

CARBON

FOOTPRINT REPORT

2022

FAMA

INVESTIMENTOS

SUMMARY

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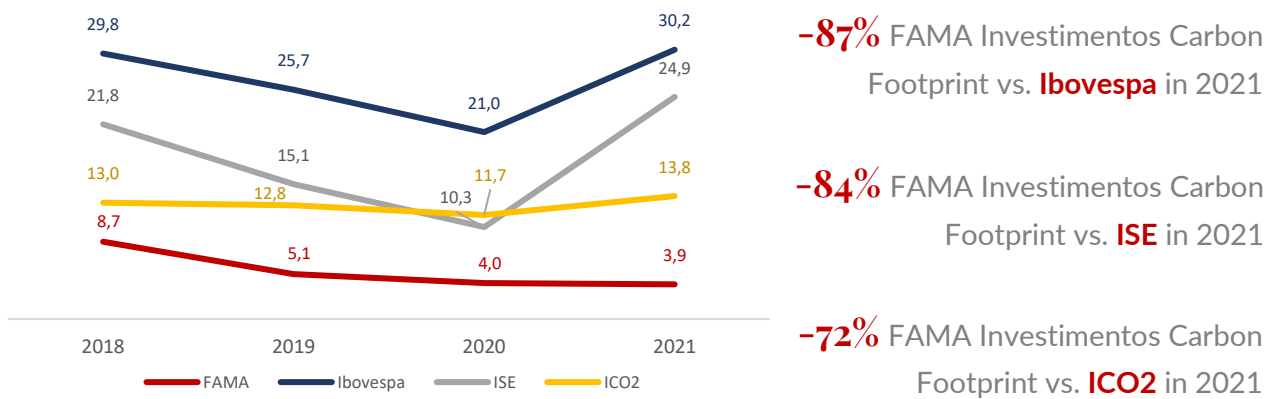
HIGHLIGHTS

FAMA Investimentos is committed to a low carbon economy...



*of our invested amount portfolio

... and part of that commitment is based on carbon emissions management, as well as transparency.



We demand quality data from companies, allowing us to achieve more realistic results.

87% of FAMA Investimentos portfolio data in 2021 are high quality data

82% for the Ibovespa Index
97% for the ISE Index
93% for the ICO₂ Index

INTRODUCTION

FAMA Inverimentos Climate Transition Plan

Investment

The basis of our climate transition plan is reflected in our [Stewardship Code](#), which describes our approach to climate change and how we are dealing with the risks and opportunities that arise alongside our investee companies.

Its main pillar is reflected in our public commitment to achieve zero net emissions by 2050 or earlier, as one of the founding members (the only one in Latin America) of the [Net Zero Asset Managers – NZAM](#) initiative, which exemplifies the importance of this topic for us, being transversal to our investment strategy.

As a starting point, we defined our intermediate goal according to the initiative's recommendations. Following several analyses, we chose to implement the “*SBTi Portfolio Coverage*” methodology, which consists in establishing a portfolio percentage comprising science-based emission reduction targets – established and validated by the SBTi initiative (*Science Based Target Initiative*) – by 2025, and to reach 100% of the portfolio by 2040.

We are committed to a low carbon economy

Achieve
28.6%*
with SBTi targets
by 2025

Achieve
100%*
with SBTi targets
by 2040

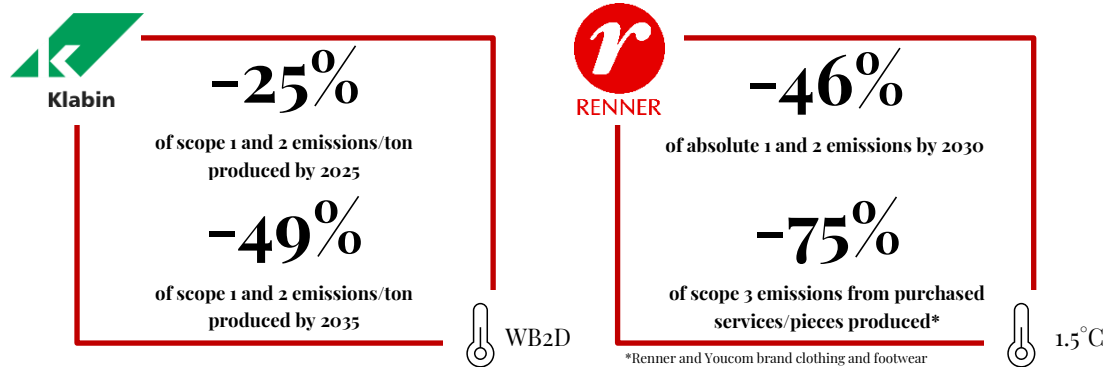
Achieve
net zero
by 2050

* of our invested amount portfolio

FAMA | Inverimentos

As reference, none of our portfolio companies had established any emission reduction targets in 2019 (the base year). Today, 46% of our invested amount portfolio has established targets, 16% of which have been verified by SBTi, specifically the commitments assumed by Klabin and Lojas Renner, both also committed to achieving zero net emissions by 2050.

In addition, by the time of this report's publication, two additional portfolio companies, MRV and Arezzo, committed to the SBTi initiative and have up to two years (from the commitment date) to establish and validate their goals alongside the initiative.



We chose the “SBTi Portfolio Coverage” methodology because it guarantees that the goals established by our investee companies are sufficiently robust and ambitious to contribute to the transition to a low-carbon economy and to the achievement of global climate goals within a suitable time. Our portfolio includes companies with established emission reduction targets, although not verified by the initiative, which will become the target of engagement so that such goals become linked to SBTi-proven scientific methodologies.

To monitor our progress concerning our commitments, we carry out an annual carbon footprint assessment of our operations, including scopes 1, 2 and 3, the latter comprising our most significant source of emissions (mainly category 15, which pertains to our main activity: investments) based on the [PCAF](#) methodology. We were the first Brazilian asset manager to measure and publish a Carbon Footprint Report.

Our assessments, which include those reported herein, employ vertical and horizontal analyses to measure our portfolio's carbon footprint against different benchmarks, and carry out comparisons to previous years. The latest analysis indicates that our portfolio gross CO₂ emissions intensity in 2020 was well below the benchmarks, namely 83% lower than Ibovespa, 63% lower than ISE (B3 Corporate Sustainability Index) and 67% lower than ICO₂ (B3 Carbon Efficient Index).

A 55% drop in our gross portfolio's carbon footprint was also noted in 2020 compared to 2018, due to emissions decreases from some of our investee companies, as well as the allocation of assets with lower greenhouse gas (GHG) emissions.

The carbon footprint of our liquid portfolio is negative, which means that it absorbs more CO₂ than it emits.

FAMA | Investimentos

Part of our climate management is centered on testing different climate scenarios ("stress tests") and quantifying potential carbon pricing-derived impacts on our investees and our portfolio, especially given the uncertainties of a regulated carbon market for Brazil and any possible impacts derived from carbon market regulation in other countries.

We have also implemented an "Implied Temperature Rise" analysis, which allows us to understand the contributions of our companies and portfolio to the global objective of maintaining the temperature increase up to 1.5°C. Bearing in mind that companies can employ different units and deadlines and include different scopes in their climate commitments, the CDP and WWF "Temperature Rating" tool proves to be an excellent alternative, as it translates all this data into temperature data and, therefore, allowing for better comparisons and prioritization of our actions, both in terms of portfolio construction, as well as engagement and advocacy.

For example, based on the results, we can define specific engagement plans for each company with aims adapted to the advances and climate challenges of each of them, prioritizing those that represent the greatest risks to the stability of our results.

Due to the current scenario regarding the establishment of emission reduction targets, where few companies have committed themselves and many have not yet verified the robustness of these targets and alignment with scientific methodologies verified by a third party, we note alarming results that demonstrate a negative contribution of our portfolio to temperature increases.

However, we believe that our engagement efforts concerning this climate front, alongside the investee companies, can result in an encouraging outlook in the coming years.

Engagement

Climate change is a **cross-cutting topic of engagement** for FAMA Investimentos

Although we are aware that it equally impacts all investee companies, we understand that, given its characteristics – mainly the limited time we have to act, as well as the progress made at measurement and reporting – considering the topic as material for all companies is the most appropriate approach.

However, this does not mean that climate engagement plans are the same for all companies; the aims vary according to their respective progress and transparency levels. The assumptions we demand from our investees are based on the TCFD (Task Force on Climate Related Financial Disclosures), detailed below:

- Analysis of scope 1, 2 and 3 emissions;
- Establishment of a climate governance structure and clear climate change management strategy;
- Integrated climate risk and opportunity management;
- Carbon emissions reduction targets based on science-based methodologies and validated by the Science-based Targets Initiative;
- Maximum caution when offsetting residual carbon emissions with carbon credits. We reinforce that carbon credits should only be used if there are remaining emissions following the implementation of a robust decarbonization plan. We also reinforce the need to guarantee the quality of those credits;
- Full transparency regarding these issues and others related to the climate agenda.

Our close relationship with our investees makes engagement our main and best stewardship tool. All engagement plans contain clear objectives, a detailed timeline, and escalation methods to be triggered if the engagement is not successful under previously established conditions. Plans are essential for the efficient use of resources towards concrete results and allow for detailed monitoring, also acting as inputs in the iterative investment analysis and decision-making process.

Still concerning the engagement sphere, we have led and supported collective engagements through institutions like the CDP and IPC (Investors for the Climate, acronym in Portuguese). Although we prefer individual engagements due to proximity with our investees, we recognize the benefits of collective engagements.

In 2022, we led the CDP campaign “CDP Non-Disclosure Campaign”, which aimed to encourage all our investee companies, on behalf of other CDP signatory investors, to provide information on climate, water and forest management and supported the CDP SBTi campaign for the third consecutive year, which encourages the world's most carbon-intensive companies to commit to scientific emission reduction targets aligned with a maximum temperature increase of 1.5°C.

Advocacy

We have supported local and international statements addressed to Brazilian policy makers demanding greater climate ambition aligned with the commitments made through *The Paris Agreement*, the adoption of carbon pricing mechanisms and the implementation of a regulated carbon market. We have demanded more robust inspection structures and environmental enforcement to eliminate deforestation, as well as mandatory corporate climate risk disclosure.

Several of the concerns and requests are mirrored in the following statements to which we are signatories:

Global Investor Statement to Governments on the Climate Crisis

FAMA Investimentos is the only Brazilian signatory

Declaração do Setor Empresarial Brasileiro

Only 5 Brazilian investors

Investor Statement in support of resilient low-carbon transition policies

Only 20 Brazilian investors

Given the ongoing construction of the sustainability and ESG Investments ecosystem, we believe it is important to contribute to the creation and development of initiatives such as [The Taskforce on Nature Related Financial Disclosures \(TNFD\)](#), which we have supported since its founding as part of the Initial Working Group, contributing to its scope definition. It is important to emphasize the interdependence

between Climate and Biodiversity, making it impossible to succeed in a climate transition plan without considering its risks, impacts, and dependencies with biodiversity.

In this regard, we welcome the advances made at the COP15 (United Nations Conference on Biodiversity), where the [Kunming-Montreal Global Biodiversity Framework](#) (GBF) was published, consisting in a biodiversity framework to be adopted by over 180 signatory countries that seeks collective collaboration to reduce biodiversity losses while promoting the equitable distribution of benefits derived from nature.

The framework consists of four macro-objectives to be achieved by 2050 and 23 guiding goals to be achieved by 2030, which discuss several essential themes, such as the effective conservation and maintenance of at least 30% of the world's land and water areas and the restoration of at least 30% of degraded land and water areas.

Other goals address high-impact sectors, such as agriculture – key to the economic stability of Brazil and the region, and demand greater action and transparency from the corporate sector and financial market concerning the risks, dependencies, and impacts of biodiversity on its operations, supply chain and portfolios – basically in line with the TNFD purpose.

Other initiatives we have supported include the aforementioned *Net Zero Asset Managers* and the [Aligned Accountability](#) project led by Global Canopy, which aims to build a corporate performance metrics database on deforestation that will be useful in decision-making by financial institutions. The Working Group for this project has the support of 11 international asset managers, with FAMA Investimentos being the only one based in Latin America.

Accountability

Every year, as a signatory to the PRI (since 2011) and the UN Global Compact (since 2020), we produce two reports that detail how we are embodying the PRI's six principles and contributing to the UN Global Compact's ten principles.

Since 2021, the PRI report has undergone several changes concerning both structure and scoring methodology, with one of the highlights comprising the inclusion of a new module following TCFD guidelines focused on climate change. Since 2021, this report has also served as a transparency tool to disclose our actions and advances regarding our climate commitment (*Net Zero Asset Managers*).

We obtained a five-star score (maximum score) in the last PRI report (2021) for the “Investment Policy & Stewardship” and “ESG Integration into the investment process” modules. We also obtained the

highest score (A+) for the “Strategy and Governance” and “ESG Incorporation” modules in the previous report (2020).

Every year we also voluntarily report our Carbon Footprint, the focus of this report, and since last year under the PCAF methodology, which is endorsed by the GHG Protocol, CDP and SBTi.

We also publish a quarterly Stewardship Report summarizing our commitments, engagements, votes, internal initiatives, and general updates, as well as advocacy efforts.

The details of our climate agenda, described in this report, are also presented as a global case study by The Investor Agenda, following the [ICAPs](#) (Investor's Climate Action Plans) Expectations Ladder framework, which suggests a series of initiatives to be implemented by investors towards a low carbon economy. These initiatives are specifically related to governance and four other interconnected areas, namely investment, corporate engagement, advocacy, and disclosure. We were the only asset manager based in Latin America to be among the first round of case studies published in January 2022.

Our climate transition plan also earned us a finalist classification in the 2022 PRI Awards, in the “Real-world Impact of the year” category, making us the only asset manager based in Latin America to reach the finals.

In addition to providing transparency to our stakeholders, our reports are crucial in evaluating our performance and identifying opportunities for improvement. In the last few years, we have made excellent progress with our investee companies and have witnessed many of them improving their measurement and transparency practices, making bold commitments to reduce emissions and even leading climate engagement initiatives.

Governance

The climate agenda is widely supported and monitored by the portfolio managers. All members of the Investment Committee are certified on CFA ESG Investing and constantly recycle knowledge through training with specialists, ensuring the skills and competencies required to assess, manage, and monitor the risks and opportunities related to climate change.

Furthermore, the corporate culture ensures that all employees will uphold the ESG principles in their work, making it a core organization value. Our portfolio managers and executives embrace the company's mission, creating a shared vision among all members for the execution of climate goals. These ESG values and principles are of paramount importance in the investment process and serve as an essential requirement in the selection process for new employees.

Fabio Alperowitch, co-founder and portfolio manager, is also a board member of renowned institutions such as WWF, Instituto Ethos and Instituto LIFE.

PORTFOLIO CARBON FOOTPRINT

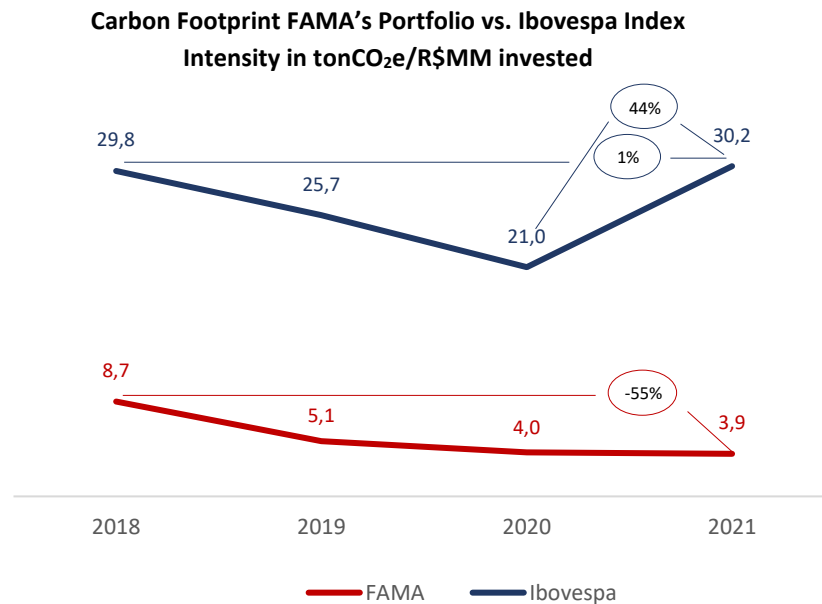
Gross Emissions

This section presents data on our portfolio's carbon footprint for December 31st 2018, 2019, 2020 and 2021, as well as estimated carbon footprint data for the main market indexes for the same periods, for comparative reasons.

All calculations follow the PCAF methodology, which establishes that the Carbon Footprint of an investment portfolio, commonly called "financed emissions", is equal to the sum of the share of emissions of each investee company that corresponds to the investor, employing a certain attribution factor, which according to the PCAF is based on the investor's company stake and its Enterprise Value (EV) or Firm Value, without discounting cash (EVIC) to avoid potential negative EV.

$$\sum \frac{\text{Investment}_i}{\text{EVIC}_i} * \text{Gross emissions (scope 1+2) company}_i$$

That said, it is important to consider that the outcome depends on three variables, namely the invested amount (or inclusion/exclusion of a given company from a given portfolio), the EVIC, and gross emissions (which can be retroactively adjusted by reporting companies).

FAMA vs. Ibovespa portfolio

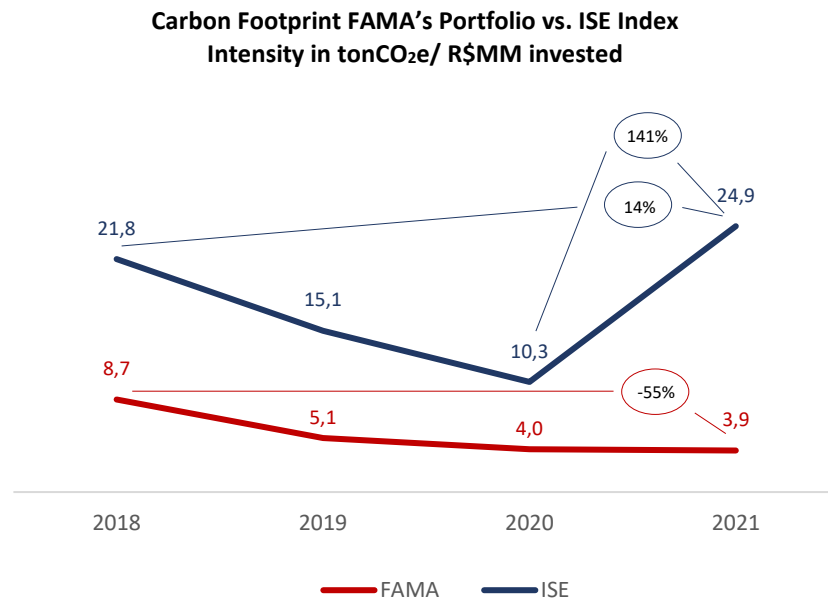
FAMA Investimentos' carbon footprint was of 3.9 tons of CO₂e per million reais invested (tonCO₂e/R\$ MM invested) in 2021, remaining essentially stable compared to the previous period and 55% below the carbon footprint of the first year analyzed of 2018.

FAMA Investimentos' carbon footprint is **87% lower** compared to the main market benchmark index (Ibovespa), which had a carbon footprint of 31.2 tonCO₂e/invested R\$MM in 2021. It is important to note that Ibovespa's carbon intensity **increased by 44%** in 2021 compared to the previous year. This increase was mainly attributed to the inclusion of Eneva in the index, which accounted for 29% of the overall variation. Additionally, Petrobrás, with a 1.5 percentage point increase in the index from 2020 to 2021, contributed 30% to this variation. Other large GHG emitters such as Braskem, Gerdau, and Vale, contribute, to a lesser extent, to this increase, and all of them together represent 68% of the index's carbon footprint in 2021.

We can attribute FAMA's portfolio carbon footprint reduction over the last few years to several factors, including:

- Changes in the portfolio composition itself. Companies appearing in the 2021 portfolio that were not part of the 2018 portfolio exhibited a 75% lower intensity compared to companies that appeared in the 2018 portfolio and that no longer appear in the 2021 portfolio.
- Reduction of the carbon intensity of remaining portfolio companies. As reference, Alpargatas, Dexco and Klabin were able to reduce their intensities by 78%, 63% and 18%, respectively, in 2021, compared to 2018.

FAMA vs. ISE portfolio

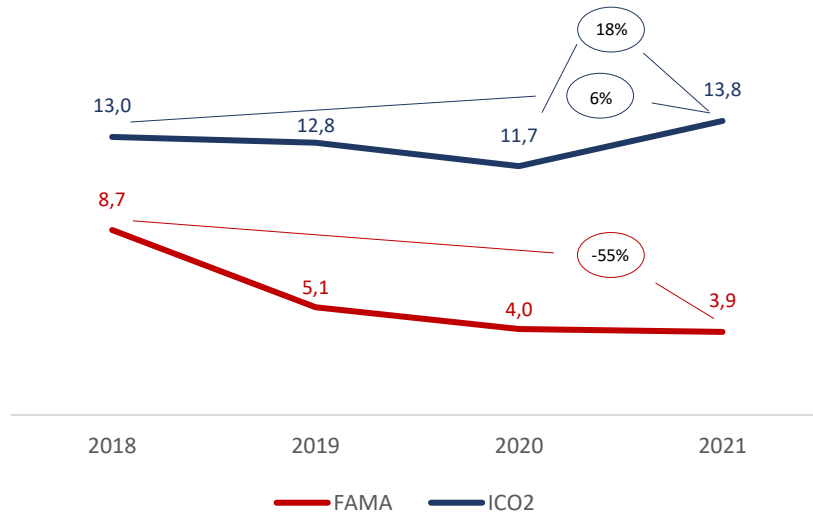


FAMA Investimentos 2021 carbon footprint is **84% lower** than the ISE market index (B3 Sustainability Index).

The **141% increase** in the carbon footprint of the ISE between 2020 and 2021 is particularly noteworthy, primarily due to the inclusion of Petrobrás, a large GHG emitter which now represents 51% of the 2021 portfolio and contributes to 88% of the variation.

FAMA vs. ICO2 portfolio

**Carbon Footprint FAMA's Portfolio vs. ICO2 Index
Intensity in tonCO₂e/ invested R\$MM**



FAMA Investimentos' 2021 carbon footprint is **72% lower** than the ICO₂ market index (B3 efficient carbon index).

We also draw attention to the **18% increase** in ICO₂'s carbon intensity between 2020 and 2021. The main company contributing to that increase is Gerdau, a high emitting company which was added to the index for the first time in 2021 and accounts for 85% of the variation. Along Gerdau, other major emitters were also added to the index for the first time in 2021, contributing to this increase to a lesser extent. These companies include Braskem, Cosan, EDP and Engie. Additionally, despite a 6pp reduction in the index from 2020 to 2021, Petrobras remains the company that contributes the most to the carbon footprint result, accounting for approximately 32% of the 2021 result (compared to 70% in 2020).

Net Emissions

The following table presents our portfolio's carbon balance summary, where it is possible to evidence all the financed emissions (also considering biogenic emissions) as well as the removals, the latter mainly attributable to our participation in two companies with forestry assets, namely Klabin and Dexco.

Gross footprint (tCO ₂ invested R\$ MM)	2018	2019	2020	2021
	8.7	5.1	4.0	3.9
Gross emissions*	14,699	11,818	10,391	6,577
Biogenic emissions*	25,659	29,087	26,508	25,071
(-) Removals ref. Dexco*	-9,485	-7,632	-9,025	-5,605
(-) Removals ref. Klabin*	-30,542	-34,144	-32,736	-36,132
Net emissions*	332	-865	-4,862	-10,089

* Emissions in tons of carbon equivalents (tCO₂e)

It is possible to observe that our portfolio has negative net emissions for 2019, 2020 and 2021, indicating that it absorbs more emissions than it emits.

CLIMATE MANAGEMENT EVOLUTION

Horizontal Analysis: business efficiency

Despite its limitations, one of the most used indicators to analyze the efficiency of a company's emission management, is the carbon intensity. This indicator allows us to compare the emissions of different companies based on specific financial or operational metrics.

Whenever possible, it is better to employ operational metrics (*e.g.*, tons of carbon per volume produced), especially when comparing the carbon intensity of companies belonging to the same sector or industry. In this case, we understand that a financial metric is more appropriate, given that the portfolio is comprised of companies from different sectors, even though we acknowledge this methodology is more sensitive to exchange rate and price fluctuations.

Company	tCO ₂ e/R\$ MM Operating income				CAGR 18vs21
	2018	2019	2020	2021	
Locaweb	3	2	2	1	-53%
Totvs	3	2	2	1	-53%
SulAmérica	0	0	0	0	-48%
Alpargatas	24	22	7	8	-41%
Lojas Americanas/B2W	6	2	1	2	-39%
Dexco	132	58	63	59	-33%
Porto Seguro	0	0	0	0	-22%
CVC	5	4	3	3	-21%
Log	21	18	13	13	-20%
Cogna	44	37	28	28	-20%
M. Dias Branco	31	29	25	23	-14%
Klabin	76	79	65	57	-13%
B3	0	1	0	0	-9%
Fleury	4	2	3	3	-9%
Mills	5	5	3	4	-7%
Randon	9	8	8	8	-7%
Iguatemi	21	18	13	19	-4%
MRV	1	2	2	1	1%
Localiza	2	2	2	2	1%
Intermédica/Hapvida	2	2	2	2	6%
Petz	2	2	2	2	10%
Raia Drogasil	2	2	2	2	10%
Arezzo	0	0	0	1	17%
Lojas Renner	2	2	2	3	18%
Multiplan	22	17	13	33	22%

The table above contains (in bold) all companies included in our portfolio for each fiscal year; nine of them (highlighted in color) have remained in our portfolio during the last four years. It is noteworthy the reductions by Dexco and Klabin, as they are major carbon emitters, as well as the increases by Arezzo and Raia Drogasil.

As mentioned throughout this report, Klabin has implemented a robust decarbonization plan that complies with TCFD recommendations and is anchored in emission reduction targets validated by the Science-based Targets Initiative (SBTi). We also highlight some specific practices that we consider relevant to advancing the climate agenda, namely:

- 100% of the executive directors in 2022 have climate-related targets tied to compensation;
- Climate management is a topic included in the company's risks and opportunities agenda;
- Since 2019, the company has adopted a shadow price to understand and prepare for possible regulatory changes on the subject;
- The company uses the Marginal Abatement Cost Curve (MACC) to evaluate and compare the cost/effectiveness of different initiatives and technologies aimed at reducing and mitigating emissions to comply with its commitments and climate plans;
- Focus on and investment in development, research and innovation to improve processes and practices, establish adaptation strategies and capture business opportunities;
- The company has full transparency regarding the issue and makes an effort to transmit a clear and comprehensible message to its various stakeholders.

Concerning Dexco, the company's 33% annual emission intensity reduction is mainly due to decreased forest fires, which were significantly higher in 2018 and whose emissions are accounted for within scope 1. A very discreet increase of 1% in its annual emission intensity is noted when comparing 2021 to 2019.

Regarding Arezzo and Raia Drogasil, although both companies have experienced an increase in their annual emissions intensities by 17% and 10% respectively, neither of them contributes significantly to our carbon footprint (approximately 2% of the 2021 result) and as a result, they are not currently our main focus. However, it is worth highlighting Arezzo's advancements in this regard. The company has made efforts to strengthen its emissions inventory and has publicly committed to establishing an emissions reduction target in line with SBTi criteria by 2023.

APPENDIX

Data quality

The primary source of data is obtained from investee companies, either through their own sustainability, integrated, or annual reports, or through institutions such as the CDP or the GHG Protocol Emissions Registry. For missing data and up to 2020, emissions were estimated by Trucost (S&P). In cases where data was still missing or deemed unreliable, manual proxies were utilized. These manual proxies may be derived from emissions data reported by investee companies for other years or from emissions data of other companies in our portfolio that are believed to potentially have similar Scope 1 and 2 emissions.

The data quality of FAMA's portfolio is outlined below, with company-reported data considered the highest-quality data under the PCAF methodology and therefore receiving the highest score of 1. Data estimated by S&P (Trucost) is displayed in light orange, and the manual proxies performed by our team are depicted in blue.

Data quality has increased over the years, and companies are improving their emissions inventories, including for previous years, as indicated previously. This improvement takes place, for example, by including specific categories not considered before, as well as the third-party independent assurance of the reported data.

By 2021, 87% of the emissions data were reported by FAMA Investimentos' investee companies, indicating high-quality data. There was a slight drop in 2020, but the percentage remained relatively high at 81%. In 2018 and 2019, this percentage was 59%.

FAMA INVESTIMENTOS				
Company/year	Score			
	2018	2019	2020	2021
Alpargatas			1	1
Arezzo		1	1	1
B3	1	-	-	-
Cogna	-		-	-
CVC			-	-
Dexco	1	1	1	1
Fleury	1	1	1	1
Iguatemi	-	1	1	1
Intermédica/Hapvida	-	1	1	1
Klabin	1	1	1	1
Localiza	1	1	1	1
Locaweb	-	-	-	
Log				1
Lojas Americanas	1	-	-	-
Lojas Renner	-	-	1	1
M. Dias Branco	1	1	1	-
Mills				-
MRV	1	1	1	1
Multiplan	1	-	-	-
Petz	-	-	-	
Porto Seguro	-	-	-	1
Raia Drogasil	1	1	1	1
Randon			-	-
Sul América	1	1	1	1
Totvs	-	-		1

Regarding the benchmarks, the table below summarizes the number of holdings that make up each benchmark for the different years, as well as the number and percentage of holdings with reported data.

A higher data quality is evidenced for the ISE (average of 97%), and ICO2 (average of 93%) benchmarks when compared with Ibovespa (average of 82%). In other words, on average, 82% of the companies that make up the Ibovespa, 97% of the companies that make up the ISE and 93% of the companies that make up the ICO2 reported scope 1 and 2 emissions data, either through their own reports or through platforms like the CDP.

BENCHMARKS					
Holdings vs. reported data		2018	2019	2020	2021
IBOV	Holdings	66	68	77	90
	Data	51	55	64	77
	%	77%	81%	83%	86%
ISE	Holdings	34	32	36	48
	Data	32	31	35	47
	%	94%	97%	97%	98%
ICO ₂	Holdings	28	29	26	61
	Data	26	26	25	57
	%	93%	90%	96%	93%

Concerning the benchmarks, manual proxies were applied for the following companies: BB Seguridade, Cia Hering, CVC Brasil, Cyrela, Fibria, Hapvida, Irb Brasil, Itausa, JHSF, Locamerica, Meliuz, Petrório, Qualicorp, Smiles, Taesa and Yduqs.

Other data sources consulted included Economática, S&P and Bloomberg. The first two were specifically relevant for EVIC calculations and the latter for collecting emissions data from public company reports.

Emissions details by company

Below, we present the breakdown of gross and net emissions of FAMA Investimentos' portfolio in metric tons of CO₂e per company, already weighted by their respective participation for the years 2018, 2019, 2020, and 2021.

2018 emissions details

Company	Gross emissions*	Gross biogenic emissions*	(-) Removals*	Net emissions*
B3	1			1
Arezzo	6			6
SulAmérica	14			14
Log	25			25
Lojas Americanas	53			53
Mills	67			67
Raia Drogasil	107			107
MRV	112			112
Localiza	132			132
CVC	141			141
Fleury	164			164
Multiplan	218			218
Randon	355			355
Alpargatas	793			793
M. Dias Branco	1,599			1,599
Klabin	2,669	17,678	-30,542	-10,194
Dexco	8,244	7,981	-9,485	6,740
Total	14,699	25,659	-40,027	332

* CO₂e tons**2019 emissions details**

Company	Gross emissions*	Gross biogenic emissions*	(-) Removals*	Net emissions*
SulAmérica	5			5
Arezzo	14			14
Log	41			41
Intermédica	45			45
Mills	75			75
Raia Drogasil	83			83
Fleury	83			83
CVC	117			117
Localiza	124			124
MRV	126			126
Iguatemi	169			169
Randon	461			461
Alpargatas	465			465
Cogna	1,039			1,039
M. Dias Branco	1,608			1,608
Klabin	3,360	21,712	-34,144	-9,072
Dexco	4,003	7,376	-7,632	3,746
Total	11,818	29,087	-41,776	-870

* CO₂e tons

2020 emissions details

Company	Gross emissions*	Gross biogenic emissions*	(-) Removals*	Net emissions*
SulAmérica	3			3
Raia Drogasil	18			18
Totvs	19			19
Mills	29			29
Arezzo	45			45
Log	45			45
Localiza	80			80
Lojas Renner	83			83
Intermédica	106			106
Alpargatas	111			111
Fleury	111			111
MRV	153			153
Iguatemi	188			188
M. Dias Branco	2,923			2,923
Klabin	3,029	21,299	-32,736	-8,408
Dexco	3,449	5,209	-9,025	-366
Total	10,391	26,508	-41,761	-4,862

* CO₂e tons**2021 emissions details**



Company	Gross emissions*	Gross biogenic emissions*	(-) Removals*	Net emissions*
Locaweb	2			2
Totvs	12			12
Arezzo	16			16
Porto seguro	19			19
Petz	37			37
Log	38			38
Intermedica	60			60
MRV	85			85
Localiza	94			94
Raia Drogasil	129			129
Lojas renner	138			138
Alpargatas	171			171
Fleury	198			198
Iguatemi	336			336
Klabin	2,182	22,810	-36,132	-11,139
Dexco	3,059	2,261	-5,605	-285
Total	6,577	25,071	-41,737	-10,089


* CO₂e tons

Details on FAMA Investimentos Institutional emissions

Since 2018, we offset our scope 1, 2 and 3 (institutional) emissions by acquiring carbon credits from the REED+ Jari-Pará project and, this year, from the REDD+ Jari-Amapá project. In 2021, our emissions totaled 9.95tonCO₂e, as detailed below, the equivalent to the conservation of 4.974 adult native trees in the Amazon rainforest¹:

FAMA Investimentos Institutional Emissions

	Scope 1	Stationary combustion	0 tonCO ₂ e
		Mobile combustion	0 tonCO ₂ e
		Fugitive emissions	0,006 tonCO ₂ e
	Scope 2	Electricity	2,485 tonCO ₂ e

	Scope 3	Business trips	4,079 tonCO ₂ e
		Employee displacement	0 tonCO ₂ e
		Deliveries	0,038 tonCO ₂ e
		Waste	3,339 tonCO ₂ e

* We have the support of Biofílca for calculating institutional emissions

Access [here](#) the emissions offset certificate for the year 2018.

Access [here](#) the emissions offset certificate for the year 2019.

Access [here](#) the emissions offset certificate for the year 2020.

Access [here](#) the emissions offset certificate for the year 2021.

¹ Based on studies conducted by Biofílca, approximately 500 trees or 20m² of Amazon Rainforest, where deforestation is avoided, can neutralize 1 tonCO₂e. However, the specific values may vary depending on the biomass of the forest and the threat of deforestation in the region.

