

Progress Report
2019

South American Soy



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Our approach to soy sustainability

Letter to stakeholders



There has been a rising sense of urgency in South America this year at the intersection of agriculture, politics and the environment. Political and social pressures created strains among different communities. People around the world became alarmed at an increase in the number of fires in and around the Amazon biome. And critics

expressed frustration that no simple solution was immediately available to protect forests across the region. In countries like Brazil and its neighbors, these were more than just headlines. They represented the tensions of everyday life for farmers and their communities.

The deforestation happening in South America today is driven by complex factors. A small amount is linked to soy production, but most of it is not. While some of it is happening illegally, much of it is being done legally. In Brazil for example, there is a strong Forest Code in place that requires farmers to preserve a percentage of their land as native vegetation. Yet they may still legally convert some to agriculture.

Meanwhile, across the rural areas of Brazil, Argentina, Paraguay and Bolivia – the countries that contain the crucial Amazon, Cerrado and Gran Chaco biomes – agriculture is a central pathway to prosperity for millions of people and their

communities. For example, nine out of the 10 Brazilian states with the best income equality according to the [GINI index](#) have economies that are predominantly driven by agriculture. In total, agribusiness in Brazil is equivalent to approximately 20% of the country's GDP, according to [government data](#). In neighboring countries, the sector is similarly important.

And with the food they grow, these communities nourish billions in other parts of the world. According to [industry data](#), Brazil exported 72 million tons of soybeans to feed other countries in 2019, the highest in the world. Argentina, likewise, has become the world's largest exporter of soybean meal. In total, [South American exports](#) of soy now exceed those from the rest of the world.

All of this means that farmers need to play a key role in solving the problem of deforestation while at the same time helping the world to feed 10 billion people by 2050. We must engage farmers in a way that allows them to continue to grow their businesses, protect their livelihoods and develop their communities. We must support them through the industry's transformation with practical solutions that acknowledge the very real risks they take on with each planting. And most important, we must listen to their perspectives and find solutions together.

We know there is more work to do in South America's soy industry. In October, we had a candid discussion with our new external advisory panel on forests about what lies ahead

and how Cargill can do more. Likewise, our teams in both South America and destination markets continue to partner with and connect farmers and customers, all of whom have a strong point of view about what should be done.

Yet we are optimistic that farming and forests can coexist. Why? First, more and more people are focusing on this topic, and attention can catalyze collective action. Second, technology is changing what is possible in terms of monitoring and verifying supply chains, which means transparency can increase. And third, we have seen how multi-stakeholder collaboration can drive positive change, including the protection of the Amazon biome over the last 13 years.

While we cannot flip a switch and transform the sector overnight, we can set it on a new course in the years to come if we work together steadily in good faith. We invite all of you who are connected to these issues and communities to join us, starting by reading and providing feedback on this, our first semi-annual progress report on our soy action plan.

A handwritten signature in black ink, appearing to read 'John Hartmann', with a long, sweeping horizontal line extending to the right.

John Hartmann
Global Sustainability Lead for Agricultural Supply Chains

Soy in South America: What's at stake

Cargill is committed to transforming our supply chains globally to be deforestation-free by 2030, including soy in South America. Our updated [global forest policy](#) applies to all of our supply chains. It lays out our overarching approach to achieving this target. It is founded on our belief that farming and forests can and must coexist. Finding solutions for this equation is what we and our partners are striving to achieve.

Our businesses source soy from all of the major growing regions in the world. We are focused on South America for a few reasons. First, the region has grown rapidly in the last few decades to become a major source of the world's soy. Second, this growth has underpinned many local, rural economies. And third, it is the home of vital landscapes such as the Amazon, Cerrado and Gran Chaco biomes that must be protected.

We have made four commitments to do our part for sustainable soy from South America:

Transforming our supply chain to be **deforestation-free** while protecting native vegetation beyond forests

Promoting **responsible production**, which benefits farmers and surrounding communities

Respecting and upholding the **rights of workers, indigenous peoples and communities**

Upholding the **high standards of transparency** through reporting of key metrics, progress and grievances

Read more in our [Policy on Sustainable Soy - South American Origins](#).

Crucial biomes of South America

The Amazon, Cerrado and Gran Chaco biomes all contain important native vegetation. Yet they are vastly different in terms of their natural characteristics and the local communities that depend on them. The Amazon is the world's biggest tropical forest, home to an immense amount of biodiversity as well as indigenous cultures. Soy farming occurs mainly around its edges. Meanwhile, the Cerrado is a savannah that stretches across Brazil's agricultural heartland. Farming activity here serves as the backbone for local economies and 46 million inhabitants. The Gran Chaco cuts across parts of Argentina, Bolivia and Paraguay. It is the continent's second-largest forest, home to important biodiversity and many different communities as well.

The Amazon



83%
of native
vegetation
still intact

<2%
of soy planted
today is on
land that was
native vegetation
a decade ago

The Cerrado



52%
of native
vegetation
still intact

<7%
of areas cleared
between 2014
and 2016 had
soy on it in the
2017 crop

The Gran Chaco



77%
of native
vegetation
still intact

<1%
of areas cleared
in 2018 had soy
on them in the
2019 crop

Sources: Embrapa, Brazil's Ministry of the Environment, ABIOVE, Funcate, Agrosatélite, FAO and UNEP, Global Forest Watch



Our agricultural supply chain business in South America

Cargill has had operations in South America for more than 70 years, growing alongside its agricultural sector. Today, our agricultural supply chain business competes with numerous other companies to source different crops – including soy – from farmers across the region's central growing areas. We buy these crops where they are grown, transform them into various products, and deliver those products to customers who need them both in the region and around the world.

7,000
employees

Buying crops
from more than
13,500
farmers

Selling products to
6,850
customers in
50
countries

Our agricultural supply chain facilities in the region:



145
country
elevators



10
plants



14
ports



28
offices



Countries in South America
where Cargill's agricultural
supply chain business operates

Our theory of change

We are doing our part to help lead the soy sector forward to a sustainable future. Broad partnerships are needed to create the transformation we all want to see. At Cargill, we are working in real time to make progress with our partners, including farmers, customers, NGOs, government agencies and industry forums. Close collaboration with each of these groups is at the heart of the [soy action plan](#) we published in June 2019.

Our theory of change rests on three core concepts:

- Supply chain traceability and mapping efforts should be risk-calibrated
 - Prioritization should direct resources toward the highest-risk supplies from the highest-risk areas
 - Sector-wide transformation is the best pathway to success
-



Our approach to build a sustainable, deforestation-free supply chain for soy in South America is anchored in [The Soy Toolkit](#) created by Proforest, adapted for the specifics of our business and what we have learned doing similar work in other geographies and supply chains. Regarding risk assessment overall, land conversion is our primary filter in order to protect natural landscapes.

In total, our action plan has six elements:

1

**Assess
and plan
implementation**

2

**Understand
supply chain
risks**

3

**Engage
supplier
partners**

4

**Deploy
action levers**

5

**Advance
transformational
partnerships**

6

**Monitor,
verify
and report**



Progress on our action plan

1

Assess and plan implementation

Cargill interacts with many different groups of stakeholders, including farmers, customers, policymakers and NGOs. Building momentum for sector-wide transformation will require a deep understanding among our internal teams of the needs and expectations of all these groups, especially in places where they may not agree. To help, we have developed programs and materials that inform our internal teams and the stakeholders with whom they communicate. We also formed a permanent internal working team that meets monthly, with participating leaders from across the company who are involved with soy.

Learning together

A significant first step in advancing our approach is equipping our internal teams, our customers, and other stakeholders with an understanding of the complexities related to soy. To do that, we have developed a program we call our Learning Journey on Sustainable Soy. This virtual set of courses debuted in October, with a first cohort of employees from different parts of the world participating over two months.

Courses cover the social and environmental context for soy production in Brazil, the soy sector and Cargill's presence in it, Cargill's current product offerings, the technology and

tools we use to ensure compliance and meet stakeholder expectations on sustainability, and more. Discussions with local leaders in our Brazilian operations provided our team members with the chance to ask the questions that are most relevant to the customers and other stakeholders in their geographies.

In 2020, more of our employees will take the Learning Journey courses, especially those on our global commercial teams.

Our sustainable soy offerings

Today, we provide a portfolio of different products to customers depending on their needs. These include:

Standard soy

Produced and processed following all legal requirements, with the assurance that it has not come from illegally deforested areas

Zero-deforestation soy

For customers concerned with traceability to ensure their soy has not been grown on land connected with any deforestation or conversion, legal or otherwise

Sustainable soy

Produced by farms with fully monitored processes like our 3S program that are free from deforestation and conversion, with verification of agricultural practices, labor conditions and social impacts

2

Understand supply chain risks

To ultimately achieve the progress that we and our partners are seeking, we must identify the sources of all the soybeans we originate and the risks of deforestation in those areas. In order to do this, we are mapping the locations of all of our suppliers with georeferenced single points by the end of 2020. This includes the high-risk areas of the Amazon, Cerrado and Gran Chaco biomes, stretching across Brazil and portions of Argentina, Bolivia and Paraguay. We will update this supplier mapping twice yearly.

A deeper assessment of risk

As we map all the sources of our soy, we must also understand the risks of deforestation or other land conversion in local areas across our supplier network. Getting a more granular assessment will help us identify the full scope of risks involved and opportunities to mitigate them.

In August 2019, we published our first [risk assessment methodology](#), laying out how we would examine the high-risk biomes of the Amazon, Cerrado and Gran Chaco. We then set to work conducting this risk assessment across a large portion of South America at a pixel level of 30 meters. We used data from several sources – including Global Forest Watch, the University of Maryland, MapBiomas, various government agencies, and others – as well as our own proprietary data.

The assessment segmented current land use across all high-risk regions, broken down into the categories of cultivated agriculture, pasture and native vegetation (including forests). It also identified areas that would be suitable for future soy cultivation based on rainfall, soil and terrain, while setting

aside protected regions. It then prioritized areas that are suitable for soy and that still currently have higher concentrations of native vegetation – in other words, areas that could be at risk of deforestation or other land use conversion.

We also used historical information to inform our risk assessment. We looked at areas of forest cover loss since 2008 laid side-by-side with areas where soy is currently in regular crop rotation. This analysis is helping us identify past patterns of soy growth that can be used to predict future trends.

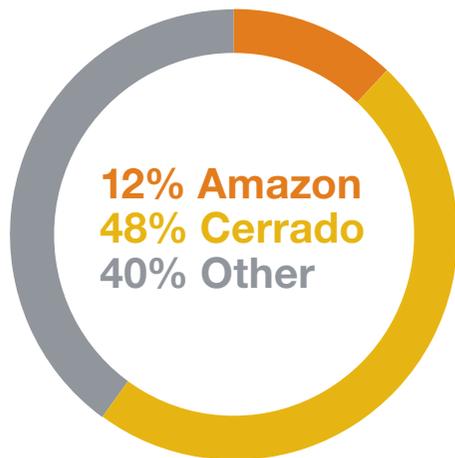
We are continuing to gather insights from this risk assessment and our supplier mapping in order to inform our next steps. We will share more of what we have learned and what those next actions will be in subsequent progress reports. Meanwhile, we will repeat the risk assessment on an annual basis.

980,000,000
hectares were analyzed in our risk
assessment at a resolution of 30 meters

Assessing future risk based on our network

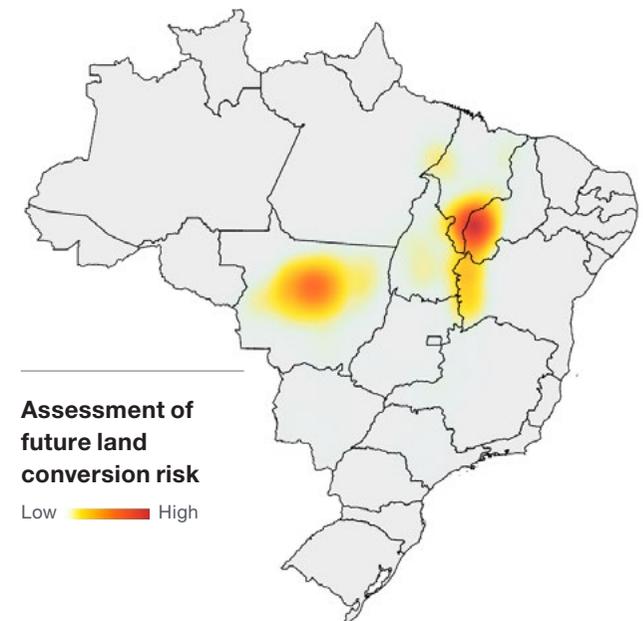
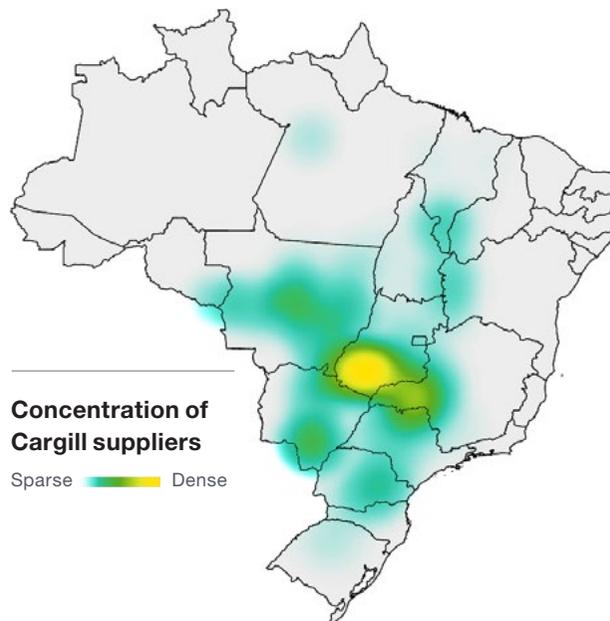
While we continue to complete the mapping of our South American supply chain, we are publishing the information we currently have here. This includes a map of the concentration of our suppliers in Brazil, as well as the results of our risk assessment showing which areas are at risk for land conversion in the future. We will publish similar maps for Argentina, Bolivia and Paraguay in subsequent reports.

Our soybean volume origination in Brazil by biome



Our suppliers and land conversion risk

Using the methodology that we [posted previously](#), we conducted a detailed assessment of where land conversion is at risk of occurring. Here, we are sharing a summary view for Brazil of where our suppliers are concentrated and where land conversion is a risk based on land type and historical trends. We will use all of this data to help us identify and prioritize our next set of actions.



A full picture of our supply chains

We are currently mapping all of our direct and indirect suppliers in the four countries that contain the high-risk biomes of the Amazon, Cerrado and Gran Chaco, using georeferenced single points to identify their locations. We aim to complete this process in 2020. Sharing a summary of this information is part of our effort to increase transparency across our South American soy supply chain.

	Brazil	Argentina	Bolivia	Paraguay
Industrywide soy production	122.3 million tons	55 million tons	2.4 million tons	11 million tons
Cargill direct suppliers by volume	72%	85%	86%*	48%
Cargill indirect suppliers by volume	28%	15%	14%*	52%
Percentage of Cargill suppliers that have been single-point mapped	60%	73%	25%	53%

Sources: [OECD-FAO](#), [USDA](#)

* Measured in number of farmers

3

Engage supplier partners

Farmers are essential to nourishing the world, and throughout Cargill's history we have known that our success is dependent on theirs. We cannot achieve sector-wide transformation to sustainable soy production without enlisting them to help lead the way. Cargill works closely with farmers all around the world, buying their crops and offering them risk management services. We also provide millions of them with training on good agricultural practices to raise their yields and incomes, and work with them to advance the environmental, social and economic dimensions of sustainability.



Collaborating closely with soy growers

In Brazil, our commercial teams maintain close relationships with the farmers who supply us soy. We also help them grow their soy in a sustainable way by offering training and other support from partners like Instituto BioSistêmico (IBS). These extension agents visit farms regularly to share practical applications of sustainability know-how. They also provide assistance digitally through WhatsApp.

We are continuing to invest in our relationships with Brazil's soy farmers, strengthening our ties each year. Read more about our engagement with farmers in [the latest report](#) of the Soft Commodities Forum.

As we fully map our network of farmers who supply us with soy and overlay it with a risk assessment for land conversion, we are developing a list of priority suppliers with whom we will raise our level of engagement during the years ahead. We expect to have this list completed during 2020 and use it to accelerate action in this area.

This year, Cargill trained more than

2,600

farmers in Brazil on sustainable agricultural practices and certification programs

Telling consumers the story of certified soy

Since launching in 2010, our 3S program has sourced soy from farms that are certified to meet exceptionally high standards for agricultural practices, labor and environmental impact. About 200 farmers in Brazil participate in the program today, which is independently verified and is focused on continuous improvement each year. Farmers get technical assistance to enhance their operations from experts at organizations like IBS.

Because 3S is deforestation- and conversion-free, it aligns with European Union standards and programs such as RTRS, ISCC, FEFAC and others. This makes it ideal for our European customers who have a strong interest in soy that addresses several dimensions of sustainability.

Consumers in Brazil can now participate in the 3S story, too. Our Liza® Origens brand of cooking oil is made with soy from our 3S program. Available at retail locations, this brand helps consumers know more about the type of farm that produced it.

“I’ve always been really concerned about environmental issues,” said Ana Paula Rizzi, manager at Rizzi Farm, which participates in the 3S program. “With this program, [consumers] can realize how important sustainability is at the origin of soybean production.”

[Watch a video](#) about Liza Origens, and [read the story](#) of another one of our 3S farmers.

400,000

hectares are monitored across
six Brazilian states as part of our 3S program

Talking about change with farmers in Paraguay

As the expectations of our customers and their consumers change, we are taking that message to farmers in the region to help them grow soy in a more sustainable way so that they can maintain their market access.

At a sustainable agriculture seminar this August in Paraguay’s Naranjal district, our sustainability team spoke with more than 700 people about sustainability issues, market demands and good agricultural practices.

We also started the process of deploying our 3S program in Paraguay, beginning by training our commercial teams. We rolled out a 3S pilot at five farms in October, with the aim of expanding 3S to 200 farming operations in the country for the 2020 crop.

Our Liza® Origens brand of cooking oil is available at retail locations in Brazil, made with soy from our 3S certification program to ensure responsible production throughout the supply chain



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Deploy action levers

Creating sector-wide transformation in South America's soy industry will require tools to identify and end illegal deforestation while also providing farmers with alternatives to legal deforestation as they seek to maintain their livelihoods. In both regards, we are working with our partners to strengthen existing tools and develop new ones. We will continue to take action in ways that we believe will be the most effective in bringing about the changes we want.

Crucial enforcement tools

Government agencies in Brazil play a key role in protecting native vegetation. The country's 2012 Forest Code established mechanisms for addressing illegal deforestation and stipulated that between 20% and 80% of native vegetation on agricultural properties must be preserved, depending on the region. Meanwhile, the federal government maintains lists of farming operations accused of illegal deforestation and slave labor.

On a daily basis, our commercial system consults these government lists of embargoed farms and blocks them so they are not eligible to sell soy to us. Our system also consults lists of non-compliant producers managed by the Soy Working Group (GTS) based on the Amazon Soy Moratorium, as well as voluntary programs managed by the state of Pará such as the Green Grain Protocol.

When a farm is blocked in our system for being on one of these lists, we also block other farms registered to the same person or entity in the local area (or in the case of a farm that shows up as a labor violator, we block all other associated farms across Brazil). These affiliated farms are only unblocked once we have conducted an analysis to ensure that soy from the violating farm is not being rerouted and sold to us through the affiliated operations. This helps ensure that the soy flowing into our supply chains was produced responsibly. Our local commercial teams have been fully trained on these tools and procedures.

\$30 million for new answers

Legal land conversion becomes more of a risk when the market sends signals to farmers to ramp up production. Sector-wide transformation will ultimately require new mechanisms to incentivize farmers to conserve forests, even when they have a legal right to clear them.

This year, we announced a \$30 million fund to jumpstart ideas for such mechanisms. We also asked others connected to soy in South America to join us because we know that solving this issue will require broad partnership.

Since announcing the fund, we have begun the process of identifying an external administrator for it. We are also pursuing a startup accelerator similar to those we have conducted in other regions. Startups with relevant business models, technology and expertise will be invited to apply. They will be able to connect their fresh thinking with the know-how of Cargill and our partners. More information will be shared about this accelerator soon.

In the second half of 2019

75 farms
were blocked

96 additional operations
were analyzed to avoid
rerouting of soy

5

Advance transformational partnerships

Given the complexity of the soy sector in Brazil, transforming the supply chain requires a multi-stakeholder approach. Collective action among farmers, processors, traders, NGOs and governments is essential to creating lasting change. For that reason, we work closely with many industry groups and associations, as well as other leaders and experts, to achieve our shared goal of protecting forests and native vegetation.

Brazilian Association of Vegetable Oil Producers (ABIOVE)

For 37 years, this association has represented the companies that process oilseeds and produce meal, vegetable oils and biodiesel. Its member companies are among the country's largest exporters, adding value to Brazil's oilseed and grain chains and advancing sustainable production practices.

Soy Working Group (GTS)

Cargill actively participates in this forum to protect forests in the Amazon biome, which was formed by members of ABIOVE, the Brazilian Association of Cereal Exporters (ANEC), Brazil's Ministry of the Environment, Banco do Brasil and civil society organizations. In 2006, industry members of the group signed a voluntary agreement pledging not to market or finance soybeans produced in areas of the Amazon that were deforested from 2008 onward. Still in effect today, this moratorium is credited with helping to drastically lower deforestation rates in the biome even as the area used for growing soy quadrupled, as soy moved onto previously cleared land.

Cerrado Working Group (GTC)

In the Cerrado biome, the GTC brings together companies, governments, banks and consumer brands with the aim of eradicating deforestation and reconciling soybean production with environmental, economic and social interests. Unlike the Amazon, where the bulk of deforestation has historically been illegal, some of the conversion of native vegetation in the Cerrado occurring today is both legal and perceived by local farmers to be an important part of the region's economic development. This makes a narrow environmental moratorium approach problematic. Therefore, the GTC has proposed the Cerrado Conservation Mechanism as an alternative means of incentivizing farmers to not clear land.

Soft Commodities Forum (SCF)

Convened by the World Business Council for Sustainable Development, the SCF is a global platform for leading soft commodities companies like Cargill to advance collective action around common sustainability challenges like those in South America. SCF members have agreed to a common framework for reporting and monitoring progress on transparent and traceable supply chains for soy in Brazil's Cerrado region. Read [the latest SCF report](#) to learn more.

Soja Plus

Funded in part by Cargill, this is a free and voluntary educational program to help Brazilian farmers continuously improve the economic, social and environmental management of their operations. This includes equipping them with sustainable agricultural practices that the market is now demanding. Technical experts visit participating farms to monitor performance and provide coaching. Cargill invests directly in this program across the states of Minas Gerais and Goiás. Currently, farming operations participating in Soja Plus account for about 8% of Brazil's total soy production.

Since 2011, Soja Plus has provided technical assistance on more than

2,000

farms across five states

In a two-year period, funding to Soja Plus from Cargill helped farms improve:

11.6% on environmental indicators

10.2% on productivity indicators

Sources: [ABIQVE](#), Cargill

A panel of advisors to help guide our efforts

We know that there is a lot we can learn from leaders in other sectors. That's why we convened a [Land Use and Forest Sustainability Advisory Panel](#) to challenge our thinking, hold us to a high standard and help us identify new solutions. These 10 experts hail from a wide range of environmental, academic and farmer organizations. They live and work all across the world, and their insights will build on our existing work with trusted thought leaders and various partners.

The first meeting of the panel took place at Cargill's headquarters in Minneapolis at the start of October 2019. Panel members met with Chairman and CEO David MacLennan, Chief Sustainability Officer Ruth Kimmelshue, and other Cargill leaders and experts on topics connected to sustainability and high-risk supply chains.

Among other things, the panel urged Cargill to define and share milestones for reaching our 2030 no-deforestation target. They also challenged Cargill to embrace a holistic approach to sustainability and broad-based transparency. And they brainstormed ideas for the \$30 million fund to develop new market mechanisms that protect native vegetation.

The group will meet again in January 2020 and twice a year going forward.



6

Monitor, verify and report

Continuous monitoring is essential for confirming that we are seeing the change we want and for taking corrective action when needed. Cargill and our partners have already built and implemented some of the world's most advanced monitoring systems to protect native vegetation. Now, we are pushing forward with even more cutting-edge solutions. Meanwhile, we encourage all stakeholders to share with us when they see something that is not right. And we are committed to transparency through regular progress reports like this one.

Knowing more in real time

Today, agencies within the Brazilian government publish regular lists of farms that have been accused of illegal deforestation or slave labor. Our commercial systems already consult these lists on a daily basis and block those producers so that they are not eligible to sell to us. This helps ensure that soy entering our supply chain was made in a responsible way and in compliance with the law.

New systems will enable us to do even more. Based on our supply chain mapping and risk assessment, we know which of our suppliers are located in areas that are at high risk for deforestation. We are currently building an internal monitoring system that will use a mass balance approach to provide reports to our customers about attributes of their soy. With this information, they will be able to share more about their own products, raising the bar for transparency. And in addition to customer-specific proprietary reports, we will be able to publicly report more details about our soy volumes at the aggregate level. We expect this system to go live in the first half of 2020.

Ending legal deforestation will require more detail on where, when and why it occurs. Our new system will use data from sources like the University of Maryland and Global Forest Watch to identify legal land conversion as it is happening in our supply chain. Then, our commercial teams will be able to

engage with the relevant farmers. As other incentive mechanisms for conservation are developed, we will be able to offer these as alternatives to those farmers so they can protect both their livelihoods and the forest resources on their land.

A stronger system for grievances

We recognize that there is a lot of progress still to be made and that the reality on the ground in the supply chain may not always line up with our stated values or objectives. That's why we encourage people to report grievances when they see something they feel is not right.

During the second half of 2019, we strengthened our grievance system and review process. Now, decisions on how to take corrective action are made by an internal panel representing different parts of Cargill, including members of our commercial, sustainability and legal teams.

143

soy-related grievances were reported in our system during the second half of 2019

Continuing to protect the Amazon

In 2006, Cargill worked with others in the soy industry, environmental NGOs, local government and more to establish the Soy Moratorium. This voluntary commitment says that we will not buy soy from farmers who cleared land in protected areas of the Amazon biome after 2008, even if this deforestation is legal. The moratorium has been credited with helping to drive a significant decline in deforestation rates during the decade that followed.

With fires in the Amazon grabbing international headlines in the middle of 2019, many people around the globe became understandably concerned about whether protections for this biome were deteriorating. Cargill uses external

registration and monitoring programs combined with internal processes to ensure that we do not buy soy produced from areas deforested after 2008. These programs continue to function robustly. Meanwhile, the [latest report](#) on the Soy Moratorium shows that in 95 municipalities across seven states representing 98% of soy production in the Amazon biome, just 1.4% of the total soy grown in the biome during the last crop failed to comply with the no-deforestation requirement. Cargill does not buy from any of these noncompliant producers.

After more than a decade, the Soy Moratorium continues to operate effectively as a protection for the crucial landscapes of the Amazon.





thrive

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the world
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