



# TRANSITIONING TO DEFORESTATION-FREE LIVESTOCK IN BRAZIL

The case of &Green fund (&Green)  
and IDH The Sustainable Trade Initiative  
investing in a more sustainable beef supply  
chain through global producer Marfrig





# INTRODUCTION

**&Green is a globally focused investment fund whose mission is to invest in commercial projects in agricultural production value chains as well as to protect and restore tropical forests and peatlands and make agriculture more sustainable and inclusive. To do so, &Green finances inclusive, sustainable, and deforestation-free commodity production that can be commercially viable and replicable. IDH and &Green are long-standing partners; since 2019, IDH managed the Technical Assistance Facility for the &Green Fund. The partnership of &Green and IDH concentrates on landscape approaches and increasing the private sector's role in forest protection. Together, they seek to strengthen the case for rural development via protecting nature and supporting high-productivity agriculture. Their partnership led to a USD \$30 million loan from &Green to Brazilian meatpacker Marfrig, a transaction with the potential to change market dynamics in the Brazilian beef sector.**

**This publication shares IDH and &Green's convergent strategies resulting in &Green's investment into Marfrig to support its ambition to transition to a deforestation-free supply chain. From IDH's role in the long-term Produce, Conserve, Include (PCI) Strategy in Mato Grosso State to &Green's due diligence and post-investment technical assistance, these strategies facilitated this transaction and provided insights for future and joint work for the advancement of more inclusive, sustainable, and deforestation-free commodity production.**

**INVESTEES COMPANY:** Marfrig Global Food S.A.

**SUPPLY CHAIN:** Cattle production

**JURISDICTION:** Mato Grosso, Brazil

**INVESTMENT RATIONALE:** &Green's financing will support Marfrig's commitments related to transition to an inclusive, sustainable, and deforestation-free cattle supply chain in the Amazon and Cerrado biomes by:

- Achieving 100% supply-chain traceability
- Applying legal and deforestation-free supply-chain criteria to all suppliers
- Promoting social inclusion of suppliers through Technical Assistance services and financial incentives as a means of compliance

**PROJECTED IMPACTS:** By establishing an inclusive, sustainable, and deforestation-free cattle supply chain, Marfrig commits to achieve a minimum of:

- 1,250,000 ha of forest conserved, of which 600,000 ha are beyond legal requirements
- 7,000 ha of land sustainably intensified
- 6,000 ha of forest restored
- The inclusion of smallholder ranchers in their supply chain, including the pilot implementation with 157 calves' producers in Juruena Valley

**FINANCING:** A USD \$30 million, 10-year sustainability-linked loan from &Green to Marfrig in Brazil, used for the implementation of the &Green covenants. The loan is linked to sustainability key performance indicators (KPIs) that could lead to a margin reduction if met prior to anticipated deadlines.

**CO-INVESTOR:** The investment from &Green will provide more flexibility for Marfrig to invest in establishing a deforestation-free cattle supply at scale, helping Marfrig meet the commitments made under the USD \$500 million Sustainable Transition Bond, issued in 2019.







# TRANSACTION CONTEXT: KEY RISKS AND ROOT CAUSES IN THE BEEF PRODUCTION IN BRAZIL

## **Cattle production linked to deforestation and loss of natural habitat**

Cattle ranching is seen as the sector with the greatest impact on Brazilian forest loss. The conversion of forests to pastures and subsequently to croplands is a major driver of deforestation. This is especially true in the Brazilian Amazon, where 70% of deforested land is under pasture. In the Amazon region, pastures accounted for nearly 80% of the land deforested between 1996 and 2006.<sup>1</sup>

## **Robust environmentally legal framework but poor legal oversight and compliance**

Legal compliance to environmental and social laws remains a challenge in the livestock chain. Although Brazil's Forest Code offers means for more environmentally friendly land management, the institutional capacity to support its enforcement is insufficient to achieve full compliance of the Brazilian productive system.

## **Efforts to strengthen supply-chain initiatives**

High-profile campaigns by non-governmental organizations (NGOs) and pressure from the Federal Public Prosecutor's Offices ("MPF") in legal Amazon states drove two important supply-chain interventions in 2009: (1) the [MPF Terms of Adjustment of Conduct \(MPF-TAC\) Agreement](#), consisting of a commitment from meatpackers to avoid purchases from properties with illegal deforestation and (2) grassroots, global, and growing [\(G4\) with Greenpeace](#), consisting of a no-deforestation commitment signed by the four<sup>2</sup> largest slaughterhouses, including Marfrig.

## **A fragmented and unorganized supply chain and indirect suppliers excluded from control**

Despite these efforts, compliance mechanisms only reach direct suppliers. Traceability and monitoring are especially challenging for indirect suppliers due to the fragmentation and informality of the sector. Besides the meatpacking level, which is highly concentrated in the three largest meatpackers (JBS, Marfrig, and Minerva), the remainder of the production chain is performed by smaller, independent actors, typically operating locally and informally. Cattle is primarily traded on the spot market, with little or no long-term link between producers and the beef industry.

## **Calf breeders with low productivity at the Amazon frontiers**

The low productivity of cattle in Brazil, representing the current scenario for small and medium-sized farmers, will likely lead to the exclusion of approximately 50% of farms from the productive system in the next 10 years<sup>3</sup>. Low productivity and low investment capacities of ranchers in pasture management result in increased levels of soil degradation, thereby increasing the pressure for deforesting new areas. This dynamic is demonstrated with the correlation between high deforestation and the presence of indirect suppliers (calf producers) at the bottom of the supply chain.

<sup>1</sup> T. Chagas et al (2018), "Impacts of Supply Chain Commitments on the Forest Frontier", 22.

<sup>2</sup> Bertin (subsequently bought by JBS), Marfrig, JBS, Minerva.

<sup>3</sup> CEPEA is the economic research center of the Luiz de Queiroz School of Agriculture, campus of the University of São Paulo in Piracicaba.

# TRANSACTION BACKGROUND: ALIGNMENT OF AMBITIONS AND COMPLEMENTARITY OF ROLES

## Marfrig, the second-largest meatpacker in Brazil

Marfrig holds the second-largest beef operation in Brazil and its supply chain encompasses approximately 30,000 direct suppliers and over 60,000 indirect suppliers, most of whom are cattle ranchers spread across the Amazon and Cerrado biomes. Following the TAC & G3 Agreements, Marfrig established a deforestation-free sourcing policy for direct suppliers in 2009. Unfortunately, the policy resulted in excluding several small and medium-sized producers from its supply chain due to their inability to meet sustainability criteria. Additionally, such policies are ineffective in controlling risks beyond direct suppliers, as indirect suppliers remain untraced and exposed to illegal and legal deforestation, forced labor, and/or violation of Indigenous Territories.

## IDH and Marfrig partner for an inclusive and sustainable supply chain

IDH's engagement in Mato Grosso began in 2015 with a strategy aimed at supporting the government of Mato Grosso in establishing its green-growth strategy, the PCI (Produce, Conserve, Include). In turn, PCI became the bedrock for IDH's work at the regional level (the

[Jurueña Valley Compact](#)) and at the field level (the [Sustainable Production of Calves Program](#)). Notably, this marked the beginning of IDH's collaboration with Marfrig. In 2019, IDH and Marfrig signed an MoU for the development of a long-term transformative program of Marfrig's supply chain, promoting technical assistance for producers, innovative financial mechanisms, and improving supply-chain traceability.

## &Green's initiative to support Marfrig's supply-chain ambitions

IDH's collaboration with Marfrig centered on a [protection, production, inclusion \(PPI\)](#) approach, which enabled the connection between Marfrig and &Green in July 2019. Concurrently, Marfrig sent a signal to the market with the ambition to extend its no-deforestation policies to its full supply chain by issuing a [USD \\$500 million sustainable transition bond](#). Based on this ambition, Marfrig and &Green, facilitated by IDH, started their engagement; the objective was to catalyze the full utilization of the transition bond through a sustainability-linked loan designed to fund the necessary supply-chain transformation.

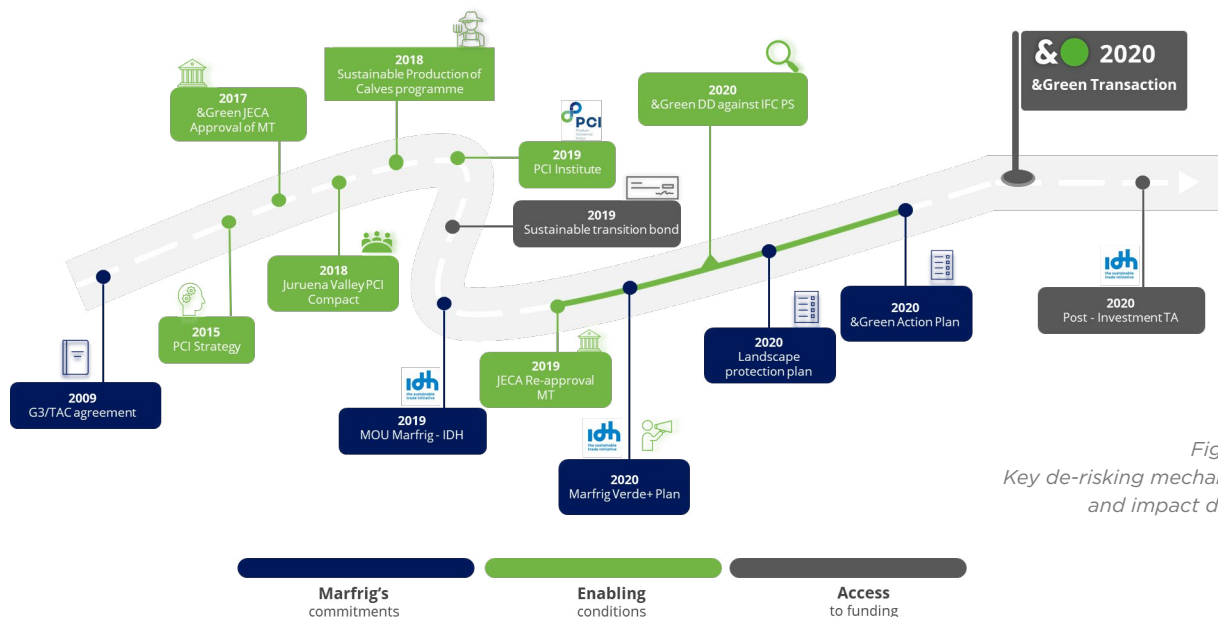


Figure 1: Key de-risking mechanisms and impact drivers



# REDUCING PROJECT RISK THROUGH JURISDICTIONAL APPROACHES

## Investing in Mato Grosso's governance

The Produce, Conserve, Include (PCI) Strategy is Mato Grosso state's Green Growth Plan, with ambitious long-term targets (2030) to drive sustainable land-use. The PCI Strategy launched in 2015 at the UNFCCC COP by 12 organizations, including the State Government, IDH, and Marfrig. The PCI Institute, in turn, was created in 2019 by eight founding members, including Marfrig and IDH, and is envisioned to be the Mato Grosso's main investment and implementation vehicle for sustainable production, conservation, and inclusion practices. IDH invested approximately EUR €4 million directly into the PCI governance model and its targets between 2016 and 2020 and will continue doing so to enable the transition to become an investment vehicle. The development of a sturdy governance and monitoring system of PCI enabled several investments into the state, thereby enabling corporate investments.

In 2017, Mato Grosso became one of the first &Green approved jurisdictions, enabling the development of an &Green investment pipeline; the jurisdictional re-assessment of Mato Grosso was re-approved by the Fund in 2019. &Green is only able to invest when the country/region/province in which the investment is located meets the Jurisdictional Eligibility Criteria (JEC) of the Fund. Through an independent expert, the Fund assesses potential jurisdictions based on specific JEC. Besides enabling &Green's investments, this process provides a strong signal to the market and policy makers regarding the risk profile of jurisdictions and the ability of institutional actors to implement and enforce environmental policies aligned with the Fund's investment criteria. The PCI Strategy and consecutively the PCI Institute provided a solid basis for &Green's JEC Approval, thus enabling &Green's investments into the region and into Marfrig.





# CREATING A MARKET AND INVESTMENT READINESS

## **Building momentum around sustainable and inclusive production models**

To support implementation of the PCI plan on a regional level, IDH applied its PPI approach, whereby a local multi-stakeholder coalition has an agreement to address sustainability challenges aligned with robust landscape governance models. These multi-stakeholder compacts offer a safer environment for institutions (such as Marfrig) looking to invest in sustainable land-use initiatives. The Juruena Valley PCI Compact, with 20 signatories (including Marfrig, Carrefour Brazil, local companies, town halls, civil society, and settlement representatives), covers the municipalities of Juruena and Cotriguaçu in the northeast of the state, where beef and timber are the main commercial commodities. The overall objective is for buyers to become the main funders of the sustainable production models in each region, contributing to the Protection and Inclusion pillars of PCI.

## **Designing and prototyping field-level interventions**

To support compacts in achieving their targets, IDH co-funds local programs with private-sector partners. In the Juruena Valley, the Sustainable Production of

Calves Program was developed with Agro Jacarezinho (AJ) Farms and Carrefour Brazil, an important buyer of Marfrig. The pilot supports 157 AJ's calf suppliers – indirect suppliers for Marfrig – towards a traceable, deforestation-free production. The program, launched in 2018, demonstrated how improving the business case for farmers and reducing the risk for the beef supply chain (i.e., less deforestation and higher-quality beef) can go hand in hand.

## **Building Marfrig's long-term sustainability ambitions**

In July 2020, Marfrig and IDH launched the Verde+ Plan, aiming to ensure 100% of the company's production chain is sustainable and deforestation-free within ten years. Marfrig and IDH's strategy is strongly anchored on the understanding that inclusion of all producers is key to ensure compliance. Marfrig and IDH are working on developing technical assistance, traceability, and financial solutions through a network of service providers and partners to support suppliers. For &Green, the launch of the Verde+ Plan was a strong confirmation of Marfrig's commitment to &Green's transformational change requirements.



# ASSURING ENVIRONMENTAL AND SOCIAL (E&S) INTEGRITY OF THE PROJECT AND REDUCING INVESTMENT RISKS

## Assuring E&S Integrity through &Green's due diligence

&Green began actively engaging with Marfrig in July 2019. &Green's due diligence continued, as the transaction progressed through the various steps of the investment process to guarantee the E&S impact and alignment with &Green's approach to market transformation. Marfrig's operations and supply-chain practices were assessed against the IFC Performance Standards. Due-diligence activities were completed through physical site visits and frequent interactions with Marfrig's teams. Independent environmental and social experts were commissioned to conduct more specialized reviews of critical areas of Marfrig's operations.

## &Green's model—compliance and impact-integrated approaches

The result of &Green's due diligence is reflected in two core documents: the E&S Action Plan (ESAP)

and the [Landscape Protection Plan \(LPP\)](#), which define Marfrig's roadmap for achieving a deforestation-free supply chain. The ESAP outlines contractual conditions in the form of concrete and auditable deliverables along a roadmap with regular milestones until 2030. Progress against these deliverables must be reported and will be audited. The LPP is a sustainable long-term land use and management plan put forward by the investors, which quantitatively determines how the impact will be generated during the financing period. The LPP and Marfrig's progress against delivering on the plan is publicly reported on &Green's website; this level of transparency and the detail of the ESAP enhances accountability to the public on the progress made. As Marfrig's Verde+ plan, the ESAP, and LPP were built simultaneously, they are highly aligned in both vision and scope.

# PROVIDING INNOVATIVE FINANCIAL SOLUTIONS

## Capital tailored to Marfrig's ambitions

&Green offers patient capital suitable for the transformational nature of the projects it finances. Besides providing a 10-year, long-term unsecured loan structure to Marfrig, &Green's investment and ESAP enable Marfrig to invest in the transition to fulfil the sustainability conditions of its 2019 sustainable transition bond and de-risk the USD \$500 million raised. The &Green loan is to be used by Marfrig exclusively for the implementation of the LPP and the ESAP, which define the key milestones for transitioning to a deforestation-free supply chain.

## Incentivizing improved environmental and social performance

The Fund typically incorporates financial and E&S plans (per the ESAP and LPP developed for borrowers) as contractual covenants to its investments. During the loan period, the Fund will hold Marfrig accountable for its progress towards delivering on its commitments through concrete and contractually binding obligations and incentives. The loan includes an interest-rate discount for anticipated delivery of key milestones, such as traceability and supply-chain compliance.



# MAXIMIZING IMPACT: POST-INVESTMENT TECHNICAL ASSISTANCE AND INVESTMENT READINESS

Post-investment assistance by the can be made available for the implementation phase of the project to increase developers' capacity to implement projects at a higher technical standard and/or with increased positive social and environmental impacts. To support Marfrig, the IDH Technical Assistance Facility invested approximately

EUR €100,000 of grants to pilot a blueprint for the re-insertion of direct suppliers blocked by the Marfrig purchase policy over the last 10 years. The pilot, implemented in 2021, covers 25 properties and promotes the restoration of 10 ha of forests in the Amazon biome.

## KEY LESSONS FOR STAKEHOLDERS

The strategies behind the IDH landscape work and the &Green Fund are epitomized in this deal, demonstrating there exists a business case behind investing in landscape governance and the PPI strategy. A strong foundation of enabling conditions (e.g., PCI Strategy and Juruena Valley Compact) created a favorable timing for this investment and all those still to come.

The coordinated investments from &Green to catalyze impact funding to foster innovative business models in jurisdictions where IDH is also investing grants to build sustainable commodities production at scale and landscape governance models show a complementarity that can maximize the impact level for investors with lower risk profiles.



**&Green** invests in commercial projects in agricultural-production value chains to protect and restore tropical forests and peatlands and make agriculture more sustainable and inclusive. The goal is to prove that financing inclusive, sustainable, and deforestation-free commodity production can be commercially viable and replicable, thus strengthening the case for a rural development paradigm protecting valuable forests and peatlands and supporting high-productivity agriculture. Besides financial returns, environmental returns of the investment are a key indicator. By limiting &Green's investments to jurisdictions with progressive forest and/or peat-protection strategies, the Fund ensures reinforcement of public-policy signals through private-sector investment. Currently in Brazil, the Fund can only invest in the state of Mato Grosso.

**IDH, The Sustainable Trade Initiative**, drives sustainability through innovative business models at scale in mainstream commodity markets. In landscapes, IDH works according to a three-tier strategy to implement the production, protection, and inclusion approach. To strengthen landscape governance, the development of Green Growth plans is supported. Multi-sector public and private coalitions (compacts) are developed at lower jurisdictional levels to support implementation of the Green Growth Plans, as are scalable pilot projects, which are co-invested in by the private sector. Connecting demand to supply via Source-Up (Verified Sourcing Areas), and catalyzing new finance sourcing, IDH aims to generate scale in landscape investments by creating a new asset class.



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