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Oxford Congress 2025

REACHING PRAGMATISM IN SUSTAINABILITY:

#IMPACT #ENGAGEMENT #MEGATRENDS #DATA POWERED BY AI

An initiative by Fide's GET-2 ESG Think-Tank

FINAL REPORT

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Welcome to the 2025 Annual Oxford Congress

The Oxford/25 Congress brought together global leaders in finance, multinational corporations, and sustainability experts to address a pivotal question: how do we turn ambition into action in a world shaped by complex risks, advancing technology, and rising expectations for environmental and social impact?

Under the theme "Reaching Pragmatism in Sustainability", this year's edition focused on actionable strategies to integrate sustainability into financial decision-making—where data, technology, and regulation converge. From artificial intelligence to biodiversity, from global taxonomies to stakeholder engagement, the congress explored how institutions can respond to megatrends with agility, credibility, and measurable outcomes.

Key topics include:

- The intersection of AI and ESG data science in driving effective impact
- Biodiversity and One Health: Scientific Insights into Economic Impacts
- Decarbonization strategies for industrialized economies
- The future of corporate engagement and stewardship
- Regulatory developments in the EU, US, and LATAM
- The evolution of impact investing beyond niche status

Fide' Annual Oxford Congress is not about idealism—it's about **bridging vision and execution**. Through **cross-sector dialogue**, we aim to accelerate **scalable, science-informed, and economically viable solutions** that align profitability with purpose.

We thank you for joining us at the Oxford Congress 2025 as as we move from principles to practice in building a sustainable financial system.

INTRODUCTION

REACHING PRAGMATISM IN SUSTAINABILITY: #IMPACT #ENGAGEMENT #MEGATRENDS #DATA POWERED BY AI

Since 2022, the GET-2 Think-Tank, born in Oxford from a dialogue between Fide members and experts from the financial, legal and public spheres, has evolved from asking how to integrate ESG and reach net-zero to a more demanding question: how to make sustainable finance work in practice without losing financial discipline. The Oxford/24 Congress, focused on ESG investment challenges and the "three S" of sustainable finance – Speed, Scope and Scale – marked a first turning point, consolidating the work of the initial working groups into a shared diagnosis and a set of concrete recommendations.

Oxford/25 takes the next step and leans deliberately into pragmatism. Across this year's programme – from One Health and biodiversity to industrial decarbonisation and taxonomies, from a U.S. and LATAM view on sustainable finance and regulation to engagement under ESG pushback, from the mainstreaming of impact investing to biodiversity integration in portfolios, and from freedom, AI and financial data science to the practical evolution of AI assistants, agents and workflows in law and finance – a common thread emerges: sustainability can no longer rest on labels or narratives alone. It must be anchored in credible transition plans, robust data, coherent regulation and real-world outcomes.

This Conclusions Document brings together the key insights from the 2025 Oxford Congress panels and keynotes, all aligned with the overarching theme "Reaching Pragmatism in Sustainability: #Impact #Engagement #Megatrends #Data powered by AI". Its purpose is not to offer a grand theory, but to distil what leading practitioners, regulators and academics are already doing to reconcile profitability, resilience and responsibility – and to provide a practical reference for the next chapter of sustainable finance.

None of this would have been possible without the commitment of the many professionals who contributed to Oxford/25: speakers, moderators, panellists, and participants who shared their experience openly and constructively; the leadership of the Congress Directors, Cristina Jiménez and Juan Ramón Caridad; and the guidance of the Scientific Committee, whose work in framing the questions, curating the agenda and challenging assumptions has been essential in steering the discussion towards concrete, actionable outcomes.

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ONE HEALTH AND BIODIVERSITY: SCIENTIFIC INSIGHTS INTO ECONOMIC IMPACTS

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KEYNOTE:

One Health and Biodiversity: Scientific Insights into Economic Impacts | The One Health concept and approach to global health threats

ABSTRACT

Progress in global health have been taken at the expenses of many threats, interconnected with the triple planetary crisis of climate change, pollution, and biodiversity loss. In response, the One Health initiative has consolidated as an operational framework that integrates human, animal, plant, and environmental health. A poor acknowledgment of ecosystem health and an absence of engagement of private sector organizations in One Health initiatives have been reported. The financial sector and policymakers have long underestimated the economic significance of ecosystem services, many of which are neither traded in markets nor directly assigned a monetary value. Appropriate economic evaluation frameworks and decision-making tools are therefore urgently needed in this area.

Keywords: *One Health concept; global health risks and impacts; economics of global health, Benefits of adopting Blue Health principles; Economics of Blue Health; Investing in scientific approaches to Blue Health; Policy integration of Blue Health; Conservation and ecosystem restoration*

KEY FINDINGS:

- The One Health has consolidated itself as a cross-cutting operational framework that integrates human, animal, plant, and environmental health
- Major health challenges cannot be addressed from isolated disciplines.
- Understanding the economic value of One Health is crucial for making decisions on One Health investments.

CONTENT

The problem and the context.

In the last two centuries human developments have advanced global health markedly. In fact, average life expectancy at birth for people was kept at about 30 years for most of human history. However, during the past 200 years, global life expectancy has more than doubled, now reaching more than 72 years according to the World Bank. According to Maddison's calculations, the average global income per person per year stood stable during this time period. Again, the advent of the Industrial Revolution in the late 18th century changed everything. In 2008, the last year in Maddison's final estimates, the real standard of living rose by more than tenfold between 1800 and 2008. That increase was largely a consequence of better nutrition and improvements of public health measures, such as filtered water and sewers and control of infectious diseases.

However, this progress has been taken place at the expense of many interlinked threats, for instance the impact of infectious diseases, non-communicable diseases, and antimicrobial resistance (AMR) is increasing, climate change is accelerating, biodiversity is declining, and crises of food insecurity and freshwater scarcity are frequent (Winkler et al., 2025).

"The Limits to Growth" was published 50 years ago. Ordered by the Club of Rome, the study was a milestone in the analysis of the economic, demographic, technical and ecological effects of the existing economic system. In industrialised Western countries in particular, the critical examination of the development model of continuous economic growth led to a broad discussion about the far-reaching implications of a global economy focusing on growth, on a planet with finite natural resources.

Five major challenges and global threats have been classically identified in the context of One Health: 1) The growth of the global population, expected to reach 10 billion people by 2100; 2) The resulting increase in demand for animal and plant foods; 3) The climate emergency and environmental overexploitation; 4) The loss of biodiversity associated with the rise of zoonoses; and 5) The increase in global trade, which multiplies the mobility of vectors and pathogens. As a key evolution of the One Health approach, the centrality of the environment and the interconnections with the triple planetary crisis of climate change, pollution, and biodiversity loss, and the impacts in sustainability and health are now part of the central discussion on this subject.

The One Health perspective and approach to global health threats.

One Health is thought to be an ancient concept. A milestone was Rudolf Virchow's definition of the term **zoonosis** and pointing out that: "there is no scientific barrier, nor should there be, between veterinary medicine and human medicine; the experience of one must be used for the development of the other." A milestone was Rudolf Virchow's definition of the term zoonosis and pointing out that: "there is no scientific

barrier, nor should there be, between veterinary medicine and human medicine; the experience of one must be used for the development of the other." The term zoonosis designates those diseases naturally shared between vertebrate animals, domestic or wild, and the human species. It is estimated that 60% of existing human infectious diseases are zoonotic. At least 75% of the emerging human infectious diseases have an animal origin such as Ebola HIV or avian influenza. Five new human diseases appear every year and some biological agents with potential bioterrorist use are zoonotic. Another fundamental advance was the proposal of the term “One Medicine” by Calvin Schwabe in recognition that the interdependence between animals, humans and their ecosystem extend beyond medical intervention for clinical disease. Most recently, One Health integrates eco-health and supports the concept that the health and well-being of animals, humans and the environment are interdependent (Zinsstag et al., 2018). Specifically, it has been in the last two decades; with a growing momentum after the COVID-19 pandemic, that the One Health concept has consolidated itself as a cross-cutting operational framework that integrates human, animal, plant, and environmental health and their relationship with ecosystems, emphasizing that major health challenges cannot be addressed from isolated disciplines. Additionally, it suggests the necessary collaboration between professionals from different sectors, especially in complex and global contexts. Key elements in this approach include the so-called "4Cs": (I) communication across sectors and levels; (II) institutional coordination; (III) multidisciplinary collaboration; and (IV) capacity building.

The present framework is based on the One Health Joint Plan of Action (JPA), launched by the One Health Quadripartite (WHO, FAO, OMSA and the UN Environment Programme), and the definition of principles, and theory of change put forth by the One Health High-Level Expert Panel (Winkler et al., 2025). Health JPA is built around six interdependent action tracks that collectively contribute to achieving sustainable health and food systems, reduced global health threats and improved ecosystem management and provide a framework for prioritising One Health action that requires investment.

One Health Economics: actions needed.

Although One Health is progressing towards interdisciplinarity, transdisciplinarity, and systems thinking, a need remains to integrate the social sciences and humanities more extensively, including economics (Lapinski et al., 2015; Leandri & Dalmas, 2024). In addition, minimal acknowledgment of ecosystem health and an absence of engagement of private sector organizations in One Health initiatives have been emphasized; for instance, the financial sector and policymakers have long underestimated the economic significance of ecosystem services, many of which are neither traded in markets nor directly assigned a monetary value (Ceglar et al., 2024). Recent reviews have indicated a paucity of standardised methods and metrics for the economic evaluation of One Health (Auplish et al., 2024). Some of the main challenges in conducting One Health economic evaluations are summarized below:

- Limitations in data availability and quality.
- Time horizon: analysing long-term benefits.

- Metrics used in economic analysis.
- Perspective of economic analysis.
- Valuation of wider costs and benefits (e.g., less tangible and non-monetary costs and benefits).
- Unequal distribution of costs and benefits between sectors and involved stakeholders.

However, understanding the economic value of One Health is crucial for making decisions on One Health investments. The World Health Organization's Choosing Interventions that are Cost-Effective (CHOICE) programme has been a global leader in the field of economic evaluation, specifically cost-effectiveness analysis (Bertram et al., 2021). New academic developments have tried to conceptualize economic evaluations of One Health and delve into the costs and benefits associated with One Health interventions, covering tangible and intangible costs, market prices of resources, and the evaluation of benefits over time (Canali et al., 2025). Standardisation of appropriate evaluation frameworks and decision-making tools are therefore urgently needed (Ceglar et al., 2024; Dobson et al., 2020, Winkler et al., 2025).

CONCLUSION AND PROPOSALS

- At present, the impact of infectious diseases, non-communicable diseases, and antimicrobial resistance is increasing, and crises of food insecurity and freshwater scarcity are frequent associated with the triple planetary crisis.
- The One Health initiative has consolidated as an operational framework that integrates human, animal, plant, and environmental health.
- Although One Health is progressing towards interdisciplinarity, transdisciplinarity, and systems thinking, a need remains to integrate the social sciences and humanities more extensively, including economics.
- Understanding the economic value of One Health is crucial for making decisions on future investments. Standardisation of appropriate evaluation frameworks and decision-making tools are therefore urgently needed.

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DECARBONIZING BALANCES IN INDUSTRIALIZED ECONOMIES:

TRANSITION PLANS AND STRATEGIES FOR A SUSTAINABLE ENERGY FUTURE

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Wednesday, 17th of September 2025

Mariola Domenech (ACCIONA Energía) & **Roberto Fernández Albendea** (Iberdrola)

Moderator: Ángel Pérez Agenjo Founder and Managing Partner, Trascendent. Member of the Scientific Committee Oxford 2025.

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PANEL DISCUSSION:

Decarbonizing balances in Industrialized Economies. Transition Plans and Strategies for a Sustainable Energy Future

ABSTRACT

This session highlighted that the energy transition is shifting from a technological challenge to an investment coordination challenge. The panel discussed how to accelerate renewable deployment, reinforce transmission networks, and mobilize capital through credible green instruments, while maintaining the financial discipline demanded by investors

The discussion focused on five dimensions:

1. Policies & Regulation — creating stability and predictability to drive investment while correcting fossil-market distortions.
2. Financials — leveraging sustainable finance instruments and ensuring that impact, not volume, drives capital allocation.
3. Technology — focusing on scalable low-carbon solutions today while maintaining selective readiness for breakthrough technologies.
4. Hard-to-Abate Sectors — promoting electrification, green hydrogen, and CCUS within realistic timelines.
5. Future Outlook — learning from examples like China and its holistic approach and recognizing that societal and behavioural change are as essential as innovation.

Throughout the discussion, participants underlined that decarbonization is not merely a technical challenge but a socio-economic opportunity, demanding coordination between regulators, investors, industries, and citizens. The meeting concluded that the next decade will be defined by the alignment of risk, regulation, finance, and human behavior, all converging around the electricity-based economy.

Keywords: *decarbonization; electrification; green finance; EU Green Bond Standard; climate risk; polluter pays; fossil subsidies; grids; hydrogen; CCUS; long-duration storage; behavioral change; economic growth; adaptation; sustainable competitiveness.*

KEY FINDINGS

- Transition towards a low-carbon economy has entered a new phase, one where electrification and decarbonization are not just environmental imperatives but economic needs and opportunities. "The era of electricity is here", marking a shift from the energy transition as a theoretical ambition to a tangible, systemic transformation.
- The polluter-pays principle remains under-implemented. Fossil subsidies and uneven taxation distort markets. Without policy correction, low-carbon investments will continue to compete on unequal terms, slowing down the transformation.
- Full decarbonization is achievable without economic slowdown if growth ensures the appropriate innovation, electrification, and efficiency. This transition must be inclusive and socially fair.
- Green bonds and ESG-linked loans are essential instruments for channeling capital, though insufficient on their own to mobilize investment at the required scale.
- Electrical transmission and distribution networks represent the physical foundation of the energy transition, requiring the right investment to ensure flexibility and resilience. Such investments are technically doable if regulatory frameworks, financing mechanisms, and permitting systems are aligned.
- The potential of hydrogen, CCUS (carbon capture, utilization and storage) and long-duration storage has to be leveraged. There is a need to avoid "spreading resources too thin" while maintaining readiness for breakthrough innovations that could reshape energy systems by 2040-2050.
- Electrification of China's economy demonstrates what long-term planning, policy coherence, and industrial strategy can achieve.
- Technology alone is insufficient. Behavioral and societal change, from consumer habits to policy frameworks, remains the missing variable in achieving the scale and speed required for the global transition.

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4.1 Policies and Regulation

Policy consistency is a must. A well-designed regulation is a key driver for technological change. Regulatory frameworks have to guarantee stability and predictability, essential for de-risking capital-intensive investments in networks and renewables.

There are still ongoing distortions: fossil subsidies and uneven energy taxation undermine clean energy competitiveness. The principle that "polluters pay should be universal" is a necessary correction to avoid market biases. Eliminating fossil subsidies is both an environmental and a fiscal imperative.

There is a need for coordination among industrialized economies to avoid carbon leakage and ensure global fairness. Without cross-border alignment, decarbonization efforts risk being neutralized by emissions shifting elsewhere.

Delay moving forward increases the risk of stranded assets, missed innovation cycles, and loss of competitiveness.

4.2 Financials

Green finance has to be a transformative enabler. The first corporate issuance under the EU Green Bond Standard (EU GBS) is a milestone that enhances transparency and investor confidence.

But financial instruments alone cannot mobilize private capital at the required scale. They are necessary but not sufficient, noting that regulatory certainty, project pipelines, and robust taxonomies are the decisive levers.

At the same time there is a need to link finance to social equity, observing that a just transition depends on accessible funding for regions and sectors facing structural decline. Public policy should ensure that green capital supports inclusive growth and employment.

4.3 Technology

Technology is available and mature enough to drive large-scale decarbonization today

Renewable sourced electricity in Europe can be now cost-competitive with fossil alternatives, providing a solid foundation for electrification of transport, heating, and industry.

Innovation in batteries and storage is enabling the rise of an electrified, low-carbon mobility sector. Industrial processes operating below 500°C can be efficiently electrified, and household heating, cooling, and cooking already have viable electric alternatives

Future competitiveness will depend not only on discovering new technologies but on deploying existing ones at speed and scale. Yet, not all solutions are equally mature. In hard-to-abate sectors, hydrogen and CCUS remain promising but costly; long-duration storage will be critical but is still pre-commercial.

System integration is imperative: renewables, storage, and grids must evolve together. Without adequate grid flexibility, renewable capacity is clearly at risk, hence the need for stability on regulation to ensure appropriate investment

4.4 Hard-to-Abate Sectors

Direct electrification cannot cover all uses, especially in heavy industry and long-distance transport. Scaling such solutions depends on policy clarity, infrastructure readiness, and demand signals.

Full value-chain accountability, including Scope 3 emissions and imported carbon footprints must get clearer. Transparent certification systems for low-carbon products, similar to energy labels, could ensure that decarbonization efforts are not offset by leakage.

Nevertheless, there needs to be a link between hard-to-abate sectors with employment challenges. The transition must be just and inclusive, not disruptive.

4.5 What to Expect Looking into the Future

Electrification now emerges as a cornerstone for long-term economic competitiveness, regional job creation, and enhanced energy security.

Grid investment is paramount. Expanding and modernizing electrical transmission and distribution networks is both essential and feasible. The regulated nature of these networks has to allow financing at a reasonable cost of capital, provided policy stability happens.

China's pace of electrification demonstrates the power of strategic planning and the benefits of long-term industrial coordination (aligning generation, grid, and demand planning)

Overestimating technology only and underestimating behavioural change could derail the transition. Cultural acceptance, consumer choices, and education will shape the ultimate success of decarbonization. True energy transition is powered not just by technology, but by people.Real change begins with us.

5. CONCLUSIONS AND PROPOSALS

Electrification through renewables has evolved from a climate objective to an economic necessity. Decarbonizing modern economies is no longer a theoretical ambition but a technically viable and socially imperative goal.

Energy transition now defines industrial competitiveness, job creation, and energy security.

1. Reform Fiscal Distortions and Apply Polluter Pays Universally

- Fossil subsidies should be phased out, and taxation should reward clean alternatives.
- The polluter-pays principle must move from rhetoric to regulatory enforcement.

2. Accelerate Permitting and Industrial Policy Alignment

- Simplify licensing and permitting to accelerate renewables and grid deployment.
- Deploy focused industrial policies to electrify heat, transport, and light industry.

3. Expand Green Finance

- Ensure green finance measures real-world decarbonization, not symbolic labeling.
- Mobilize blended finance and public-private mechanisms to crowd-in private capital.

4. Invest Heavily in Grids and Flexibility

- Recognize electrical networks as critical national infrastructure.
- Stability and predictability of regulation remain essential for attracting investors.

5. Adopt a Staged Technology Strategy

- Focus on deployment of mature technologies now while piloting frontier options.

6. Ensure a Just Transition

- Support workers and communities affected by fossil phase-outs through retraining and regional investment.
- Embed social dialogue and equity into all transition policies.

7. Reframe Growth through Electrification and Innovation

- Economic growth and decarbonization are compatible if policy and investment align with innovation-led productivity.
- Electrification offers a new era of competitiveness and energy security.

CLOSING REMARK

Energy transition is entering its decisive decade. Success will depend not only on technological or financial innovation but on policy coherence, collective will, and social inclusion. Decarbonizing modern economies is no longer an aspiration, it is an operational mandate and its implementation will define the prosperity of this generation and the next.

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SUSTAINABLE INVESTMENT IN THE US: A DEEP DIVE FOR AN INTERNATIONAL AUDIENCE

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Wednesday, 17th of September 2025

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FIRESIDE CHAT:

Sustainable Investment in the U.S.: A Deep Dive for International Audiences

ABSTRACT

The U.S. sustainable investment landscape is undergoing a phase of recalibration rather than retreat. Political polarization and legislative pushback across several U.S. states have reshaped the ESG conversation, prompting investors to shift from values-driven branding to financially material integration. While "ESG" has become politically charged, institutional investors, endowments, foundations, and family offices continue to pursue sustainability goals under the banner of "responsible investing" or "stewardship." This evolution reflects a pragmatic turn — emphasizing fiduciary duty, risk management, and mission alignment over ideology. The paper examines how U.S. investors are redefining sustainability through measurable impact, adoption of frameworks such as IRIS+, SASB, and GRI, and growing reliance on private markets. It also explores innovations triggered by the ESG backlash — from digital tools and enhanced oversight to impact-driven investment strategies — and highlights the importance of narrative, transparency, and transatlantic collaboration in restoring credibility and advancing global goals.

Keywords: *U.S. sustainable finance, ESG backlash, responsible investing, fiduciary duty, impact measurement, regulatory divergence, transatlantic collaboration, institutional investors, family offices, mission alignment, private markets, materiality, stewardship, data transparency, political polarization, innovation in ESG, communication strategy, long-term value creation*

KEY INSIGHTS

- Recalibration, not retreat: ESG backlash has changed the rhetoric, but U.S. investors are still integrating material ESG risks under "responsible investing" and "stewardship."
- Mission-led, private-market focus: Endowments, foundations and family offices advance sustainability via mission alignment and growing allocations to private and thematic strategies.
- From labels to measurable impact: Investors are moving from ESG branding to impact measurement, using frameworks like IRIS+, SASB and GRI and testing outcome-based reporting.
- Materiality and fiduciary duty converging: Climate and sustainability risks are increasingly framed as part of fiduciary duty, supported by clearer narratives, transparency and legal interpretation.
- Divergence with the EU as risk and opportunity: EU rules are seen as both burden and blueprint, reinforcing the need for transatlantic alignment on standards to avoid fragmentation and unlock capital flows.

1. WHAT'S DRIVING THE ESG PUSHBACK IN THE U.S., AND HOW IS IT IMPACTING INSTITUTIONAL INVESTORS?

The U.S. ESG landscape is currently marked by a pronounced backlash, driven primarily by political polarization. Over 20 Republican-led states have enacted laws restricting ESG-based investment strategies, arguing that ESG considerations prioritize ideological agendas over financial returns and may conflict with fiduciary duty. This has led to legal challenges against the SEC's climate disclosure rules and a significant wave of outflows from ESG funds: $6.1 billion in Q1 2025 alone, marking ten consecutive quarters of withdrawals.

Despite these headwinds and the overt public backlash, many institutional investors continue to integrate ESG factors into their investment processes, recognizing their value for risk mitigation and long-term value creation. However, the political environment has made these investors more cautious in their communications, often reframing ESG as "risk management" or "responsible investing" to avoid political scrutiny. The result is a bifurcated market: while some asset managers retreat from overt ESG branding, others double down on integrating material sustainability risks into their core investment theses. Moreover, institutional investors have pivoted into a custom arena, working diligently to invest a portion or the entirety of their portfolio in companies and strategies that align with their mission.

Key Impacts:

- Increased legal and reputational risk for asset managers.
- Heightened scrutiny of ESG disclosures and fund labeling.
- A shift toward more nuanced, financially material ESG integration rather than broad, values-based approaches.

References:

CNBC, Ecoskills Academy, Investment News

2. HOW ARE ENDOWMENTS AND FOUNDATIONS RESPONDING TO POLITICAL AND REGULATORY CHALLENGES?

Endowments and foundations, which often have long-term missions and less frequent capital flows than other institutional investors, remain committed to sustainability. However, they are adapting their strategies to the current political and regulatory climate. Rather than emphasizing ESG branding, these organizations are focusing on mission alignment and risk management. Some are shifting their language to "responsible investing" or "stewardship," which resonates better with stakeholders and avoids political controversy. Additionally, this approach is palatable for committee and board turnover when their term limits come to an end. Emphasizing ESG branding rather than aligning directly with an Endowment and Foundation's mission could stoke unnecessary tension should incoming members arrive with their own political biases.

Federal rollbacks and state-level restrictions have created uncertainty, but most endowments and foundations continue to pursue long-term sustainability goals, often through private markets and thematic funds. They are also investing in internal capacity to better measure and manage ESG risks, recognizing that these factors are integral to their fiduciary responsibilities and long-term mission fulfillment.

Key Responses:

- Rebranding ESG as "responsible investing" or "stewardship."
- Emphasizing alignment with organizational mission and values.
- Increasing allocation to private markets and thematic funds.
- Building internal expertise in ESG risk management.

References:

Responsible US, Commonfund

3. WHAT ARE THE MOST COMMON MISCONCEPTIONS EUROPEANS HAVE ABOUT U.S. SUSTAINABLE INVESTING?

European observers often hold several misconceptions about the U.S. sustainable investment landscape:

- **Myth 1: ESG means sacrificing returns.**
  In reality, many U.S. ESG strategies perform on par with or better than traditional benchmarks, especially when ESG factors are integrated as part of a material risk assessment.
- **Myth 2: ESG is only about exclusions.**
  U.S. investors employ a variety of approaches, including positive screening, thematic investing, and ESG integration, rather than relying solely on exclusionary tactics.
- **Myth 3: ESG is "woke capitalism."**
  For most U.S. investors, ESG is fundamentally about managing material risks, not engaging in political or social activism.

These misconceptions can lead to an underestimation of the sophistication and diversity of the U.S. ESG market. While the political debate is louder in the U.S., the underlying investment practices are often pragmatic and focused on creating long-term value.

References:

J.P. Morgan Private Bank, American Century

4. HOW DO U.S. INVESTORS DEFINE AND MEASURE IMPACT TODAY?

Impact investing in the U.S. is distinct from ESG integration. It seeks measurable social or environmental outcomes alongside financial returns. U.S. investors are increasingly using frameworks such as IRIS+, SASB, and GRI to define and measure their impact. Still, the field remains fragmented, with no single dominant standard.

The trend is toward Impact Measurement and Management (IMM), which links financial performance to thematic goals such as carbon reduction or social equity. However, challenges remain in standardizing metrics and ensuring data quality. Many investors are experimenting with outcome-based reporting and third-party verification to enhance the credibility of their investments.

Key Practices:

- Adoption of global frameworks (IRIS+, SASB, GRI) for impact measurement.
- Linking impact metrics to financial performance.
- Experimentation with IMM and outcome-based reporting.

References:

World Economic Forum, UpMetrics, Norselab

5. ARE FAMILY OFFICES BECOMING MORE ENGAGED IN SUSTAINABILITY, OR PULLING BACK?

Family offices in the U.S. are, if anything, increasing their engagement with sustainability. Driven by intergenerational values and heightened awareness of long-term geopolitical and climate risks, many family offices are hiring ESG specialists, investing in green technologies, and backing impact-focused funds, such as those targeting ocean conservation. The focus is often on private markets and thematic opportunities, rather than public ESG labels, allowing for greater flexibility and alignment with family values.

Key Trends:

- Increased hiring of ESG specialists.
- Growing allocations to green technologies and thematic funds.
- Preference for private market investments over public ESG funds.

References:

All About Family Offices, The FO Pro

6. WHAT ROLE DOES NARRATIVE AND COMMUNICATION PLAY IN OVERCOMING SKEPTICISM?

Narrative and communication are critical in overcoming skepticism toward ESG in the U.S. The backlash has exposed a "narrative gap," where technical metrics and jargon fail to resonate with stakeholders. Effective communication reframes ESG as utilizing transparency and storytelling to build trust.

Companies are increasingly moving from jargon-heavy disclosures to purpose-driven narratives that connect with investors, employees, and the broader public. This shift is essential for maintaining stakeholder support and countering misinformation. Trust and integrity is paramount within this segment of the market.

Key Approaches:

- Emphasizing the financial materiality of ESG.
- Using storytelling and real-world examples to illustrate impact with integrity.
- Prioritizing transparency and authenticity in communications.

References:

London Business School, Freshfield

7. HOW DO INVESTORS BALANCE FIDUCIARY DUTY WITH LONG-TERM SUSTAINABILITY GOALS?

The interpretation of fiduciary duty in the U.S. is evolving. While some states advocate for a narrow focus on short-term returns, legal scholars and leading asset owners argue that climate risk is a material financial factor. Failing to address such risks could constitute a breach of fiduciary obligations.

Many investors are embedding transition planning and systemic risk management into their strategies, recognizing that long-term sustainability is integral to fulfilling fiduciary duty. This approach is supported by emerging legal opinions and guidance from regulatory bodies.

Key Developments:

- Recognition of climate risk as a material financial factor.
- Integration of sustainability into fiduciary duty frameworks.
- Adoption of transition planning and systemic risk management.

References:

Verdani Partners, C2ES

8. WHAT INNOVATIONS HAVE EMERGED IN RESPONSE TO ESG BACKLASH?

The ESG backlash has spurred several innovations in the U.S. market:

- **Rebranding ESG**: Many firms now use terms like “sustainable investing” or “responsible stewardship” to avoid political controversy.
- **Enhanced Legal Oversight**: Companies are strengthening compliance frameworks to navigate the complex regulatory environment.
- **Focus on Materiality and ROI**: There is a growing emphasis on measuring sustainability investments with the same rigor as other capital expenditures.
- **Digital Tools**: The adoption of digital platforms for ESG reporting and scenario analysis is accelerating, improving data quality and transparency.

These innovations reflect a pragmatic approach to sustainability, focusing on financial materiality and operational effectiveness.

References:

ESG Dive, Asuene

9. HOW DO U.S. INVESTORS VIEW EUROPEAN REGULATION—BURDEN OR BLUEPRINT?

U.S. investors have mixed feelings about European ESG regulations such as the CSRD, SFDR, and EU Taxonomy. Many see these rules as gold standards for transparency and accountability, but also as costly and complex, especially for U.S. multinationals operating in Europe. SEC officials have criticized EU laws as overly prescriptive, while some investors view them as a blueprint for future global harmonization.

The divergence in regulatory approaches presents challenges for cross-border investment but also offers opportunities for learning and alignment.

Key Perspectives:

- EU regulations are seen as both a burden (due to complexity and cost) and a blueprint (for transparency and harmonization).
- U.S. firms are watching EU developments closely, anticipating potential convergence in standards.

References:

NatLawReview, US News

10. IS TRANSATLANTIC COLLABORATION IN SUSTAINABLE FINANCE NECESSARY TO ADVANCE TARGETS?

Transatlantic collaboration is essential for advancing global sustainability targets. The divergence between U.S. and EU approaches risks fragmentation and inefficiency, thereby increasing compliance burdens and slowing capital flows toward climate goals. Collaboration on standards, taxonomies, and disclosure frameworks would reduce these barriers and accelerate progress.

Policymakers and industry groups on both sides of the Atlantic are calling for harmonization and joint initiatives, recognizing that global challenges require coordinated solutions.

Key Points:

- Collaboration reduces compliance burdens and accelerates capital flows.
- Harmonization of standards and disclosures is critical for global progress.

- Joint initiatives are gaining momentum among policymakers and industry leaders.

References:

Bluechain Consulting, EEAS

KEY TAKEAWAY FOR INTERNATIONAL INVESTORS

Despite political headwinds and media propaganda, U.S. sustainable investing is not retreating it is recalibrating. The focus is shifting from ideology to pragmatism, materiality, and measurable impact, creating opportunities for cross-border partnerships and innovation in reporting and engagement. For ex-U.S. investors, understanding these nuances is essential for effective collaboration and capital allocation in the evolving global sustainability landscape for the greater good[1].

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Sustainable Finance Q&A

INDUSTRIAL SECTORS IN THE FACE OF DECARBONIZATION AND TAXONOMY

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Wednesday, 17th of September 2025

Pedro Mora (OFICEMEN)

Interviewer: Cristina Rivero, Director of Industry, Energy, Environment and Climate, CEOE

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Q&A:

Industrial sectors in the face of decarbonization and taxonomy

ABSTRACT

This paper explores how Spain's cement industry is leading industrial decarbonization through sustainable finance. It highlights the role of the CEOE-Treasury working group in developing sector-specific guidelines that translate EU Taxonomy and reporting standards into actionable tools for companies. The discussion outlines financing strategies blending public support (Innovation Fund, Carbon Contracts for Difference) with market instruments (green bonds, sustainability-linked loans), enabling investment in breakthrough technologies like CCUS and LC^3. It also emphasizes the importance of standardized metrics, audit-grade data, and digital innovation to ensure transparency, investor confidence, and a just, competitive transition.

Keywords: *sustainable finance, cement sector, decarbonization, EU Taxonomy, ESRS, Oficemen, CCUS, clinker factor, alternative fuels, carbon contracts for difference, Innovation Fund, KPI-linked finance, green bonds, sustainability-linked loans, industrial transition, hard-to-abate sectors, just transition, audit-grade data, digitalisation, blockchain traceability, standardisation, Spain sustainable finance council, industrial guidelines, low-carbon cement*

KEY FINDINGS

- Spain's cement sector is leading sustainable finance innovation through practical, taxonomy-aligned guidelines developed by CEOE and the Treasury.
- Public–private financing blends (e.g. Innovation Fund grants, Carbon Contracts for Difference, sustainability-linked loans) are essential to de-risk high-CAPEX industrial decarbonization.
- Standardized KPIs and ISO-aligned data frameworks enable audit-grade transparency and unlock investor confidence.
- Breakthrough technologies like CCUS and LC^3 cement become viable when backed by long-term revenue support mechanisms.
- Digital tools (e.g. blockchain, digital twins) are critical for real-time emissions tracking and performance-linked financing.

CONTENT

The Green Paper on Sustainable Finance in Spain, led by the **Secretary General of the Treasury and International Finance**, with collaboration from the Ministry for the Ecological Transition and financial supervisors, establishes the **Consejo de Finanzas Sostenibles (Council for Sustainable Finance)**, serving as a **public-private collaboration forum** to address the challenges of the **ecological transition** and promote **sustainable finance in Spain**. It brings together representatives from public administrations, supervisory bodies, the financial sector, the private sector, the third sector, and independent experts. Its main work includes:

1. **Driving and monitoring** the actions outlined in the Green Paper on Sustainable Finance.

    i. Developing complementary lines of work, such as analyzing challenges related to the sustainable finance regulatory framework and Creating knowledge and capacities in the field.

2. **Impelling new financial instruments and initiatives** to facilitate the transition for companies. This includes launching a **Sustainability Sandbox**, creating a **repository of best practices** or publishing **sectoral guides**.

One of the working groups, led by **CEOE** (Confederation of Business Organizations) and the **Treasury** is focused on **Developing Practical Guidelines**: Creating specific, practical guidelines for various economic sectors to help companies, particularly SMEs, understand and implement sustainable finance criteria. The guides are being designed to help businesses align their activities and investments with the requirements of the ecological transition. A key focus is on providing clear instructions on how to apply complex European sustainable finance regulations—such as the **EU Taxonomy** and mandatory disclosure rules—to their specific industrial context.

In essence, the CEOE-Treasury group acts as a bridge between financial regulation and the real economy, ensuring that sustainability standards can be practically adopted by companies across all sectors to drive the shift towards a more sustainable economic model. Within this framework. The cement industry, through its national association Oficemen is leading the work by being the first industrial sector to present the guideline. This interview is framed in this context.

1) The cement sector is pioneering sectoral guidelines in the Council. How would you define sustainable finance in this EU context?

Sustainable finance for the cement sector must demonstrably align with the **EU Taxonomy threshold** of cement and the **Oficemen's Sustainable-Finance Guide**. This is achieved by transforming granular **decarbonization metrics** (like clinker factor and alternative-fuel rate) into verifiable, investable cash-flows, with compliance and results secured through **ISO 53001 / PAS 53002 management systems** and third-party assurance. Sustainable finance, therefore, serves a dual purpose: ensuring a profitable, **acceptable risk-adjusted return** on every Euro of CAPEX while simultaneously validating environmental performance via a verifiable and compliant management system that also meets "**Do-No-Significant-Harm**" and **Minimum Social Safeguards.**

2) The cement industry is a "hard-to-abate" sector. How can sustainable finance help decarbonise it?

The strategy for financing the decarbonization of the Spanish cement industry involves blending **public funding mechanisms** with **market instruments** to reduce the Weighted Average Cost of Capital (**WACC**) and provide necessary price certainty for low-carbon cement production.

This approach is critical because Spanish producers require an estimated **€7–9 billion** for essential upgrades by 2030, including the development of **CCUS (Carbon Capture, Utilization, and Storage) hubs**, adoption of **Alternative Fuels (AF) systems**, and deployment of **LC^3 (Limestone Calcined Clay Cement)** technology.

The financing blend includes:

1. **Public Support**: Utilizing **Innovation Fund grants** to cover up to of capital expenditures (**CAPEX**), and employing **Carbon Contracts for Difference (CfDs)**—similar to Germany's *Klimaschutzverträge* or the Netherlands' SDE++—to cover operational expenditures (**OPEX**) over 15 years. These CfDs function by bridging the cost gap between the EU ETS price and the cost of clean production.

2. **Market Instruments**: Integrating **sustainability-linked loans and bonds**.

By securing predictable revenues through CfDs, the strategy effectively **lifts debt-service coverage ratios**, which enables financial institutions to confidently finance these first-of-a-kind, high-CAPEX technologies.

3) Give examples of successful sustainable-finance initiatives within the EU cement industry:

There is a deep and demonstrable investor demand for well-structured, KPI-linked financial instruments within the cement industry, as shown by several recent transactions from major issuers. This market interest spans different types of debt, including bonds and loans, and is universally tied to specific, measurable decarbonization targets. Examples include:

- **Heidelberg Materials' €750M Sustainability-Linked Bond (SLB)** from 2023, which features a 75 basis points step-up penalty unless their net-specific emissions are by 2030.

- **Holcim's CHF 425M SLB** (2022), directly linked to achieving a absolute emissions cut.

- **Cementos Molins' €300M sustainability-linked loan** (2024), whose performance is tied to operational metrics like **clinker factor** and **alternative fuel (AF) rate**.

- **Cemex Spain/EU's US$1 billion perpetual Green Notes** (2023), with significant funds (US$571M) allocated to tangible decarbonization projects such as using decarbonated raw material and optimizing clinker factors, all of which are subject to ISAE 3000 assurance.

- **Buzzi Unicem's green term loan**, which was leveraged alongside an EU Horizon grant to fund the CLEANKER Ca-looping demonstration project, achieving a capture rate at the pilot scale.

These examples confirm that the market is willing to finance the sector's transition, provided the instruments are credibly linked to **verifiable decarbonization metrics** and robust projects.

4) What are the biggest challenges in implementing sustainable-finance strategies in such a capital-intensive industry?

The sustainable transition of the cement sector faces significant hurdles, primarily characterized by high CAPEX, carbon-price volatility, technology risk, and gaps in audit-grade data. Specifically, the cost of implementing a full CCUS (Carbon Capture, Utilization, and Storage) chain is prohibitive, estimated at €140–180 per ton of and over €400 million per plant. This high investment is often undermined by the volatility of the ETS (Emissions Trading System) price, which recently dipped to around €60 in early 2024, squeezing investment margins. Although Carbon Contracts for Difference (CfDs) are a powerful tool to mitigate this price risk, they remain scarce. Furthermore, financial diligence is complicated by the lack of standardized, reliable environmental data, as only of EU kilns produce full Environmental Product Declarations (EPDs). To streamline credit processes and reduce diligence costs, initiatives like the Oficemen's standard KPI templates and ISO 53001 verification systems are essential for providing the necessary audit-grade data.

5) How is Oficemen supporting its members in overcoming these obstacles?

The strategy to accelerate investment involves **standardizing data, publishing a national project "deal book," and hosting annual investor days** in collaboration with major financial institutions like the (European Investment Bank), the (Instituto de Crédito Oficial), and commercial banks.

This approach is facilitated by a centralized data system where members **upload quarterly (Key Performance Indicators) to a portal**, ensuring alignment with reporting standards. **Oficemen** then **aggregates this data into anonymized sector curves**, which are shared with financiers to improve transparency and diligence. The "deal book" itself serves as a pipeline for finance, listing (Carbon Capture, Utilization, and Storage), , and retrofit projects that have been **pre-screened for eligibility** for key public funding mechanisms like the **Innovation Fund** or **Carbon Contracts for Difference (CfDs)**.

6) What role should EU governments and regulators play in enabling sustainable finance?

The core policy message is the need to provide long-term policy visibility and consistent revenue support for industrial decarbonization through mechanisms like **Carbon Contracts for Difference (CfDs)**, implemented alongside the **full auctioning of the ETS** and the **rollout of the CBAM (Carbon Border Adjustment Mechanism)**.

CfDs are crucial because they de-risk investment revenues and significantly speed up financing for costly, first-of-a-kind projects. This strategy is already being adopted in Europe: Germany launched a **€4 billion CfD tender** in 2024, and the Netherlands' **SDE++ scheme** is already supporting Carbon Capture and Storage (CCS) projects in

Rotterdam. Furthermore, the **Net-Zero Industry Act (NZIA)** is set to pilot EU-level CfDs specifically for heavy industry. By combining these revenue-stabilizing CfDs with upfront **Innovation Fund grants**, these public policies create the financial certainty necessary for banks to invest in deep decarbonization technologies.

7) Are institutional investors showing more interest in the cement sector from a sustainability perspective?

Yes, the financial markets are now actively rewarding credible transition plans within the cement sector instead of excluding it outright. This shift is demonstrated by the robust investor demand for sustainable financial instruments: **EU labeled issuance in the sector exceeded €4 billion in 2024**. Financial institutions and rating agencies are recognizing concrete decarbonization commitments, evidenced by **Sustainalytics upgrading the risk scores** for industry leaders like Heidelberg Materials and Holcim after they aligned their targets with the Science Based Targets initiative (**SBTi**) pathway. Furthermore, the market's enthusiasm was clear when **Cemex's Green Notes were oversubscribed more than three times**, a success underpinned by independent **KPMG assurance** of their sustainability claims.

8) What long-term financial benefits accrue to companies that embrace sustainable finance?

The financial incentives for decarbonization are driven by a combination of a lower cost of capital, preferential procurement, and premium pricing for low- products, alongside effective carbon-cost hedging. This strategic combination is crucial for making massive investments, like those in CCUS (Carbon Capture, Utilization, and Storage), viable. For instance, the strategic blending of **Carbon Contracts for Difference (CfDs)** and **Innovation Fund grants** can drastically cut the payback period for CCUS projects to less than eight years. Furthermore, low- products are commanding a premium in the market; branded products like Holcim's **ECOPact**, Heidelberg's **evoZero**, and Cemex's **Vertua®** typically enjoy a price uplift of **€10–15 per ton**. This price premium provides a critical buffer that cushions producers against volatility in carbon prices, ensuring stable margins and making the sustainable business model financially attractive.

9) Which breakthrough technologies are most promising, and how can finance accelerate their deployment?

The future of cement decarbonization relies on key technological pathways—specifically (Carbon Capture, Utilization, and Storage) clusters, /calcined-clay blends, and -assisted electrified kilns—that are made financially viable by blending grants with operating-phase.

Significant progress is already being made: Norway's **Brevik CCS** project is set to capture by 2026, while **Buzzi's Ca-looping** pilot has demonstrated a capture rate at costs below. Operational shifts, such as **Cemex Alicante**'s use of decarbonated raw materials, are already avoiding over of clinker, funded by Green Notes. This model is sustained by smart financing: **Innovation Fund grants** cover the high upfront capital costs, while **operating CfDs** (as seen in Germany and the Netherlands) stabilize

revenues to improve debt-service coverage, allowing banks to finance these massive projects. Simultaneously, **KPI-linked bonds** ensure that the financing is directly tied to achieving specific emission reduction milestones.

10) How is the cement industry addressing the social dimension of sustainable finance?

The scope of sustainable finance in the cement sector is expanding to incorporate crucial social and environmental KPIs (Key Performance Indicators), ensuring a truly just and holistic transition. This evolution moves beyond simple carbon metrics to integrate factors such as just **transition**, **biodiversity**, and **safety** into financing frameworks. Regulatory guidance, like **PAS 53002**, mandates thorough **human rights due diligence**. Major companies are already demonstrating this integration: **Heidelberg's evoZero** includes initiatives to restore quarry habitats; **Holcim** links coupons on its Sustainability-Linked Bonds (SLBs) to its **Lost Time Injury Frequency Rate (LTIFR)**; and **Cemex** actively tracks employee training hours and implements **Water Action Plans** covering of its high-stress sites. This trend ensures that financing incentivizes a transition that is not only green but also socially equitable and environmentally sound.

11) If you could give one message to financial institutions about the cement industry, what would it be?

The cement industry offers some of the largest and fastest-verifiable reductions per euro invested, making it a highly impactful area for climate finance. Currently, cement production accounts for approximately, but industry data (such as that from Oficemen) shows that **over abatement is technically possible this decade**. This massive decarbonization potential is being converted into bankable projects because **policy-backed revenue support**, primarily through **Carbon Contracts for Difference (CfDs)** and **Innovation Fund grants**, is now effectively **de-risking revenues**. When combined with -linked finance, these mechanisms ensure that the high-impact transition is financially viable and attractive to investors.

12) Top priorities for the next 5–10 years

The cement industry's transition to a sustainable model is defined by five key, interrelated milestones, all targeted for the current decade:

1. Establishing **three Carbon Capture, Utilization, and Storage hubs**.
2. Achieving a **clinker factor** (reducing the most -intensive component).
3. Reaching an **Alternative Fuels rate** (replacing fossil fuels).
4. Utilizing **renewable power** in operations.
5. Financing of **CAPEX** through labeled instruments (such as Green Bonds or Sustainability-Linked Loans) backed by **CfDs** and **Innovation Fund** grants.

These ambitious milestones are crucial, as they align with the **Oficemen 2030 targets** and the **CEMBUREAU pathway**. Successfully achieving them will cut the sector's intensity by approximately while ensuring the industry remains competitive under the **CBAM (Carbon Border Adjustment Mechanism)**.

13) How important is standardisation and metrics in sustainable finance?

Data harmonization, specifically through the use of Taxonomy KPIs, ESRS E1, and ISO 53001, is absolutely crucial as it provides a single, verifiable "source of truth" for investors.

This standardization is a powerful mechanism for market efficiency: it's estimated that harmonized metrics can **cut financial due diligence costs by**, significantly **curb greenwashing risks**, and enable more **active secondary trading of labeled debt**. Industry tools, such as **Oficemen templates**, play a vital role by mapping specific plant-level Key Performance Indicators (KPi) directly to the required (European Sustainability Reporting Standards) tables. Furthermore, standards like **PAS 53002** link corporate performance to the Sustainable Development Goals (SDGs), allowing for clearer, more meaningful cross-issuer comparison.

14) What about the role of digitalisation in sustainability and finance?

Digital technologies are fundamental to achieving emissions reductions and providing the audit-grade data necessary for performance-linked financing, with digital twins, optimization, and blockchain traceability leading the way.

These innovations are transforming operational efficiency and reporting credibility. For example, -assisted kiln control can yield **thermal savings**, directly cutting energy-related emissions and costs. Crucially, technologies like **Cemex's blockchain-ready passports**, which provide -coded footprints, automate the (**Measurement, Reporting, and Verification**) process. This real-time, tamper-proof data is essential for triggering the margin adjustments (ratchets) built into **Sustainability-Linked Loans** (). As the (European Sustainability Reporting Standards) moves towards machine-readable formats, adopting robust digital systems is becoming decisive for maintaining investor trust and streamlining financing.

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MIND THE ENERGY GAP:

NAVIGATING THE CHALLENGES AND OPPORTUNITIES OF THE ENERGY TRANSITION

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Wednesday, 17th of September 2025

Manuel Fernández Losa (Pictet Asset Management)

Moderator: Juan Ramón Caridad, Head of Fide's International Strategic Group.

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FIRE CHAT:

Mind the energy gap: Navigating the Challenges and Opportunities of the Energy Transition

ABSTRACT

Given the current wave of reindustrialisation in Western economies, and as a direct consequence of the shift from training to deploying artificial intelligence, we face a significant challenge. The next major drought may well be one of energy. In this context, reflection on our energy future is more urgent and complex than ever. The digital revolution, driven by artificial intelligence (AI), is redefining paradigms of consumption, investment, and sustainability on a global scale. There is no AI (nor Industry, nor Technology) without Energy. Without resilient and adequate infrastructure, and without timely and sufficient increases in energy production, technological transformation risks being constrained by an energy bottleneck in many parts of the world.

The objective of this paper is to articulate one of the key contemporary debates arising from the intersection of energy demand, the costs of increasing supply, and the timeframes required to achieve these changes. These topics, far from being merely philosophical questions or ecological preferences, reflect the strategic, regulatory, social, and geopolitical dilemmas that define both emerging and developed economies today and in the future.

Keywords: *AI energy demand, reindustrialisation, energy infrastructure, digital transformation, renewable vs nuclear, tech sector energy use, data centers, energy bottleneck, investment strategies, energy policy*

KEY FINDINGS

1. AI and reindustrialization are driving an unprecedented surge in global energy demand, raising the risk of a near-future "energy drought."
2. Renewables now offer faster, cheaper, and more scalable solutions than nuclear, though both face infrastructure and financing challenges.
3. The energy transition sector is historically undervalued, with projected returns more than double those of the S&P over the next 3 years.
4. Energy efficiency technologies—especially ASIC chips and improved building insulation—offer up to 40% energy savings, making them key drivers of sustainable growth.
5. Resilient infrastructure (grids, cooling, redundancy) is critical, with recent power failures in the UK and Spain underscoring the need for strategic investment.
6. Emerging technologies like hydrogen fuel cells, nuclear fusion, and quantum computing may reshape the energy landscape, but face scalability hurdles.
7. Investors should focus on innovation, value chain differentiation, and supply-chain dependencies, especially in volatile sectors like mining.
8. Favorable macroeconomic conditions (declining interest rates) are amplifying the attractiveness of clean energy investments.

CONTENT

The global energy landscape is undergoing a profound transformation, driven by the dual forces of technological innovation and the urgent need for sustainable energy solutions. As artificial intelligence (AI) and reindustrialization reshape the developed world, the demand for energy is surging to unprecedented levels. We have explored the critical challenges and opportunities arising from this energy transition, drawing on insights from recent analyses.

The Energy Drought

A Looming Challenge The rise of AI, exemplified by advanced models like ChatGPT and autonomous systems such as MANUS, has revolutionized industries and redefined global consumption patterns. However, this technological leap comes with a significant caveat: the energy required to sustain such advancements is immense. The computational complexity of AI, coupled with the increasing reliance on data centers and cooling systems, has created a pressing need for resilient and scalable energy infrastructure. Without timely and sufficient increases in energy production, the world risks facing an "energy drought" that could stifle technological progress and economic growth.

The Energy Mix Debate: Renewables vs. Nuclear

The debate over the optimal energy mix has intensified in recent years. While renewables were once considered unprofitable and nuclear projects unfeasible, technological advancements and the imperative to reduce emissions have shifted the narrative. Renewables now offer a cost-effective and sustainable solution, with shorter implementation timelines and lower breakeven points compared to nuclear energy. However, the transition to a renewable energy-dominated grid is not without challenges, particularly in terms of scalability and infrastructure requirements.

Investment Opportunities in the Energy Transition

The energy transition presents a compelling investment opportunity trading at the lowest historical premium versus the MSCI, projecting to deliver a compound annual growth rate (CAGR) of over 2x that of the S&P in the next three years and most importantly, where the primary driver of returns is not dependent on who occupies the White House, but rather on stable or declining interest rates—an especially promising prospect in the current environment.

The key drivers of this opportunity include:

- **Surging Energy Demand**: The developed world is experiencing a significant increase in energy demand, driven by reindustrialization, electrification, and the widespread adoption of AI. For instance, within the next three to four years, data centers in the West are projected to consume as much energy as entire regions, underscoring the scale of the challenge.
- **Efficiency and Innovation**: The role of semiconductors, particularly application-specific integrated circuits (ASICs), is critical in reducing energy consumption. These chips can achieve energy savings of up to 40%, making them indispensable in the era of AI and digital transformation.
- **Green Buildings**: Energy savings in buildings play a crucial role in emissions reductions. Circa 40% of global energy-related CO2 emissions come from buildings. Improved building envelopment reduces heat loss but also space cooling needs are growing x3 in the last years
- **Strategic Investment in Infrastructure**: The need for robust electrical grids and advanced cooling systems is paramount. Recent power outages in countries like Spain and the UK have highlighted the vulnerabilities in existing infrastructure, prompting significant investments in network upgrades and complementary services to ensure stability.
- **Favorable Market Conditions**: The energy transition is particularly attractive in environments with stable or declining interest rates. Lower borrowing costs enhance the profitability of energy projects, making them more appealing to investors.

Navigating the Investment Landscape Investing in the energy transition requires a nuanced approach.

Two key principles stand out:

- **Understanding the Value Chain**: Investors must differentiate between the various players in the energy and technology sectors. For instance, while it may seem intuitive to invest in companies that sell tools (e.g., data centers) rather than those that manufacture them (e.g., chipmakers), rapid technological advancements can disrupt traditional business models. Companies that innovate and adapt to new technologies, such as those producing energy-efficient chips, are better positioned to thrive.

- **Evaluating Resource Dependencies**: The correlation between technology companies and the mining sector is complex. While it may be tempting to invest in mining companies that supply raw materials for technological products, the volatility of commodity prices and the cyclical nature of the mining industry pose significant risks. Active management and a deep understanding of supply and demand dynamics are essential for navigating this space.

- **The role of emerging technologies**, like nuclear fusion and hydrogen fuel cells hold promise for addressing the energy challenges of the future. However, their scalability and economic viability remain uncertain. Similarly, quantum computing are poised to disrupt traditional industries, further emphasizing the need of future innovation to be able to produce it on the Earth surface

The energy transition is not just an ecological imperative; it is a strategic necessity for sustaining technological innovation and economic growth. The convergence of technology and energy sectors offers unprecedented investment opportunities, but it also demands careful planning and a comprehensive understanding of the challenges ahead. As the world braces for a potential energy drought, the time to act is now. By investing in sustainable energy solutions and resilient infrastructure, we can ensure a future where technology and industry continue to thrive, powered by a secure and efficient energy supply.

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SUSTAINABILITY AND FREEDOM:

IMPACT VIA AI AND FINANCIAL DATA SCIENCE

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Andreas Hoepner (University College Dublin (UCD))
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KEYNOTE:

Sustainability and Freedom: Impact via AI and Financial Data Science

…Without security, there is no freedom. And without freedom, we cannot live our lives [as sustainably as] .. we want to." – Mark Rutte, NATO Secretary General (adapted)

ABSTRACT

This paper explores the intersection of sustainability, freedom, and financial data science, focusing on how augmented intelligence (AI) can support society's need to be "free from" harmful activities like climate change while preserving the "freedom to" pursue sustainable and competitive economic choices. Drawing from Isaiah Berlin's concepts of negative and positive freedom, the session reframes sustainability as a balance between avoiding harm and enabling opportunity. It emphasizes the urgency of accurate, precautionary CO_2e data, particularly where regulatory pressure is high and corporate disclosure is weak. The speakers present a Financial Data Science (FDS) pipeline powered by agentic augmented intelligence, capable of generating real-time, high-quality CO_2e estimates across all scopes and categories. This technology supports more credible, actionable, and outcome-driven sustainable finance by empowering institutions with data that reflect the true environmental impact of their investments—regardless of self-reporting biases. Ultimately, the paper advocates for AI systems that are transparent, accountable, and human-supervised, supporting both effective regulation and investor decision-making.

Keywords**:** *sustainability, freedom, financial data science, augmented intelligence, AI, CO_2e emissions, Scope 3, ESG data, climate risk, precautionary principle, regulatory compliance, negative freedom, positive freedom, sustainable finance, impact measurement, data accuracy, investor decision-making*

CONTENT

Sustainable finance can support society to meet its objectives by channelling capital into sustainable economic activities. However, there remains a lack of clarity regarding the extent to which sustainability shall embrace or curtail freedom. In "Two Concepts of Liberty", Isaiah Berlin (2016) defines negative freedom as the 'freedom from' interference, meaning the absence of something. Positive freedom, on the other hand, is the 'freedom to' choose and shape one's life, meaning the presence of something (Berlin, 2016). We relate Berlin's concepts of freedom to sustainability through the definition provided by the Brundtland Commission Report, in which sustainability means meeting the needs of the present generation without compromising the ability of future generations to meet their own needs (WCED, 1987). In the 'freedom from' perspective, harms should be avoided so that current and future generations can meet their basis needs (Wood, 2023). For example, fossil fuel-induced climate change should be avoided, as it jeopardizes the food availability of both present and future generations. In the 'freedom to' perspective, people have the freedom to define, choose, and pursue their own goals (Sen, 2024). For instance, individuals may choose to specialize in impact management. We relate both freedom perspectives to three types of activities - harmful, neutral, and helpful – while acknowledging the basic need of every economy to be competitive (Draghi, 2025). As shown in Figure 1, the freedom to invest in helpful or neutral activities without material differentiation appears crucial for competitiveness while the freedom from the harmful causes of climate change is crucial for achieving the Paris Agreement.

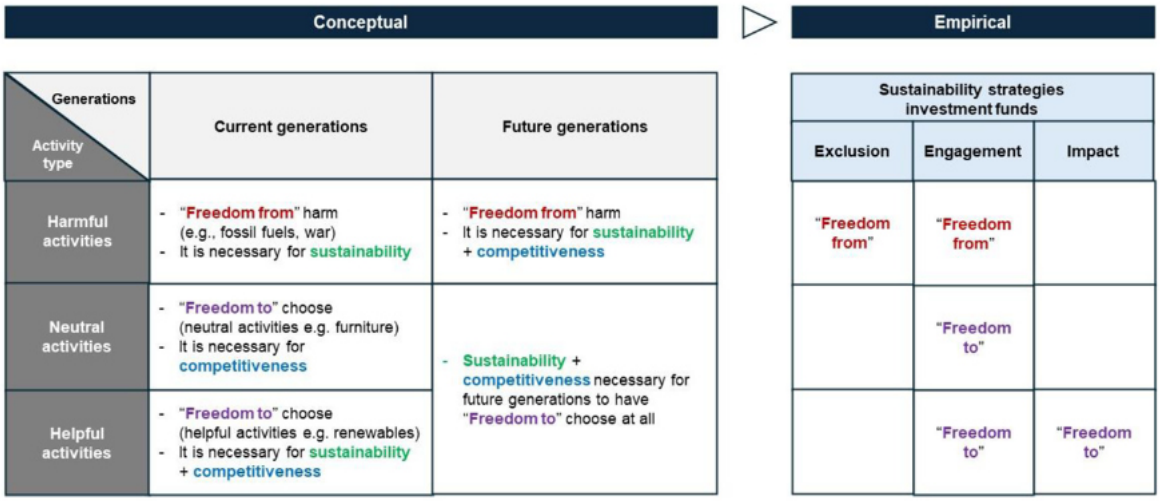

Figure 1: Sustainability and Isaiah Berlin's two categories of Freedom (Dekker, Grubnic, Hoepner & Vivian, 2025)

This conceptualisation of sustainability and freedom implies that most pressing need for impactful, accurate data delivered by a custom Augmented Intelligence (AI) financial data science is the quantification of harmful activities where regulation is likely and discretion is low. In other words, the substantial discretion likely awarded to helpful or neutral activities reduces the need for accuracy as much more variation is tolerable. While society's freedom from several harmful activities is crucial, climate change and related or unrelated wars are probably the most severe risks of our time. For exemplary purposes, this note focuses on the former to demonstrate the Impact that can be achieved via Augmented Intelligence (AI) and Financial Data Science.

With respect to climate change, accurate and instantly updated CO2e emission data that emphasises society's need to be free from climate change still appears an illusion for three reasons. First, to date a relevant number of corporations in public or especially private capital markets do not report CO2e emissions, not even Scope 1 and 2. Second, despite regulation in the EU being very clear that estimations should use the Precautionary Principle (aka "if in doubt, err on the side of the planet"), too many estimation models in use today are simplistic point estimates that will underestimate CO2e emissions as soon as the majority of self-reported input data is underreported, which is usually the case. It is crucial to note that accuracy viewed from a freedom from perspective is not the most likely estimate but the estimate which is with a sufficient likelihood (e.g. 90%) not too low. Such a Precautionary Principle based CO2e estimation process in line with EU regulation is displayed in Figure 2.

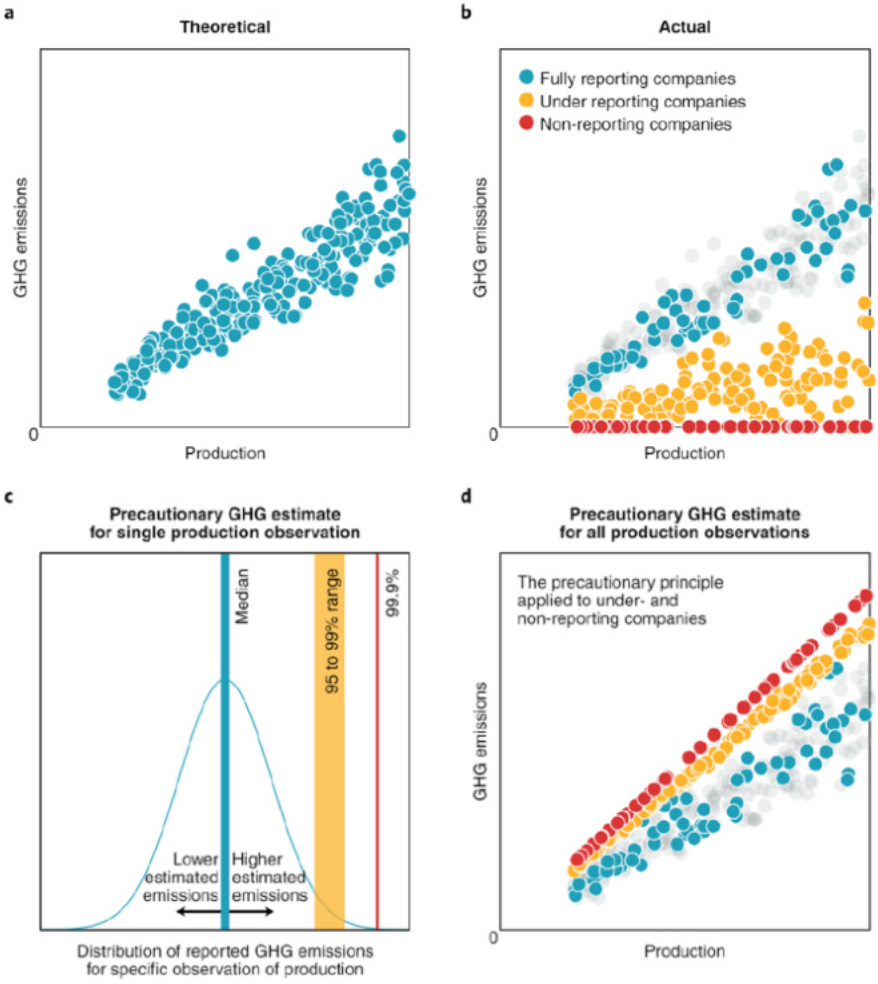

Figure 2: Precautionary Principle based CO2e estimation process (Hoepner & Rogelj, 2021)

The third reason why accurate and instantly updated CO2e emission data remains illusive lies in insufficient use of agentic augmented intelligence driven financial data science (FDS) processes which achieve both, a very high (e.g. six sigma level) quality standard and a delivery of CO2e data updates within a few weeks rather than many months. Crucially, the (FDS) process has to represent augmented rather than artificial

intelligence because (i) artificial models can only learn do execute without error tasks which virtually any human in the training data can do without error and (ii) accuracy requires ownership and responsibility which to date can only be assumed by humans. In other words, given insufficient clean (i.e. error free) training data on complex CO2e disclosure aspects where the reporting companies themselves can err the fully artificial process is unable to train accurately and, complementarily, humans remain needed to take ownership and thereby blame in today's compliance regimes.

Using an augmented intelligence driven financial data science pipeline with four AI agents supervised by financial data scientists and data quality controlled by climate data scientists, we can estimate precautionary live CO2e data for every Scope and category for thousands of listed and unlisted companies at any precautionary threshold (e.g. 90%, 95%, lower or even higher). Such technological ability allows for an array of new analytical insights such as (i) which Scope 3 categories are the most impactful, (ii) which sectors are most material in each category or (iii) which firm would have the highest emissions if everyone was monitored (regardless of self-reporting or not). Figure 3 provides indicates answers to these three questions using a universe of about fifty developed and emerging economies.

Largest Emitters in MSCI ACWI IMI ETF Universe per Scope 3 category

Scope 3 Category (Top 10 ordered by max size)	Self Reported	95% Precautionary Principle Estimated
cat_11_use_of_sold_products	Exxon Mobile	China Petroleum & Chemical Corporation
cat_15_investments	Credit Agricole SA	Blackrock Inc.
cat_10_processing_of_sold_products	Rio Tinto plc	BHP Group Ltd
cat_1_purchased_goods_and_services	Walmart Inc.	Public Joint-Stock Company Gazprom
cat_3_fuel_and_energy_related_activities	Shell Plc	Korea Electric Power Corporation
cat_12_treatment_of_sold_products	Daikin Industries Ltd.	Glencore plc
cat_13_downstream_leased_assets	AerCap Holdings NV	AerCap Holdings NV
cat_4_upstream_transportation_and_distribution	Deutsche Post AG	China Petroleum & Chemical Corporation Class H
cat_9_downstream_transportation_and_distribution	C.H. Robinson Worldwide Inc.	Walmart Inc.
cat_2_capital_goods	Volkswagen AG Pref	BYD Company Limited

Figure 3: Largest Emitters per Top 10 Scope 3 category as of Q2 2025 -Self-Reported vs. Precautionary Principle estimated (Hoepner, Huang, Rogelj & Wong, 2025)

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FROM THEORY TO REALITY: THE EVOLUTION OF AI

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Alex Rayón (Brain & Code)

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Global ESG Think-Tank
Finance and Law Engaging our Society

KEYNOTE:

From Theory to Reality: The Evolution of Artificial Intelligence

ABSTRACT

The intervention addressed how artificial intelligence has evolved from a theoretical concept into real, transformative applications. The focus was on the legal and financial sectors, where AI is reshaping productivity through personal assistants, intelligent agents, and workflow automation. The discussion combined practical case studies with a forward-looking perspective on regulatory, ethical, and cultural challenges.

Keywords: *AI in legal services, AI in finance, productivity augmentation, generative AI, workflow automation, AI assistants, algorithmic explainability, hallucinations, intellectual property, regulatory compliance, human-AI collaboration, ethical AI, semantic search, document automation, knowledge sharing*

KEY INSIGHTS:

- From theory to workflows: AI has moved from abstract models to embedded, day-to-day tools that reshape how legal and financial work is actually done.
- Legal work, redefined: In law, semantic search, contract drafting and document automation cut manual work and let lawyers focus on judgement and client strategy—provided human review and traceability are preserved.
- Finance with AI copilots: In finance, AI supports reporting, risk and ESG analysis, acting as a copilot that boosts speed and depth of insight without replacing fiduciary responsibility.
- Assistants and agents as productivity engines: AI assistants and agents orchestrate end-to-end workflows—from data gathering to reporting—reducing repetitive tasks and setting new productivity standards.
- Hallucinations as a critical risk: Plausible but wrong outputs in law and finance demand strict guardrails: domain-specific design, human-in-the-loop checks and clear governance on acceptable use.
- Ethics, regulation and IP as core design constraints: Data protection, bias control, explainability and intellectual property rules must shape AI systems from the outset to ensure trust, compliance and sustainable innovation.
- Human–AI collaboration as the real shift: AI creates value when it augments teams, skills and cross-functional collaboration, becoming a practical enabler of the broader sustainability and impact agenda discussed at Oxford/25.

CONTENT

1. From Theory to Reality: AI as an Infrastructure for Productivity

Over the past decade, artificial intelligence has moved from research labs and conceptual frameworks into the core of how organisations operate. What was once an academic discipline centred on algorithms and model architectures is now an infrastructure layer for productivity—particularly in data-rich, knowledge-intensive sectors like law and finance.

In this transition, three shifts stand out:

- **From prototypes to products**: AI is no longer limited to pilot projects; it is embedded in everyday tools—email, documents, case management systems, portfolio dashboards.
- **From models to workflows**: The focus has moved from "Can the model work?" to "How does this fit into end-to-end processes, integrate with legacy systems, and change how teams deliver value?"
- **From back-office to front-line**: AI is now directly visible to clients and end-users (chatbots, copilots, automated reporting), raising the stakes on reliability, explainability, and trust.

For the Oxford/25 context, this evolution is particularly relevant: AI is becoming a key enabler of *pragmatic sustainability*—turning massive ESG and financial datasets into decision-ready insights that can support impact, risk management, and regulatory compliance at scale.

2. AI in Legal Services: From Search to Structured Reasoning

In the legal sector, AI has already begun to transform how work is sourced, structured, and delivered:

- **Semantic search and knowledge retrieval**: Systems now understand meaning, not just keywords, allowing lawyers to query case law, regulations, contracts, and internal memos in natural language and receive contextually relevant results. This reduces time spent hunting for information and lowers the risk of missing critical precedents.
- **Contract drafting and review**: Generative AI can propose initial drafts, standard clauses, and alternative wordings based on playbooks and past agreements. Combined with clause extraction and anomaly detection, it streamlines review processes and makes it easier to identify risks, inconsistencies, and missing provisions.
- **Compliance checks and document automation**: AI can cross-check documents against regulatory requirements, internal policies, or client-specific constraints, flagging issues for human review. Routine documents (NDAs, standard contracts, letters) can be generated and populated automatically, freeing up time for more complex work.

However, the panel stressed that in law, *accuracy is non-negotiable*. Even minor errors can trigger litigation, reputational damage, or regulatory sanctions. For this reason:

- AI must be implemented with **human-in-the-loop review**,
- systems must be designed for **traceability and explainability**, and
- firms must adopt **clear policies** on where AI can and cannot be used autonomously.

The role of the lawyer does not disappear; it shifts toward higher-value tasks—interpretation, strategy, negotiation, and client counselling—built on AI-accelerated analysis.

3. AI in Finance: Copilots for Risk, Reporting, and Investment Decisions

In finance, AI has become a "copilot" rather than a black box. In line with other panels at Oxford/25, the discussion emphasised AI's role in *making sustainable finance operational*:

- **Regulatory and ESG reporting**: AI systems can ingest large volumes of heterogeneous data (financial statements, ESG reports, news, regulatory updates) to generate draft disclosures, identify gaps, and map data to evolving frameworks (IFRS S1/S2, SFDR, CSRD, TNFD).
- **Risk management and fraud detection**: Machine learning models detect anomalies, patterns, and outliers in transaction data, market movements, or counterparty behaviour—supporting early detection of credit, market, operational, and ESG risks.
- **Investment analysis and portfolio construction**: Generative and analytical AI tools summarise research, synthesise scenarios, and stress-test portfolios under climate, macroeconomic, or policy shocks, helping investors align decisions with both financial and impact objectives.

Crucially, the panel noted that **AI does not remove fiduciary responsibility**. Instead, it amplifies both the potential upside of good decisions and the consequences of poor governance. Institutions that integrate AI effectively can:

- Improve the speed and quality of decision-making,
- Enhance transparency for clients and regulators, and
- Free talent from low-value tasks to focus on engagement, stewardship, and long-term strategy.

4. Assistants, Agents and Workflow Automation

A central theme of the session was the rise of **AI-powered assistants and agents**:

- **Assistants** support individuals: drafting documents, summarising meetings, generating code, or preparing memos based on user prompts.

- **Agents** go further: they can call tools and systems, retrieve data, trigger workflows, and coordinate multiple steps (e.g., gather information, run analyses, draft outputs, and route them for approval).

In both law and finance, these capabilities enable:

- **End-to-end workflow orchestration**: from data collection to analysis, drafting, review, and archiving;
- **Reduction of repetitive, manual work**: freeing professionals to focus on judgement, negotiation, stakeholder engagement, and complex problem-solving;
- **New productivity benchmarks**: teams can handle more cases, clients, or portfolios without linear increases in headcount.

The Oxford/25 context underlined that this automation is critical to deal with the **explosion of sustainability-related data and regulation**. Without AI-enabled workflows, keeping pace with evolving taxonomies, disclosures, and impact metrics would be operationally unmanageable for many institutions.

5. Guardrails: Regulation, Ethics, and the Control of Hallucinations

The panel highlighted that the same capabilities that make AI powerful also introduce new risks—particularly in heavily regulated and high-stakes sectors.

Hallucinations—outputs that sound plausible but are factually wrong—are especially dangerous in law and finance. They can:

- introduce errors into contracts or filings,
- distort risk assessments, or
- misinform clients and regulators.

To mitigate this, several safeguards are essential:

- **Technical controls**: retrieval-augmented generation (RAG), restricted model scopes, domain-specific fine-tuning, and robust evaluation frameworks that prioritise accuracy over fluency.
- **Process controls**: mandatory human review for critical outputs, escalation procedures, and clear approval chains.
- **Governance frameworks**: policies defining allowed uses, prohibited uses, documentation standards, and audit trails.

In parallel, ethical and regulatory frameworks must evolve:

- Data protection, confidentiality, and professional secrecy remain paramount.
- Algorithmic decisions should be **explainable** enough to allow challenge and oversight.
- Bias detection and mitigation are not optional; they are core to fairness and compliance.

The overarching conclusion: AI adoption must be treated as a **governance topic**, not just an IT project.

6. Intellectual Property and Data Governance in the Age of Generative AI

Generative AI raises complex **intellectual property (IP)** and data governance questions that are particularly acute in law and finance:

- **Provenance and copyright**: Where do training data come from? Are outputs derivative works? Can they be safely reused, especially in client-facing or public contexts?
- **Use of proprietary and confidential data**: How are client documents, internal models, and transaction records protected when fed into AI systems?
- **Fair use and licensing**: Firms must understand what rights they have to use, adapt, or commercialise AI-generated content.

The panel emphasised that:

- Legal practitioners need **clear guidelines** on citing AI outputs, verifying sources, and disclosing AI use where relevant.
- Financial institutions must ensure that they **do not inadvertently leak proprietary data** into external models or violate data-sharing rules.
- Well-designed IP frameworks can become a **driver of sustainable innovation**, giving actors the confidence to invest in custom AI solutions, domain-specific models, and impact-focused analytics.

7. Human–AI Collaboration: Culture, Skills, and Collective Work

A recurring message was that AI's real value is unlocked **in teams, not in isolation**. The move from theory to reality is fundamentally a *human* transformation:

- **New skills and roles**: prompt engineering, AI product management, data stewardship, and "AI-aware" legal and financial professionals.
- **Cultural change**: encouraging experimentation while maintaining discipline, accepting that tools are fallible, and creating space for learning from failures.
- **Knowledge sharing**: capturing best practices, reusable prompts, tested workflows, and domain-specific playbooks so that benefits are scaled beyond individual innovators.

Rather than replacing collective work, AI **reconfigures it**:

- Routine tasks become automated;
- Collaboration shifts toward problem framing, oversight, and creativity;
- Cross-functional teams (law, finance, tech, risk, compliance) become the norm for designing and governing AI use cases.

In the broader Oxford/25 narrative, this human–AI collaboration mirrors the evolution of sustainable finance itself: from siloed efforts to integrated, cross-disciplinary practice.

KEY CONCLUSIONS AND RECOMMENDATIONS

In line with the overall spirit of the Oxford/25 Congress—Reaching Pragmatism in Sustainability—the panel concluded with several practical recommendations:

1. **Treat AI as a strategic capability, not a gadget**. Institutions should integrate AI into core processes, governance structures, and long-term planning, particularly where it enables better sustainability, risk, and impact decisions.

2. **Anchor AI in high-stakes, high-value use cases**. Prioritise legal and financial workflows where AI can clearly augment productivity (search, drafting, reporting, analysis), while maintaining strong human oversight.

3. **Invest in guardrails early**. Build frameworks for hallucination control, explainability, data protection, and IP compliance before scaling deployments, especially in client-facing and regulated contexts.

4. **Focus on human–AI collaboration**. Upskill professionals, redefine roles, and promote collaborative workflows that blend machine scale with human judgement, ethics, and context.

5. **Align AI with the sustainability agenda**. Use AI to cope with data complexity in ESG, impact measurement, taxonomies, and disclosure—turning information overload into actionable insights that support real-world change.

By moving from theory to operational reality—with credible guardrails and a human-centric approach—AI can become a powerful enabler of both **productivity** and **sustainable transformation** in the legal and financial sectors.

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UNLOCKING THE POWER OF AI:
FROM THEORY TO IMPLEMENTATION

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Lorenzo Saa (Clarity AI) and **Luis González** (BBVA Quality Funds).

Moderator: Irene Valdelomar, ESG & Sustainability Reporting Specialist

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KEYNOTE:

Unlocking the Power of AI: From Theory to Implementation

ABSTRACT

Sustainable investing faces growing pressure: fragmented data, complex regulations, political pushback, and tighter budgets. Meanwhile, investor demand and macroeconomic risks continue to drive ESG integration.

Artificial Intelligence (AI) offers a way forward. Costs are falling, adoption is accelerating, and generative AI is both a strategic enabler and a productivity booster. It can reshape strategy and operations at the organizational level, and empower professionals to analyze data, automate tasks, and scale insights.

But AI is not plug-and-play. Its impact depends on strong data foundations, structured integration, and human oversight. ESG is data-heavy, and up to 80% of AI's value is created before the first prompt, by building reliable datasets. API integration is key to embedding AI into workflows and ensuring auditability.

Most AI projects stall at the pilot stage due to weak alignment, limited technical and sustainability expertise, and unclear ROI. Human-in-the-loop models, staff training, and strong governance are essential to reduce bias, build trust, and ensure responsible use.

Partnerships are the accelerator. Trusted providers bring AI capabilities, data infrastructure, and sustainability expertise. With them, firms can move beyond pilots and scale adoption effectively - augmenting human insight rather than replacing it.

Keywords: *Artificial Intelligence (AI), Generative AI, Sustainable Investing, ESG, Data Intelligence, Workflow Automation, Expert Augmentation, API Integration, Human-in-the-loop, Organizational Strategy, User Adoption, Governance, Partnerships, Scalability, ROI, Responsible AI.*

KEY FINDINGS

1. Sustainable investing faces political headwinds, tighter budgets, and smaller teams, while data gaps and unclear insights persist.
2. AI adoption must occur at both the organizational and user level; it is both a strategic enabler and a productivity booster.
3. ESG is data-heavy; 80% of AI's value lies in building reliable data foundations before any model is deployed.
4. System-level integration through APIs is key to scaling AI securely and transparently — beyond individual use and into workflows with auditability.
5. Measurable ROI remains elusive for most firms due to weak alignment, poor integration, and limited training.
6. Human-in-the-loop models, staff upskilling, and clear communication are essential to build trust and driving adoption.
7. Strong governance frameworks are needed to manage risk, bias, and environmental impact, especially in regulated industries.
8. Partnerships with trusted providers, combining AI expertise, robust data, and sustainability know-how - accelerate responsible scaling and cut implementation risk.

CONTENTS

Sustainable investing continues to face familiar challenges. Data is fragmented and inconsistent: only 60% of companies disclose Scope 3 emissions, and definitions vary so widely that comparability is limited. Many investors admit that, while data exists, they struggle to map it into valuations or risk models. Regulatory reporting demands are increasing, while profitability pressures and shrinking teams force asset managers to "do more with less." Political polarization around climate and sustainability only heightens complexity and reputational risk.

Against this backdrop, AI is emerging as both a necessity and an opportunity. Its value can be understood across three dimensions:

1. Data intelligence

ESG is inherently data-heavy, spanning both numerical and textual information. AI can fill gaps through estimation models, harmonize disclosures, and expand coverage into new areas such as biodiversity and nature. It helps validate data by scanning large datasets for anomalies and inconsistencies. Human experts define quality standards - AI applies them at scale. As a result, up to 80% of AI's value in sustainable finance comes from building strong data foundations.

2. Workflow automation

AI agents can handle repetitive tasks, monitoring, reporting, and classification that consume analyst time. APIs can automate these steps: querying systems, refreshing insights, and delivering structured outputs daily. This frees professionals to focus on value-added work: company engagement, client strategy, and regulatory dialogue. AI drives efficiency; humans provide empathy, context, and judgment.

3. Expert augmentation

AI extends analyst capacity. Where humans review dozens of companies, AI reviews thousands, connecting dots across disclosures and datasets. It reduces bias by applying consistent methods at scale, while experts bring interpretation and nuance. For example, AI can compare sustainable funds, benchmark disclosures, or synthesize ESG documentation across portfolios. Experts validate and refine outputs that AI alone can't contextualize.

AI momentum is strong. Costs of models have fallen nearly tenfold in just two years, and adoption is rising quickly. Yet the gap between promise and practice remains wide. Despite $30–40B invested in generative AI, 95% of firms report no ROI, with most projects stalling at the pilot phase.

Barriers include:

- Lack of business alignment: use cases not tied to clear KPIs.
- Weak integration: projects run in isolation, not embedded in workflows.
- Cultural resistance: fears of job loss without training or communication.
- Limited expertise: gaps in technical and sustainability skills.
- Insufficient governance: few safeguards around risk, bias, or environmental impact.

Overcoming these challenges requires system-level action. API integration — connecting AI tools directly with existing systems so they can exchange data and functions — allows AI to scale across the enterprise, making it repeatable, auditable, and cost-effective. In regulated sectors like sustainable finance, this is no longer optional.

Although not yet common, some organizations are embedding AI deeply into their corporate culture by making it accessible to all employees across the enterprise. This democratized approach allows AI to permeate every corner of the organization, potentially driving productivity gains and fostering the generation of innovative ideas in any area of the business. Organizations and individuals that can adopt and integrate AI models more rapidly and effectively stand to gain significant competitive advantages. By building the skills, infrastructure, and culture required to harness AI at scale, they can outpace peers in efficiency, innovation, and decision-making.

All in all, AI can drive tangible progress in sustainability. By providing broader access to both raw and processed information, it enables better-informed decision-making—

grounded in the principle that what cannot be measured cannot be effectively managed.

CONCLUSIONS AND PROPOSALS

AI in sustainable investing is no longer experimental. Rising expectations, tighter margins, and regulatory complexity make adoption urgent. The benefits are clear: better data, faster workflows, and enhanced expert capacity. But without strong foundations, most projects fail to scale or show impact.

Success requires action at multiple levels:

- At the **organizational level**, AI must be tied to business goals and measurable outcomes. It's a catalyst for productivity, unlocking tasks and processes that were previously impractical or cost-prohibitive.
- At the **user level**, it should empower professionals of all backgrounds, supported by clear communication, upskilling, and human-in-the-loop models.

Reliable data collection, validation, and structuring are non-negotiable. They account for most of the value AI can deliver in sustainable finance.

Partnerships are the key accelerator. Vendor-led projects succeed more often, cut time-to-market, and reduce risk. According to the MIT, specialised vendor-led projects are two times more likely to succeed than internal builds. Trusted partners bring AI expertise, solid data infrastructure, and sustainability know-how, the essential mix for responsible scaling.

The future is collaborative. AI brings speed, structure, and scale. Humans provide strategy, judgment, and context. Firms that move beyond pilots, invest in integration, and build strong partnerships will not only gain efficiency: they will lead the next wave of sustainable investing.

RECOMMENDED READINGS

- eBook: Investing in the Age of AI: An Essential Guide on AI for Investors
- Podcast: The ESG Backlash Changed Sustainable Investing. Where Do We Go Next and Can AI Help?
- Podcast: AI in Finance: How Investors Are Unlocking 40% in Productivity Gains
- Podcast: Climate Finance is at a Crossroads. Can Policy and AI Help Investors Drive Real Action?
- Webinar: AI and the Future of Sustainable Investment
- Article: The Essentials of AI and ESG: Opportunities, Risks, and Governance Insights for Institutional Investors

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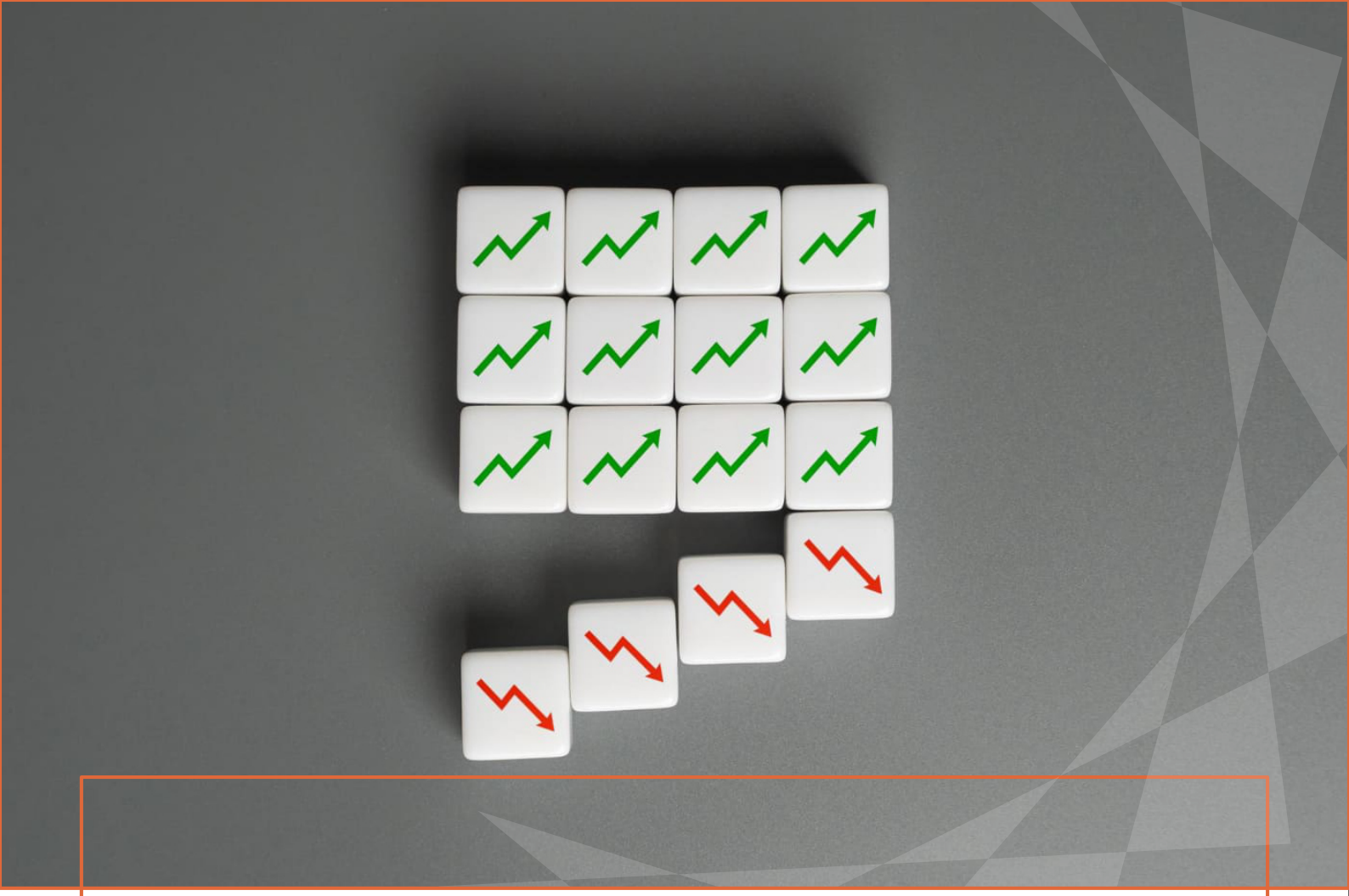

EU COMPETITIVENESS COMPASS:

REGULATORY REFORMS AND CONCLUSIONS FROM THE SUSTAINABLE FINANCE COUNCIL

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Juan Carlos Delrieu (Bank of Spain/Banco de España) and **David de Miguel** (CNMV)

Moderator: Pilar Galán Gavilá, Head of Financial Services Legal, KPMG España

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RAPID-FIRE DISCUSSION:

EU Competitiveness Compass: Regulatory Reforms and Conclusions from the Sustainable Finance Council

ABSTRACT

This article addresses the urgent challenges facing sustainable finance today. It highlights the triple pressures of climate change, geopolitical upheaval, and regulatory fatigue, and argues for a balanced approach to simplification that preserves the integrity of climate data. The article calls for innovation in data collection, broader coalitions beyond technocratic circles, and a renewed narrative that connects sustainability to societal priorities to treat sustainability as a driver of economic transformation and opportunity, rather than viewing it solely through the lens of compliance requirements. Ultimately, it urges Europe to remain committed to a model of transition that is both ethical and competitive, positioning sustainable finance as a pillar of economic stability and future prosperity.

Keywords: *Sustainable Finance, Climate Change, Regulatory Simplification, Data Integrity, Political Economy, Financial Stability, ESG (Environmental, Social, Governance), Geopolitics*

KEY FINDINGS

1. Finance is at a crossroads, facing simultaneous pressures from climate change, geopolitical shifts, and regulatory backlash.
2. Simplification of sustainability regulations is necessary, but must not undermine the integrity of climate data or the credibility of the transition.
3. Reliable, comparable, and timely data is essential for effective risk management and financial stability.
4. Broader coalitions and renewed narratives are needed to ensure sustainability is seen as a political economy project with a substantial economic sense, not just a compliance exercise.
5. Europe must maintain its leadership in sustainable finance to remain competitive and resilient in a rapidly changing world.

CONTENT

The world of finance stands on the brink of profound transformation. As climate change accelerates, geopolitical tensions rise, and skepticism toward sustainability regulations grows, the financial sector faces a complex paradox: the need for decisive climate action is greater than ever, yet political and regulatory fatigue threaten to stall progress.

Today's financial landscape is shaped by a convergence of powerful and disruptive forces, each amplifying the complexity of the challenges we face. The first of these is the undeniable reality of climate change. No longer a distant threat, its physical impacts are now part of our daily headlines: floods that devastate communities, wildfires that consume forests and homes, and droughts that threaten food security and economic stability. These events are not isolated; they are interconnected signals of a planet under stress, and their repercussions ripple through societies and economies alike.

At the same time, the world is witnessing a profound geopolitical realignment. The war in Ukraine has not only brought immense human suffering but has also redrawn the map of energy dependencies and trade flows. Meanwhile, the strategic rivalry between the United States and China is reshaping the global order, influencing everything from technology standards to supply chains. These shifts inject uncertainty into markets and force countries—and their financial systems—to adapt rapidly to new risks and opportunities.

Overlaying these challenges is a growing backlash against sustainability. As governments and institutions have raced to implement ambitious frameworks for environmental, social, and governance (ESG) standards, a countercurrent has emerged. Critics argue that the regulatory burden has become excessive, stifling innovation and competitiveness, especially for small and medium-sized enterprises. Calls to simplify, reduce, or even abandon ESG frameworks are gaining traction, fueled by concerns over costs, complexity, and the pace of change.

This convergence of climate urgency, geopolitical upheaval, and regulatory fatigue creates a deep tension at the heart of financial policymaking. On one hand, there is a clear and pressing need for decisive action to address climate risks and accelerate the transition to a sustainable economy. On the other, there is a legitimate desire to streamline regulations, reduce administrative burdens, and preserve the competitiveness of businesses operating in an increasingly fragmented world. The danger is that, in our efforts to simplify, we may inadvertently undermine the very foundations of transparency and data integrity that are essential for managing risks and building trust in financial markets.

Europe has been at the forefront of developing comprehensive regulatory frameworks, such as the CSRD, CSDDD, and the EU Taxonomy. These initiatives were designed with the best intentions: to drive meaningful change, ensure accountability, and provide clear guidance for sustainable finance. Yet, their complexity has often overwhelmed the very actors they were meant to support. For many companies, especially smaller ones, compliance has become a daunting and costly exercise,

sometimes overshadowing the strategic benefits of sustainability. The recent Omnibus proposal seeks to address these concerns by simplifying reporting requirements. However, if simplification goes too far—if it strips away the data needed for effective oversight—it risks leaving supervisors and investors blind to emerging risks, and could ultimately weaken the credibility of the entire transition effort.

In this context, the importance of reliable, comparable, and timely data cannot be overstated. Transparency is a necessary condition for effective governance, but it is not sufficient on its own. Central banks and supervisors depend on robust data to identify exposures, measure systemic risks, and ensure that climate considerations are fully integrated into financial decision-making. When data is scarce or fragmented, opacity and short-termism thrive; when data is plentiful and accessible, markets and regulators can act with foresight and confidence.

Meeting this challenge requires innovation and collaboration. It means engaging more deeply with a wide range of stakeholders, from public institutions to private companies and civil society. It calls for the use of alternative data sources—such as environmental registers, emissions trading schemes, and even satellite imagery—to supplement traditional reporting. It also demands investment in new technologies that can transform unstructured information into actionable intelligence, and the promotion of data-sharing agreements that break down institutional silos.

But perhaps most importantly, the sustainability agenda must be reframed as a project of political economy, not just a technical or compliance-driven exercise. The allocation of resources, the balancing of trade-offs, and the setting of societal priorities are inherently political acts. To succeed, the transition to sustainable finance must be rooted in broad-based coalitions that extend beyond investors and policymakers to include SMEs, trade unions, civic groups, and ordinary citizens. The narrative must connect climate objectives to the everyday concerns of people—affordable energy, secure jobs, resilient communities—if it is to maintain legitimacy and momentum.

Institutions like the Banco de España and CNMV are embracing this broader vision. By fostering collaboration between public and private actors, as exemplified by the Spanish Council on Sustainable Finance, and by contributing to international coordination through networks such as the NGFS or the recently established IOSCO Monitoring Group, they are helping to build the foundations for a more resilient and inclusive financial system.

The stakes for Europe could not be higher. In a world where the transatlantic relationship is increasingly transactional, where China is advancing a determined green technology agenda, and where energy has become a lever of geopolitical power, Europe must demonstrate that its model of transition is not only ethical but also competitive. Falling behind is not an option; the credibility and future prosperity of the continent depend on getting this balance right.

CONCLUSION AND PROPOSALS

Sustainable finance is at a critical juncture. Its legitimacy and effectiveness are being questioned, but the risks and opportunities of the transition are immediate and real. It is important to remember that sustainable finance is not an end itself, but a channel to fight against climate change and nature degradation.

The way forward requires:

- Humility to acknowledge past mistakes and realism to correct them.
- Determination to maintain focus on building a resilient, competitive, and fair economy.
- Commitment to preserving and enhancing climate data, engaging citizens, and embedding sustainability in the financial system as a source of resilience, not a burden.
- Collaboration between public and private actors, as exemplified by the **Spanish Council on Sustainable Finance**, where diverse group of stakeholders co-create proposals that are both ambitious and achievable.

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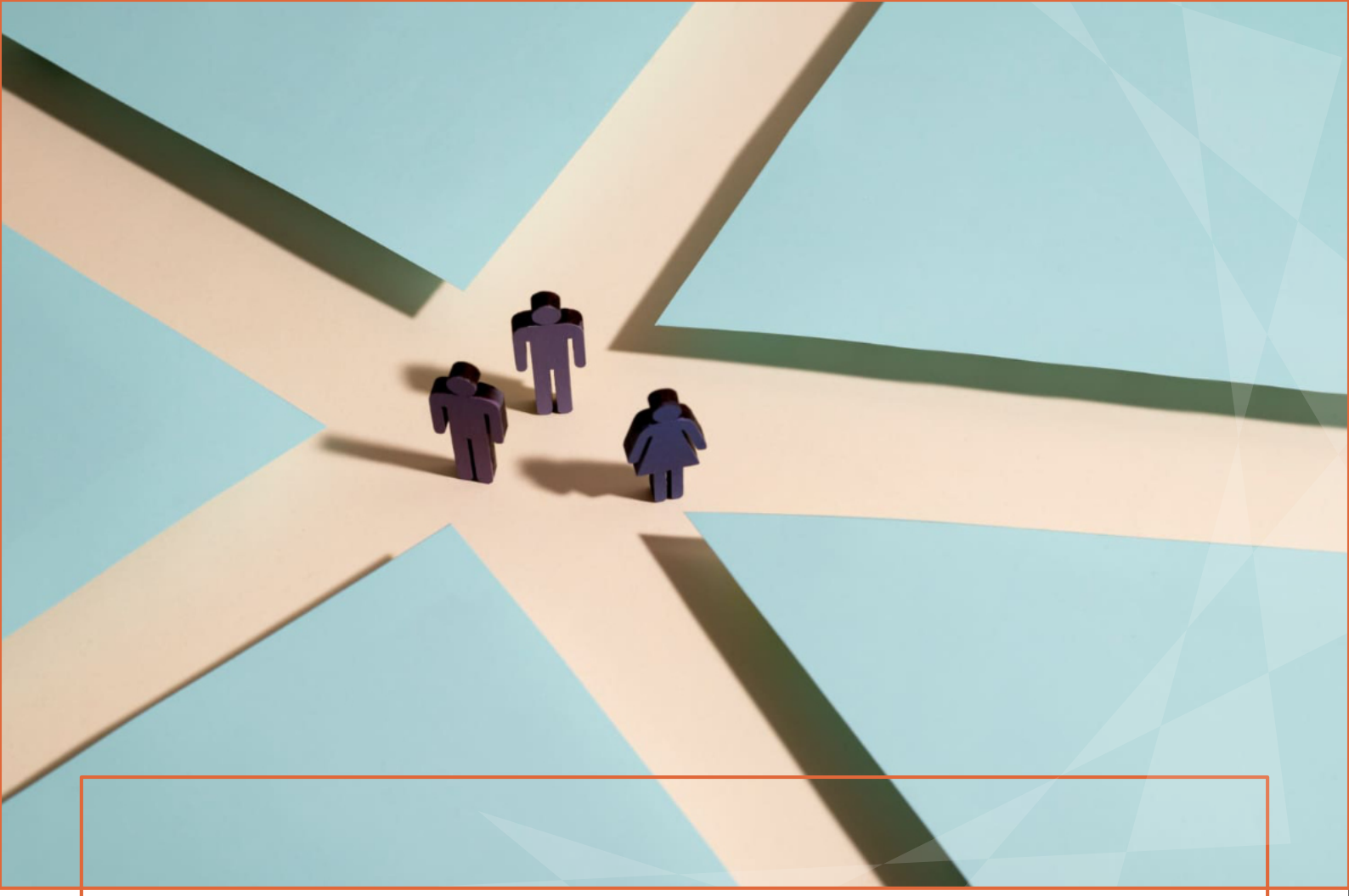

REGULATORY CROSSROADS:

WHAT LATAM EMBRACES (AND REJECTS) FROM THE US & EU

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Eva M. Gutierrez (Financial expert), **Guillermo Zamarripa** (FIAP), **Sergio Aratangy** (Superintendence of Pensions of Chile (Online)) and **Jorge Meléndez** (AFORE XXI BANORTE (Online))

Moderator: Caroline Berthood, Director of ESG Development, GovenArt

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PANEL DISCUSSION:

Regulatory Crossroads: What LATAM Embraces (and Rejects) from the US & EU

ABSTRACT

Latin America stands at a pivotal "regulatory crossroads" in sustainable finance, shaped by its unique combination of low greenhouse gas emissions, extreme climate vulnerability, rich biodiversity, and deep social inequality. Across the region, governments, pension regulators, and financial institutions are advancing taxonomies, ESG disclosure frameworks, and sustainable finance roadmaps that blend elements of U.S. flexibility with EU-style rigor—while adapting them to local realities.

The papers in this section showcase a region in active transition. Countries such as Mexico, Chile, Colombia, Brazil, and Peru are developing taxonomies, strengthening pension fund regulation, adopting IFRS S1/S2, issuing thematic bonds, and integrating ESG into investment and risk-management processes. Pension funds—managing more than USD 800 billion across FIAP member countries—have emerged as central actors, mobilizing long-term capital toward infrastructure, energy transition, nearshoring, and social impact.

Despite global headwinds—U.S. political pushback, European regulatory fatigue, declining corporate ESG mentions—Latin America continues to advance pragmatically. Mexico, in particular, is leveraging pension reform, a robust Sustainable Taxonomy, and long-term institutional investors (Afores) to position itself as a regional leader and potential global safe haven for sustainable finance.

The contributions from Eva M. Gutierrez, Guillermo Zamarripa, Sergio Aratangy, and David Razú collectively highlight the region's challenge: moving from rule-making to meaningful implementation, improving data quality, coordinating regulators, and balancing ambition with market realities. They also emphasize its opportunity: harmonizing standards, scaling impact investing, strengthening fiduciary stewardship, and channeling domestic savings into economic transformation.

Taken together, the LATAM experience illustrates how emerging markets can transform sustainability from an external expectation into a strategic, competitive, and long-term development model—anchored in resilience, institutional strength, and pragmatic regulation.

***Keywords*:** *PLatin America, sustainable finance, ESG integration, pension funds, taxonomies, climate risk, biodiversity, IFRS S1/S2, sustainable investing, Mexico Sustainable Taxonomy, Afores, regulatory convergence, double materiality, social inequality, impact investing, green bonds, thematic bonds, energy transition, infrastructure finance, nearshoring, fiduciary duty, financial regulation, disclosure frameworks, sustainable development, climate adaptation, public-private collaboration, emerging markets.*

KEY FINDINGS

1. Latin America is highly vulnerable to climate change but contributes little to global emissions.Despite accounting for less than 7% of global GHG emissions, 74% of countries in the region are highly exposed to extreme weather events. This asymmetry reinforces the urgency of adaptation, biodiversity protection, and socially inclusive sustainable finance strategies.

2. The region is building hybrid regulatory models that blend EU ambition with local pragmatism. Countries like Mexico, Chile, Colombia, and Brazil are integrating ESG into financial regulation and developing sustainable taxonomies inspired by the EU—but adapted to regional needs (e.g., exclusion of gas/nuclear, inclusion of agriculture, voluntary frameworks).

3. Pension funds are becoming the cornerstone of sustainable finance in the region. With over $800B in AUM across FIAP member countries, pension funds are embedding ESG into investment mandates, issuing engagement guidelines, and channeling capital toward infrastructure, energy transition, social inclusion, and climate resilience.

4. Regulatory progress is tangible—but implementation gaps remain. ESG disclosure requirements (e.g., IFRS S1/S2) and taxonomy-linked metrics (like green asset ratios) are coming into force, but lack of data, limited impact investment pipelines, and asymmetry with banking regulation create bottlenecks.

5. Mexico is emerging as a regional leader. Through its Sustainable Taxonomy, ESG pension reform, and increased allocations to green and social bonds, Mexico is positioning itself as a stable ESG investment hub amid global volatility—particularly leveraging nearshoring and long-term capital from Afores.

6. Volatility in global ESG consensus creates both risks and opportunities. Political resistance in the U.S. and regulatory fatigue in the EU weaken investor confidence—but also create space for LATAM to differentiate through clarity, stability, and credible ESG frameworks.

7. Public-private coordination is critical to scale sustainable finance. From thematic bonds to biodiversity taxonomies and infrastructure investments, collaboration between regulators, institutional investors, and development banks is needed to move from compliance to real impact.

8. The region's approach is evolving from policy to performance. There is a shift from rule-writing to active stewardship, impact metrics, and fiduciary ESG integration. Latin American countries are no longer just adopters of global standards—they are adapting and innovating within their own frameworks.

EVA M. GUTIERREZ

Latin America and the Caribbean (LAC) countries are developing an approach to sustainable finance that combines elements of the EU and US approach that reflect the challenges in the region including climate adaptation, biodiversity loss, and social inequality. In contrast to the US or the EU, LAC is not a big GHG emitter (only 7% of total emissions). Only Brazil, Mexico (and to lower extent Argentina) are significant emitters. However, LAC countries are greatly exposed to climate change; 74 percent of its countries are highly exposed to extreme weather events, the second-most disaster-prone region in world after Asia. LAC is also home to important carbon sinks, such as the Amazonia. Furthermore, LAC is the second most biodiverse region in the world, and such biodiversity is key to many economic activities (agriculture, industry, tourism) that are particularly important to economic vulnerable populations. Loss of biodiversity in Latin America, due to climate change, pollution and urbanization can reduce carbon storage, decrease food security and affect livelihoods. Biodiversity loss was estimated to cost 4.5 percent of GDP in Mexico in 2019. Beyond climate considerations, social challenges are prevalent in a region with high income inequality (one of the highest levels together with southern Africa). Climate proofing the economies in LAC and attain the UN Sustainable Development Goals requires comprehensive policy action to plan and fund the needed investments to address these challenges.

Several countries in LAC are advancing on firming their sustainable finance frameworks/roadmaps and strategies. A key component, more so in the case of LAC countries are ESG integration into investment decisions under the double materiality approach, to minimize financial risks to investments and to ensure sustainable outcomes. Many LAC countries have issued ESG guidelines for issuers to report IFRS S1 but mostly those requirements begin in 2025 and 2026 (eg. Mexico, Brazil, costa Rica, Chile and Bolivia). Colombia was a pioneer issuing ESG disclosure requirement for financial entities in 2021. Unfortunately, IFRSS1/S2 do not incorporate double materiality considerations. However, the largest domestic banks in Brazil, Colombia, Uruguay and Mexico adopted the Ecuador principles, inspired in IFC performance standards, as they are the large Spaniard banks with substantial operations in the region. The sustainable taxonomies developed in the region also include "do not harm" considerations albeit so far they are mostly voluntary reporting guidelines.

To support mobilization of sustainable investments several countries have published sustainable taxonomies in region including Colombia, Mexico, Chile, Panama ,Costa Rica, Dominican Republic, Panama and Paraguay. All the taxonomies have climate objectives, mitigation and adaptation albeit inspired by the EU taxonomies, the focus is in mitigation. Mexico 's taxonomy also has explicit social objectives (gender equality). Many countries in LAC are working with the BIOFIN initiative to develop a biodiversity taxonomy. In contrast to the EU, taxonomies in LAC cover the agricultural sector and exclude nuclear and natural gas from green list. In contrast to the EU approach, the taxonomies in LAC are so far voluntary tools, and only CONSAR in Mexico asked pension companies to report according to a well stablished taxonomy.

Beyond taxonomies, several countries in LAC have also issued guidelines for the issuance of green and thematic bonds (Colombia was a pioneer too) and sovereigns

have been active in issuing sustainability linked bonds and sustainable bonds. Also, with the support of the IADB and the World Bank, guidelines were issued for the issuance of Amazonia bonds to support projects focused on environmental conservation, social well-being and economic growth in the region. Social bond issuance is raising, particularly in Mexico and Chile. In 2025 LAC's share of total Green, social, sustainability and sustainability linked bonds reached 35% (up from about 9 percent in 2020). Withing the sovereign segment of these bonds, LAC accounted for 50 percent of total issuance.

Finally, state owned financial institutions, are the largest providers of green finance in the world according to CPI statistics. In LAC there are efforts to green their state-owned development and commercial banks, important in several countries such as Costa Rica, Uruguay, Brazil and Mexico) as part of their sustainable finance roadmaps.

GUILLERMO ZAMARRIPA

The objective of my section of the panel discussion is to give an overview of where we are in Latin America (Latam) in terms of regulations and industry practices related to ESG and sustainable finance, some of the challenges and where are we headed in terms of the crossroads.

I.- The current situation in Latam

The pension fund industry in the region is a relevant player in terms of financial intermediation. We understand that in sustainable finance we are at a crossroads. Also, we acknowledge that pension funds can influence the definition of which path we will take, both in terms of capital mobilization and engagement with other players of the sustainability ecosystem.

In Mexico the pension fund industry is the second financial intermediary in terms of size. As of September 2025, the industry has over 400 billion USD of AUM. The assets will more than double over the next six years.

FIAP member countries have around 800 billion USD of AUM and manage accounts for more than 130 million workers in the region.

The evolution of the ESG regulatory agenda in Mexico is consistent with the efforts of all members of FIAP. We also see an evolution in terms of industry practices. I present two examples of such practices.

One is the adoption of the Principles for Responsible Investment (PRI). Now includes 19 pension funds from seven countries in the region (Chile, Colombia, Costa Rica, Mexico, Peru, the Dominican Republic, and Uruguay) which are more than half of the industry participants. It shows a commitment because adoption is voluntary not mandatory.

As of December 2023, more than 50% of the pension fund portfolios in Latin American

countries have some analysis using ESG criteria. While there is no unique approach to ESG analysis, Latam pension funds recognized the relevance of incorporating these factors in investment and risk management processes.

II.- Where are the challenges in Latam?

In terms of adoption of best practices and regulations our point of reference is the European Union. However, we believe that full replication is not the adequate strategy for Latam countries.

Harmonization efforts should be done where applicable. It is important to understand that we have differences. Also, we are listening to some voices in Europe arguing that is convenient to review their regulation and their taxonomy.

Countries such as Chile, Mexico, Colombia, and Peru are leading the integration of ESG factors into their processes. The change is driven by regulatory requirements that establishes their incorporation in different risk management and investment evaluation processes.

In the case of Mexico there are additional requirements. One is transparency and disclosure of what each Afore does in ESG. Another one is to have at least one certified member of the investment and the risk management teams.

In 1Q 2026 the Mexican pension funds will be calculating some metrics according to one taxonomy. One is the green asset ratio and other is the internal sustainability capex. Also, a new requirement to report aligned with an international standard like IFRS S1 and S2, PRI or TCFD.

Complementary to pension fund regulation, several countries published sustainable taxonomies including Colombia, Mexico, Chile, Panama Costa Rica, Dominican Republic, and Paraguay. Still is work in progress but there are frameworks in Latam.

Pension Fund regulators have done their part, so does the pension fund industry. There are two caveats in terms of progress. First, we are concentrated on internal aspects of policies and procedures and less on impact investment. Second, we need actions beyond the pension fund industry.

Countries need to move from rule writing to meaningful compliance. There will be a reality check in terms of ESG regulation in Mexico in 2026. In the first calculations of the green asset ratio and other metrics there will be a lot of 0´s because the lack of information. Also, the region needs to ask the following question: Will we move slowly from compliance with policies and procedures, disclosure and doing several calculations to asset allocation in terms of thresholds and restrictions?

Better adoption of ESG standards and sustainable finance in the different countries of the region require regulation and other actions from other financial industries, mainly the securities and banking regulators. All need to move in a coordinated way.

One example of potential distortions if there is no coordination is what can happen in the credit market segment of big corporations. If banks do not have requirements for credit granting that include ESG criteria and pensions funds do, then a big regulatory asymmetry will emerge creating a bias toward banking finance.

We also need to define which approach is better. I think the top-down is the correct one. This implies starting with large companies and leaving SME´s to a later stage. Imposing requirements to small companies can get us to a point where we have regulation with no enforcement.

One example in Mexico is the local version IFRS S1 and S2 reporting standards issued by CINIF. The local standard is consistent with the global one. The scope of application is for all companies that prepare financial statements using CINIF standards which include small and medium size companies. This will be excessive since most of SME´s barely have reliable accounting numbers.

III.- Latam and the crossroads: Europe and the U.S.

Europe is the global leader in sustainable finance and ESG. Has more assets under management with ESG criteria than the US and other parts of the world. This is driven by strict regulations such as the SFDR (Articles 8 and 9) and the EU Taxonomy which classifies sustainable activities and fosters transparency.

In addition, 60% of publicly traded companies in Europe have targets validated by the Science Based Targets initiative (SBTi), reflecting a strong commitment to decarbonization.

IFRS S1 and S2 is basically a European effort that will help with the disclosure of companies in Europe. This will be key towards the goal of better comparing assets and mitigating climate risks.

In all these issues Latam is behind. Regulations are not as strict; taxonomies are work in progress like in Mexico; less companies in the region with SBTi (the ones influenced because they do business in Europe), and only a few will apply IFRS S1 and S2.

In Latin America less than 20% of companies in our markets have SBTi-approved targets. Here the challenges include lack of reliable ESG data and nonstandard methodologies. The problems are bigger for companies in the small- and mid-cap segments of the markets.

Latin America is more closely aligned with European approach in terms of regulation when compared to the United States. However, the US has greater investment scale, although with a less uniform approach due to more flexible regulations (such as those of the SEC). Views about ESG and sustainable finance today are influenced by the political status quo in the country.

Influence means change not disappearing. It is more about beliefs, values and commitment of each corporation and market participant than a general trend.

In Mexico we are very close to the US market and are aware of this. Industry players are trying to understand how to deal with the new reality.

In Latam we acknowledge that this is also a public interest dilemma. Latam countries account for less than 7 percent of greenhouse gas emissions, but it is greatly exposed to climate change (74 percent of its countries are highly exposed to extreme weather events).

We are working in sustainable finance and ESG in the pension fund industry in Latam because we are "good global citizens". The path that we are taking in the crossroads is more aligned with European practices and standards but with a pragmatic approach.

SERGIO ARATANGY

Abstract

Chile has recently approved a new law introducing substantial changes to the pension system, including major reforms to the investment structure. These changes are expected to have implications for Sustainability and Climate Change analysis.

There are two key reforms designed to foster a long-term perspective for Chilean pension funds:

1. **Shifting from target risk funds to target date funds**. While the main objective of this shift is to align the entire investment philosophy with the system's ultimate goal—paying pensions—it should also encourage a longer-term mindset. At the statutory retirement age, the expected duration of a pension is approximately 15 years.

2. **Establishing a new collective fund to finance the higher life expectancy of women**. This fund is mandated to remain solvent for the next 75 years and will offer defined benefits. It therefore represents the first public Chilean DB fund since 1980. Consequently, the investment approach must reflect a long-term commitment consistent with these obligations.

Having said that, long-term trends such as climate change will have a tremendous impact on investment decisions. We must be prepared: not only do we need good and reliable information—but we also need to know how to act on it.

Regulators play a pivotal role in preparing the ground for information disclosure—but that alone is not enough. Science must develop robust models to understand real environmental changes that will affect demographics, resources, costs, and consumption. Investors then need to apply these models to adjust valuations and factor in climate-related risks.

In Chile, we are embracing recognized best practices, such as adopting the IFRS Sustainability Disclosure Standards—**IFRS S1** (General Requirements for Disclosure of Sustainability-related Financial Information) and **IFRS S2** (Climate-related Disclosures). These standards are being incorporated into the strategies of Pension

Fund Managers—not just in their investment decisions, but also in their market analysis and corporate strategies.

As a society, we are still learning how to tackle this challenge. It's not enough for a few countries to move in the right direction—widespread, coordinated action is required, amid geopolitical distractions that can easily derail progress.

In the same vein, and with the aim of defining criteria for classifying economic activities as sustainable, there has been an international push to establish classification systems ("taxonomies"), providing a common language that facilitates comparability across different industries and helps prevent practices such as greenwashing.

In this context, in May 2025, the Chilean Ministry of Finance published the **Taxonomy of Environmentally Sustainable Economic Activities of Chile (T-MAS)**. Its objective is to identify and categorize economic activities considered environmentally sustainable, thereby providing a common language to facilitate decision-making on sustainable investments.

I think we could emphasize the fact that, in Chile, we have been enforcing as much as regulating. And, through our preventive oversight process, we are also fostering the adoption of good practices in risk management, including he treatment of Climate Change risks and opportunities.

DAVID RAZÚ AZNAR

Key Findings

1. ESG agendas face increasing political and market pressures at the international level, weakening consensus but opening new strategic opportunities for countries like Mexico to position themselves as stable and sustainable investment hubs.

2. Despite international setbacks, ESG remains a competitive advantage and fiduciary tool, particularly for institutional investors committed to long-term sustainable value creation.

3. Protectionist measures and U.S. trade policy shifts increase volatility but also highlight nearshoring opportunities that Mexico can capture with the right regulatory and financial frameworks.

4. LATAM's regulatory crossroads reveal both convergence and divergence with U.S. and EU frameworks. Mexico's Sustainable Taxonomy and CONSAR regulation on ESG investments demonstrate leadership in aligning local markets with global standards.

5. Mexico's pension system (Afores) has become a cornerstone of domestic financial markets, channeling long-term savings into infrastructure, energy transition, and sustainable finance.

6. The 2020 Pension Reform and subsequent regulatory updates have significantly

expanded the ability of Afores to invest in structured instruments, real estate (FIBRAs), and ESG-linked bonds, positioning them as pivotal actors in financing Mexico's economic transformation.

Abstract

While international consensus on ESG is weakening in the United States and facing political headwinds in Europe, Mexico is uniquely positioned to step forward as a regional and global leader in sustainable finance. This opportunity stems from both structural reforms and institutional maturity. On the regulatory side, the Mexican government has introduced a forward-looking framework that strengthens fiduciary responsibility, expands investment limits for pension funds (Afores), and aligns local market practices with global standards such as the Paris Agreement and the UN SDGs. The adoption of Mexico's Sustainable Taxonomy, alongside CONSAR's ESG investment regulation, and the expansion of the limit for certain investments has provided the legal certainty and incentives needed for institutional investors to channel long-term savings into strategic sectors.

Pension fund administrators have become the cornerstone of this transformation. Afores not only stabilize domestic financial markets but also mobilize vast resources into the market that has increased investment on infrastructure, renewable energy, and digital transformation. By leveraging these reforms, they have financed large-scale sustainable projects, promoted gender equality and social impact initiatives, and positioned themselves as credible actors in global green markets. This dynamic illustrates how Mexico is turning external volatility into an engine of resilience, growth, and innovation. In doing so, the country offers a model for other emerging economies: combining regulatory pragmatism, institutional strength, and long-term fiduciary vision to transform sustainability from a trend into a competitive advantage and a source of inclusive development.

Contents

Pragmatism in Sustainability Agenda

The current political context in the United States, resistance to the European Union's Corporate Sustainability Reporting Directive (CSRD), and the U.S. withdrawal from the Paris Agreement have weakened the international consensus on climate and sustainability. These events generated a perception of fragility around ESG standards, discouraging some investors while emboldening skeptics who see sustainability as a passing trend.

Yet, this vacuum creates an extraordinary opportunity for countries that can offer regulatory stability, credible frameworks, and long-term institutions. Mexico is uniquely positioned to seize this moment. Unlike economies where ESG has become a political battleground, Mexico has advanced steadily and pragmatically, designing regulations that strengthen fiduciary duty, embedding sustainability in pension fund mandates, and fostering tools such as the Sustainable Taxonomy. This approach

allows Mexico to become a reference point for Latin America and beyond: not through rhetoric, but through measurable reforms, financial discipline, and the mobilization of pension assets.

The Congress highlighted that pragmatism means aligning ambition with execution. For Mexico, this means leveraging pension funds as catalysts of sustainable transformation, aligning regulation with global standards, and demonstrating that sustainability is not only compatible with competitiveness—it is the foundation for long-term growth and stability.

ESG Agendas in a Complex Global Environment

Globally, ESG is at a crossroads. In the United States, corporate ESG mentions peaked in 2023 and are now in decline. The SEC has retreated from efforts to mandate climate disclosures, and political discourse has increasingly framed ESG as controversial. Even in the EU, which pioneered double materiality and comprehensive reporting, political resistance is emerging, delaying the effective implementation of the CSRD. The U.S. withdrawal from the Paris Agreement exacerbates this fragmentation, weakening international solidarity and redirecting attention toward fossil fuels.

This erosion of consensus has several consequences. First, it undermines investor confidence in the permanence of ESG standards, raising doubts about whether commitments are structural or temporary. Second, it reduces appetite for capital flows into emerging markets, especially those that rely on ESG differentiation to attract investors. Third, it weakens public-private coordination at the global level, delaying the development of green markets.

For Mexico, however, this environment presents a paradoxical opportunity. By offering stability where others retreat, the country can differentiate itself as a credible ESG destination. Mexico's adherence to the TCFD disclosure framework, the creation of the Sustainable Taxonomy, and the incorporation of ESG into pension fund regulation since 2022 provide precisely what international investors now demand: clarity, transparency, and long-term commitment.

In this sense, the weakening of ESG abroad does not diminish its relevance. Rather, it sharpens the distinction between opportunistic actors and those with genuine long-term vision. Mexico can use this moment to consolidate its reputation as a serious and consistent player, attracting capital from Europe, Asia, and Canada, where ESG remains a core principle of institutional investment.

The Investor Side

According to CONSAR reports, one of the first impacts of the ESG regulation was reflected in the increase in investments by Afores. In May 2024, Afores invested USD 12.4 billion in ESG bonds, compared to just USD 10.2 billion in 2023.

Afore XXI Banorte, the largest pension fund administrator in Mexico and Latin America, has been a pioneer in the implementation of ESG criteria even before the new regulation came into effect, and it may be considered the industry leader in this area of investment. Its objective has been to promote the adoption of ESG practices in the operating processes of the promoted firms and projects in its portfolio. As a result, 45 major issuers from various sectors have signed engagement letters to incorporate ESG factors into their businesses, enabling them to access long-term funding from XXI Banorte.

Thanks to the implementation of these criteria, various social impact strategies have been promoted—educational projects, donations, workshops, development programs, and other initiatives—that have benefited millions of people. A notable example is the investment in sustainable electricity production, which has helped generate more than 2.9 million mw/h.

Moreover, Afore XXI Banorte has actively promoted gender equality and equal opportunities, both within its own organization and in the companies it finances. Through its investments in Structured Equity Securities (CKDs), it has enabled the granting of credit to 241,000 women to start their own businesses, among other examples of the impact of its ESG investment strategy.

Regarding the inclusion of women, it has been established that by 2030, 30% of the portfolio on corporate instruments must be invested in companies with at least 30% female participation on their boards of directors.

Currently, 30% of Afore XXI Banorte's investments are directed toward sustainable projects, including renewable energy, agribusiness, healthcare, education, and women's empowerment. Additionally, it has allocated MXN 89 billion to active strategies and MXN 2 billion to passive strategies, as well as MXN 55 billion in thematic bonds—of which 41% are sustainable, 26% sustainability-linked, 15% green, 13% social, 4% development-focused, and 2% blue bonds.

Mexico's Pension Reform and the Expanding Role of Afores

One of Mexico's most significant contributions to sustainable finance lies in its pension reform trajectory. The 2020 reform increased contribution rates, reduced the required weeks for retirement, and capped Afore fees. More importantly, it expanded the potential for pension funds to act as long-term institutional investors.

The impact is already visible. According to Banco de México, the reform will elevate pension assets from 35% of GDP under a no-reform scenario to 56% by 2040. As of August 2025, Afores manage USD 415.6 billion, representing 22.2% of GDP. This scale positions them as the second most important financial actors in the system, only behind banks.

Subsequent regulatory changes in 2024 and 2025 expanded the investment limits for structured instruments, infrastructure, and alternative assets. Afores can now allocate up to 30% of their assets to domestic projects such as energy and infrastructure. This has translated into USD 52.3 billion invested in infrastructure and

USD 17.7 billion in energy projects, making them the largest contributors to national development in these sectors.

The reforms also enabled greater participation in FIBRAs, CKDs, and CERPIs, allowing Afores to capture opportunities from nearshoring. By August 2025, Afores had invested USD 5.6 billion in highways and USD 34.0 billion in development capital certificates, strengthening Mexico's industrial corridors and logistics networks.

These figures reveal a structural shift: pension funds are no longer passive savings managers, but nation-builders whose portfolios align with the country's long-term strategic priorities.

Investment in Key Sectors: Energy, Infrastructure, and Nearshoring

The transformation of Mexico's financial system is particularly evident in its sectoral allocations. Energy transition stands at the forefront. Through structured instruments, Afores have mobilized USD 17.5 billion into energy, representing over 90% of outstanding instruments in the sector. These investments support renewable generation, sustainable fuels, and grid modernization, aligning with Mexico's commitments under the Paris Agreement.

Infrastructure has become another pillar. With nearly USD 40 billion invested, Afores are the single most important source of financing for roads, airports, and logistics platforms. Their long-term horizon and risk tolerance allow them to fund projects that require decades to mature, something few other investors in Mexico can achieve.

Nearshoring amplifies the relevance of these investments. As global supply chains relocate, demand for industrial real estate and logistics hubs in Mexico is rising. The regulatory changes that allow Afores to invest up to 12.5% of assets in FIBRAs enable them to directly capture this trend. By financing warehouses, manufacturing clusters, and e-commerce distribution centers, pension funds not only generate stable long-term returns but also anchor Mexico's role as a sustainable manufacturing hub for North America.

The opportunity is enormous, but it requires policy stability, adequate infrastructure planning, and international partnerships to secure technology and capital. If Mexico succeeds, nearshoring could become the engine that consolidates its leadership in sustainable economic development.

ESG as a Fiduciary Duty and Competitive Advantage

ESG is not philanthropy — it is a fiduciary obligation. Mexican Afores exemplify this principle. Afore XXI Banorte, for instance, has directed 30% of its portfolio to sustainable projects, including renewable energy, healthcare, education, and agribusiness.

Beyond allocations, Afores are shaping corporate behavior. Engagement letters signed with 45 issuers have ensured the integration of ESG criteria into corporate strategies. Social initiatives funded through their portfolios have benefited millions of Mexicans, from renewable electricity generation to credit access for women entrepreneurs.

These practices reinforce a broader point: ESG is not a short-term trend but a source of resilience, differentiation, and competitiveness. For pension funds, it reduces exposure to reputational, market, and regulatory risks. For affiliates, it guarantees that their savings are invested responsibly. For the Mexican economy, it mobilizes capital into sectors that generate long-term growth, social equity, and climate resilience.

Proposals and Conclusions

- **Strengthen regulatory ecosystems**: Mexico's Sustainable Taxonomy should become mandatory, interoperable with EU standards, and supported by monitoring mechanisms to guarantee compliance.
- **Promote regional convergence**: Latin America should harmonize taxonomies and reporting standards, reducing fragmentation and improving access to cross-border financing.
- **Enhance investor confidence**: Mandatory ESG disclosures, standardized metrics, and third-party verification can elevate the quality of information available to global investors.
- **Leverage pension funds for transformation**: By channeling capital toward infrastructure, renewable energy, and digital projects, Afores can accelerate regional development.
- **Foster public-private partnerships**: Nearshoring, electromobility, and renewable energy require collaboration between governments, businesses, and institutional investors.
- **Position LATAM as a safe haven**: By emphasizing regulatory stability, long-term returns, and credible ESG frameworks, the region can attract capital reallocated from less stable jurisdictions.

Mexico's experience demonstrates that it is possible to reconcile financial growth with environmental stewardship and social inclusion. By scaling these lessons regionally, Latin America can turn sustainability from a niche ambition into a pragmatic driver of competitiveness and prosperity.

Mexico stands at a regulatory crossroads, with the potential to lead sustainable finance in LATAM. Despite global ESG setbacks, its proactive reforms and institutional leadership offer a model for resilience and innovation. To capitalize on this momentum, Mexico should operationalize its Sustainable Taxonomy, enhance regional cooperation, and continue expanding ESG investment frameworks. Pension funds must deepen their engagement strategies and promote transparency, while regulators should transition from voluntary to mandatory ESG standards.

Links to recommended readings or specific bibliography on the content of the panel.

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  Sustainable Taxonomy Overview – SHCP
- Banco de México Pension Reform Impact Study (2021)
  Impact Study on Pension Reform – Banxico
- World Finance – Best Pension Fund Awards
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  Ley del Mercado de Valores – Reformas 2024 (CNBV)
  Informe Anual CNBV 2024
- CONSAR – Quarterly Reports to Congress
  CONSAR: Informe Trimestral

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Moderator: Caroline Berthood, Director of ESG Development, GovenArt.

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FROM PUSHBACK TO PROGRESS:

TURNING SUSTAINABILITY CHALLENGES INTO ENGAGEMENT SUCCESS

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Catherine Bohill (Telefónica), **Lara Altable** (Santander Asset Management) **and Cristina Aldamiz-Echevarría** (Grupo ACS).

Moderator: Ignacio Rodríguez Añino, Chief Distribution Officer Americas, M&G Investments

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PANEL DISCUSSION:

From Pushback to Progress: Turning sustainability Challenges into Engagement Success

ABSTRACT

The global ESG landscape is undergoing a profound transformation. While sustainability has become a central consideration in business and investment decisions, it now faces unprecedented political, regulatory, and communicative challenges. The pushback observed in recent years—particularly acute in the United States and increasingly visible in other regions—has prompted a re-evaluation of how ESG is understood, reported, and implemented.

Rather than weakening the sustainability agenda, this resistance is driving a new phase characterized by pragmatism, materiality, and accountability. Investors, companies, and regulators are adapting by simplifying frameworks, improving data reliability, and focusing on measurable financial relevance. Turning pushback into progress requires anchoring ESG in sound governance, transparent reporting, and effective stewardship. Sustainability will remain credible only if it is useful: useful for managing risks, improving profitability, and channelling capital toward long-term economic and social resilience.

Keywords: *Pushback, Regulation, Narrative, Stewardship, Successful engagement, geographical differences, external expectations, regulators, clients, reporting, transparency, measurement, impact, value creation, Simplification, materiality, risks, resilience.*

KEY FINDINGS

1. ESG under pressure but evolving: The current ESG pushback—driven by political polarization, regulatory overload, and scepticism about financial materiality—has acted as a stress test, exposing weaknesses but also driving a more pragmatic, value-driven approach to sustainability.

2. Shift in narrative: Across regions, the ESG conversation is moving from idealism to financial relevance. Stakeholders increasingly expect a focus on materiality, profitability, and long-term competitiveness.

3. Quality over quantity in engagement: Asset managers are redefining stewardship—moving from counting engagements to measuring outcomes, and emphasizing data quality, material issues, and constructive dialogue.

4. Innovation through resistance: Pushback has accelerated the development of more robust, transparent, and data-driven financial products, as well as the use of digital and AI tools to improve ESG data, reporting efficiency, and credibility.

5. Need for simplification and convergence: Regulatory fragmentation continues to generate inefficiencies and asymmetries. Progress depends on clearer, interoperable standards and alignment between voluntary and mandatory frameworks.

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1. Understanding the Pushback

The ESG backlash is multi-dimensional. In the United States, political polarization has positioned sustainability as a cultural and ideological debate. In Europe, the main source of resistance arises from regulatory fatigue: while the EU has led the creation of a comprehensive sustainability framework (CSRD, SFDR, Taxonomy), the pace and complexity of reforms have generated confusion and operational strain. Poor scientific communication (e.g. replication crisis in ESG academic papers1) and excessive activism have also weakened credibility, underscoring the need to rebuild trust through evidence-based narratives.

2. Reframing the Narrative

Sustainability must be repositioned from a compliance exercise to a driver of financial and strategic value. For companies, this means integrating ESG into the core business model, not treating it as a parallel activity. For investors, it requires emphasizing materiality—focusing on ESG factors that truly affect risk, cost of capital, and long-term performance.
The narrative is shifting from *values-driven* to *value-driven*, highlighting the role of sustainability in profitability, competitiveness, and resilience.

At Telefonica, efforts with regards to ESG are focussed on delivering value and reducing risk. Concrete examples include:

- We are actively preparing for and protecting the company against climate-related risks, including natural disasters. For example, we were well insured and operationally equipped to manage the aftermath of the Dana storm in Spain and the floods in Brazil.
- By being fair, transparent, and accountable, we strengthen both our reputation and our customer relationships. This is reflected in our steadily improving Net Promoter Score (NPS), which reached 33 in Q2 2025—an increase of 12 points since 2017.
- Our solutions contribute to global decarbonization—57% of our B2B portfolio is now labelled Eco Smart. Think remote work, smart agriculture, and intelligent manufacturing. Sustainability is not just a responsibility; it's a revenue and growth driver, especially in regions like Europe and APAC where emissions reductions are mandated.
- Sustainability also enhances profitability. During the energy crisis, while energy prices soared, Telefónica was shielded thanks to long-term PPAs signed years earlier to secure renewable energy at stable costs.
- Being a responsible company is also key to attracting and retaining talent—particularly among younger generations. Our employee Net Promoter Score (eNPS) has risen consistently, reaching 75 in 2024.

3. Engagement Strategies that work

Effective engagement requires a shift from quantity to quality. Asset managers are increasingly prioritizing deeper interactions with companies, focusing on the most material issues—those directly connected to risk management, resilience, and long-term financial performance. The goal is no longer to measure success by the number of meetings held, but by the tangible changes those engagements produce.

Constructive dialogue supported by reliable, comparable data is essential to build trust and credibility. However, achieving this level of depth demands significant resources—both human and analytical. High-quality engagement requires time, specialized expertise, and access to robust data. As sustainability issues become more technical, asset managers must invest in capabilities for understanding sector-specific risks and in systems that integrate ESG information efficiently into investment analysis.

Recognizing these constraints, investors use different approaches to engagement, combining various models depending on their objectives, resources, and expertise. In some cases, this means working collaboratively with other investors or external partners to address systemic challenges, while in others, focusing on more targeted and direct dialogue with companies. What matters most is ensuring that each engagement is purposeful, well-informed, and capable of generating meaningful outcomes.

Engagement also extends beyond corporates. Dialogue with regulators plays an increasingly important role, as investors can offer practical insights on the

implementation burden, costs, and potential unintended effects of new regulations. By sharing data and real examples, asset managers can contribute to shaping more balanced and effective sustainability frameworks.

Tailoring the message remains critical. For institutional investors, engagement should demonstrate financial materiality—how ESG issues translate into volatility, cost of capital, or long-term value. For retail clients, the focus must be on clarity and simplicity: explaining where their money goes, what impact it achieves, and how it performs financially. Storytelling can be powerful, but it must always be backed by credible evidence.

Ultimately, engagement is not a communication exercise—it is a strategic tool for driving change, managing risk, and strengthening stewardship credibility.

From a corporate perspective, Telefonica welcomes the chance to engage with investors. Engagement facilitates ongoing dialogue and enables the nuanced exchange needed to explain circumstances and collaboratively identify pathways that align with investors' needs.

4. Innovation

Pushback has accelerated innovation in product design and reporting. Sustainability-linked instruments explicitly tie financing conditions to ESG performance. The ongoing review of SFDR and MiFID presents an opportunity to simplify disclosures and better align client preferences with product typologies.
The growing demand for proof and transparency is encouraging the use of digitalization and AI to identify inconsistencies, standardize information, and enhance forward-looking analysis, including scenario modeling and greenwashing detection. These tools can make engagement more effective by helping investors focus on the most financially relevant issues.

5. The Role of Investors and Asset Managers

Investors are adapting their stewardship models to a more polarized and uncertain environment. Asset managers have had to refine their approach to engagement and proxy voting, ensuring that decisions are grounded in clear financial rationale and adapted to regional sensitivities. The politicization of these themes—particularly in the U.S.—has demonstrated the importance of consistency in principles and proportionality in application.

Another key challenge is maintaining collaborative momentum. The withdrawal of certain large investors from collaborative engagement initiatives has tested the resilience of these alliances. For those who remain, the responsibility is twofold: to demonstrate that collaboration is not ideological but pragmatic, and to ensure that collective action continues to produce measurable impact. This moment of transition can also be an opportunity to strengthen purpose, sharpen priorities, and foster greater accountability within engagement coalitions.

At the same time, investors are enhancing the sophistication of their stewardship. The focus is shifting from measuring activity to evaluating results. Engagements are becoming more thematic and data-driven, emphasizing materiality and decision-useful information. Asset managers are also expected to be transparent about their escalation policies—how they act when companies are unresponsive—and to clearly explain their voting decisions, particularly on sensitive climate or social resolutions.

Finally, investors must continue to act as a bridge between markets, companies, and regulators. They have a unique position to promote coherence and interoperability across frameworks, advocate for pragmatic and proportionate regulation, and encourage data quality and comparability. Stewardship, in this sense, is not only about influence over investee companies, but also about contributing to a more stable, credible, and efficient sustainability ecosystem.

In summary, the role of investors must combine long-term vision with operational discipline, balancing ambition with realism. The objective is clear: to ensure that ESG integration remains not a matter of belief, but a matter of sound investment practice and responsible capital allocation.

6. Looking Ahead

Progress over the next years will depend on:

- Simplification and convergence of reporting frameworks to improve comparability and reduce inefficiency.
- Better data quality, enhanced through technology and human oversight.
- Outcome-based measurement, focusing on real progress rather than volume of disclosure.
- Balanced integration, embedding sustainability into financial strategy while maintaining proportionality and pragmatism.
- Commitment to engage – both from Asset Managers and corporates. It is a long-term play, which may derive value in the short term, but most certainly in the long-term.

CONCLUSIONS AND PROPOSALS

The current ESG pushback has acted as a catalyst for change, compelling investors, companies, and regulators to focus on what truly matters: materiality, proportionality, and impact. Rather than weakening the sustainability agenda, this period of skepticism is fostering a more mature, evidence-based approach—one that connects ESG performance with financial outcomes, competitiveness, and long-term value creation. Progress now depends on simplifying regulatory frameworks, ensuring consistency across jurisdictions, and improving the quality and comparability of data through technology and sound governance.

Looking ahead, the challenge is to transform disclosure into meaningful action and engagement into measurable outcomes. Building trust requires transparency, credible metrics, and a narrative that emphasizes pragmatism over ideology. The way forward is clear: focus on what is material, communicate with clarity, and collaborate effectively. ESG will remain credible only if it proves useful—for investors managing risks, for companies strengthening their business models, and for society seeking sustainable growth.

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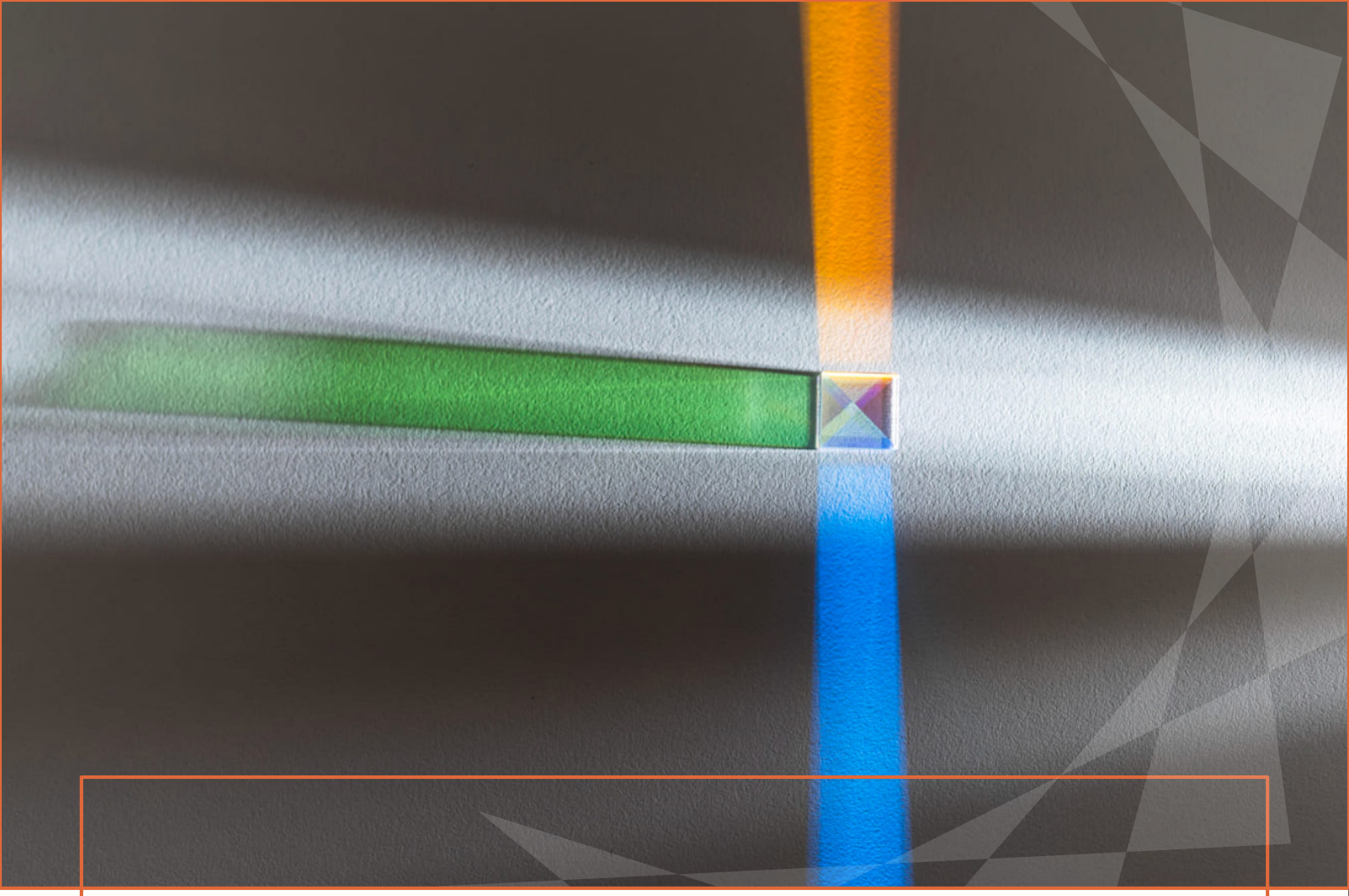

IMPACT INVESTING:

MAINSTREAM MOMENTUM OR NICHE PURSUIT?

Oxford Congress 2025 Conclusions

Jesus College (Oxford)
Thursday, 18th of September 2025

Yi Shi (Pictet Asset Management), **Diane Mak** (Allianz Global Investors) and **Ángela Pérez** (COFIDES)

Moderator: Pierre Garrault, Senior Policy Adviser, Eurosif, the European Sustainable Investment Forum (EUROSIF)

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PANEL DISCUSSION:

Impact Investing: mainstream momentum or niche pursuit?

ABSTRACT

Impact investing benefits from a positive momentum and is developing across private and public markets, in part supported by an adapting regulatory landscape.

Core principles - intentionality, measurability, and additionality - guide impact strategies. Based on these, various frameworks, methodologies and models can be used to deliver impact across different market segments, including private credit, and topics, such as social and biodiversity. These approaches can demonstrate credibility through robust, science-based methodologies, the use of internationally recognised tools and by leveraging investor engagement.

Despite this progress, challenges persist, such as defining additionality, addressing perceived trade-offs between impact and financial returns, onboarding institutional investors, and closing data gaps, particularly in emerging areas like biodiversity.

Convergence around key impact concepts and standardised metrics are essential to overcome these hurdles and scale up impact investing. As it evolves from niche to mainstream, impact investing offers a key opportunity to align financial performance with real-world social and environmental change.

***Keywords*:** impact, sustainable, social, environmental, biodiversity, measure, indicators, methodologies, comparability, greenwashing, regulation

KEY FINDINGS

1. From niche to mainstream: Impact investing is expanding rapidly across public and private markets, driven by regulation, investor demand, and real-world urgency.
2. Core principles remain key: Intentionality, measurability, and additionality are essential for credibility and distinguish impact from ESG.
3. Private credit gains traction: Embedded impact targets and predictable returns make it attractive for institutional investors.
4. Public markets drive scale: Stewardship and engagement enable impact across large, listed companies.
5. Progress in biodiversity metrics: Emerging tools are helping investors assess biodiversity risks and exposures.
6. Momentum in social impact: Legal frameworks like Spain's are enabling scalable, replicable models for social change.
7. Ongoing challenges: Data gaps, additionality debates, and return expectations remain barriers to growth.
8. Terminology matters: Clear definitions are needed to avoid impact-washing without excluding emerging players.
9. Regulation is evolving: New rules (e.g., UK SDR, ESMA, Spain's definition) are shaping the market and raising standards.
10. Engagement is critical: Active investor involvement ensures impact targets translate into real-world results.

CONTENT

Why invest with impact?

With the rising frequency of major environmental events and social movements, the objective of making the world a better place has gone from personal choice to a global necessity. This has raised awareness of the role capital can play to address these topics.

As the world faces mounting environmental challenges, the call for pragmatic, actionable solutions in sustainable finance has never been stronger. This is especially the case post-COVID, where there's strong demand for financial tools that address inequality and social inclusion. Globally, we see a convergence of regulatory progress, investor appetite for purpose, and the urgent need for systemic resilience.

Comprehensive impact investing is not just a moral imperative but a strategic necessity to protect people and the planet from economic and environmental shocks, while ensuring long-term value creation for investors.

Recent trends in impact investing

The impact investing market is rapidly expanding, reflecting a growing demand from sophisticated investors for credible, transparent, and purpose-driven strategies which also means that asset managers are increasingly identifying impact as a differentiating factor.

Globally, the GIIN indicates that Impact Assets under Management have increased at a compound annual growth rate of 21% over the past six years with an 11% increase over 2024 aloneGIIN State of the Market 2025[1]. This trend is verified for example in Spain, where especially since the COVID-19 pandemic, impact investing has gained unprecedented traction, multiplying the impact economy by three times since 2018, with an annual rate of 26%. Growth will persist as current funds expand, and new ones emerge.

This positive momentum is also verified across market segments.

— Private markets:

There has been a continued growth in interest in impact private markets investing, though the level of appetite differs across geographies. While some regions show signs of ESG fatigue, sophisticated investors draw a clear distinction between impact and ESG investing and increasingly seek investments into business models that deliver both financial returns and tangible, measurable impact.

In particular, investors saw an accelerated growth of interest in impact private credit, which has benefitted from the strong growth of private credit as an asset class overall, as well as from the accelerated growth of impact private equity in a market with limited pure play impact private debt fund players. Combined with private credit's attraction for institutional investors – given a more predictable income stream, shorter duration, and downside protection relative to Private Equity/Venture Capital – it has been an increasingly popular route for investors to invest in impact.

— Public markets:

Meanwhile, the investor community is becoming increasing aware of the crucial role impact investing can play in the public markets. While private market impact investing delivers deep, asset-specific impact, public market impact investing achieves scale by influencing listed companies whose operations affect communities and supply chains globally.

Impact investors in public markets use engagement and stewardship to directly influence corporate practices. This involves scrutinising companies' sustainability commitments, capital expenditures, and R&D priorities, setting measurable targets, and holding firms accountable for delivering progress. Such proactive ownership drives business model reform and encourages companies to integrate social and environmental impact at scale, amplifying the reach and influence of capital beyond the private markets.

[1] *GIIN State of the Market 2025*

How to define and measure impact?

Unlike ESG investing, which focuses on managing risk or improving corporate practices, impact investing is about actively contributing to measurable, positive change.

There has been good development of key principles and guidance for impact investing over the past years. Intentionality, measurability, and additionality are commonly considered as the core elements of impact investing. They are usually translated in investment approaches by establishing an impact objective, assessing impact materiality and additionality, and identifying key performance indicators to measure impact.

Engagement is also a key element, as it ensures that investments not only generate financial returns but also drive meaningful social and environmental change. Individual and collective investor engagement with investees informs impact target-setting and performance assessments and is essential to incentivising real-world change and delivering impact.

These elements can be applied to different market segments and objectives, resulting in various approaches and leading to the establishment of bespoke methodologies:

— Private impact credit

Interest is growing in impact private credit as an innovative response to generate impact and can help a range of different companies and projects across developed and emerging markets. This approach enables support to targeted companies and to innovative sustainable or social initiatives that may benefit from mission-aligned investors, and which may have less access to capital markets. The embedding of impact requirements in loan documentation, including for example impact targets and reporting requirements, enable lenders to engage with borrowers over the course of the investment to ensure impact objectives are met.

— Social impact investing

In Spain, where the June 2024 legal framework for impact was implemented, the social impact market is particularly dynamic, with product launches showing how public capital can unlock private investment at scale, some even highlighted by the United Nations as a use case of public innovation in achieving social challenges which confirms their value as a replicable model. Tools used in this space can include IRIS+, the Impact Management Platform, and alignment with SDG Impact Standards. Robust decision-making process, and governance are also highly relevant.

— Biodiversity impact investing

Biodiversity loss is now widely acknowledged as a material financial risk, yet investors have historically lacked the tools to measure or manage it effectively. Methodologies have emerged to map environmental pressures across countries and economic activities, tracing supply chain linkages worldwide and calculation of biodiversity

impacts throughout companies' value chains. Such models can provide investors with a picture of where risks and opportunities are concentrated and the portfolio exposures to such risks, while enabling them to identify and prioritise the main drivers of biodiversity loss, using this information in their engagement efforts towards targeted companies.

Ongoing challenges and debates

As a developing approach, impact investing still faces challenges to scale-up.

This includes the potential tension between the willingness to mainstream impact investing and its "niche" nature. The notion of additionality – achieving positive outcomes that would not have occurred without the investment – is the centre of many debates, as it is challenging to demonstrate, and even more so in some specific market segments (e.g. public markets). Furthermore, some projects may be additional but should not be categorised as impact investments unless they are also intentional and measurable.

A balance needs to be found in the definition of impact investing to enable its development. If the term is restricted too tightly, this would risk sidelining actors genuinely transitioning toward impact. But if the term is diluted, the risk is eroding trust and opening the door to impact-washing.

Another debate is the sometimes-perceived trade-off between impact objectives and financial returns. Some argue that there is always a trade-off between financial returns and impact, asserting that true impact investing necessarily involves concessionary or below-market returns. Others maintain that there is no trade-off, and that the most effective impact investments can and should yield fully commercial returns - particularly over extended time horizons. However, this binary perception seems increasingly outdated, as impact investing sits in a space where financial returns and impact can be balanced depending on the investment objectives.

A key challenge is the availability of shared metrics and data. There is still a significant need to improve impact convergence and data comparability to more robustly benchmark impact performance and to enable better impact decision-making. This data gap is even more challenging in emerging topics, such as biodiversity. Biodiversity underpins economic stability, yet its loss is poorly understood and rarely quantified in financial markets. Unlike climate change, where carbon metrics such as Scope 1 & 2 emissions are now mainstream, and where there are emerging standards around methodologies around e.g. avoided emissions calculations, biodiversity metrics are more complex, less standardised, and highly location dependent.

Challenges also include how to onboard institutional investors and whether approaches such as blended finance, shared-governance and risk-sharing, or support such as technical assistance in certain cases could help in this regard.

The regulatory landscape is adapting

Current regulatory frameworks and guidance (e.g. European and Singapore-Asia Taxonomies) are encouraging investments into sustainable economic activities and can already provide some of the growth drivers for impact investing.

National rules are developing in Europe. The UK's SDR label in setting expectations for impact. Spain's legal definition aligns with this trend. Defining impact for the first time, it offers much-needed clarity for investors and policy makers.

At the EU level, the ESMA guidelines on funds names provided more clarity by pushing back on the misuse of the term "impact." The upcoming review of the SFDR may also bring additional clarity for impact investing and further incentivise its development.

CONCLUSION

Impact investing is transitioning from niche to mainstream, fuelled by robust growth across markets, innovative approaches, and the development of dedicated regulatory frameworks.

By balancing financial returns with measurable social and environmental outcomes, impact investing offers a model adapted to value creation while delivering real-world change.

Convergence over key concepts, such as additionality, and more standardised and comparable metrics will be critical to sustaining momentum and ensuring credibility as the market matures.

RECOMMENDED READINGS:

- GIIN State of the Market 2025 (https://s3.amazonaws.com/giin-web-assets/giin/assets/publication/giin-stateofthemarket2025.pdf)
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BIODIVERSITY IN SUSTAINABLE FINANCE

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Q&A:

Biodiversity in Sustainable Finance

ABSTRACT

This panel examined how biodiversity isbecoming a core pillar of sustainable finance, with investors increasingly required to manage nature-related risks and opportunities. Speakers discussed the Taskforce on Nature-related Financial Disclosures (TNFD) as the emerging market reference for governance, strategy, risk management, and metrics & targets, and contrasted its evolution with TCFD. The discussion focused on implementation realities for asset managers—notably data gaps, non-standard metrics, and the conversion of ecological impacts into financially material insights and portfolio actions. Finally, the panel defined best-in-class corporate practice and the role of investor engagement in accelerating adoption, improving disclosure quality, and aligning business models with nature-positive outcomes.

Keywords: *Biodiversity; Nature-related risks; Dependencies & impacts; Risks & Opportunities; TNFD; TCFD; Governance; Metrics & Targets; Financial materiality; Portfolio integration; Investor engagement; Greenwashing; Nature-positive*

KEY FINDINGS:

- Biodiversity is becoming a more mainstream topic in finance following the signing of the Kunming Montreal Global Biodiversity Framework in 2022 and the development of disclosure frameworks. Investors are increasingly adopting measures to identify, assess and manage nature-related risks, dependencies and impacts, not only climate risks.
- TNFD is the reference framework for nature disclosure, echoing TCFD's four pillars while widening scope to nature dependencies and impacts; adoption is accelerating but remains voluntary and heterogeneous across sectors and regions.
- Challenges remain regarding implementation, including limited data availability, absence of standardized metrics, and difficulties in translating ecological impacts into financially material outcomes and actionable portfolio decisions.
- Leaders in biodiversity include governance accountability, strategy tied to sector-relevant pressures on nature, credible targets and KPIs, and transparent methodologies.
- Investors are increasingly using engagement strategies to influence corporate behaviour, pushing companies toward robust management of nature-related risks and opportunities, where these are material, TNFD-aligned disclosures, and nature-positive strategies.

CONTENTS

The panel opened by framing biodiversity as a **financially material theme** that intersects **physical risks** (e.g., disruption of ecosystem services such as water regulation, pollination and soil health) and **transition risks** (e.g., policy changes, liability exposure, shifting consumer preferences). For diversified investors, these risks surface through supply chains and asset locations, often in **nature-sensitive geographies**. Beyond risk, biodiversity presents **opportunities**—from nature-based solutions and ecosystem restoration to technologies and solutions that monitor, measure or mitigate nature loss—provided capital allocators can distinguish **credible impact pathways** from marketing claims.

Afterwards, the panelists discussed the role of the TNFD, which mirrors TCFD across Governance, Strategy, Risk Management, and Metrics & Targets, but **expands beyond climate to incorporate nature dependencies and impacts** alongside risks and opportunities. Whereas **TCFD is embedded in multiple regulatory regimes**, TNFD remains **voluntary**—yet is gaining momentum as investors request nature-related transparency and issuers seek coherence with emerging standards. The panel highlighted that TNFD's emphasis on **location, ecosystems, and drivers of nature loss** introduces analytical complexity but ultimately enhances decision-usefulness for capital markets. It also discussed TNFD's LEAP process, which involves the following steps for corporates to assess:

1. Locate your interface with nature;
2. Evaluate dependencies and impact that your activities have on nature;
3. Assess the risks and opportunities arising from those dependencies and impacts;
4. Prepare to integrate the findings into governance, strategy, risk management, and metrics / targets.

Corporate responses to TNFD (over 500 organisations had adopted the recommendations of the TNFD at the time of the FIDE event) are **uneven**. Some early movers are integrating **board oversight**, while gaps remain at the stage of **high-level commitments** with limited underlying metrics. The divergence reflects sectoral exposure, data scarcity, and internal capabilities. The panel underscored that **investor demand for comparability** is accelerating convergence, but methodology choices and metrics still vary widely.

While TNFD is voluntary, the **regulatory direction of travel** is toward stronger nature-related disclosure expectations. Asset owners increasingly ask managers to **evidence alignment** with emerging frameworks. Issuers that proactively map **nature hotspots**, integrate **site-level risk management**, and build **traceability** are better positioned for future requirements and for **cost of capital** advantages tied to improved risk profiles.

Asset managers face three core frictions. First, **data scarcity and quality**: biodiversity metrics are dispersed across providers, often modeled, and **location-dependent**,

complicating aggregation. Second, **metric standardization**: translating ecological indicators (e.g., habitat condition, deforestation footprints, water intensity) into **financial materiality** and portfolio-level KPIs remains challenging. Third, **integration in investment processes**: aligning research, risk systems and active ownership to **prioritize nature-material holdings** requires new tools, and **cross-functional expertise** spanning sustainability, investment and data science.

Panelists discussed **what "good" looks like from a biodiversity point of view—and how to assess it**. In this sense, from an investor perspective, leaders in biodiversity exhibit:

- **Governance** with clear board and management accountability for nature; management remuneration that is linked to non-financial KPIs
- **Strategy** that identifies material **risks** (e.g., land-use change, freshwater use, pollution) and **dependencies** (e.g., water availability, pollination) and links them to business models and capital allocation, and potential opportunities
- **Clear disclosure of nature related data** (water, deforestation, waste, location), and a **commitment to align with or adopt the recommendations of the TNFD**
- **Metrics & Targets** that are **relevant, comparable, and location-specific**;
- **Transparent methodologies** (baselines, estimation techniques, and uncertainty ranges) that reduce **greenwashing** risk.
- **Stakeholder engagement and leadership** – taking a **proactive stance** to drive more positive outcomes **nature related outcomes.**

The panel emphasized **active engagement with issuers** as a primary driver of improvement. Effective engagements are **thematic** (e.g., deforestation, water stewardship), **time-bound**, and anchored in **clear asks** (TNFD-aligned disclosures, target adoption, traceability milestones). Success metrics include **disclosure quality**, **policy adoption**, and **demonstrable reductions in pressure indicators** (e.g., verified no-conversion in priority biomes). Collaborative engagements can mitigate data asymmetries and reduce the burden on issuers, while **escalation pathways** (voting, resolutions, divestment in last resort) maintain credibility.

Nature-themed strategies are evolving from **exclusionary screens** to **explicit nature-positive objectives**. Portfolio managers are steering thematic funds (restoration, clean water, circular economy, sustainable land use, sustainable food, green technology) and embedding **nature KPIs** in broader ESG strategies. Policy signals and market demand are channelling a **pipeline of investable projects**, though the panel stressed the importance of **impact integrity** and **additionality** in any nature-linked product. In this respect, clear engagement targets and bottom up KPIs for monitoring impact outcomes are important elements that need to be incorporated into the impact case and theory of change for individual investments.

CONCLUSION AND PROPOSALS:

To address these challenges, several proposals can be made:

1. **Adopt TNFD-aligned governance and strategy**, even where disclosure is voluntary, to build internal capabilities and anticipate to risks while taking advantage of opportunities.

2. **Close data gaps collaboratively** (issuers–investors–providers): prioritize **location-specific** data on dependencies/impacts; disclose methodologies and uncertainty to enhance credibility.

3. **Standardize KPIs and methodologies** by sector: mix **pressure indicators** (e.g., land conversion, water withdrawals in stressed basins) with **outcome measures** where feasible; set time-bound **targets** and interim milestones.

4. **Integrate biodiversity into investment processes**: add nature screens to research notes, embed analytics in risk systems, and align portfolio monitoring with interim milestones and targets.

5. **Scale effective engagement**: systematically incorporate biodiversity into engagement programmes, and link **voting policies** to nature-related performance and disclosure progress to avoid greenwashing and take advantage of the opportunities.

6. **Develop nature-related strategies** to channel capital toward credible **nature-positive** opportunities.

LINKS TO RECOMMENDED READINGS / SPECIFIC BIBLIOGRAPHY:

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- Taskforce on Climate-related Financial Disclosures (TCFD) – Framework: https://www.fsb-tcfd.org/
- Finance for Biodiversity Foundation – Investor initiatives & tools: https://www.financeforbiodiversity.org/
- Science Based Targets Network (SBTN) – Nature targets guidance: https://sciencebasedtargetsnetwork.org/
- UNEP-FI Nature workstream – Nature-related risk management resources: https://www.unepfi.org/themes/nature/

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5 KEY QUESTIONS FOR THE FUTURE OF SUSTAINABLE INVESTMENT

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PANEL DISCUSSION:

5 Key Questions for the Future of Sustainable Investment

ABSTRACT

This paper examines how sustainable investing should adapt amid political backlash, regulatory uncertainty and shifting geopolitics. We will assess the material effects of anti-ESG initiatives and policy reversals, conduct a candid diagnostic of missteps, and outline credible course-corrections. Particular attention will be paid to the direction of capital flows across energy and defence and to whether prevailing definitions of "sustainability" should evolve. The discussion aims to reframe the narrative toward outcomes-oriented practice, disciplined stewardship and long-term value creation.

Keywords: *sustainable investing, ESG backlash, regulatory uncertainty, energy transition, capital flows, stewardship, credibility gap, transition finance, private markets, defence finance, disclosure standards, financed emissions, just transition, systemic risks, long-term value creation*

KEY TOPICS TO DISCUSSED DURING THE COLLOQUIUM

- Responding to political and regulatory pushback; distinguishing symbolic moves from rule-specific, material impacts.
- Lessons learned from exuberant pledges, data limitations and regulatory design; pathways to restore credibility.
- Outlook for capital flows into the energy transition, including enabling infrastructure and efficiency.
- Guardrails for transition assets to avoid carbon lock-in and stranded-asset risk; role of private markets and blended-finance vehicles.
- Defence finance: governance standards, transparency and investor stewardship.
- Improving disclosure on financed emissions, use-of-proceeds and just-transition outcomes, communicating uncertainty and trade-offs.
- Reframing objectives: corporate improvement, risk management, real-world outcomes and capital for systemic challenges.

CONTENTS

Framing the backdrop.

The past decade had seen rapid expansion in ESG strategies, regulation and corporate commitments; the present appeared more contested. Political pushback—especially visible in the United States—coexisted with sizeable pipelines in clean energy, grids and mobility. The panel distinguished between signalling effects and rule-specific changes that altered risk, cash flows and the cost of capital. It also weighed second-order impacts from tariffs, supply-chain re-shoring and climate-reporting requirements on investee business models and portfolio construction. The objective was to replace blanket narratives (either "ESG is over" or "ESG is inevitable") with rule-by-rule analysis of where risks and opportunities truly moved.

What went wrong—and what must change.

A credibility gap had opened where ambitious pledges, labels and taxonomies sometimes outpaced delivery and verifiable outcomes. Methodological opacity, inconsistent data and incentives for box-ticking had undermined confidence; in places, regulatory design had blurred distinctions between financial materiality and broader societal goals.

The panel debated practical course-corrections:

1. **aligning claims** with time-bound transition plans and decision-useful KPIs;
2. strengthening stewardship by **linking engagement objectives to capital allocation** and voting;
3. sharpening the **distinction** between exposure to solutions, exposure to transition, and exposure to business-as-usual; and
4. **improving client communication on uncertainty**, trade-offs and the plausible pace of change.

Flows, sectoral implications and evolving definitions.

The discussion considered **likely trajectories for sustainable investment flows**. In energy, investors were re-balancing from pure-play renewables to enabling infrastructure (grids, storage, flexibility), efficiency and selective transition assets—applying guardrails to avoid carbon lock-in and stranded-asset risk. Private markets' role was growing as capital intensity rose while public-market signals remained noisy; blended-finance structures and concessional capital could be catalytic where positive externalities were large and private returns thin. In defence, heightened security priorities required robust governance, transparency and safeguards on

collateral impacts. The panel discussed frameworks that would permit consideration of resilience or sovereign-security objectives without mis-labelling core defence activities as "sustainable investments," and how to reflect this nuance in mandates and disclosures. Overall, the definition of sustainability appeared likely to become more granular, with clearer boundaries and a greater emphasis on credible transition pathways.

Reframing the narrative and goals.

The debate often oscillates between morality tales and narrow risk management. The panel proposed a pragmatic narrative: sustainable investment as **disciplined capital allocation** under uncertainty, focused on financially material risks and opportunities, complemented by stewardship that could plausibly influence corporate behaviour and system outcomes over time. It also addressed how to communicate the **limits of investability** (what markets can and cannot solve), how to report progress in a time-consistent way, and how to align incentives so that short-term performance pressures did not crowd out genuine long-term transition.

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This document has been prepared by professionals who are part of the Fide's 2025 Annual Oxford Congress. In this section, we wish to highlight them all, acknowledging their vast contributions to the project.

Below, we share the complete list of professionals who have participated in this document, either by being part of one of the panels, presentations or keynotes, or by having attended the 2025 Oxford Congress and shared their views with the rest of the congress' attendees.

We wish to thank them all for their invaluable insights, with a special acknowledgement to the members of the Scientific Committee:

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Present at the 2025 Annual Oxford Congress.

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