolving cyber threats.

**Impacts**

**Timeline**

**Short-Term**


**Advancements in aircraft structures** (Morphing structures) leveraging Clean Sky 2 program (C-27J Flying Test Bed aircraft) could **generate a tech competitive advantage**.

**Impacts**

**Timeline**

**Mid / Long-Term**


Expansion of **HPC capacity**, while **optimizing energy** and/or **heat management**.

Support for sustainable-focused businesses with advanced **data analysis** and **computational capabilities**.

**Impacts**

**Timeline**

**Short / Mid-Term**


Support **rescue operations** during **natural disasters** (e.g. aerial fire-corps for wildfire).

**Wildfire** rising **demand for deployment of diverse aerial fire-corps** (e.g. helicopters & aircraft).

**Impacts**

**Timeline**

**Short-Term**


Investments in Hybrid Propulsion offers Leonardo opportunities to **innovate in regional** and **military aviation**, **enhancing efficiency**, **sustainability**, and **tactical capabilities**.

**Impacts**

**Timeline**

**Mid / Long-Term**

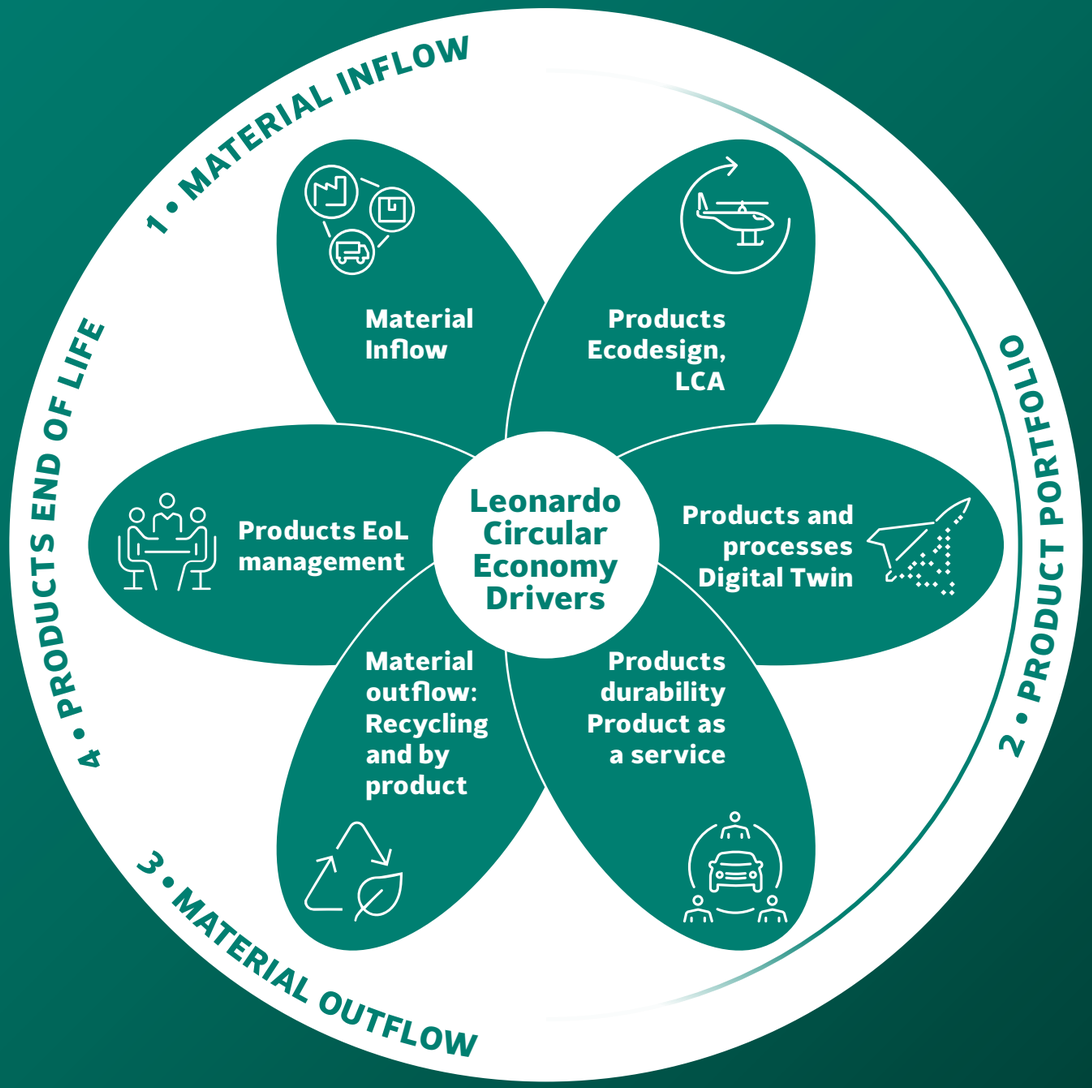
Legend:

**Impacts** Economic Environmental Social

**Timeline** Short-Term Long-Term

# 3.3 NATURAL RESOURCES, CIRCULARITY & BIODIVERSITY

The circular transition represents a **competitive advantage** that contributes to the “sustainable value creation”, leveraging on the innovation and technology of the Group and assuring at the same time a **reduced environmental footprint**.






# PILLARS OF LEONARDO CIRCULARITY

## 1. MATERIAL INFLOW: RISK MITIGATION ON SUPPLY CHAIN AND CRM

The Group aims to adopt **secondary materials** and reused components, to reduce dependence on materials and costs in the long run. The Group also fosters digitalization for **material tracking** and **AI** enhanced material intelligence. Finally, ESG requirements will be integrated, such as Green Supplier List for pilot non-critical new design.

**CRM:** Critical raw materials are massive material inflow in Leonardo’s value chain **(e.g. aluminium, titanium). Strategic Raw Materials (e.g. gallium, silicium, lithium) are key for the digital transition of the Group**. Considering the risk of disruption of the supply chain due to the evolution of the geopolitical context and to **natural sources depletion and shortages,** Leonardo has analysed the metabolism of materials inflow and outflows on materials management with the objective to increase efficiency.

## 2. PRODUCT PORTFOLIO AND DIGITALIZATION

The Group is introducing Ecodesign, and interoperable Life Cycle Assessment aimed at the reduction of the environmental footprint.
Circularity extends value proposition of products based on:
• durability of products and life extension;
• servitization, product and infrastructure as a service e.g. HPC;
• predictive maintenance.

**DIGITAL PROCESSES:** Circularity is enabled by the Group **massive digitalization**, supported by AI, that includes implementation of Digital Twin, predictive analytics and big data and Industry 5.0 approach. Digital innovation reduces environmental footprint of operations and products along their entire life.

## 3. MATERIAL OUTFLOW AND OPERATIONAL EFFICIENCY

The Group promotes **circular value chains** for critical materials also through R&I, **upcycling** and valorisation of scraps and of End of Life materials, adoption of **byproducts**, and **industrial symbiosis** with single waste utility.

**STRENGTHEN OPERATIONAL EFFICIENCY: Cost efficiency and production resilience** is achieved by adopting material scraps as a resource approach ‘closed loop’ manufacturing approach aimed at valorization of production scraps and at minimizing the produced waste.

## 4. PRODUCTS END OF LIFE

The Group is integrating **circular services** for customers (e.g. parts marketplace, **takeback** of products) and will pursue customer involvement also through contracts.

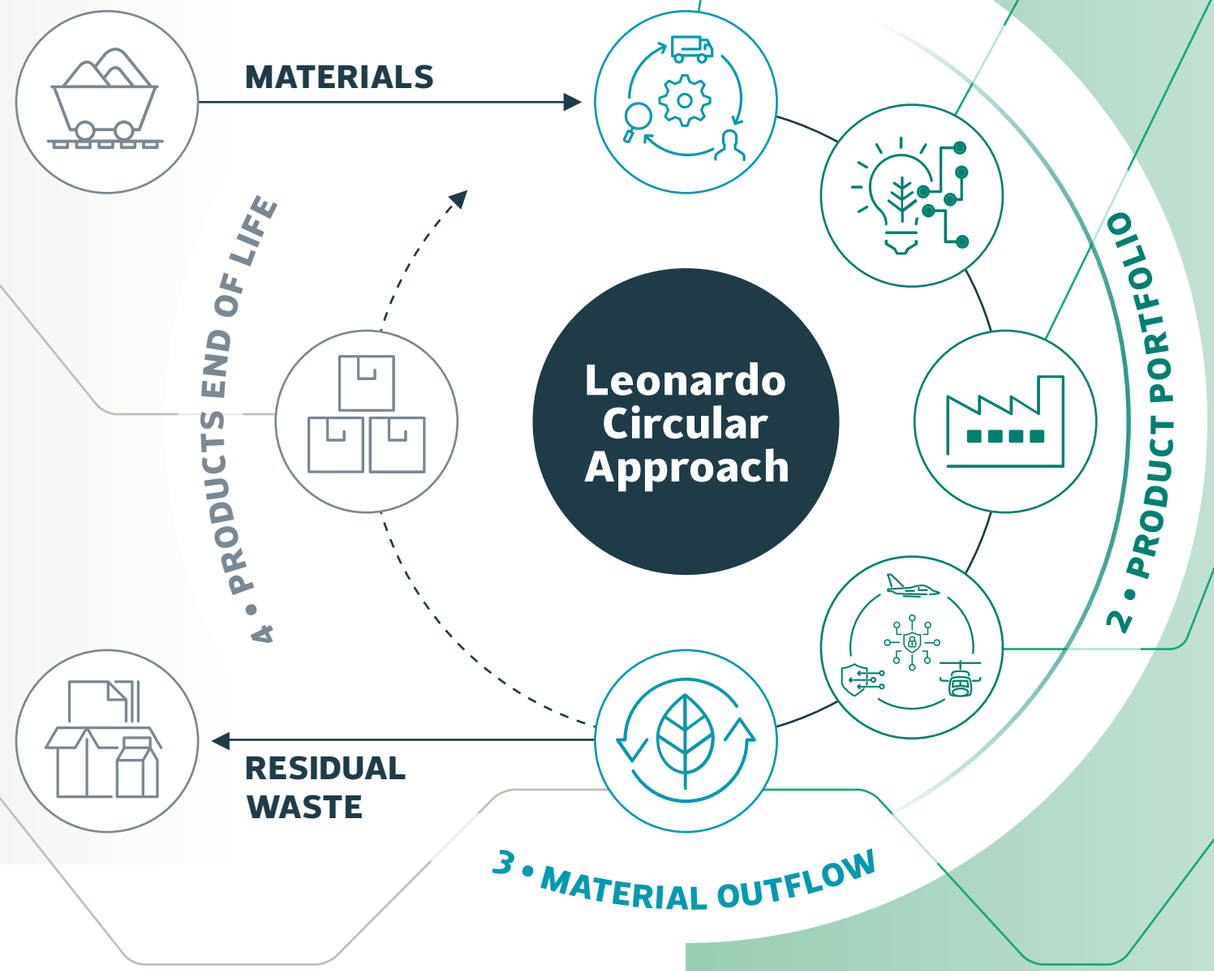
# LEONARDO CIRCULAR ECONOMY APPROACH ALONG THE VALUE CHAIN

Leonardo circular economy approach is based on specific projects spread across **the entire value chain** from the material inflow to residual materials promoting both **partnerships and internal approaches**. Starting from pilot projects the approach is scaled up across all business sectors sites.

## PARTNERSHIP APPROACH

### REUSED PARTS
- **Marketplace for helicopters parts with customers***
- Rotortrade Helicopters take back

### RECYCLED MATERIALS
- **Recycled Carbon Fiber by Herambiente***
- **Sale of Aluminum Byproducts to Ecogreen***
- Production packaging reuse




## INTERNAL APPROACH

### SUPPLY CHAIN MANAGEMENT
- Drive supply chain
- Address recycled and Critical Raw Materials management

### R&I and DESIGN
- **Ecodesign (mobile telemetry microlaunchers)***
- **Digital Engineering Initiative (Digital Twin, Additive Manufacturing)***
- **Rotorcraft Digital twin***

### PRODUCTION PROCESSES AND DIGITALIZATION
- **Virtualization of processes**
- **NEMESI***
- **Water Circularity (WAREGA)***
- **Oil emulsion recycle***
- Collection and reuse of wastewater*
- Life Cycle Assessment
- **Factory of the future***

### PRODUCTS AND SOLUTIONS
- Ecodesign
- **Product as a Service (IFTS virtualisation of training)***
- **Satellite life extension through In-Orbit Servicing***
- **Life Cycle Assessment***
- **Simulations Solutions***

### RESIDUAL MATERIALS MANAGEMENT TO AVOID WASTE, REUSE, LIFE EXTENSION
- Internal reuse of materials
- Predictive maintenance
- **End of Life (EoL) IT electronics recycle and reuse***
- Helicopters takeback

* Sustainability Plan Projects

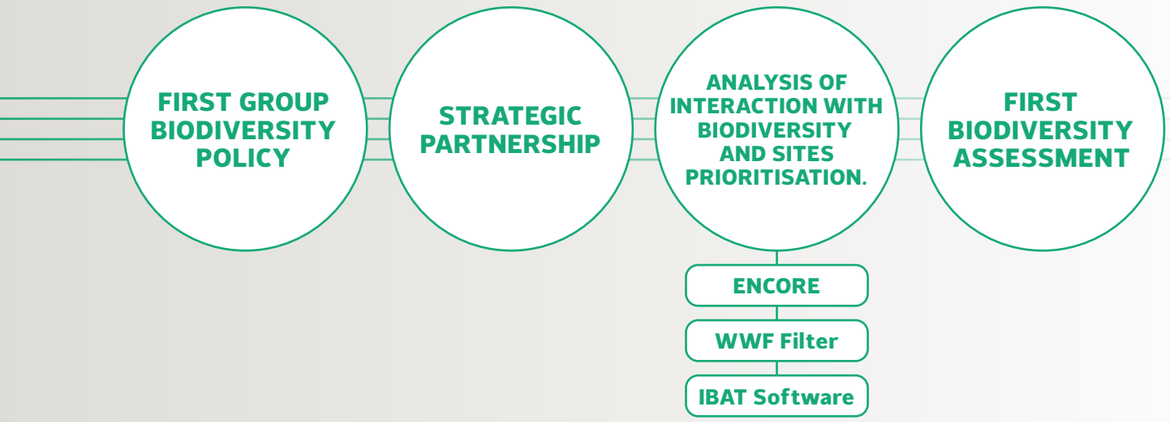
# IMPACTS AND DEPENDENCIES FROM BIODIVERSITY FOR LEONARDO BUSINESS

The interactions of the business with biodiversity is driven by: **change in land and water use, pollution, exploitation of resources for the productions, invasive species** along with **climate change consequently the assessment and the biodiversity plans require an holistic and site specific approach in line with the Science Based Targets Network (SBTN) methodology**.

The Group considers ecosystems conservation as a resilience factor for its business, aiming to:

- mitigate impacts in ecosystems around industrial sites and during the use of its products;
- capture business opportunities in “natural capital” maintenance based on satellite sensing solutions, artificial intelligence, natural emergency response and disaster recovery systems.

## 2024 ACHIEVEMENTS





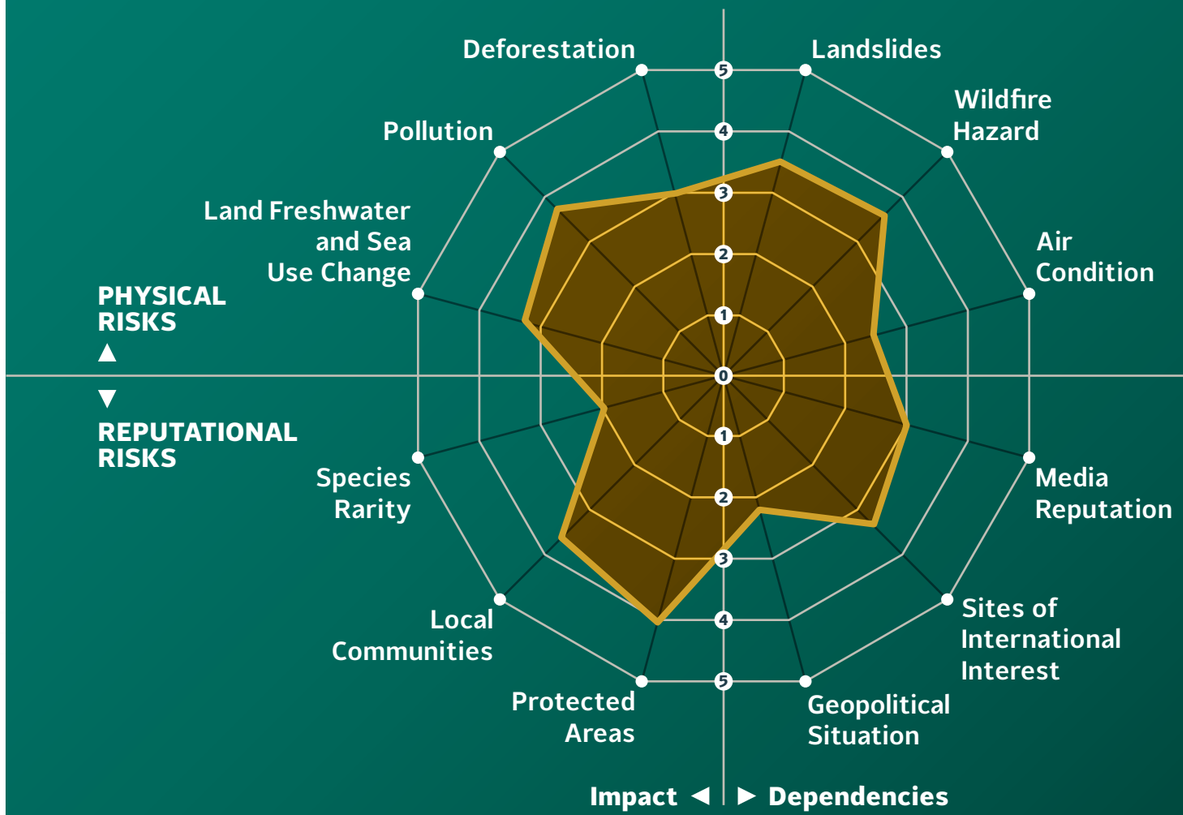

## OUR APPROACH TO PRIORITISE ACTIONS AND PROTECT NATURAL CAPITAL

The following table represents the results of the analysis conducted in 2024 with IBAT software and internal reporting data.

| Distance from high biodiversity value areas | Included within a 5 km radius | Within a 20 km radius (excluding those included in the 5 km radius) |
|---|---|---|
| Sites | **75** | **30** |
| Area size (km²) | **19** | **3** |

## RISK ANALYSIS OF THE BUSINESS

The following chart represents the average risks indicators at Group level, year 2024. Based on desktop analysis following the WWF Biodiversity Filter.




Risk assessments evaluate each site’s impacts and dependencies within their ecosystems, classifying the physical and reputational risks of the Group.

# 3.4 JUST TRANSITION

**Create value for people, communities and territories to generate a positive impact on society: this is Leonardo commitment as a global security player and catalyst for sustainable growth.**

## Navigating tomorrow
Digital education and sustainability culture

**Promoting digital education, scientific-technological knowledge, and innovation is crucial for strengthening innovation**, competitiveness, and reducing social gaps where Leonardo operates. With a **61.5% STEM workforce**, Leonardo runs internal and external **upskilling and reskilling** programs, including **Aerotech Academy** and the free **STEMLab** platform. Leonardo also integrates **sustainability into its business** with a global education offer, including the first sustainability EduGame **Level up your Sustain-Abilities**, the executive **Sustainable Transformation of Business** program, and the **Sustainability Excellence Programme** for future sustainability professionals.

## Opportunities for growth
The value of inclusion

**Transforming differences into growth opportunities** is a strategic factor for Leonardo's competitiveness, talent attraction, human capital, and innovation, fostering a **collaborative and inclusive work environment**.
In 2024, Leonardo achieved the **UNI/PdR 125:2022 Gender Equality Certification** in Italy, demonstrating its strong commitment.
This success is based on the **Gender Equality Strategic Plan**, integrated into the Sustainability Plan, featuring projects, actions, milestones, and KPIs to **enhance women's contribution** in the company.

## Contributing to prosperity
Social impact and sustainable supply chain

**Leonardo promotes social, economic, and environmental development** in communities hosting its sites, partnering with non-profits and associations. Among key initiatives is **Ad Astra - Costellazione Leonardo**, aimed at increasing the Group's social impact by sharing scientific and technological culture, especially encouraging girls in **STEM and AD&S fields**. Leonardo also leads a **supply chain transformation** in the AD&S sector, integrating sustainability through education and capability-building programs, positively impacting **societal prosperity**.

## Key figures for transition

- Over 1,600 schools, 2,300 teachers, and 80,000 students joined STEMLab
- Over 200 executives involved in Sustainable Transformation of Business
- About 1.4 million training hours delivered internally
- 250 STEM Ambassadors active on a global scale
- Over 100 students trained (94% employed) in Aerotech Academy
- UNI/PdR 125:2022 Gender Equality Certification Achievement
- ~800 people (430 children) hosted at 6 Leonardo sites in partnership with 10 non-profit associations for Ad Astra - Costellazione Leonardo
- 1,281 training programs activated within the Italian education system (internships, apprenticeship programs, work placements)
- ~200 Key Suppliers trained on ESG Topics

Figures referred to 2024 ACT

# 04 METRICS, TARGETS AND ACHIEVEMENTS

**4.1 Metrics & Targets**
- Leonardo Data Driven Approach to Sustainability
- Emissions Targets and Calculation Criteria
- Focus on Energy
- Focus on Water
- Focus on Material Scraps

**4.2 ESG Rating**

# 4.1 METRICS AND TARGETS

## LEONARDO DATA DRIVEN APPROACH TO SUSTAINABILITY

The **digital ecosystem evolves continuously** increasing management efficiency, reinforcing the **data accountability** and the **control of Group's Sustainability** performance, **directly connecting all sustainability Group's structures**.

**Sustainability Plan** KPIs and economics aimed at half-yearly **control** effectiveness and **progress** of the **Sustainability Plan Projects**.

Five-years **ESG KPIs Budget Plan** aimed at yearly **control** the **progress towards** the **Group's Sustainability Targets**.

**Bottom-up process**, ruled by an internal procedure, involving **pillars data owners** and **validators fully accountable**.

## DATA INPUT AND MULTI LEVEL APPROVAL PROCESS

Data owners **fully accountable**

### BOTTOM-UP PROCESS

data provided by:

- Business Areas
- Companies
- Organizational Units

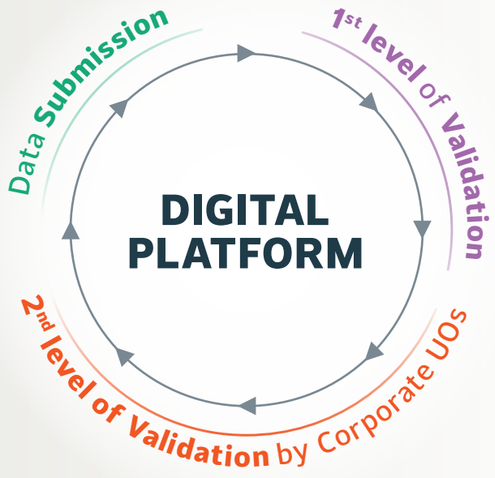
- Sustainability Managers
- Finance Referents
- Project Managers
- Data Owners

**Projects performance** and **progress** are monitored by **>200 dedicated KPIs** reported on digital platform.

The end of the process is the final reporting of consumptive data. It is performed through an internal data management system and it involves **129** sites and a number of corporate stakeholders such as Internal Audit with third part assurance.

### INTEGRATED DIGITAL SYSTEM

assuring data accountability




## DATA ANALYTICS AND VISUALIZATION

Managed by **Sustainability**

**Analysis results** shared with all **relevant stakeholders** and internally used to **support decision-making**

Top Management →

- **Group's Sustainability** performance and **progress** vs **Group's Targets** comparable with **Financials**

### OUTPUT

- Management control reports
- Dashboards

Professional Family →

- **Sustainability Plan**'s projects **performance, progress** and **contribution** to **Group's Targets**

# EMISSIONS TARGETS AND CALCULATION CRITERIA

## TARGETS

## PROGRESSION ON TARGETS*

**-53%** of absolute Scope I and II GHG emissions by 2030 from a 2020 base year. SBTi has classified Leonardo's Scope I and II target ambition as in line with a 1.5°C trajectory.

▶ **-43%** of direct and indirect emissions compared to the 2020 baseline.

**58%** of Leonardo's suppliers by emissions covering Scope III, categories 1 and 2 (purchased goods and services and capital goods) will set science-based targets by 2028.

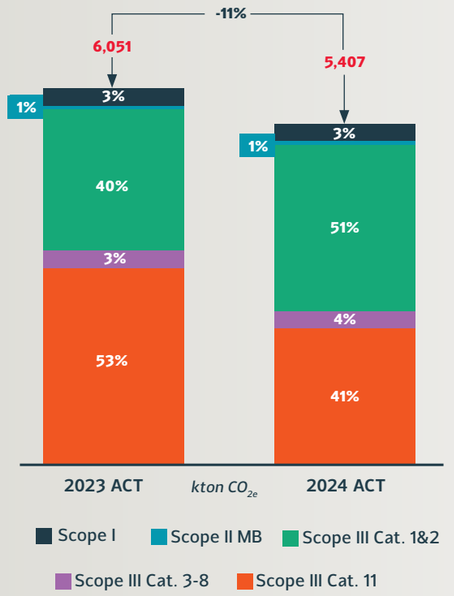
▶ **12%** of Leonardo's suppliers by emissions covering Scope III (upstream) have set science-based targets.

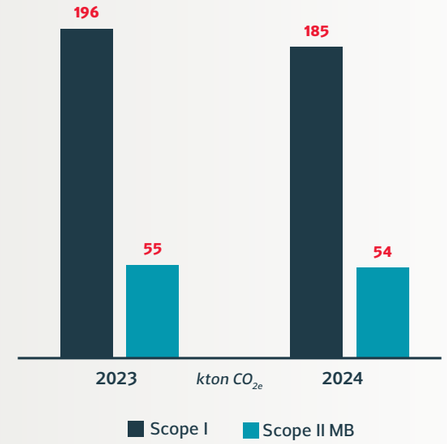
**-52%** of Scope III GHG emissions from fuels and energy-related activities, upstream transportation and distribution, waste generated in operations, businesses travel, employee commuting, upstream leased assets, and the use of sold products per flight hour equivalent by 2030 from a 2020 base year.

▶ **-36%** compared to the 2020 baseline.

*Referring to 2024 ACT

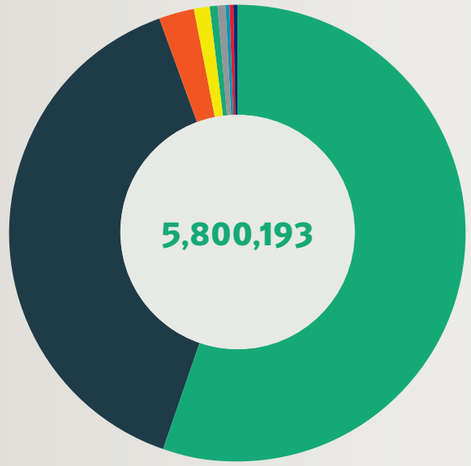





## Scope III emissions 2023

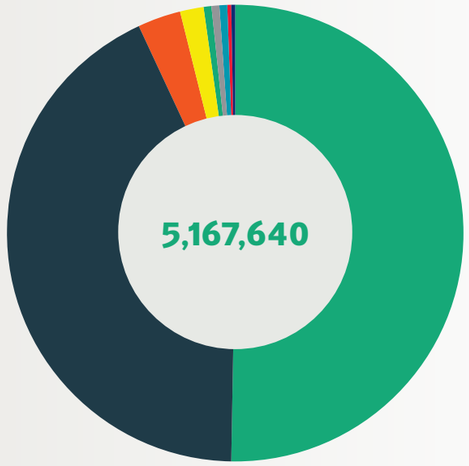
*ton $CO_{2e}$*




| | | | |
|---|---|---|---|
| **Cat. 1** | 2.263.633 | **Cat. 9** | n.a |
| **Cat. 2** | 149.149 | **Cat. 10** | n.a |
| **Cat. 3** | 34.594 | **Cat. 11** | 3.215.336 |
| **Cat. 4** | 17.027 | **Cat. 12** | n.a |
| **Cat. 5** | 26.371 | **Cat. 13** | n.a |
| **Cat. 6** | 27.200 | **Cat. 14** | n.a |
| **Cat. 7** | 54.713 | **Cat. 15** | n.a |
| **Cat. 8** | 12.170 | | |

## Scope III emissions 2024

*ton $CO_{2e}$*

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| **Cat. 7** | 54.713 | **Cat. 15** | n.a |
| **Cat. 8** | 12.170 | | |

# FOCUS ON ENERGY

## TARGET

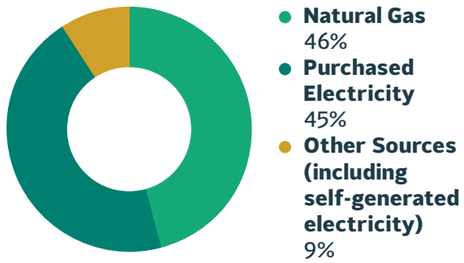
**-10%** reduction in consumption of electricity withdrawn from external grid in 2025 from 2019.
*(Reduction calculated as a ratio to revenues)*

## PROGRESSION ON TARGET*

**-23%** consumption electricity withdrawn from external grid.

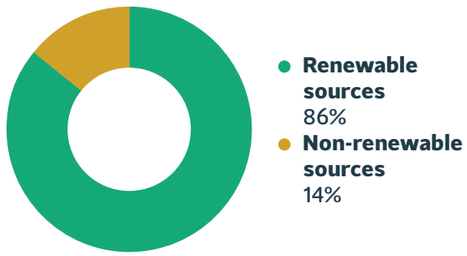
*(Reduction calculated as a ratio to revenues)*

### Energy consumption by source



- **Natural Gas** 46%
- **Purchased Electricity** 45%
- **Other Sources (including self-generated electricity)** 9%

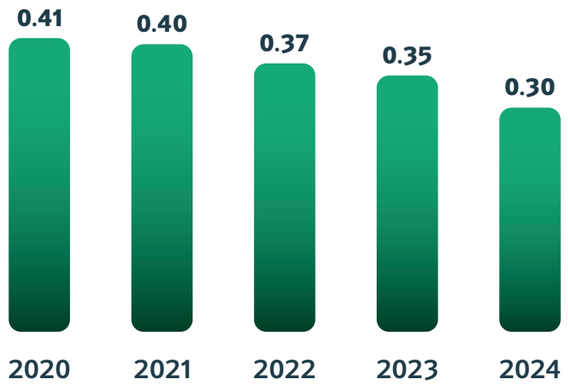
### Electricity consumption by source



- **Renewable sources** 86%
- **Non-renewable sources** 14%

## LEONARDO GLOBAL SOLUTIONS IS IN CHARGE OF ALL THE MAIN ACTIVITIES RELATED TO ENERGY EFFICIENCY

### Energy intensity consumption (MJ/€)




Intensity of energy consumption on revenues: 0.30 (-13% compared to 2023). The denominator of this KPI is equal to the revenues reported in the Leonardo Group's consolidated financial statements.
Energy consumption: 5,377 TJ (+1.2% compared to 2023), of which 39% from renewable sources, including:

- consumption of electricity acquired: 2,443 TJ, equal to 679 GWh (+6% compared to 2023), of which 86% from renewable sources;
- natural gas consumption: 2,469 TJ, equal to 68.6 million m3 (+1% vs 2023), mainly used for heating;
- other sources (of which self-producted electricity): 465 TJ, -17,7% vs 2023.

*Referring to 2024 ACT

## ACTIONS

### ENERGY SELF-PRODUCTION PROGRAM

Leonardo's Self-Production Program foresees the installation of renewable energy generation plants across production sites. In 2024, contracts were signed for an estimated power of about 43 MWp, and the total estimate of self-consumed photovoltaic energy from the plants can reach a value of over 55 GWh/y.

**17.5 kton $CO_{2e}$ the total avoided per year due to Self-Production at full speed.**

**21 ACTIVE AGREEMENTS for Self-Production: 19 in Italy, 1 in UK and 1 in Poland.**

### LED FULL POTENTIAL LIGHTING PROGRAM

Installation of LED lamps in Leonardo sites, maximising energy efficiency.
In the period 2021-2024 investments of about €29 million have been completed, which will make it possible to save about 27 GWh/y.

**€31 million the total investment.**

**10 kton $CO_{2e}$ of emissions reduction.**

### THERMAL ENERGY CONSUMPTION EFFICIENCY

In line with its goal of improving thermal efficiency, Leonardo analyzed the optimization of thermal plants at its main sites throughout 2024. Starting in 2025, detailed design work will be carried out at two pilot sites (Nola and Pomigliano) for the next implementation phases.

**Thanks to the interventions at the Vergiate site, gas consumption will be reduced by approximately 900,000 m³ annually, resulting in a decrease of about 1,800 tons of $CO_{2e}$.**

### GUARANTEES OF ORIGINS

Leonardo purchases Guarantees of Origins (GOs) for the geographies of Italy, UK and Poland. The certificates guarantee the compensation of the emissions due to the Group electrical supplies (Scope II MB).

**86% of the whole Group's electricity comes from renewable sources.**

# FOCUS ON WATER

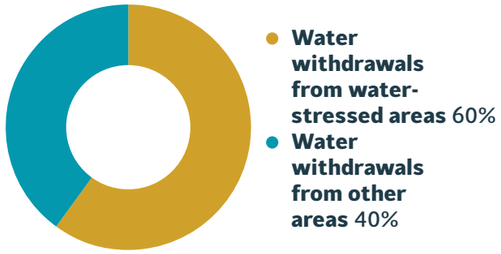
## TARGET

**-25%** of water withdrawals in 2030 - 2019 baseline.
*(Absolute value)*

## PROGRESSION ON TARGET*

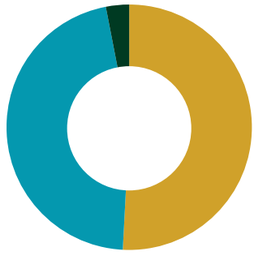
**-21%** of water withdrawal in 2024 - 2019 baseline.
*(Absolute value)*

### Water withdrawals by area



- **Water withdrawals from water-stressed areas** 60%
- **Water withdrawals from other areas** 40%

### Water withdrawals by source



- **Well** 51%
- **Water supply systems** 46%
- **Other Sources** 3%

- **0.26l\€ Intensity water withdrawals \ revenue**
- **-19%** with reference to 2023
- **4%** of recovered or reused water

**Water withdrawals**
**4,647 megaliters**
**-5,7% vs 2023**

The strategy implemented so far has resulted in a 21% reduction in water withdrawals in 2024 compared to 2019. With reference to water withdrawn from traditional sources (well/water networks).

### WATER STRATEGY

- **Water network revamping and smart metering**
- **Risk mitigation for business continuity based on diversification of sources: rainwater collection**
- **Water circularity**
- **Action prioritisation for water stressed sites**

*Referring to 2024 ACT

## ACTIONS

### WATER NETWORK REVAMPING AND METERING

#### SMART WATER

Water network restoration, higher efficiency of water also including recycle of water. Revamping of old water adduction lines in progress for water withdrawals saving, and smart meters installation.

**-195Ml/y water withdrawals planned.**

**>100 Smart Meter installed.**

### WATER CIRCULARITY AND RAINWATER COLLECTION

#### WAREGA AND ELECTROPLATING CASELLE

The technological revamping of the wastewater treatment plant at the La Spezia and Caselle site, which manages residual water originating from surface treatment processes. The upgraded system enhances the effective removal of harmful pollutants from the water, reducing environmental pollution. This significantly reduces the amount of waste disposed each year.

**2,800 ton/y waste reduction planned.**

#### RAINWATER COLLECTION

Moreover rain collection plants are already implemented in Grottaglie and Foggia plants, among the most water stressed areas.

#### LIQUID WASTE REDUCTION

In the sites of Vergiate and Benevento some interventions and measures have been put in place in order to reduce liquid industrial waste.

**Vergiate 800 ton/y.**

**Benevento 660 ton/y.**

# FOCUS ON MATERIAL SCRAPS

## TARGET

**-15%** of waste produced in 2030 - 2019 baseline.
*(Absolute value)*

## PROGRESSION ON TARGET*

**-15%** of waste produced in 2024 - 2019 baseline.
*(Absolute value)*

### Waste

- **Non-hazardous waste** 73%
- **Hazardous waste** 27%

- **Recycled Waste** 57%
- **Disposal Waste** 43%

- **1.83 g/€ Intensity waste/revenues**
- **-15%** with reference to 2023
- **20%** of recovered waste is recycled.

**Waste produced 32,555 ton**
**-1.5%vs 2023**

The strategy implemented so far, has resulted in a reduction of 15% of waste generated in 2024, compared to 2019.

**13%** of **reworks** reduction and **5%** of **scraps** reduction by **NEMESI** optimization activities.

*Referring to 2024 ACT

## ACTIONS

### MATERIAL SCRAPS AS A RESOURCE

#### CARBON FIBER (CF) SCRAPS RECYCLING

Industrial plant for carbon fiber recycling, in partnership with a waste multi utility**.
Industrial symbiosis with the automotive sector.

**High quality of recycled CF.**
**70% lower GHG emission based on LCA compared to virgin CF.**

**Current recycled CF price: about 24€/kg.**

#### ALUMINUM AND STEEL SCRAPS

Aluminum scraps in briquettes for waste valorization and byproduct sale.

**40 ton/y Aluminum project - Cisterna.**
**70 ton/y Steel project - La Spezia.**
**200 ton/y Aluminum project - Venegono.**

### REACh: HAZARDOUS SUBSTANCES SUBSTITUTION

#### CHROME VI PHASE OUT

Focus on sustainable chemicals to replace and reduce chromates in industrial processes.

**80 processes involved.**

**8 M€ investments in 2025.**

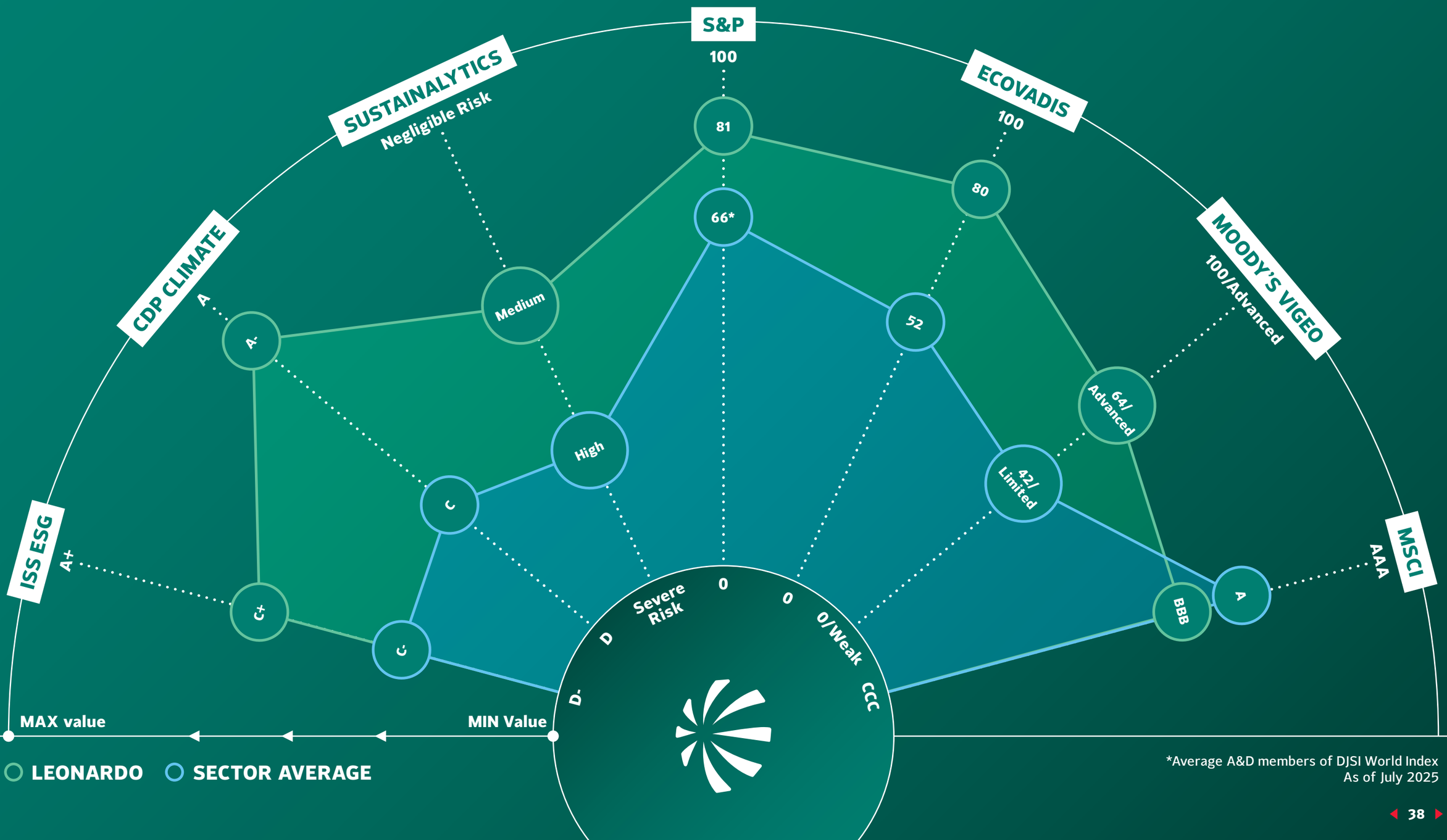
#### REGENERATION AND REUSE OF OILY EMULSION

Regenerate and reuse exhausted emulsion, rather than disposing of it as waste.
This involves processing the emulsions used in milling machines for lubrication.
The emulsion is filtered, de-oiled, disinfected, regenerated and reused through a highly automated system.

**30 ton/y waste reduction planned.**

**Composite Materials: A Hidden Opportunity for the Circular Economy, Leonardo, Bax&Co, CSR Europe New materials and circular economy accelerator.

# 4.2 ESG RATING




*Average A&D members of DJSI World Index
As of July 2025

# 05 BUSINESS SECTORS

- **Helicopters**
- **Electronics**
- **Cyber & Security Solutions**
- **Aeronautics** (Aerostructures and Aircraft)
- **Space**

# HELICOPTERS

## ROTORCRAFT DIGITAL TWIN

The project aims to develop a set of digital models of the helicopter components and a digital infrastructure to connect the digital models with the physical counterpart. A Digital Twin is a virtual replica of a physical entity, connected to it through a data exchange mechanism. The Rotorcraft Digital Twin is a virtual replica of the helicopter, its components, or assemblies, which, through design, experimental flight, and in-service data, delivers benefits throughout the entire product life cycle. This technology allows simulating the behavior of hardware from various engineering perspectives, providing significant advantages in both design and in-service phases. Benefits include reduced costs and time during the bidding, design, testing and delivery phases and optimized component management during the commissioning phase.

## NEXT GENERATION CIVIL TILTROTOR (NGCTR)

The Next Generation Civil TiltRotor project, developed within the European Union Aviation R&I framework programme Clean Sky 2, is aimed to design, build and fly an innovative next generation civil tiltrotor technology demonstrator. Demonstration activities will aim to validate its architecture, technologies/systems and operational concepts, expected to show significant improvement with respect to current Tiltrotors. Further to that, this particular Tiltrotor design will show that it can cut $CO_2$ flight emission of up to 50% compared to existing helicopters.

## SAF

The overall project aims to evaluate, test and verify the use of SAF blended with conventional jet fuel and gain knowledge about how they impact helicopter's systems and performance. The adoption stream of the activity is aimed at fostering the use of £50% SAF blending – already approved for operations – in the fleet and also for a regular use for development flights within Leonardo Helicopters. The exploration stream is aimed at testing the impact of high blending up to 100% - currently not approved yet by aviation safety authorities – through specific lab tests to evaluate fuel system response (e.g., sealings, coatings, fuel bladders, etc.) with respect to performance, durability, corrosion, and maintenance over the lifetime. Collaboration with fuel manufacturers, engine OEMs, equipment manufacturers and safety agencies is pursued to ensure coordinated effort with the supply chain and key stakeholders.

## LCA DEVELOPMENT + LCA FULL IMPLEMENTATION + LCA SIMULATOR:

The LCA development project has the goal to make steps forwards on product Life Cycle Management and to respond to sustainability regulations requirements. The project delivers the methodology and the hardware & software infrastructure to properly assess the Carbon Footprint either of major helicopter's systems or of an entire helicopter. The use of digitalization enablers is a fundamental part of the project to ensure appropriate data governance and fast data retrieval and analysis. Current developments are the initial steps of a long-term implementation roadmap through which the LCA methodologies and assessment capabilities shall be fully embedded in Life Cycle Management of Helicopters. The implementation of such frame is intended to support environmental impact traceability for further initiatives like product decarbonization and circular design and manufacturing.

## MARKETPLACE FOR SPARE PARTS

A new platform designed, within the Leonardo Customer Portal, to connect sellers and buyers, enabling the purchase and sale of spare parts (new or used). The platform is a tool for the publication of offers by sellers supporting transactions management, documents exchange and communication between the parties. Other benefits are: increased customer intimacy, creation of new brand equity, extension of life for parts by reusing available materials and reducing the need for new components (saving in critical raw materials). This project is an important pillar in the strategy to ensure more circular life cycle management and environmental impact reduction.

# ELECTRONICS

## CIRCULAR ECONOMY
It is a cornerstone of sustainability strategy. It is a new approach where waste reduction becomes a key leverage to rethink and enhance processes with a comprehensive perspective (Industry & Sustainability) to maximize resource efficiency. Key projects are: regeneration and reuse of oily emulsions, aluminium and steel shaving - from waste to byproduct and WAREGA technological revamping.

## MORPHEUS XR - VIRTUAL TRAINING ENVIRONMENT
It is an innovative tool providing training in an extended reality environment, where users interact with a virtual mock-up of a complex system. Using a virtual, instead of a physical system, it allows operational and maintenance tasks, reducing resource use and $CO_2$ emissions.

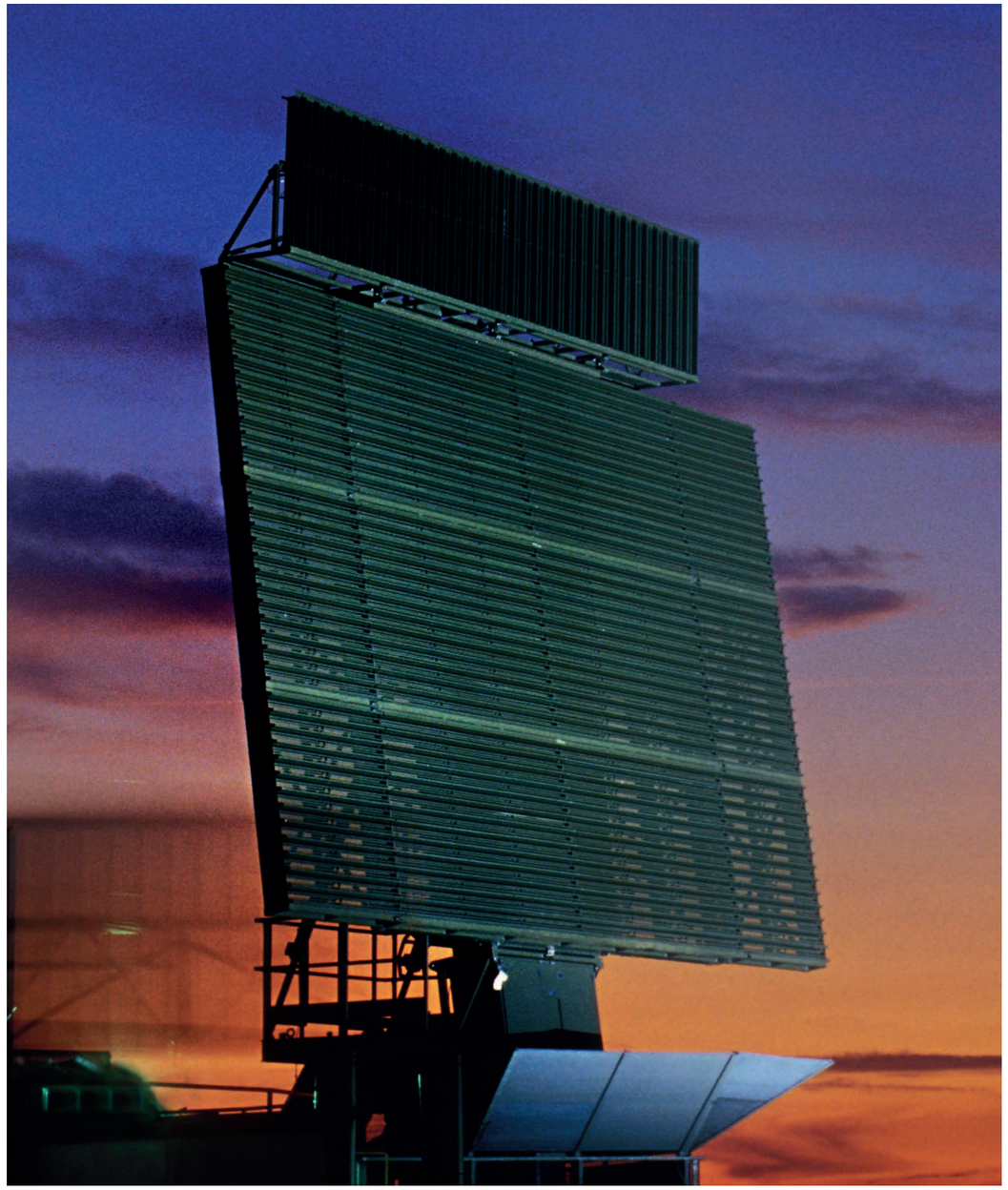
## OCEAN - LABORATORY, NETWORKS AND FACILITIES VIRTUALIZATION
It is a tool that improves energy and emissions efficiency and reduces e-waste through innovative architectural solutions. OCEAN is a self-service automated environment for orchestrating both physical and virtual machines, supporting the entire life cycle of a complex system, from design to maintenance.

## SESAR
As the technological pillar of the European Commission's Single European Sky (SES), SESAR drives the modernization of European Air Traffic Management (ATM). SESAR plays a crucial role in advancing Green Aviation and Clean Sky objectives reducing the environmental footprint of air traffic by optimizing flight trajectories, leveraging digitalization, automation, and connectivity within a harmonized European airspace.

## DIGITAL FACTORY (Factory Efficiency)
It aims at optimizing processes, reducing costs and waste, and promoting sustainable and innovative production practices. By leveraging advanced technologies and digitalization, quality, efficiency, and flexibility can be improved, creating a transparent, agile, and customer-focused production environment. Key projects include **Closed-Loop Manufacturing (CLM)** applications for real-time monitoring of production and inventory, **Creation of an OT Network** for a continuous data flow between operational and management systems, and **Digital Visualization & Analytics** for an easy access to **big data** supporting better decision-making.

## DIGITAL ENGINEERING INITIATIVES
Focus on evaluating technologies and processes to drive innovation in design and manufacturing. The goal is to improve efficiency, flexibility, productivity, and sustainability. Key projects include the multiphysics Digital Twin and the mechanical Digital Thread (MDT), which use lower environmental impact materials and enhance documentation and inspection. These initiatives provide comprehensive, traceable product data throughout the lifecycle.

## DIGITAL PROCESSES
Process digitalization is being leveraged to improve efficiency and effectiveness. Two pilot projects lead this shift: BMS (Business Management System) Compass, which enhances document search through AI, and a field returns process digitalization initiative, which enables systematic tracking and data analysis. Both aim to streamline operations and support informed decision-making.




# CYBER & SECURITY SOLUTIONS

## SCS (Sicily Cyber Security)

The purpose of the project is to combat criminal phenomena with a focus on the fire emergency and create the conditions for widespread control of the territory by strengthening the surveillance capabilities of the Corpo Forestale Regione Siciliana and the Dipartimento Regionale Protezione Civile. The objectives of the initiative will be pursued through: the realization of a Regional Unified Operations Room aimed at hosting, in addition to technological tools, the personnel in charge of the active fight against the phenomena covered by the SCS initiative and thanks to the implementation of an Integrated Monitoring and Control Platform, in support of Operations Room activities. This platform will provide a unified and centralized view of all information, technological components, models for the prevention and countering of criminal phenomena, preventive intervention models and, lastly, the enhancement of field sensors and the existing monitoring infrastructure through the use of intelligent "disposable" IoT sensors for early warning purposes, and video surveillance systems.

## 4 ASSI DI FORZA-GENOVA

Leonardo's technologies can be a key tool for transforming urban areas into smart cities, starting with mobility services. The "4 Assi di Forza" project aims to improve urban mobility with electric buses and trams, reserved lanes and interchange car parks in four areas of Genova. Thanks to our technologies, it will be possible to offer Genova a higher quality of public transportation in terms of comfort, safety and reduced $CO_2$ emissions.

## GLOBAL MONITORING PLATFORMS

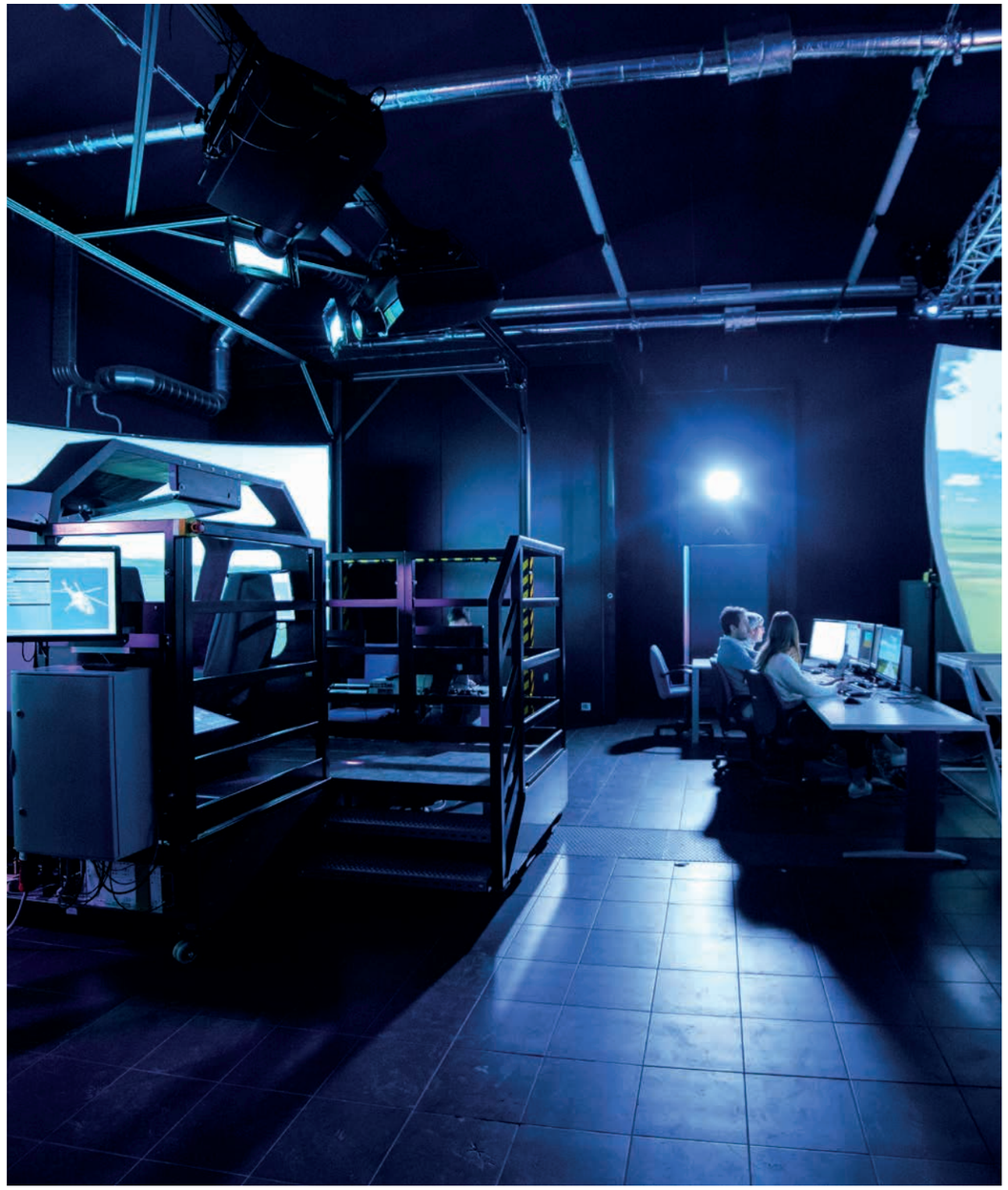
The platforms are characterized by communication, cyber and intelligence capabilities to monitor the territory. They are capable of processing and analyzing huge amounts of data from heterogeneous sources in real time.
The solutions provide an integrated overview of the operational context via command-and-control rooms and are used, for example, for monitoring environmental and anthropogenic events, risk prevention, the enhancement and protection of Italy's cultural, artistic and architectural heritage, and for city administration and urban security.

### FOCUS ON SIM (Sistema Integrato di Monitoraggio)

Another platform application is SIM.
It is a solution that works alongside existing systems with which it collaborates by providing: data, metadata, processing services, workflows, widgets and applications.

The environmental areas of application, include four verticals:

1. **Hydrogeological instability:** providing a support system to the Agencies in charge of monitoring both for cognitive and warning purposes, for landslide phenomena, flood and drought areas.
2. **Precision Agriculture:** developing of a tool for estimating district irrigation consumption and requirements and the economic impacts of irrigation and for generating maps of plant health status.
3. **Marine and Coastal Pollution:** providing a system to support the agencies in charge of monitoring both cognitive and for the purpose of detection of hydrocarbon spills at sea.
4. **"Identification of environmental offenses"** - for the set of Use Cases envisaged, the paradigm of monitoring action, in addition to being connected to the institutional purposes of the promoting Bodies and Administrations, has as its main thread, and is strongly declined in this sense, that of being able also to implement an investigative type of activity to defend and protect the territory.



# AERONAUTICS (AEROSTRUCTURES)

## CIRCULARITY: CFRP RECYCLING

Cured and Uncured CFRP Fiber Recycling (Pyrolysis) and Utilization for New Materials and Parts. The CFRP recycling, enables to obtain: short fibers thermoplastic pellets for structural non aeronautic parts or secondary aeronautic parts, non-woven fabrics for tooling applications, filaments for FDM 3D printing, tapes with realigned carbon fibers and other products, as CF molding compound. The potential applications of recycled CF are both internal and external. The internal applications -downcycling- includes, among others, their use as secondary parts for helicopters or aircraft, as tools for composite fabrication or auxiliary tools and primary and secondary structure for Baggage/ package Handlers (BU Automation). The open loop (external applications) includes their use as components for the automotive sector or other (retails, civil, etc) and their use as secondary raw materials for the chemical and materials industry. The new New Herambiente recycling plant (Pyrogasification) is the first of its kind in Europe, located in the heart of Italian Motor Valley, and marks a crucial step in carbon fiber recycling, closing the loop of its value chain. Among the many benefits, it is important to highlight that the high quality recycled CF, (mechanical performances comparable with virgin fibers), are produced generating 70% less GHG emissions (LCA).

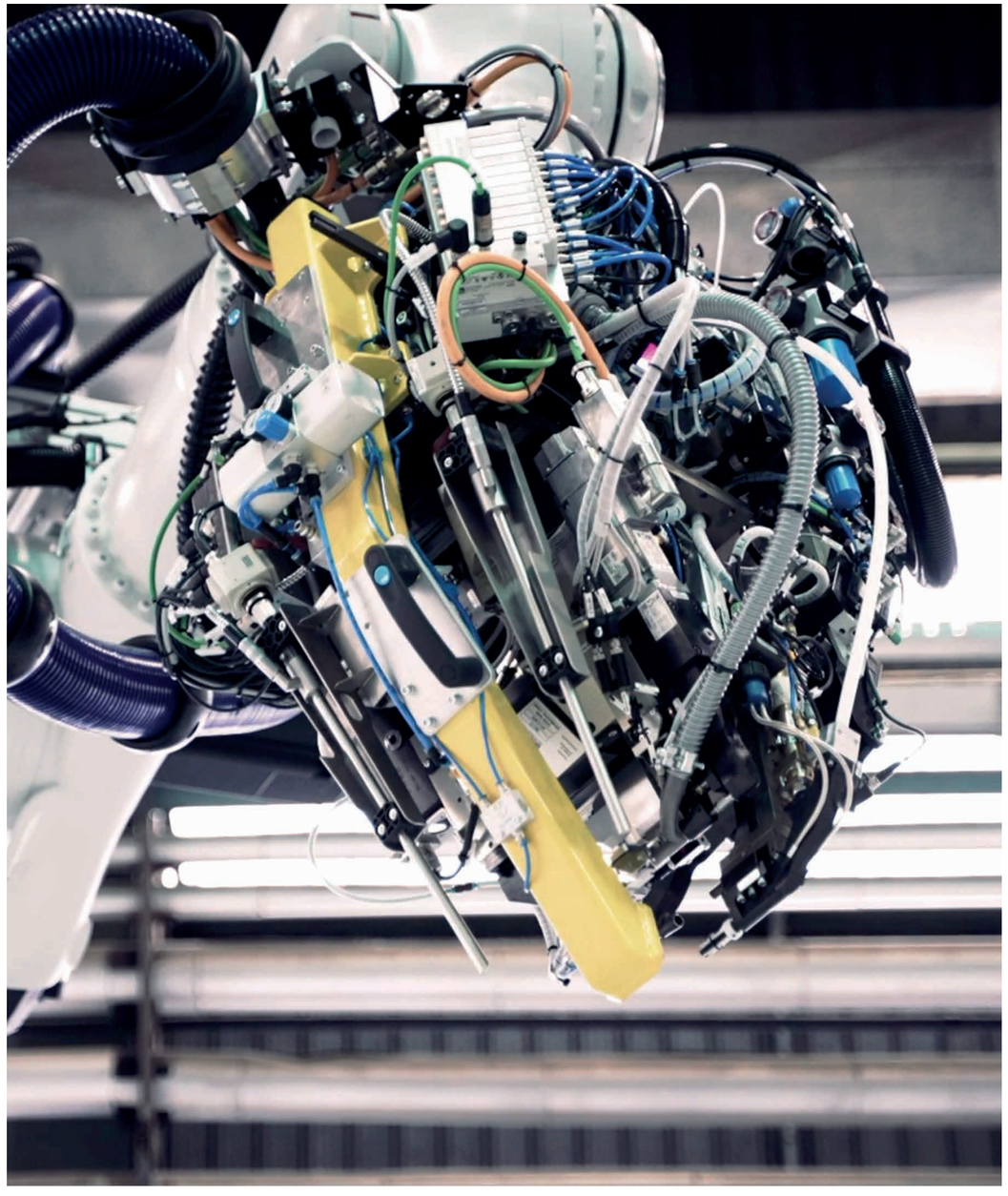
## NEMESI (New Engineering and Manufacturing Enhanced System Innovation)

The project will turn the Pomigliano d'Arco and Nola sites into smart factories, by transforming the ATR fuselage production line through digitalization, automation and the integration of technologies inspired by the Industry 5.0 model. It will combine human factor to digitalization and automation technologies, starting from full digital mock-up to digital twin, robotics, AI, virtual and augmented reality, allowing to reduce waste production thanks to the improved quality.

The NEMESI project boosts the process optimization in a human centered environment that ensures sustainability benefits and enhanced aerostructure capabilities along product lifecycle and supply chain. It will provide a full 3D Digital Mock-Up, a product Lifecyle Management Infrastructure, automation assets & process qualification and a shop Floor Digitalization & Digital Training. 24 M€ investments during 2024.

## AEROTECH ACADEMY

It is an advanced, interdisciplinary training program focused on cutting-edge engineering topics. It is a collaborative initiative between Leonardo and the Federico II University of Naples for Campania, and the Polytechnic University of Bari and the University of Lecce for Puglia. The academy aims to equip participants with both theoretical knowledge and practical skills that can be immediately applied in high-tech industrial sectors. This program is open to students selected through a specific call published by the participating universities. The training lasts approximately 8 months, with 4 months dedicated to classroom instruction on aerospace research and higher education (600 hours), followed by 4 months of project work. During this phase, participants analyze, apply, and develop case studies based on real-world experiences. The Academy's courses are taught by university professors and experts from Leonardo. The training takes place at Leonardo's facilities in Pomigliano d'Arco (Campania) and, starting this year, in Grottaglie (Puglia) at dedicated campuses. Since its inception, the Academy has successfully trained 98 engineering graduates, with 94% of them joining Leonardo after completing the program. The 5$^{th}$ edition for Campania and the 1$^{st}$ edition for Puglia are currently underway, with a total of 55 participants.



# AERONAUTICS (AIRCRAFT)

## SAF (Sustainable Aviation Fuel) - COMPATIBILITY ASSESSMENT

Detailed review (analysis and reporting) of the current standards and specifications (both civil and military) for the drop-in usage of the SAF to be cross-checked respect to the authorized fuels for the following aircrafts: M345, M346, EFA, C27J, ATR Special Versions. The assessment will return the compatibility level of each aircraft with the various SAF approved by the standards. The results will be provided to the end-users.

## CLEAN AVIATION

The initiative brings together all the studies that are under development through the European Research projects named HERA and HERWINGT. The scope is to explore the complexity of regional aircraft concepts and architectures integrating cutting-edge technologies to meet the ambitious 50% GHG emissions reduction. HERA identifies aircraft configurations that significantly reduce environmental impact through hybrid-electric propulsion and innovative architectures. HERWINGT develops an innovative high aspect ratio, active adaptive wing configuration suitable for the future hybrid-electric regional aircraft. The whole initiative defines the in-flight and on-ground demonstration strategy to validate the performance of future technologies.

## C27J FIREFIGHTING

In 2023, the development of the Fire Fighter (FF) version began with the aim of increasing the “multi-mission” capabilities of the C-27J, integrating technology that enables fire fighting operations. The C-27J Fire Fighter adopts a Modular Airborne Fire Fighting System, able to reconfigure the aircraft from a transport configuration into an airtanker in less than two hours. The module features a 7,500-litre tank, refillable in less than 10 minutes with water and retardant liquid.

## IS4AEROSPACE

The City of Aerospace was born in Turin as a large urban and industrial re-development project, entirely dedicated to the world of Aeronautics and Space, which will involve the major players in the sector, Small and Medium Enterprises and start-ups as well as academia, research and education institutions. It will be a strategic hub for the development and international competitiveness of the sector: its first step, currently under realization, sees Leonardo, together with the Polytechnic of Turin and other major players, as the main actor of an advanced research infrastructure (IS4Aerospace) aimed at developing new technologies and advancing research cooperation. Leonardo, in particular, will focus on four innovation areas: AI & Advanced Digitalization, Next Gen Pilot Training, Care for Flight (advanced data monitoring for innovative high value services), Disruptive Innovation (rapid prototyping and testing of innovative solutions, on ground and in flight).

## CUSTOMER SUPPORT DIGITAL SERVICES

The Commercial, Customer Support Services & Training area has launched a huge transformation program called C4F (Care for Flight) to develop the new Leonardo Aircraft Digital Services Platform, including several projects that are rethinking how value is delivered to end users. Two key projects currently under release are Enhanced Technical Publications, that creates innovative processes for producing and delivering technical publications, improving the tech pubs development processes also exploiting new technologies (mainly Generative AI), and Connected Fleet, that empowers the mission readiness of our customers through advanced digital services, to optimize technical, maintenance and logistic activities, supporting data-driven decisions (i.e. predictive maintenance).

## SIMULATION & TRAINING

Simulation and training represent one of Leonardo Aircraft key business areas to evolve our design capabilities and to strengthen our positioning as Global Provider of Integrated Hybrid Training System & Turn-Key Services, among the main levers for reducing $CO_{2e}$ emissions along the supply chain. The development of advanced simulators allows to increase pilots virtual trainings, providing mixed reality scenario comparable to real ones.

State of the art simulation capabilities includes several new technologies and projects:

- The development and integration of Varjo Extended Reality XR-3 headset optimizing the performance of ground training. The adoption of the Mixed Reality solutions, reduces training costs and improves the effectiveness of training, as well as reducing flight hours.
- Advanced image-generator systems, allowing to recreate the most realistic training scenarios.
- Advanced Training Management Information System (TMIS), to track pilot cadet training activities and embeds progressively AI technologies, to create a full adaptive training system.
- Augmented and Virtual Reality technologies, to speed up and improve the learning process, in a risk-free environment.

The solutions described are implemented in the International Flight Training School (IFTS) at Decimomannu, and the skills development have been identified as KPI drivers of the project proposed in the roadmap. These technologies can significantly reduce the reliance on flights using aircraft, leading to a substantial decrease in fuel consumption and emissions production.

# SPACE

## MAPPING AND MONITORING

- **LAND COVER AND TROPICAL FOREST MAPPING AND MONITORING (LCFM)**
  Forests are one of the most important habitats, involved in multiple functions, among them, their hugely important role as global carbon sinks for planet Earth. GAF AG [an e-GEOS (Telespazio/ASI) company] is responsible for the production of the tropical forest products within the consortium of the LCFM service, a component of the Copernicus Land Monitoring Service (CLMS), that advances tropical forest monitoring capabilities, providing critical information for analysis and monitoring of deforestation and forest degradation.

- **LAND MONITORING SERVICES**
  The Land Monitoring services provide maps of land cover/land use and their changes at different levels of spatial and classification detail, for comprehensive and in-depth analysis of a territory, allowing the identification of potentially hazardous situations for land and populations. The Displacement services provide information on slow deformations in infrastructures and natural sites, helping to identify situations that could compromise territory resilience and population safety (e.g., landslides and infrastructure collapses).

- **AGRICULTURE SERVICES**
  Data Technologies enable solutions to provide modular services to monitor the growth and health of crops, soil status, agricultural practices planning and management, water, fertilizers and pesticide management, by processing and integrating satellite EO data with proximal sensors, agronomic and cadastral information.

- **CENTAUR**
  The overall objective of CENTAUR is to respond to societal challenges deriving from climate change threats by developing and demonstrating new service components for the Copernicus Emergency Management Service (CEMS) and Copernicus Security Service. The project methodology, based on the processing of multisource EO satellite data indicators relevant to drought and flood threats, enables to reinforce early warning capacities and pro-active geo-intelligence services for the systematic surveillance of early signs and drivers of social unrest, population movements, and conflicts in connection with food and water insecurity.

- **COPERNICUS EMERGENCY MAPPING SERVICE (CEMS)**
  The service provides near real time reference maps over areas impacted by abrupt natural or manmade critical events (such as floods, earthquakes, droughts, humanitarian crisis) allowing the assessment of their impact with respect to pre-event situation, as well as monitoring the event evolution in time, supporting in field intervention.

## HYPERSPECTRAL INSTRUMENTS EO AND RADAR FOR BIODIVERSITY OBSERVATION

EO hyperspectral Earth observation technologies and instruments have made it possible for the Group to participate in the most relevant global governmental development programs on the assessment of plant health and vegetation damage detection based on the analysis of chlorophyll photosynthesis. In the ocean domain, we report the visible hyperspectral Ocean Color Instrument for detecting photosynthesis, a natural process of $CO_2$ capture and pollution for NASA's PACE satellite platform, while, in the terrestrial domain, we highlight ESA's FLEX - FLuorescence, EXplorer satellite to be launched in 2025 equipped with the Floris high-resolution spectrometer to detect, from 800 km, the intensity of fluorescence. Leonardo is also contributing to Earth surveillance in the frame of "IRIDE" LEO Constellation, which is under development in the frame of PNRR funds (Italian Investments in Space Economy).
From 2026 Italy will be ready to fly a constellation of 69 satellites, including a suite of compact state-of-the-art E/O Instruments provided by Leonardo with the purpose of distinguish the chemical-physical composition of the surface of the Earth (land & sea monitoring, cost & land surveillance, atmosphere monitoring etc.).

## IN ORBIT SERVICING (IOS)

Through the PNRR project IOS Telespazio is developing enabling technologies needed to fulfil challenging in orbit operations for both prepared and unprepared satellites (target). Telespazio is in charge of the Ground segment development, implementing all the functionalities needed to manage the IOS services, including the control of the servicer and the stack after the docking/mating. In terms of sustainability benefits this project will foster technical capabilities able to support the following benefits in the future service such as: extended life of satellites, with a reduction of launches, reduced debris in space, through active debris removal services, and reduced risk of uncontrolled de-orbiting debris, thus reducing the risk of accidents and damage to people and properties.

## ECO-DESIGNED, FLEXIBLE AND MOBILE TELEMETRY SOLUTION FOR MICROLAUNCHERS TRACKING

Adoption of methodological guide for the realization of LCAs in the space industry and apply ecodesign and eco-conception concepts to develop a mobile telemetry solution dedicated to microlaunchers and new spaceports in order to limit environmental impact throughout its life cycle. The model used for the life cycle analysis foresees the integration of environmental criteria at each stage of the design, development and selection of suppliers to limit environmental impact of the final product. Three main axis are implemented: remote control and autonomous operations (less people and travels to launch site), reuse of equipment (limit raw material and energy to produce new equipment) and miniaturization (reduce number of equipment and therefore overall mass and emissions during transport, digitalization to limit hardware).

## SPACE SITUATIONAL AWARENESS (SSA)

Telespazio is developing Space Situational Awareness services to map and monitor space objects in orbit around the Earth that can damage satellites and infrastructures critical to everyday life. The services provided are based on an innovative digital services platform that integrates data from various sources, including space data from the NorthStar constellation, making it possible to achieve higher performances than previous systems.
The SSA project will expand the objectives of Earth environment monitoring to the Space Environment, introducing the theme and technology of Space Situational Awareness, allowing to protect vital assets in orbit, including human life aboard the Space Station, and to reduce debris in space.

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