



SEMINÁRIO CRIAÇÃO DE VALOR E VALUATION COM ESG

21/10/2024

Apoio:

NAMBBU

Entidades apoiadoras:

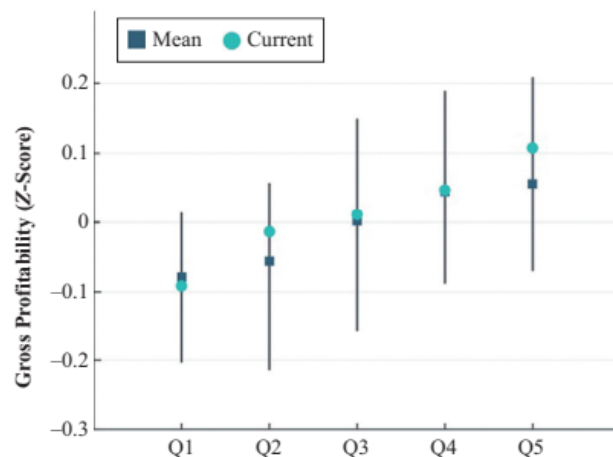
ABRASCA / ANCORD / ANEFAC / COFECON
CORECON SP / CRA-SP / IBRI

MSCI: Como ESG Afeta Valuation, Risco e Performance do Mercado de Equity

- **Main Metrics of the Study:**

- 1,600 constituents of the MSCI World Index;
- From Jan 2007 to May 2017;
- Q1= Companies with Lowest ESG Ratings;
- Q5= Companies with Highest ESG Ratings

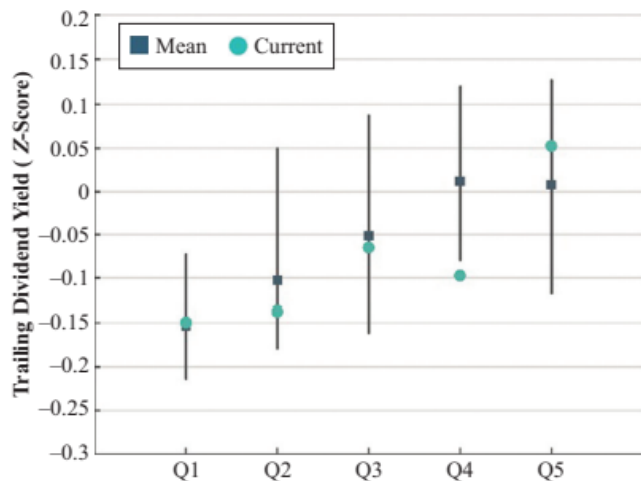
Gross Profitability of ESG Quintiles



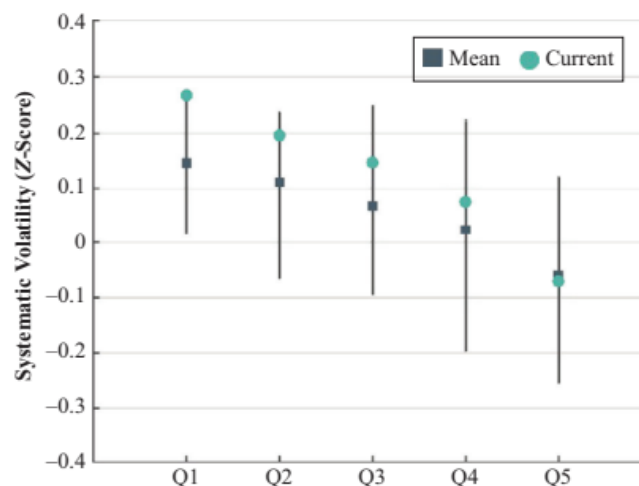
Financial Performance of Top versus Bottom ESG Momentum Quintile



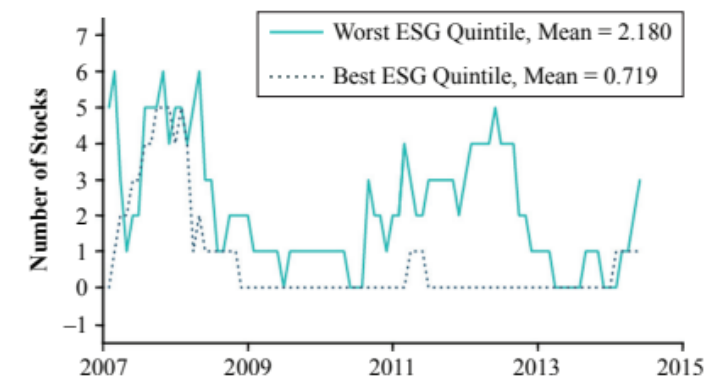
Trailing Dividend Yield of ESG Quintiles



Systematic Volatility of ESG Quintiles



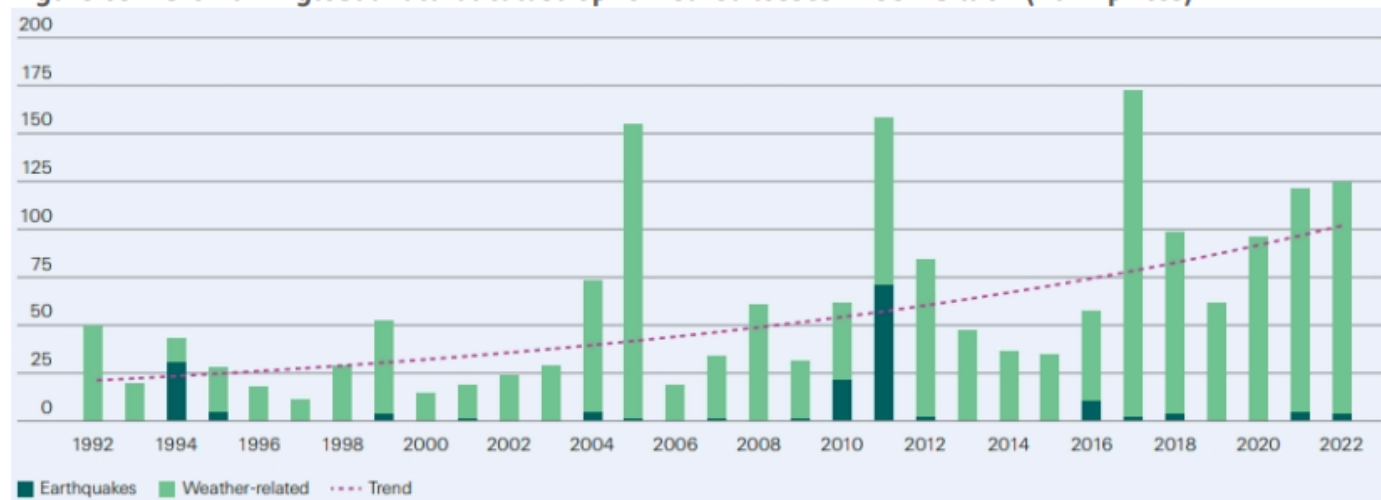
Idiosyncratic Incident Frequency of Top and Bottom ESG Quintiles



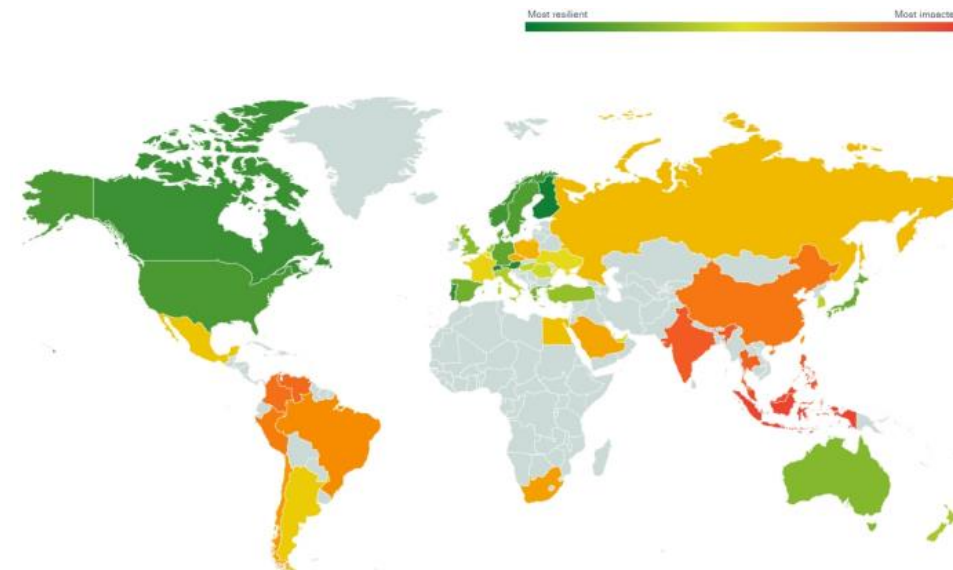
Países em Desenvolvimento Serão Mais Afetados Por Eventos Climáticos Extremos

- Swiss Re Institute also publishes a Climate Economics Index to estimate the climate exposure of 48 countries representing 90% of the world economy, ranking them according to their climate resilience. **Brazil ranks in 38th place (with #1 being most resilient), and Latin America in its entirety is highly exposed to climate change impacts**, given its location in a tropical area and its substantial dependence on agriculture, tourism, and service activities. In the case of **Brazil** specifically, according to Aon insurance company, losses from natural disasters totaled US\$3.8 billion in 2020, US\$ 6.1 billion in 2021 and US\$5.5 billion in 2022 (**between 0.2%-0.4% of the GDP**).

Figure 69 - Growth in global natural catastrophe insured losses in USD billion (2022 prices)



Source: Swiss Re Institute



Projeções de Crescimento Global Ainda Não Incluem Perdas de Mudanças Climáticas

FIGURE 2. Global economic losses associated with unchecked climate change.¹

Region	Net present value, 2021–2070 (\$ trillion)	GDP impact in 2070 (\$ trillion)	GDP impact in 2070 (%)
Asia Pacific	-96	-16	-9.4
Europe	-10	-1	-1.5
Americas	-36	-4	-5.7
Total (modeled regions)	-138	-20	-6.8
Africa, Middle East, and Rest of World (estimate) ²	-40	-5	-14.7
Global ³	-178	-25	-7.6

FIGURE 4. Net economic benefits associated with limiting warming to close to 1.5°C¹

Region	Net present value, 2021–2070 (\$ trillion)	GDP impact in 2070 (\$ trillion)	GDP impact in 2070 (%)
Asia Pacific	47	9	5.7
Europe ²	-1	1	1.8
Americas ²	-3	1	1.6
Total (modeled regions) ³	43	11	3.8

Losses by Industry NPV 2021-70 Considering Average Global Temperature Increase of 3oC (US\$ trillion)

	Asia Pacific	Europe	US	South America	Africa, Middle East and Rest of the World	Total Losses per Sector
Public and Private Services	5.5	3.2	7.8	7.1	-	23.6
Manufacturing	3.2	1.3	2.9	3.5	-	10.9
Retail and Tourism	3.0	0.7	1.7	2.3	-	7.7
Construction	1.6	0.4	0.9	1.3	-	4.2
Transport	0.7	0.3	0.3	0.7	-	1.9
Conventional Energy	0.6	0.1	0.2	0.3	-	1.2
Agriculture and Forestry	0.5	0.0	0.0	0.8	-	1.3
Resources/Materials	0.5	0.1	0.2	0.5	-	1.3
Water and Utilities	0.1	0.1	0.2	0.2	-	0.5
Clean Energy	0.1	0.2	0.2	0.1	-	0.6
Other Losses	80.2	3.7	0.2	0.2	40.5	124.8
Total Losses per Region	96.0	10.0	14.5	17.0	40.5	178.0

FIGURE 3. Economic impact associated with climate change



Principais Fatores ESG Que Podem Afetar a Performance Financeira das Empresas

Environmental:

- Environmental Fines
- Carbon Taxation
- Efficient Use of Natural Resources and Energy
- Water Scarcity
- Clean Sources of Energy

Social:

- Employees' Satisfaction, Diversity, Incentive Plans, Turnover, Retention, Training, and Litigation
- Clients' Satisfaction, Complaints, and Litigation
- Accidents Among Employees and Communities
- Improving Communities Development, and Litigation with Communities
- Products' Traceability and Suppliers' Monitoring

Governance:

- Reputational Risk
- Transparency
- Corruption, Fraud, and Litigation
- Compensation Practices
- Long-term strategy focused on sustainable results
- Innovation

Estimativa de Projeção de Custo Com Compensação de Emissões de CO2

Ibovespa Data	
2020 Scope 1 Emissions (tons)	136,967,288
2020 Scope 2 Emissions (tons)	8,984,836
2020 Scope 3 Emissions (tons)	1,267,650,396
Total GHG Emissions Scopes 1+2	145,952,124
Total GHG Emissions Scopes 1+2+3	1,413,602,520
Total 2020 Operating Results (million R\$)	649,393

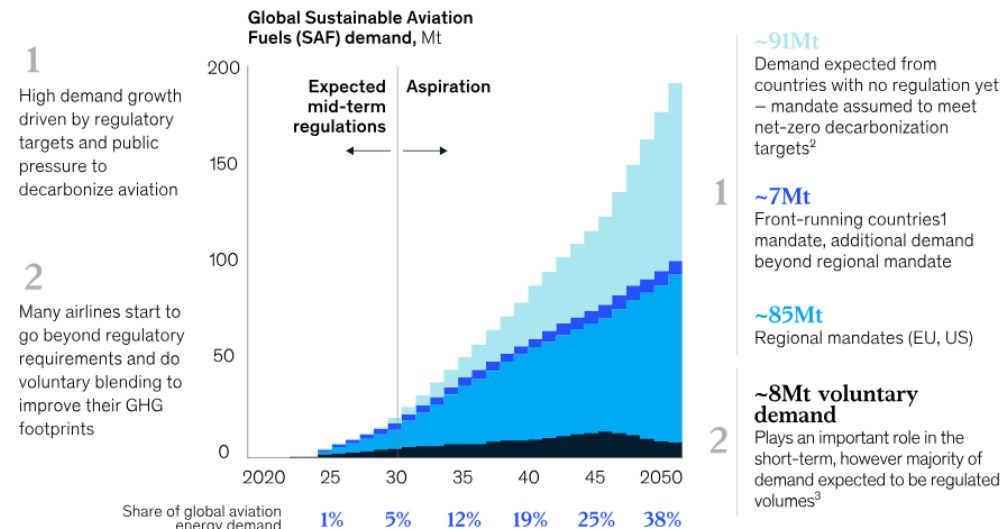
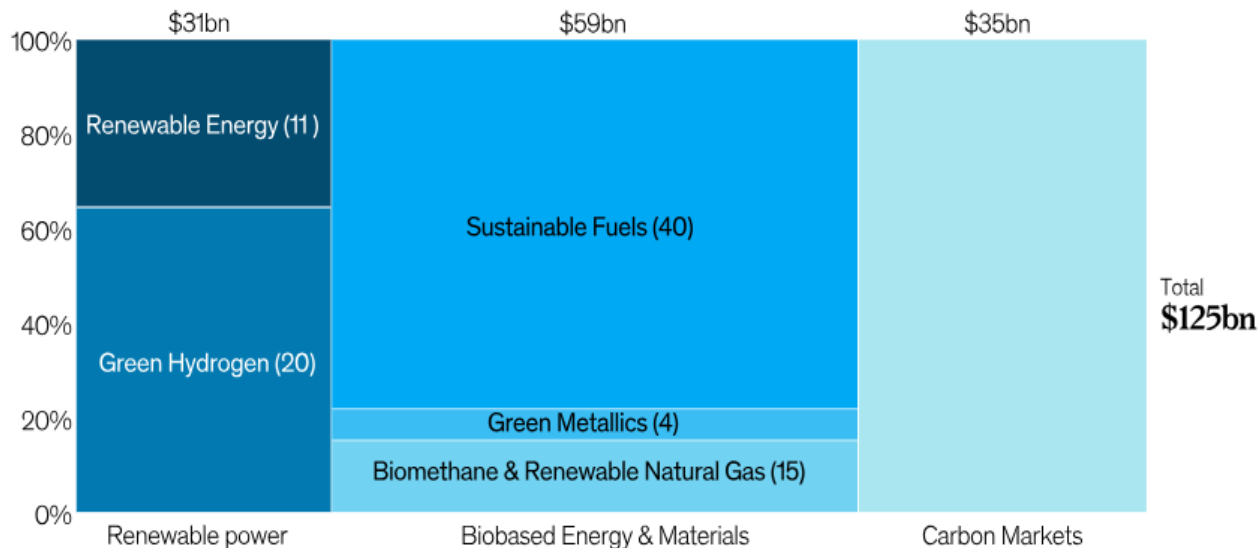
	Carbon Price R\$25 / US\$5 / GBR4		Carbon Price R\$50 / US\$10 / GBR8		Carbon Price R\$100 / US\$20 / GBR16	
	Scopes 1+2	Scopes 1+2+3	Scopes 1+2	Scopes 1+2+3	Scopes 1+2	Scopes 1+2+3
Cost R\$	3,648,803,100	35,340,063,000	7,297,606,200	70,680,126,000	14,595,212,400	141,360,252,000
% Adj EBITDA (or Banks' EBT)	0.6%	5.4%	1.1%	10.9%	2.2%	21.8%

	Total Cost of Offsetting Scope 1+2 Emissions					
	Carbon Price R\$300 / US\$60 / GBR49		Carbon Price R\$875 / US\$175 / GBR140		Carbon Price R\$1,250 / US\$250 / GBR200	
	Stable Emissions	Emissions-40% by 2030	Stable Emissions	Emissions-40% by 2030	Stable Emissions	Emissions-40% by 2030
Cost R\$	43,665,939,000	26,199,563,400	127,358,988,750	76,415,393,250	181,941,412,500	109,164,847,500
	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA
Total Ibovespa Op Results (mn R\$)	1,455,531	873,319	4,245,300	2,547,180	6,064,714	3,638,828
Total Op Result Increase	124%	34%	554%	292%	834%	460%
Required Yearly Growth 2020-30	8.4%	3.0%	20.6%	14.6%	25.0%	18.8%
Required Yearly Growth 2020-50	2.7%	1.0%	6.5%	4.7%	7.7%	5.9%

	Total Cost of Offsetting Scope 1+2+3 Emissions					
	Carbon Price R\$300 / US\$60 / GBR49		Carbon Price R\$875 / US\$175 / GBR140		Carbon Price R\$1,250 / US\$250 / GBR200	
	Stable Emissions	Emissions-40% by 2030	Stable Emissions	Emissions-40% by 2030	Stable Emissions	Emissions-40% by 2030
Cost R\$	423,961,057,800	254,376,634,680	1,236,553,085,250	741,931,851,750	1,766,504,407,500	1,059,902,644,500
	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA	3% Adj EBITDA
Total Ibovespa Op Results (mn R\$)	14,132,035	8,479,221	41,218,436	24,731,062	58,883,480	35,330,088
Total Op Result Increase	2076%	1206%	6247%	3708%	8967%	5340%
Required Yearly Growth 2020-30	36.1%	29.3%	51.4%	43.9%	56.9%	49.1%
Required Yearly Growth 2020-50	10.8%	8.9%	14.8%	12.0%	16.2%	14.2%

Opportunities Para o Brasil com a Transição Energética

By 2040, the total estimated opportunity for Brazil is USD ~125bn



Governo projeta impacto de R\$ 772 bi com Plano de Transformação Ecológica até 2050

Ministério da Fazenda prevê impulso inicial de até 3% do PIB até 2026 com políticas para o mercado de carbono, obras do PAC e programa voltado à agricultura de baixo impacto, entre outras iniciativas

Obrigada!!!

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