



Annual report

Crop Season 2023:2024

Supporting the supply of deforestation
and conversion-free soy

Designed and operated by:



Contents

1.	Executive summary	3
2.	The Responsible Commodities Facility	5
2.1	Context	6
2.2	The theory of change	8
2.3	The RCF Cerrado Programme approach	9
3.	Results of the 2023-2024 crop season	10
3.1	Investors and capital raised	11
3.2	Location of farms selected	13
3.3	DCF soy crop and financial results	14
3.4	Environmental impacts	16
3.5	Environmental impact statements	17
4.	RCF structure and operational routine	19
4.1	Source of funds: Green CRAs	20
4.2	Operational routine	21
4.3	RCF eligibility criteria	24
4.4	Environmental Advisory Board	26
4.5	Partnerships, awards and endorsements	27
4.6	Management team and service providers	28
Annex A	Monitoring methodologies used by SIM, BVRio and Earth Daily	29
Annex B	Management Team	34

1

Executive summary

The programme scaled more than four-fold and the amount invested expanded to US\$47 million through an innovative blended finance structure bringing three more investors onboard.

As a result, the number of participating farms increased from 32 to 122, significantly increasing the environmental impact of the programme.

At the same time, this crop season, was a particularly difficult period for agriculture across the world, and in particular in Brazil. The changing climate, exacerbated by El Niño, has resulted in more severe heat and lower precipitation than normal in the Cerrado region. Soy yields for some farmers from Brazil were up to 40% lower than previous years, and the reduced and delayed rainfall and very hot conditions forced some farmers to plant late or replant their crops.

These environmental challenges, coupled with a significant reduction in soy prices over the last year have, unfortunately, resulted in some of RCF farms missing the repayment deadline. Additionally, a case of conversion of native vegetation was identified in one of the farms financed, covering an area of 99.5 ha (0.09% of the total area of the programme). This participant was expelled from the RCF and subjected to a fine of 15% of the amount loaned.

In spite of these challenges, the RCF has managed to generate meaningful environmental impacts, producing more than 180,000 tonnes of DCF soy, and protecting over 43,000 ha of native vegetation, 11,346 in excess of the legal reserve requirement and 18 MtCO₂ carbon stocks.

And, to improve its transparency, the forest conservation impacts of the RCF are now independently verified by ERM. One important evolution in the structure of the RCF is that it has now obtained a Second Party Opinion that considered the RCF to be in alignment with the Green Bond Principles of the International Capital Market Association (ICMA), and the Green Loan Principles (GLP). In addition, the RCF received the Impact of the Year 2023 award from Environmental Finance Magazine, complementing the recognition of the previous awards received in 2023.



Aligned with Green Loan Principles (GLP) and Green Bond Principles (GBP) - Second Party Opinion provided by ERM Brasil



“Global demand for soy production is driving significant deforestation,” said Susan Gardner, Director, Ecosystems Division at UN Environment Programme. “Practical financial solutions like the Responsible Commodities Facility incentivise farmers to decouple commodity production from deforestation and land conversion practices, leading to enhanced landscape restoration, climate mitigation, adaptation and biodiversity protection in line with the United Nations Sustainable Development Goals and the UN Decade on Ecosystem Restoration. A great example of how farmers can be effectively incentivized would be for all the companies that have signed up to the Cerrado Manifesto Statement of Support to materialise this commitment through funding this facility.”

Overview of impacts for the 2023:2024 season



122
farms



43,324 ha
of native vegetation
conserved in
the Cerrado



11,346 ha
of native vegetation
conserved in excess
of legal reserve
requirement



180,221
tonnes
of vDCF soy
produced in the
main crop season



18.2 MtCO₂
carbon stocks in
native vegetation
protected by the RCF



0 t CO₂
emitted from land
use change (0 t CO₂/
t soy produced)

2

The Responsible Commodities Facility





2.1 Context

Growing demand for soy globally is resulting in a continuous expansion of the area under cultivation in Brazil. This expansion has been identified as a major driver of deforestation, resulting in substantial destruction of natural habitats, loss of biodiversity and greenhouse gas emissions. The Amazon Soy Moratorium has significantly reduced deforestation in the Amazon, but this has resulted in leakage of deforestation and conversion activities to a species rich tropical savanna known as the Cerrado¹. More than 50% of the native vegetation in the Cerrado has now been cleared and over the last decade in the Matopiba region, 0.5–0.8 Mha of soy has been planted on recently converted land each year².

Demand-side calls to action such as the 2017 Cerrado Manifesto³ have raised the profile of the Cerrado amongst food retailers, food manufacturers and food service companies that have soy embedded in their products, and more recent initiatives such as the Innovative Finance for the Amazon, Cerrado and Chaco (IFACC)⁴, Forest Positive Coalition of the Consumer Goods Forum⁵ and the UK and French Soy Manifestos, all share the objective of driving deforestation – and conversion-free (DCF) soy production in the region. Alongside this, in December 2022, the EU reached an agreement on a new law to prevent companies from placing commodities linked with deforestation and forest degradation onto the EU market, or exporting them from the EU, known as the EU Deforestation Regulation (EUDR). While the regulation initially only includes forests, thereby excluding much of the Cerrado, it is widely expected that ‘other forested land’ will be included in the first update, and that this will bring the Cerrado under the regulation.

¹ Gibbs et al., 2015: Brazil's Soy Moratorium. Supply-chain governance is needed to avoid deforestation. *Science* 347:6220.

² Ermgassen, Erasmus KHJ, et al. (2020) "Using supply chain data to monitor zero deforestation commitments: an assessment of progress in the Brazilian soy sector." *Environmental Research Letters* 15.3 (2020): 035003.

³ https://d3nehc6yl9qzo4.cloudfront.net/downloads/cerradomanifesto_september2017_atualizadooutubro.pdf

⁴ <https://www.tropicalforestalliance.org/en/collective-action-agenda/finance/ifacc/>

⁵ <https://www.theconsumergoodsforum.com/environmental-sustainability/forest-positive/>

Other recent initiatives focus on reducing the carbon emissions of agricultural production. The Science Based Targets Initiative⁶ mobilizes the private sector to take urgent climate action by setting targets to reduce their carbon emissions. This includes a target for Scope 3 emissions, that is, emissions that a company is indirectly responsible for, up and down its value chain. For companies with soy embedded in their products, their Scope 3 emissions include those from land use change, crop production, transport and processing. Soy produced in the Cerrado biome has an average carbon footprint of 1.00 t t^{-1} (CO₂ equivalent per tonnes of soy equivalent) with around half the emissions coming from land use change. Soy produced specifically in the Matopiba states (Maranhão, Tocantins, Piauí and Bahia) has an average carbon footprint of 2.32 t t^{-1} , with over two-thirds of this due to land use change emissions⁷. When food sector companies come to including these emission factors in their Scope 3 calculations, the source of the soy becomes very significant.

While there is growing demand for land to expand agricultural production, it is widely recognised that the expansion of agricultural production can happen without further clearing of native vegetation in the Cerrado⁸.

In addition to the market signals and demand preferences for sustainability, there is a crucial requirement to create incentives to engage farmers in the production of DCF commodities. This is the rationale of the Responsible Commodities Facility (RCF).



⁶ <https://sciencebasedtargets.org/>

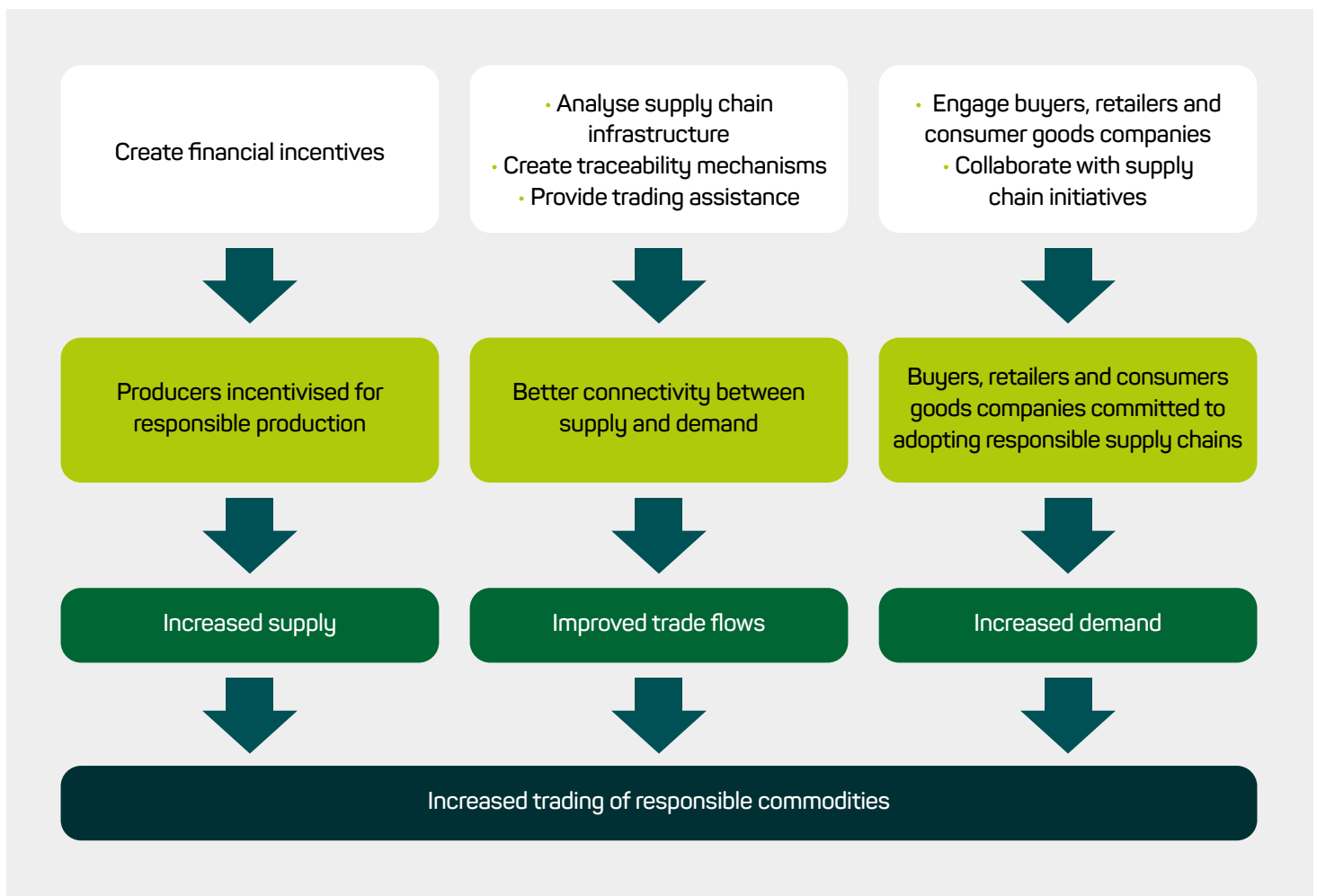
⁷ Escobar, N., Tizado, E. J., zu Ermgassen, E. K. H. J., Löfgren, P., Börner, J. and Godar, J. (2020). Spatially-explicit footprints of agricultural commodities: Mapping carbon emissions embodied in Brazil's soy exports. *Global Environmental Change*, 62. 102067. <https://doi.org/10.1016/j.gloenvcha.2020.102067>

⁸ Strassburg, B. et al (2014). When enough should be enough: Improving the use of current agricultural lands could meet production demands and spare natural habitats in Brazil. *Global Environmental Change*. Elsevier, v. 28, pp. 84–97. DOI: 10.1016/j.gloenvcha.2014.06.001.

2.2 The theory of change

The overall outcome of the Responsible Commodities Facility is an increased trading of responsible commodities. By responsible we mean produced without deforestation or land conversion, in respect of human rights and landownership rights, and with wise use of agrichemicals. This is achieved through three main activities:

- **Creation of supply**, engaging producers committed to responsible production by provision of financial and trade incentives. This involves direct engagement with producers and the provision of incentives for responsible production – in the case of the RCF Cerrado Programme 1, in the form of low interest credit lines;
- **Creation of demand**, by engaging a coalition of buyers, retailers and consumer goods companies committed to adopting responsible supply chains. This is done by engaging soy buyers in investing in the RCF, and collaborating with initiatives such as the Innovative Finance for the Amazon, Cerrado and Chaco (IFACC), Forest Positive Coalition of the Consumer Goods Forum and the UK and French Soy Manifestos, and the UK Soy Retail Group;
- **Improvement of trading flows** of responsible commodities, by improving the connectivity between supply and demand and providing trading assistance. This is done by analysing soy supply chain infrastructure to better understand the trade flows of soy globally and by creating a traceability mechanism to allow DCF soy to be tracked from farm to end user.



2.3 The RCF Cerrado Programme Approach

The first fund developed by the Responsible Commodities Facility, RCF Cerrado Programme 1, was designed to support the production of DCF soy by providing financial incentives to farmers that commit to zero deforestation and conversion in the Brazilian Cerrado. By engaging a wide coalition of actors promoting these markets, the objective of the RCF is to drive a significant increase in the demand and supply of responsible, legally-compliant commodities. This, in turn, should result in the reduction of deforestation and conversion, with resultant benefits in terms of carbon storage and biodiversity conservation.

Incentives are given in the form of revolving low interest credit lines for crop finance: i.e. acquisition of agricultural inputs (seeds, fertilizers, chemicals) for soy cultivation. Loans are collateralised by soy production and once soy is harvested, they are repaid to investors and loans are renewed.

The Facility is capitalized through the issuance of Green CRAs⁹ (a green bond-like instrument), issued in Brazil and subscribed by investors concerned with the impacts of soy deforestation and conversion on their supply chains.

Producers involved with the Facility are screened based on the RCF's eligibility criteria (Section 4.3). The operations of the Facility are reviewed by an Environmental Advisory Board which provides advice on potential improvements to the Programme to maximize the environmental benefits of the Facility (Section 4.4).

The combination of these measures should help accelerate the growth of responsible commodity production and trading, to reach the scale required to meet market demands and halt current environmental impacts.

Given that implementation of this model is based on provision of debt finance, it has the potential to drive a sustained transformation of the sector on a landscape level, without long-term reliance on public and philanthropic resources.



⁹ CRAs stand for Certificados de Recebíveis Agrícolas (Certificates of Receivables of the Agribusiness), a type of security widely used to finance the Brazilian agribusiness.

3

Results of the 2023-2024 crop season



3.1 Investors and capital raised

Investors

Through investment by UK retailers Tesco, Sainsbury's and Waitrose, banks Santander and Rabobank and impact fund AGRI3, the Responsible Commodities Facility (RCF) Cerrado Programme 2023:24 raised USD \$47 million in the form of "Green CRAs" registered in the Vienna Stock Exchange and the Brazilian Stock Exchange (B3).



Ken Murphy, Tesco Group CEO said:



We've been driving industry action on tackling deforestation for a number of years, including playing a leading role in the formation of the UK Soy Manifesto last year. We've also made a commitment that by 2025 we will only source soy from whole areas verified as deforestation-free. To help us meet this goal it's vital we provide practical, financial support to farmers in Brazil committed to the production of zero deforestation soy and the conservation of native vegetation. This initiative highlights the need for the whole food industry to come together and support the protection of critical ecosystems like the Cerrado. We urge more businesses and organisations to join us in providing funding for the RCF, to aid its roll-out in future years."

Sainsbury's

Simon Roberts, CEO at Sainsburys, said:



During COP26, where Sainsbury's was a principal supermarket partner, we signed the WWF Retailers' Commitment for Nature, with a collective aim to halve the environmental impact of UK shopping baskets by 2030 and tackle deforestation, supporting our commitment to achieve 100% deforestation and conversion free supply chains by 2025. To limit global warming to 1.5 degrees and achieve the goals set out in the Paris Climate Change Agreement, it is vital that we protect and restore forests and ecosystems such as the Cerrado in Brazil. It's why we are proud to join forces with others to help fund the Responsible Commodities Facility, investing in the sustainable production of soy, using green finance to reward farmers for protecting wildlife and biodiversity in the Cerrado."



James Bailey, Executive Director, Waitrose, said:



We're delighted to be one of the leading investors supporting this inaugural fund alongside Tesco and Sainsbury's. Waitrose is committed to doing our part to protect and restore nature, and we have set a bold commitment to source all our key raw materials responsibly by 2025, including deforestation and conversion-free soy. The scale of the challenge to halt the loss of biodiverse ecosystems like the Brazilian Cerrado requires innovative new approaches. We hope this pilot fund will demonstrate the huge opportunity for green finance to incentivise responsible farming practices in a way that's sustainable and scaleable, and which delivers tangible benefits to nature and farmers. However, to achieve this potential and protect whole biomes will require broader uptake, and I'd therefore appeal to fellow food sector businesses and to financial investors to join us in supporting this extremely important initiative."

Rabobank

Michiel Teunissen, Global Head TCF Agri, Rabobank, said:



As a cooperative bank we believe that only by working together can we drive the food system towards a more sustainable future. Deforestation is a global challenge and major contributor to climate change. The Responsible Commodities Facility is the result of collaboration between various value chain stakeholders building a scalable solution to tackle the deforestation challenge. Rabobank is proud to be investing into this innovative facility.”

Santander

Maitê Leite, Institutional Vice President, Santander Brasil, said:



We are continuously looking for partnerships that allow us to develop new and innovative ways to support businesses with a focus on environmental, economic or social sustainability. In the case of this green bond, in addition to the protection of an important biome like the Cerrado, there was also the engagement of different agents involved with financial services and the food supply chains – from the producer to the retailer, which made it possible to expand the reach and impact of the initiative.”

AGRI3 FUND

Casper Havinga, Investment Director at AGRI3, said:



AGRI3 is excited to support the expansion of this facility through our participation in the mezzanine tranche. The RCF is a strong match with the fund’s goal to mobilise commercial capital to support forest protection and promotion of sustainable agriculture, and builds on and expands AGRI3’s existing investments in supporting deforestation-free supply chains in the region.”

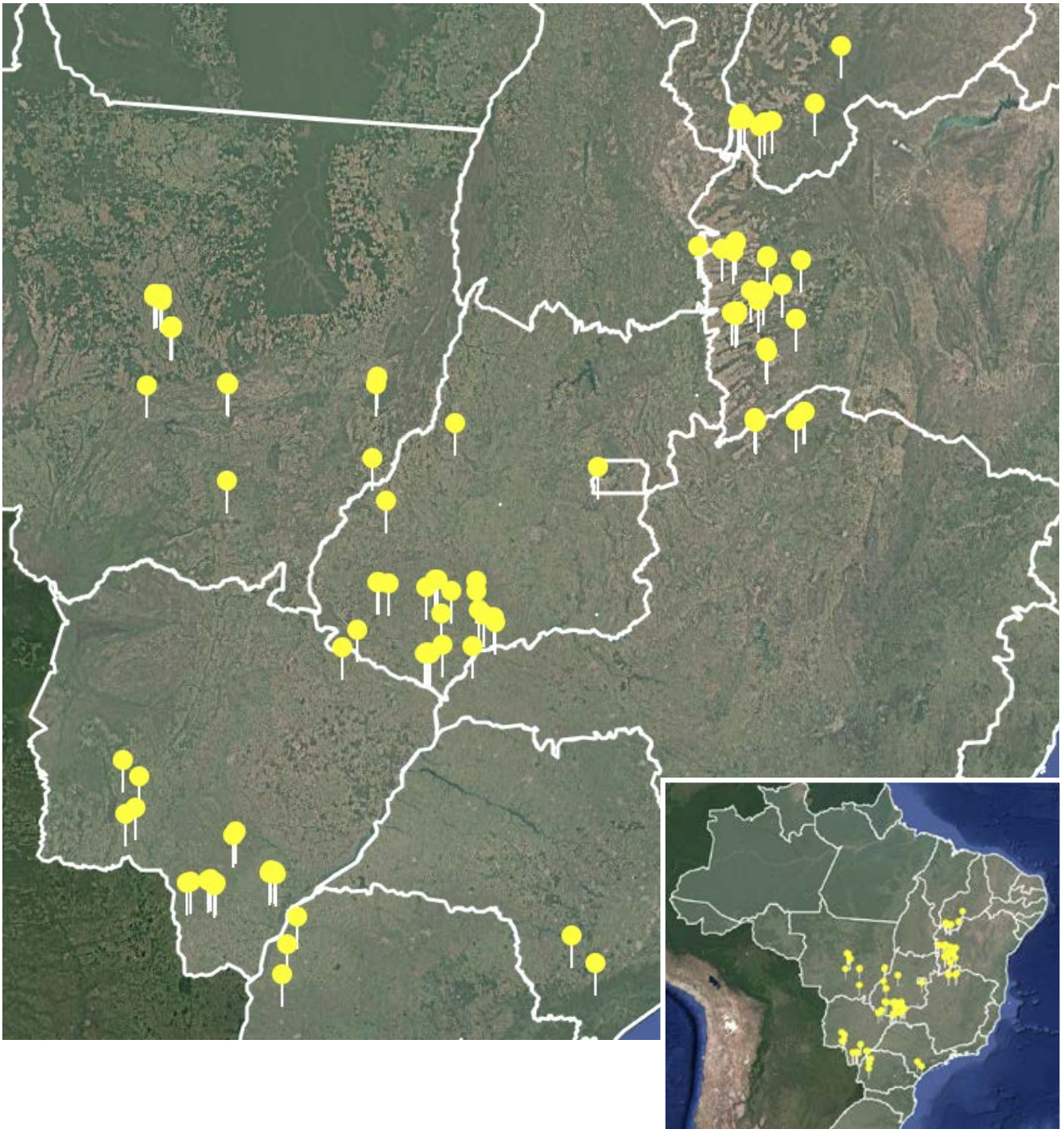
Grants and sponsorship

RCF also received funding through sponsorship grants from the Good Energies Foundation, Barry Callebaut, Convergence and SDG Impact Finance Initiative (SIFI), as well as Tesco and Sainsbury’s as part of their involvement with the Forest Positive Coalition of the Consumer Goods Forum.



3.2 Location of farms selected

The RCF Cerrado Programme 2023:24 financed 122 farms from 23 farming groups located in 48 municipalities in 8 states in the Cerrado. One farming group cleared 99.5 ha of native vegetation during the course of last year, and the production and environmental impacts of this group and its farms were not included in this report. Most of the farms (65%) were located in priority municipalities identified by TNC (see table of results).





3.3 DCF soy crop and financial results

Capital raised was used to acquire agricultural inputs to plant the 2023-2024 crop season.

This crop season, however, was a particularly difficult period for agriculture across the world, and in particular in Brazil. The changing climate, exacerbated by El Niño, has resulted in more severe heat and lower precipitation than normal in the Cerrado region. Soy yields from Brazil were lower than previous years, and the reduced and delayed rainfall and very hot conditions¹⁰ have forced some farmers to plant late or replant their crops.

These environmental challenges, coupled with a significant reduction in soy prices over the last year have, unfortunately, resulted in reports of a large number of soy farm bankruptcies in Brazil¹¹. In spite of these challenges, the RCF has managed to reduce the impact on its portfolio of 23 farming groups, and as of today only two repayments are outstanding¹².

¹⁰ Reuters, Nov. 2023 - <https://www.reuters.com/markets/commodities/erratic-weather-threatens-brazils-run-another-record-soy-crop-2023-11-03/>

¹¹ Bloomberg, Mar, 2024 - <https://www.bloomberg.com/news/articles/2024-03-11/brazilian-growers-go-bust-in-blow-to-7-billion-farm-credit-boom?embedded-checkout=true>

¹² The RCF is now in the process of negotiating a debt recovery plan with these farmers.

Harvesting took place in February-March 2024, yielding 180,220 tonnes of DCF soy from compliant farms¹³ (see Table below).

Farm group	Municipalities	State	Total area of farms (ha)	Native vegetation conserved (ha)	Native vegetation in excess of legal requirement (ha)	Protection: Production Ratio (%)	DCF soy production (t)
2	Cocalinho, Barra dos Garças	Mato Grosso	1,553.3	561.9	5.8	36.2%	1,689
3	Lucas do Rio Verde, Diamantino	Mato Grosso	6,850.9	3,184.3	725.2	46.5%	7,241
4	Santa Rita do Trivelato, Tapurah, Ipiranga do Norte	Mato Grosso	14,858.7	6,603.7	516.8	44.4%	22,736
5	Santa Filomena, Uruçuí	Piauí	7,703.2	3,678.3	2,086.8	47.8%	10,516
6	Caiapônia, Água Boa, Jataí	Goiania, Mato Grosso	5,348.0	1,538.8	33.5	28.8%	8,306
7	Rio Verde, Caiapônia, Doverlândia, Quirinópolis, Jataí	Goiania	6,702.5	1,506.1	30.5	22.5%	12,322
8	Mineiros	Goiania	4,132.8	1,102.7	229.8	26.7%	8,394
11	Ponta Porã, Dourados	Mato Grosso do Sul	3,110.0	705.5	10.8	22.7%	6,071
12	Sao Desiderio, Dianapolis, Luis Eduardo Magalhaes, Cocos, Correntina	Bahia, Tocantins	9,368.2	6,125.9	3,394.1	791.2%	1,559
31	Angatuba, Avaré	Sao Paulo	516.3	128.0	9.5	24.8%	5,576
33	Barreiras, Formosa do Rio Preto, Luis Eduardo Magalhaes, Riachao das Neves, Dianapolis	Bahia, Tocantins	4,057.2	1,212.8	328.0	29.9%	4,514
49	Itaquiraí, Jatei, Eldorado	Mato Grosso do Sul	3,568.1	793.0	22.3	22.2%	8,125
52	Tuverlandia, Santa Helena de Goias, Caaponia, Jaborandi, Nova Xavantina	Goiania, Mato Grosso, Bahia	6,736.3	1,847.2	55.5	27.4%	0*
65	Barreiras, Sao Desiderio, Alto Parnaiba, Santa Filomena, Bom Jesus	Bahia, Maranhao, Piauí	12,063.0	4,427.6	1,579.5	36.7%	16,160
81	Vila Propicio	Goiania	2,057.5	825.6	195.4	40.1%	3,148
88	Miranda	Mato Grosso do Sul	7,253.6	1,764.4	306.4	24.3%	2,381
89	Bonito	Mato Grosso do Sul	1,391.6	342.3	64.0	24.6%	10,664
91	Riachao das Neves	Bahia	995.7	201.9	2.7	20.3%	16,300
93	Aparecida do Rio Doce, Mineiros, Caiaponia	Goiania	5,417.0	1,862.4	542.0	34.4%	4,657
97	Dourados	Mato Grosso do Sul	9,305.1	2,987.3	698.2	32.1%	16,468
123	Monitiviu, Parauna	Goiania	2,706.7	615.3	91	22.7%	7,529
126	Campo Verde	Mato Grosso	778.8	355.4	35.3	45.6%	4,468
133	Bodoquena, Bonito, Sidrolandia	Mato Grosso do Sul	2,443.5	954.1	465.4	39.0%	1,397
Total			118,917.7	43,324.3	11,346.8	36.4%	180,221

*Production of the Group excluded due to deforestation

¹³ The soy produced by one farming group that is suspected to have cleared native vegetation is not included in the reported soy yield.

3.4 Environmental impacts

The 2023-2024 portfolio contains ca. 43,324 ha of native vegetation, of which 11,346 ha is of Excess Native Vegetation (9.6 % more than the forest cover legally required by Brazilian legislation), exceeding the initial 5% target of the programme. The portfolio has a Protection Ratio of 36.4 %, i.e., 36.4% of the area financed was placed under the additional protection status of the RCF.

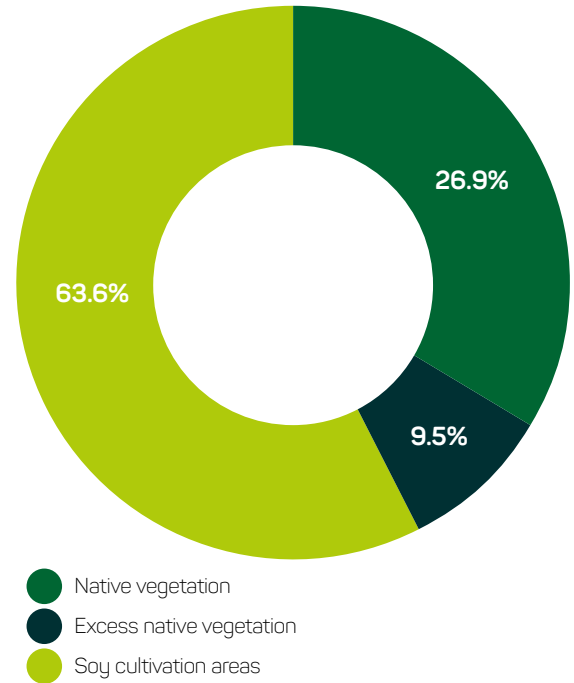
In order to participate in the RCF programme, landowners committed to forego their right to legally convert the remaining vegetation in their farms (in excess of legal minimum requirements). Participants in the programme were also required to adhere to other social and environmental requirements, as defined in RCF’s Eligibility Criteria¹⁴ (Section 4.3).

One case of clearance of native vegetation was detected in a participating farm, amounting to 99.5 ha (0.09% of the total area of the programme). This participant was expelled from the RCF and subjected to a fine of 15% of the amount loaned to this farming group. All the soy produced by the other RCF participants were deforestation and conversion free, and consequently there were no greenhouse gas emissions associated with land conversion in any of these farms.

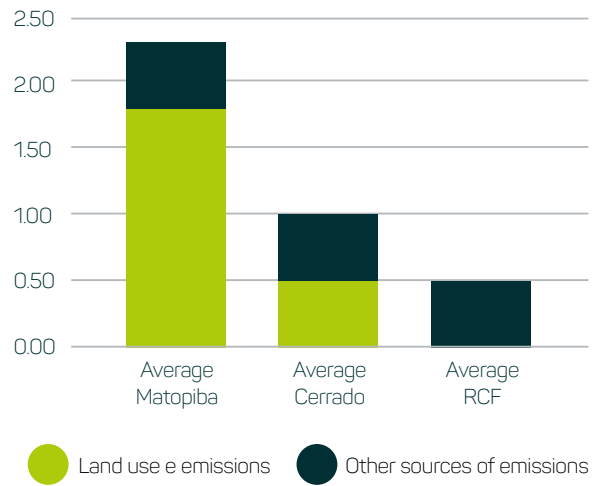
While it is undesirable that deforestation may have occurred in an RCF area, this is only a fraction of the area of native vegetation protected (0.09% of the total area financed by the RCF). It is important to note that the RCF deliberately operates in areas of high risk of deforestation, so that its impacts have the maximum additionality. By operating in these areas, however, the RCF also has a higher risk of events of deforestation involving its farms or participants.

The amount of carbon stocks stored in natural vegetation protected in RCF farms was estimated to be 18.2 MtCO₂e, excluding stocks from areas that converted native vegetation. This is based on the assumptions mentioned in the footnote¹⁵.

Average areas of native vegetation in RCF farms



Average GHG emissions Brazilian soy (tCO₂/t soy)



Note: According to Escobar et al. 2020¹⁶, most soy shipped to the EU comes from the Matopiba region, where emissions are in average 2.3 tCO₂/tonne of soy, compared with the RCF producers that have an estimated 0.5 tCO₂ / tonne soy. Emission-data for a given year.

¹⁴ <https://sim.finance/wp-content/uploads/2024/05/RCF-Eligibility-Criteria-v4-May-2024-1.pdf>

¹⁵ Figures for Aboveground Biomass extracted from the 2022 Brazilian submission to the UNFCCC (Submissão brasileira de Nível de Referência de Emissões Florestais para redução das emissões provenientes do desmatamento no bioma Cerrado, para REDD), applied to the specific vegetation types in each farm, using the 2018 IBGE Vegetation Map. Where no values were found, values were taken from the 3rd Brazil GHG Inventory, or an average of the values in the Brazilian submission to the UNFCCC was used. Belowground Biomass values are taken from Bustamante (2006).

¹⁶ Escobar, N., Tizado, E. J., zu Ermgassen, E. K. H. J., Löfgren, P., Börner, J. and Godar, J. (2020). Spatially-explicit footprints of agricultural commodities: Mapping carbon emissions embodied in Brazil’s soy exports. *Global Environmental Change*, 62. 102067

Given that the RCF excludes from its calculation any soy from areas with deforestation, there were also no greenhouse gas emissions associated with land conversion related to the DCF-soy volume produced.

Consequently, the DCF soy volume produced contribute to a lower Scope 3 emissions footprint to its buyers than the average soy sourced from the region. While the total emissions from RCF farms would need to include a combination of land use and transportation emissions, the volume of soy produced in compliant farms contribute 0t t⁻¹ CO₂ emissions from land use change for the period 2020-2024.

According to Escobar et al. 2020¹⁷, most soy shipped to the EU comes from Northern Brazil, where emissions are in average 2.3 tCO₂/tonne of soy (using emission figures for the Matopiba). Assuming an equivalent amount of non-land use emissions, RCF farms have an estimated footprint of 0.5 tCO₂ / tonne soy.

Once RCF farms are connected to the supply chains of its investors, they will be able to demonstrate deforestation and conversion free supply chains with lower Scope 3 emissions. RCF is working on ways to trace its soy along the supply chain.

With relation to the upcoming EU Deforestation Regulation (EUDR), this still excludes most of the Cerrado from its scope, as the majority of vegetation in this biome is not classified as "forests". However, once the scope of this regulation is expanded to include all Cerrado vegetation, which is widely expected to be included in the first update, soy from RCF producers is expected to be in compliance with the regulation's requirements.

All areas selected appeared to be in compliance with the Brazilian Forest Code and other relevant legislation.

Monitoring of environmental obligations and impacts was conducted by SIM and BVRio's teams, and monitoring of crop development was monitored by EarthDaily Agro. Independent verification of the areas of native vegetation conserved and converted to other uses, as well as verification of compliance with legislation, was conducted by ERM-NINT. See Annex A for the monitoring methodologies used.

3.5 Environmental impact statements

Results of the monitoring and verification activities were reported to the Independent verification and Environmental Advisory Board (Section 4.4) that reviewed and assessed whether the methodologies used by the RCF Cerrado Programme activities are appropriate. The Environmental Advisory Board did not audit the impacts reported, but reviewed the information provided.

An Environmental Impact Statement for the RCF Cerrado Programme as a whole is shown on page 17. Individual Environmental Impact Statements will be issued to each investor in the RCF, attributing the production and impacts generated by the Cerrado Programme pro rata to their financial contributions.

¹⁷ Escobar, N., Tizado, E. J., zu Ermgassen, E. K. H. J., Löfgren, P., Börner, J. and Godar, J. (2020). Spatially-explicit footprints of agricultural commodities: Mapping carbon emissions embodied in Brazil's soy exports. *Global Environmental Change*, 62. 102067.



Responsible Commodities Facility

Environmental impact statement

Crop season: 2023-2024

Harvest: Jan-May 2024

Total amount invested	US\$ 47,240,000
Number of farms involved in the programme	122 farms
Impact	Quantum
Amount of vDCF soy produced in the main crop season	180,221 tonnes
Area of native vegetation conserved	43,324 ha
Area of native vegetation conserved in excess of legal requirement	11,346 ha
Protection ratio (% area protected/total area financed)	36.3%
Area of native vegetation converted to other uses	99.5 ha (0.16%)
Carbon stocks maintained in forests protected by the RCF	18.2 MtCO ₂ (0.16%)
GHG emissions from land use change (tCO ₂ e / t DCF soy produced)	0 tCO ₂ e

Data monitored by:



Independently verified by:



The environmental impacts listed above occurred during the crop season 2023 – 2024 and were monitored by SIM and BVRio, while Earth Daily and Traive monitored the volumes of DCF soy produced. ERM independently verified the areas of native vegetation conserved and converted to other uses. The volume of DCF soy and the environmental impacts reported here exclude those related to a farm where conversion of native vegetation was observed, and this farming group was excluded from the RCF programme.

Methodologies used for impact quantification were assessed by an Environmental Advisory Board with the participation of The Nature Conservancy, UN Environment, Conservation International Brasil, Proforest, IPAM, and BVRio (secretariat). The Environmental Advisory Board is not responsible for auditing impacts.



The RCF is a member of the Innovative Finance for the Amazon, Cerrado and Chaco initiative, and a landscape initiative of the Forest Positive Coalition of the Consumer Goods Forum

4

RCF structure and operational routine

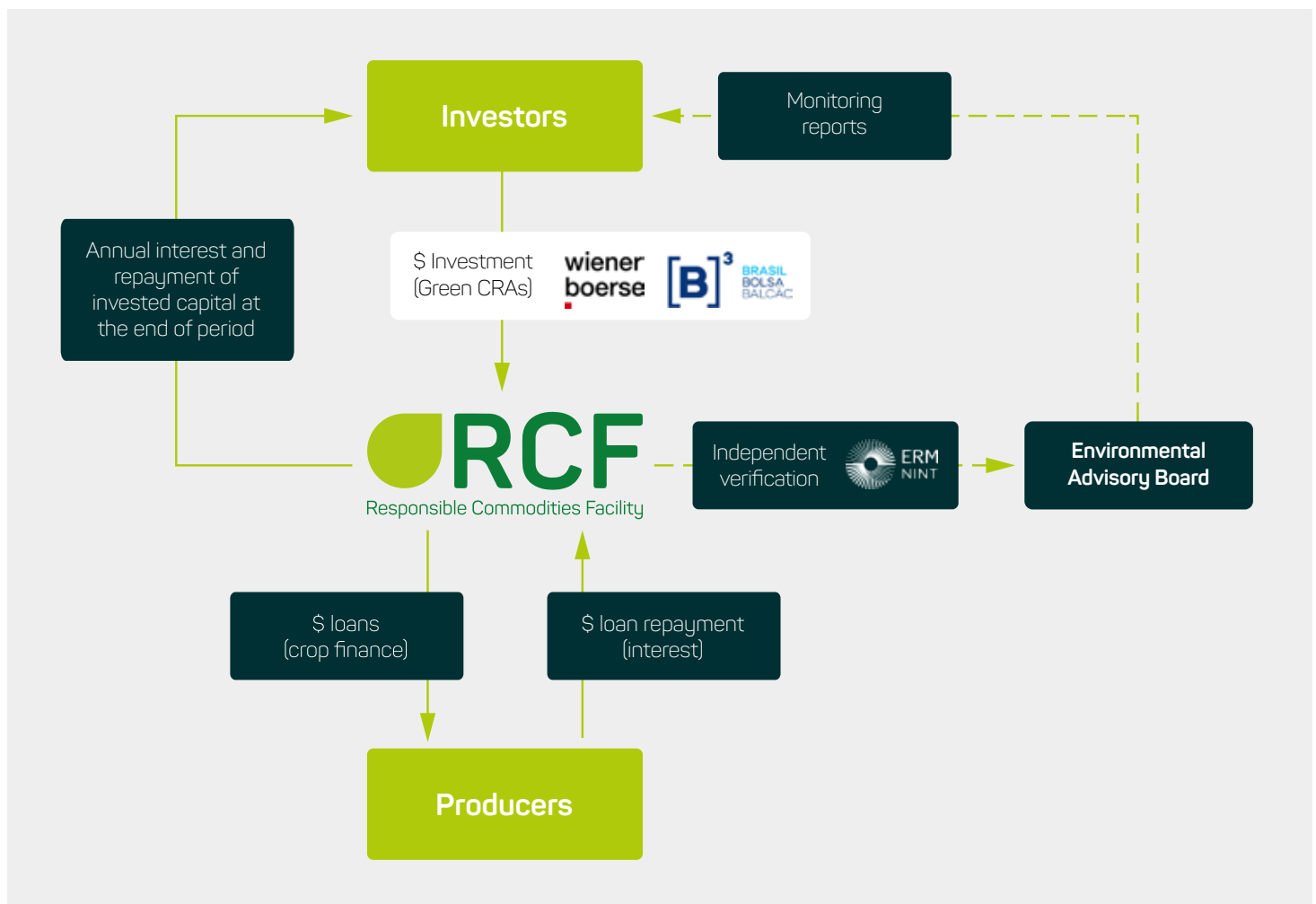


4.1 Source of funds: Green CRAs

The Facility was funded through the sale of USD-denominated green CRAs¹⁸, issued in Brazil and registered in the Vienna Stock Exchange and the Brazilian Stock Exchange (B3). The CRAs were subscribed by investors (Tesco, Sainsbury's, Waitrose, Santander, Rabobank and AGRI3 Fund) and capital raised was sent to Brazil to be loaned to RCF farmers. Every loan was collateralized by Financial CPRs¹⁹ worth 110% of the loan value.

At the end of the harvest, loans were repaid²⁰ and principal capital and interest was paid to investors, as appropriate. Some loans were renewed for the next crop season. All environmental impacts were monitored by BVRio and SIM and independently certified by ERM.

The financial flows of the Facility are as shown below, and details of each operational steps described in the following sections.



¹⁸ CRAs stand for Certificados de Recebíveis Agrícolas (Certificates of Receivables of the Agribusiness), a type of security widely used to finance the Brazilian agribusiness.

¹⁹ CPR stands for Cédula de Produto Rural (Certificate of Agricultural Production), a type of promissory note widely used to document agribusiness credit transactions in Brazil. It includes a lien on the future production, and can result in physical (CPR Física) or financial (CPR Financeira) settlement.

²⁰ Two of the 23 farming groups participating in the RCF have missed their repayment deadline, and the RCF is now in the process of negotiating a debt recovery plan with these farmers.

4.2 Operational routine

Implementation of the RCF Cerrado Programme involves a number of organisations (see section 4.6) that specialise in different activities in the process, involving both financial and environmental streams. Sustainable Investment Management (SIM) plays the role of ‘RCF Cerrado Programme Coordinator’, to ensure the adequate integration of both these streams, while management of the CRA issuance is done by Opea Securitizadora S.A (the Securitization Company). The operational routine of the RCF is described in the Securitization Instrument issued by Opea.



4.2.1. Environmental screening

Prior to their inclusion in the RCF, farms and producers interested in participating in the programme are assessed by SIM for compliance with the RCF’s Eligibility Criteria (see Section 4.3 and Annex 1).

In parallel, an independent analysis was conducted by EarthDaily Agro, a firm specialised in monitoring the agricultural sector.

The initial screening looks for farming groups that have native vegetation in excess of legal requirements (called “excess natural vegetation”) and have not converted any native vegetation since 1st January 2020.

Other requirements are listed in the eligibility criteria.

A list of farmers that meet these requirements, and have adequate credit rating, is submitted to the Environmental Advisory Board, prior to inclusion in the RCF programme.



4.2.2. Credit analysis

Prior to their inclusion in the programme, all participating producers and farms are screened by Traive (the Credit and Monitoring Agent) using their credit analysis methodology. This includes analyses of indebtedness and debtors, receivables, pledges, total assets, revenue forecast, and historic performance.

Based on the results of the credit analyses, a final portfolio allocation is defined ensuring geographic diversification, credit limits for each farmer, as well as average and maximum loan concentration parameters established by the Securitization Agreement.

Once a final portfolio is defined, it is recommended to the investors, prior to proceeding with contracting for inclusion in the RCF programme.



4.2.3. Collection of guarantees and contracting

Once confirmation is secured from the Credit Committee, the loan is documented in the form of a Financial CPR²¹. Each CPR includes a lien (in the form of a fiduciary alienation²²) on the soy to be produced, for a value corresponding to 110% of the full amount due by the producer at maturity. The CPRs also include the environmental obligations of farmers.

Each CPR is registered in the public notary of the farm's municipality and deposited in the B3 Stock Exchange in Brazil. The collection of the CPRs and the formalization process is conducted by the Formalization Agent (Ace – Agriculture Collateral Experts Ltda).



4.2.4. CRA issuance and registration in Vienna Stock Exchange

Once all CPRs and the respective guarantees are duly formalised, Opea Securitizadora issues the CRAs and register them in the Vienna Stock Exchange and the Brazilian Stock Exchange (B3).

Investors subscribe the CRAs and deposit the funds in a bank account managed by the Paying Agents (TMF and UMB).

Farmers enter into offtake agreement with traders, for delivery of soy at harvest, and assign these agreements to the RCF to receive payment directly from the traders.

Funds are transferred to Brazil and paid into the bank accounts of farmers.



4.2.5. Monitoring

During the crop season, farms are continuously monitored for crop development and deforestation and land conversion by both SIM and the third-party EarthDaily Agro (the Independent Monitoring Firm). See methodologies used by SIM and Earth Daily in Annex 1.

SIM's analyses focus only on detecting any sign of conversion of native vegetation, using Landsat images taken at different times in the crop season. EarthDaily conducts an independent analysis of crop development using satellite images with 10 m resolution. Any sign of deforestation and land conversion and/or crop failure is reported immediately to the RCF (Opea), to determine ways of mitigating risks of environmental or financial underperformance.

SIM also monitors farms and farmers for infractions of other environmental legislation associated with their tax IDs (CNPJ/CPF), using BVRio's Due Diligence & Risk Assessment System²³ that monitors 20 databases of compliance with different legislation.



²¹ CPR stands for Cédula de Produto Rural (Certificate of Agricultural Production), a type of promissory note widely used to document agribusiness credit transactions in Brazil. It can result in physical (CPR Física) or financial (CPR Financeira) settlement.

²² "Alienação Fiduciária", a modality of lien that allows for an expeditious execution process widely adopted to guarantee agribusiness credit transactions in Brazil.

²³ <https://www.bvrio.com/madeira/analise/cadeiaCustodia/dashboardDueDiligence.do>



4.2.6. Independent verification and second party opinion

Monitoring reports are made available to an independent verification company (ERM-NINT) to review and assess compliance with the eligibility criteria and the environmental performance of the programme. In addition, ERM also provided a Second Party Opinion and considered the RCF to be in alignment with the Green Bond Principles of the International Capital Market Association (ICMA), and the Green Loan Principles (GLP).

The review assessed the four core components of the Principles in the category of 'living natural resources and land use projects' which includes environmentally sustainable agriculture and preservation of natural landscapes. In three of four components of the analysis, ERM-NINT allocated the highest rating of 'Leadership' and in the fourth 'Comfortable' owing only to the RCF's specific focus on DFC actions, and not on wider low-carbon agricultural practices. The report also made mention of the RCF's "well-structured Environmental Eligibility Criteria."



4.2.7. Harvesting, loan repayment and renewal

At the end of the crop cycle, soy is harvested and delivered at the location defined in the offtake agreements with soy traders. Traders pay directly to the RCF for the soy delivered.

RCF uses proceeds to repay interest and/or principal back to investors and the balance is used to finance the next crop cycle.

Loans are renewed for farmers that continue to comply with the requirements of the RCF.

4.3 RCF eligibility criteria

Farmers must meet the RCF Eligibility Criteria²⁴ to be able to join the programme. Eligibility Criteria for the RCF Cerrado Programme are:

a) Criteria related to the area of cultivation:

Land use - The Property included in the RCF must comply with the following conditions:

- i) Deforestation and conversion: the cultivation area of the Property must have been cleared of native vegetation before 1 Jan 2020;
- ii) Preference to be given to areas restored from abandoned pastureland to soy cultivation;
- iii) No conversion of additional areas of native vegetation is allowed (in the Property) during the term of the Facility; and
- iv) The Protection:Production Ratio (PPR) of the portfolio of Properties financed must be at least:
 - 40% in Cerrado areas inside the Legal Amazon; and
 - 25% in Cerrado areas outside the Legal Amazon; and the areas of native vegetation must be conserved for the duration of the finance period.

Compliance with the Forest Code:

- i) The Property must be registered with the Cadastro Ambiental Rural (CAR);
- ii) The Property must not overlap with conservation units, indigenous reservations, and community lands (including quilombos);
- iii) The Property must contain and maintain an area of native vegetation equivalent to those required for Legal Reserve and Areas of Permanent Protection (APPs) determined by the Forest code or be engaged in a Programme of Environmental Regularization (PRA) established by the state environmental agency.

b) Criteria related to the Farmer

Land title: Farmers must have unquestionable right to use the Property, be it as land title, land lease agreement or another legally recognised form of land tenure (e.g., 'posse').

Legal compliance: Farmers must demonstrate that the Property does not contravene any environmental or legal requirements, such as:

- i) environmental embargoes,
- ii) labour legislation (including slave and child labour),
- iii) Soy Moratorium (if applicable), and
- iv) internationally accepted rules for the use of agrochemicals (at the RCF farm level).

Percentage of Legal Reserve required by the Forest Code

Type of vegetation	Legal Amazon			Rest of Brazil
	Forest	Cerrado	Grasslands	
Legal reserve	80%	35%	20%	20%



Biomes		
Amazon Forest	Cerrado	Brazilian Legal Amazon
Pastureland	Atlantic Forest	State boundary
Cerrado	Pampas	

c) Environmental and Social Framework

The Responsible Commodities Facility adopts an Environmental & Social Framework developed in partnership with UNEP Finance.



The E&S Framework was developed to ensure that it supports the objectives of the Facility, and also contribute to a number of the Sustainable Development Goals (SDGs), Brazil's National Biodiversity Strategy and Action Plan (NBSAP), Brazil's National Determined Contribution (NDC) to Paris Agreement of the United nations Framework Convention on Climate Change (UNFCCC), as well as several relevant industry initiatives²⁵.



²⁵ I.e., Soy Working Group (Grupo de Trabalho da Soja – GTS); Cerrado Working Group (Grupo de Trabalho do Cerrado – GTC); Cerrado Manifesto (including the Statement of Support); Collaboration for Forests and Agriculture (CFA); Tropical Forest Alliance 2020 (TFA 2020); Consumer Goods Forum (CGF); Amsterdam Declaration Partnership.

4.4 Environmental Advisory Board

An Environmental Advisory Board provides strategic input to the RCF, with relation to its operations, expansion plans, and any amendments to its environmental governance or criteria.

Members of the EAB (and their alternates) and their organisations, are:

Greg Fishbein – The Nature Conservancy

Ivo Mulder (Martin Hallé) – UN Environment

Lilian Vendrametto – Conservation International

Fabício de Campos – Sustainable Finance expert

Isabella Freire Vitali (Jane Lino) – Proforest

André Guimarães – IPAM

Beto Mesquita (secretariat of the board) – BVRio



The Nature Conservancy's Director of Agriculture Finance, Greg Fishbein:



RCF will create tangible climate and biodiversity impacts by offering farmers who can legally clear their forests a clear financial incentive not to do so. This is exactly the type of mechanism we envisioned when we created IFACC – one that can leverage commercial finance to support farmers in their transition to climate-friendly production models.”

4.5 Partnerships, awards and endorsements

The development and implementation of the RCF counted with the support of many organisations, as follows:



4.6 Management team and service providers

The following organisations were involved in the implementation of the RCF Cerrado Programme 1:

Programme Coordinator



Securitisation Company



Credit and Risk Managers



Trustee (Fiduciary Agent)



Legal Counsel



Legal Opinion



Custodian



Judicial Collection



Independent Verification



Secretariat of Environmental Advisory Board



Registration Agent



Paying Agents



Technical Assistance



Crop Monitoring



Annex A

Monitoring methodologies used by SIM, BVRio and Earth Daily



A.1 Internal monitoring conducted by SIM and BVRio

The teams of SIM and BVRio are responsible for screening farmers and farms for compliance with the eligibility criteria throughout the programme cycle.

At the pre-contract stage, SIM-BVRio conduct the following analysis:

- spatial analysis of farms selected to identify deforestation or conversion of native vegetation since 2008 and after 2020 using ArcGIS and Landsat images taken at different times in the crop season;
- location of the farm with relation to vegetation type and biome;
- determination of areas of native vegetation, cleared areas and areas of crop cultivation;
- potential overlaps with indigenous, community or quilombola lands;
- potential overlaps with conservation areas;
- verification of possible infractions of other environmental legislation associated with farmer's tax IDs (CNPJ/CPF), using BVRio's Due Diligence & Risk Assessment System²⁶ that continuously monitor 20 databases of compliance with different legislation. This system uses advanced analytics on a combination of real-time production data, consultation to external databases (SICAR, IBAMA, state environmental agencies, Ministry of Labour, etc.), documental and satellite imagery analyses (MapBiomias). This internal due diligence system was adapted from BVRio's Due Diligence and Risk Assessment tools²⁷ developed for the timber sector, which uses big data analysis and blockchain encryption²⁸.
- Infringements of labour legislation are monitored by SIM using the Brazilian Ministry of Labour and Social Security database of employers who breach legal requirements, including subjecting workers to conditions analogous to slavery²⁹.



²⁶ <https://www.bvrio.com/madeira/analise/cadeiaCustodia/dashboardDueDiligence.do>

²⁷ www.bvrio.org/timber.

²⁸ See BVRio, 2016: Using big data to detect illegality in the tropical timber sector. www.bvrio.org/publicacoes/

²⁹ https://www.gov.br/trabalho-e-previdencia/pt-br/composicao/orgaos-especificos/secretaria-de-trabalho/inspecao/areas-de-atuacao/cadastro_de_empregadores.pdf



Determination of compliance with the Forest Code is a particularly challenging task, given that there is no official confirmation provided by government authorities and the data reported in the CAR is self-declared and not validated by the relevant environmental agencies.

For this reason, SIM conducts its own analyses to determine likelihood of compliance, based on the amount of native vegetation observed in the CARs and whether this satisfies the theoretical requirements of the law (see more detail in the **RCF Eligibility Criteria**). All this analysis is conducted using satellite imagery.

SIM's analysis takes into account the data self-declared in SICAR. However, the quality of declarations is highly varied, and it is often the case that the numbers declared do not match the areas in the polygons drawn in SICAR, or the boundaries and locations of legal reserves and APPs are incorrect or inappropriate, requiring case by case interpretation.

The process of determination of legal reserve compliance starts with the area of native vegetation observed within the polygon declared in SICAR. If this area is sufficient for the requirements of the law for the Legal Reserve (20% or 35%, for the Cerrado areas of the RCF), the farm is considered preliminary compliant with this requirement, pending analysis of APPs.

For the calculation of APPs, SIM used the number self-declared in the CARs, both in figures and in the polygons drawn in the CARs. The area declared and the area drawn in the map are often different. In case of discrepancies, when the visual and GIS analysis provided a clear delineation of the APP area, these results were used. Otherwise, we considered the highest figures.

If farms contain sufficient area of native vegetation to include both legal reserves and APPs, compliance with these two categories is considered satisfied and any remaining native vegetation is considered "excess legal reserve". If farms do not contain native vegetation to include both legal reserves and APPs, the APPs are considered part of the legal reserves, as per Article 15 of the Code.

The analysis of native vegetation was based on groups of CARs that, in aggregate, satisfied the spatial requirements of the Forest Code. This is particularly relevant as, in many cases, these CARs were originally part of a single farm in an estate that was segmented during generational transfers. In some cases, this may create situations where the individual CAR is not in compliance with the vegetation requirements of the Code, and the landowner has to enter into a PRA to rectify it. In these cases, considering that during the rectification process the native vegetation of the farm would be below the legal requirements, SIM requires the farmer to submit additional areas of native vegetation to the protection of the RCF. So, without prejudice to the correction measures to be taken under the Forest Code requirements, the total area of native vegetation protected by the RCF is not affected.

Throughout the crop season, SIM relies on Earth Daily's monitoring reports that provide early warning of any factor that could potentially affect the financial and environmental objectives of the Cerrado Programme (see next section).

At the end of the crop season, BVRio repeats some of the analyses listed above to define whether farmers remain eligible for participation with the RCF Cerrado Programme and whether there were any indication of deforestation or infringement of other eligibility criteria.

With relation to agrochemicals, the agronomist responsible for each farm sends a list of the types of chemicals used (receituários agrônômicos), and a declaration that the products banned by the RCF were not used.

A final crop season monitoring report is prepared for appreciation by the Environmental Advisory Board. The Environmental Advisory Board is not responsible for auditing impacts, but reviewing the information provided.

A.2 Independent monitoring conducted by Earth Daily

In parallel to the monitoring conducted by SIM-BVRio, an analysis of crop development is conducted by **Earth Daily Agro**, a data and analytics company providing data services, satellite processing, machine learning and actionable insights to customers to track long-term trends, monitor change, and take guided, strategic actions.

At the pre-contract stage, Earth Daily is given a list of CARs of potential participants in the RCF and provide the following analysis:

- Spatial analysis of farms selected to identify deforestation and conversion of native vegetation since 2008 and after 2020;
- satellite images of each individual farm selected;
- location of the farm with relation to vegetation type and biome;
- historic series of crop performance and crop failure, going back at least 5 years;
- a risk assessment of future crop performance.

Throughout the crop season, Earth Daily continuously monitors the development of the crop and provide bi-weekly reports on:

- emergence of planted crops and comparison with historic performance;
- development of the crop and comparison with historic performance;
- any indications of factors affecting crop development and yield, including droughts, pests, diseases, or fire;
- expected harvesting date;
- evolution of harvesting activity;
- real time deforestation and conversion alerts.

The objective of this monitoring activity is to provide early warning of any factor that could potentially affect the financial and environmental objectives of the RCF Cerrado Programme.

At the end of the crop season, Earth Daily provide a report with the following information:

- recent satellite images of each individual farm selected;
- location of the farm with relation to vegetation type and biome;
- estimates of soy harvested.

A.3 Verification – Analysis of land use conversion and environmental legal compliance by ERM-NINT Brasil

ERM-NINT Brasil (hereafter 'ERM') was contracted to conduct an independent verification of the impacts of the RCF Cerrado Programme, including changes in vegetation cover to detect possible conversion of native vegetation, as well as compliance with the Forest Code and detection of infringements of Brazilian legislation. All analyses were based on the premises of the RCF eligibility criteria.

Land use conversion assessment

To verify the occurrence of deforestation on the farms financed by the RCF, ERM conducted an in-depth geospatial analysis of participating farms. The assessment was carried out through the use of geoprocessing tools (QGIS and Copernicus), working on satellite images and using map algebra.

Shapefiles (polygons of the farms) provided by SIM were layered with deforestation cases between 2020 and 2024, sourced from two national deforestation alert systems, Satellite-Based Monitoring Project of Deforestation in the Brazilian Legal Amazon (Projeto de Monitoramento do Desmatamento na Amazônia Legal por Satélite – PRODES3) and the near real-time deforestation detection system (Sistema de Detecção de Desmatamentos em Tempo Real - DETER4).

Any potential cases of deforestation were then assessed by visual analysis using Copernicus satellite images of the farms. The analysis was carried out by comparing satellite images year by year, considering the images closest to January 1, 2020, and July 30, 2024, available.

Assessment of compliance with national legislation

In addition, ERM also verified that the property/group of properties were in line with the Brazilian Forest Code. ERM also verified the existence of socio-environmental embargoes on the properties/groups of properties.

The process of verifying environmental embargoes on farms was conducted using QGIS and Google Earth. To do this, the databases of IBAMA (Brazilian Institute for the Environment and Renewable Natural Resources) and ICMBio (Chico Mendes Institute for Biodiversity Conservation) were used as a reference.

ICMBio has a georeferenced database of embargo cases updated almost in real time, and the analysis was carried out on 07/18/2024, based on the version dated 07/17/2024. Using QGIS, it is possible to overlay the layer showing the embargoes against the polygons of the farms. IBAMA's most recent georeferenced database was updated in 2020. It was therefore necessary to export the data in XLS format and carry out a manual analysis of the embargoes in order to check whether any of them were within the boundaries of the properties analysed. The XLS database used was updated on 17/07/2024, the most recent possible on the date of the analysis, 18/07/2024.

In addition, a verification of the Ministry of Labor's Register of employers who have subjected workers to conditions analogous to slavery was conducted to ensure that none of the farms made use of forced or analogous to slavery labour. The list exposes producers who have been notified by the Public Prosecutor's Office for using slave labour. ERM assessed the properties by checking the National Register of Legal Entities (CNPJ, in Portuguese acronym) of the farmers/group of farmers.

Annex B

Management Team





Implementation of the RCF Cerrado Programme involves a number of organisations (see section 4.6) that specialize in different activities in the process, involving both financial and environmental streams. Sustainable Investment Management (SIM) plays the role of 'RCF Cerrado Programme Coordinator', to ensure the adequate integration of both these streams. The management of the CRA issuance is done by Opea Securitizadora S.A (the Securitization Company). Traive is responsible for the credit risk analysis of the producers and subsequent credit risk monitoring.

B.1 Sustainable Investment Management (coordinator)



Sustainable Investment Management Ltd (SIM) is a boutique environmental finance advisory firm incorporated in 2018. SIM's objective is to promote the financing of activities that result in positive environmental impacts worldwide.

At SIM, we have witnessed first-hand the immense potential of combining private and public capital toward achieving targeted environmental goals. We also know from experience that pursuing "green" investments and seeking attractive financial returns are not mutually exclusive.

Our vision is to create a double bottom-line global investment firm to mobilize capital for actionable sustainable development. We do this by connecting investors seeking positive environmental change with credible businesses and implementable projects that have a direct and immediate environmental impact.

Our aim is that our financial mechanisms can have a disruptive effect at scale, helping to inflict change at sector or landscape level.

SIM works in four different sectors:

- Sustainable agriculture
- Sustainable forest and conservation finance
- Greenhouse gases (GHG)
- Waste management and the circular economy

SIM's senior management team is:**Pedro Moura Costa, Founder and CEO, UK**

Pedro has over 25 years' experience in the forestry, climate and environment sector. As well as co-founding SIM, he is also co-founder and director of BVRio Environmental Exchange, and co-founder and former President of EcoSecurities Group Plc., the world leader in greenhouse gas mitigation and carbon trading. Pedro has authored over 100 publications including the Intergovernmental Panel on Climate Change (IPCC) reports that were awarded the 2007 Nobel Peace Prize. He has a PhD from University of London.

**Mauricio Moura Costa, Founder and COO, Brazil**

Mauricio has over 25 years' experience in commercial and financial law, M&A, banking and finance, capital markets and general contracting. He is co-founder and director of BVRio Environmental Exchange and was formerly country director of EcoSecurities Group Plc. Brazil and managing partner of international law firms in Brazil (São Paulo) and Portugal (Lisbon). Mauricio has a doctorate in Economic Law from Université de Paris II (Panthéon-Sorbonne).

**Grace Blackham, Director, ESG and Compliance**

Grace has over 15 years' experience in tropical ecology, project management, sustainable land use practices and policy, and financial and environmental compliance. Grace has a MSc from Oxford Brookes University and a PhD in Tropical Forest Ecology from the National University of Singapore. She has worked on a variety of land use and forestry projects in Southeast Asia, Africa and Latin America.

**Steven Ripley, Director, Investment Engagement**

Steven has spent his entire professional career (20+ years) working towards creating value for forests. He's held positions with the United Nations, Global Canopy, IDH Sustainable Trade Initiative and Tesco, as well as a decade working for software firms developing commodity traceability systems. Steven holds a Masters in International Environmental Law and a Bachelors in Environmental Science.



B.2 OPEA Securitizadora (Securitization Company)



Opea is a pioneering securitization platform in Brazil. It provides, in an agile and transparent manner, services within the regulated securitization market, such as: Issuance of securities, portfolio management, billing process, paying agent, etc. Opea's solutions and services have supported companies within a variety of industries, especially real estate and agribusiness, to access alternative sources of funds in the Brazilian capital markets.

With 23 years of experience, Opea has issued more than 600 series of receivables certificates (CRI – Real Estate and CRA – Agribusiness), financial debentures and receivables investment funds, totaling more than R\$102 billion.

Opea works closely with the main agents in the Brazilian capital markets, such as investment banks, institutional investors, independent originators, paying agents, regulator, clearing house, etc., in order to coordinate the issuance process and its closing.

Since 2021, Opea has become an independent company, been part of Jaguar Growth Partners (JGP) investment's portfolio. JGP is an American private equity's firm.

Opea senior management team:

Flavia Palacios – CEO

More than 25 years of experience within the financial sector, Palacios holds a degree in Economics from the Federal University of Rio de Janeiro and an MBA in Finance from IBMEC Business School. As the CEO of Opea, she is responsible for leading the company's strategy, developing partnerships, and overseeing the day-to-day operations. Under her leadership, Opea has become a leading player in the securitization market, with a proven track record of delivering innovative solutions to its clients.



Marcelo Leitão – CSO

Marcelo Leitão is a financial expert and the head of securitization at Opea Capital. With over 20 years of experience in the finance industry, Marcelo oversees the securitization of various types of assets, including real estate, receivables, and infrastructure projects. His expertise in structuring complex financial transactions has led to the successful closing of numerous deals, making Opea Capital one of the top players in the securitization market in Brazil.



Renato Barros – Head of agribusiness

Renato Barros is a seasoned executive with over two decades of experience in agribusiness. He currently serves as the Head of Agribusiness at Opea Capital, an investment firm focused on the agricultural sector. Renato has a deep understanding of the challenges facing farmers and ag-related businesses, and his expertise is critical to the firm's success.



Thiago Faria Silveira – Head of Fiduciary Management

Thiago Faria is the Head of Fiduciary Management at Opea who has a remarkable track record of managing and analyzing portfolios. He is known for his keen analytical skills and in-depth knowledge of the financial markets. Thiago has a vast experience in the financial industry and has held key positions in several organizations before joining Opea.

Rodrigo Shyton – Head of Credit Services

Rodrigo Shyton is the Head of Credit Services at Opea Capital, a finance professional with a focus on credit. He is known for his expertise in credit analysis and risk management. Prior to joining Opea Capital, he worked at several other financial institutions, honing his skills in credit analysis and underwriting.

Anderson Pereira - Services Coordinator

As a Services Coordinator, Anderson is responsible for overseeing the day-to-day operations of the company's service department. Anderson has a strong background in customer service and operations management, with experience working in various industries prior to joining Opea Capital.



B.3 Traive (Credit and risk manager)



Traive™ is an open financial platform that connects the entire agricultural chain to the capital market using data and an innovative financial solution, eliminating uncertainties, increasing operational efficiency, and lowering costs in a timely and sustainable manner. Traive provides all agricultural credit management services and connections in one place, from order to payment.

Traive's vision is to create financial solutions for both lenders and borrowers so that everyone in the agricultural sector can prosper.

Traive's mission is to revolutionize the Brazilian agricultural financial sector through data technologies and financial connections.

Traive senior management team:

Fabricio Pezente is a co-founder and the CEO of Traive. He worked for 12 years in investment banking, where he led a quantitative modeling group as an expert in financial asset pricing. Fabricio attended Escola Politécnica da USP in Brazil for his Bachelor's degree and the MIT Sloan School of Management for his MBA. At Traive, he is bringing the technologies that are disrupting financial services to the agriculture industry.



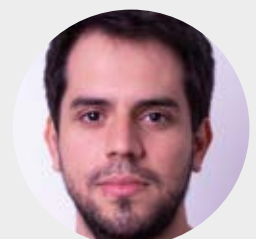
Luis Lapo is the Risk Chief Officer of Traive. He has 15 years of experience in financial markets and risk management. Luis Lapo attended Universidade Estadual de Campinas (UNICAMP) for his Bachelor's degree in agricultural engineering. At Traive he offers a unique, fair, and live credit risk assessment to farmers, cooperatives, input suppliers and agricultural industries.



Rafael Arruda is Credit Risk Coordinator at Traive. Rafael attended UNICAMP for his Bachelor's degree in agricultural engineering. Worked in Agribusiness Credit in inputs distributors, structured operations, credit policy structuring, implementation of systems for credit assessment and portfolio management. At Traive, he has been working with Structured Finance and credit assessment. Actively collaborated with the first Green CRA operation in Brazil certified by CBI. Also, working on the relationship with clients, partners and product development SME.



Antonio Hildenberg is Credit Risk and Structure Finance Coordinator at Traive. Antonio attended Brasilia Federal University (UNB) for his Bachelor's degree in Civil Engineering. Since the beginning of his career, his experience was dedicated to credit risk assessments, securitization and credit facilities structuring, working in the past 4 years at Santander Wholesale Credit Risk department and at Traive, both experience covered agriculture companies and farmers in the Brazilian market.



B.4 BVRio (Secretariat Environmental Advisory Board)



Founded in 2011, BVRio (Bolsa Verde do Rio de Janeiro – Environmental Exchange of Rio de Janeiro) is a non-profit organization working at the intersection of economic, environmental and social sustainability. BVRio was originally created with the objective of developing market mechanisms to facilitate compliance with Brazilian environmental laws. The models and approaches developed there have now been adapted to develop market mechanisms, economic tools, and support the development and implementation of environmental initiatives and markets in different countries and regions worldwide.

BVRio's operations are overseen by a board of directors and an audit committee made up of members from business, NGOs and academia and individuals.

BVRio works to deliver positive impacts for the economy, environment and people through work focusing on:

- Sustainable land-use, agriculture, and forests
- Waste management in support of the circular economy
- Climate change and the bioeconomy

BVRio acts as the Secretariat of the Responsible Commodities Facility Environmental Advisory Board and is involved in the processes of monitoring farmer compliance with the eligibility criteria of the fund.

BVRio is represented by:

Beto Mesquita, an experienced forest engineer, Beto is Doctor of Environmental and Forestry Sciences and Director of Policies and Institutional Relations for BVRio. He is responsible for liaising with partners and representing institutions in various forums and managing projects and initiatives in the areas of forest, sustainable production and public policies.

Theresa Rocco Pereira Barbosa, Theresa is experienced in Spatial Data Analytics and Mapping – Modelling of Tropical Natural Resources and Land Cover. She is a geologist, and has a MSc from Santa Maria Federal University in Soil Science and a MBA in Progress in Data Science and Analytics from Esalq-USP.

Francisco Godoy, Francisco has almost a decade of experience in forest law, working as a geographer. His expertise includes analysing deforestation, remote sensing, a broad knowledge of the Brazilian Forest Code, and mastering its databases. Alongside his role he is also currently pursuing a master's degree in Geography at PUC-Rio.



Lucy Cox, Lucy has over 20 years corporate communications and Public Relations experience latterly within the environment sector. Lucy is responsible for SIM communication channels and activities and is the media contact.

Ludmila Girardi, Ludmila is a journalist with MBA in Marketing and a Master's Degree in Human Geography focusing on Environmental Policy, Sustainable Food Systems and Cartography. She has experience working within the Brazilian government, publishing, research and charitable sectors.

Huoyun Li, Huoyun is responsible for maintaining the financial systems and controls for SIM. She has dual-qualification in engineering science and accountancy (ACCA) and previously she worked in climate change business, specialising in GHG MVR under various schemes.





Responsible Commodities Facility

sim.finance/responsible-commodities-facility

