atvos

Annual Report

2018/2019 harvest

Table of contents

Leadership messages 102-14

Board of Directors

The 2018/2019 harvest was marked by challenges in the macroeconomic, political and sectoral environments and by a Gross Domestic Product (GDP) that remained at the 2017 level with only 1.1% increase. Despite the drop in sugar prices, the markets in which we operate – biofuels and energy from biomass – achieved significant results in the period.

In this scenario, we initiated a financial restructuring process with deleveraging goals and adjustment of our capital structure. We have a transparent agenda for dialogue with our creditors and we are convinced that we will soon successfully complete the judicial recovery phase.

In the operational area, we made investments around R$610 million to renew and expand sugarcane fields, agricultural equipment and industrial improvements. We intensified the reorganization and standardization of processes, with a thorough study on farming, which allowed for improvements in planning. Despite adverse weather conditions, the milling was resumed and reached 26.7 million tons, almost one million more than in the previous cycle, which represents progress in sugarcane and evolution in the maturity of operations.

These results would not have been achieved without the 46 sugarcane suppliers that are part of our *Parceiros Mais Fortes* program and who produced 7.9 million tons of the product. In this harvest, we increased our sugarcane supplier base by 28% and we also signed 1,300 contracts with land partners.

In addition, because we believe that our 10,526 members and about 5,000 third parties are the strength of the company, we continue to focus on people development. Thus, we devoted 608,157.1 hours to training members. Even with emphasis on health and safety during training and processes, we had three accidents.

Following a thorough forward-thinking diagnosis, we affirm our purpose of "seeking creative and cost-effective solutions for producing clean and sustainable energy for the planet" based on an ethical and fair performance and a value relationship with our members, partners, general suppliers and customers.

We experience the maturity of our compliance system – an essential asset in conducting our business. We have 15 policies and guidelines, nine of which were created and updated during this harvest. We strengthen our due diligence practices based on a comprehensive risk analysis. These actions allowed us to achieve level four maturity in ten of the 13 indicators of the Ethos Institute Business Pact for Integrity and Against Corruption.

Finally, our participation in the growth of the municipalities where we operate deserves mention, with the creation of thousands of direct and indirect jobs. We continue to invest in training, culture, education, health and environmental preservation programs through our Social Energy initiative, which completes 10 years, 77 projects developed and more than 150,000 people benefited. We were also honored for the second time at the United Nations (UN) Headquarters for the work done to include people with disabilities.

For the next harvest, as we are aware of the challenges, we will focus our efforts on ensuring the continuity of our business by guiding the new leader who takes over as CEO of Atvos, Juliana Baiardi. We know Atvos has the potential to renew tomorrow, and we will constantly work to continue to generate wealth for all our audiences.

Luciano Guidolin
Chairman of the
Board of Directors

Business Leader

At the beginning of the 2019/2020 harvest, I assumed the presidency of Atvos with the mission of leading the company into a new cycle of growth and operational excellence, as well as continue the financial restructuring that is essential to achieving our goals.

In the early months of this new cycle, we filed for bankruptcy in order to preserve our operations, ensure financial balance and, above all, strengthen our commitment to more than 10,000 members, their families, communities, partners, suppliers and customers.

In order to continue the operational advances made in the past harvest, we will continue with the sugarcane expansion plan, the strengthening of our partner and supplier program and the development of our members. We systematically improve practices for the efficient use of resources, responsible cultivation, and innovation in the field and industry.

In addition, we see the National Biofuels Policy (*RenovaBio*) as an opportunity to promote the expansion of production and use of biofuels in the national energy matrix. Managing carbon reduction and energy efficiency indicators has been part of our planning for years and we are therefore ready to contribute proactively to this program. We are the second largest ethanol producer in Brazil and the first supplier in the Country with the largest ethanol mix.

For the 2019/2020 harvest, the expectation is to grind about 27 million tons of sugarcane, enough to produce 2.1 billion liters of ethanol and 237,000 tons of Very High Polarization (VHP) sugar, besides generating 2.9 thousand GWh of electricity.

We created more than 40,000 direct and indirect jobs in four Brazilian states and our social legacy can be seen in the communities where we live.

This history traced by Atvos over more than 11 years of operation and our ability to surpass results are the basis for us to continue the growth trajectory and advance as protagonists in the production of clean and sustainable energy.

Juliana Baiardi
CEO of Atvos

Request for **judicial recovery**

On May 29, we filed a judicial recovery request at the São Paulo State Court with the purpose of preserving our operations, safeguarding our suppliers, partners and customers, ensuring financial balance and, above all, reinforcing our commitment to over 10,000 members, their families and the communities where we operate. The request was a defense because of the hostile onslaught of a single Atvos creditor that, through legal action, put our operations at risk.

With the request for judicial recovery we can continue the process of capital restructuring in a balanced manner. We are confident that we will be able to continue with our business plan and invest in the growth of our sugarcane fields, reducing idle capacity and significantly increasing cash generation.

In the 2018/2019 harvest, we have seen a growth in our productivity and understand that we have opportunities for improvement. The information presented here highlights the reality of the harvest that ended in March this year. For the 2019/2020 crop, the expectation is to grind about 27 million tons of sugarcane, enough to produce 2.1 billion liters of ethanol and 237,000 tons of Very High Polarization (VHP) sugar, besides generating 2.9 thousand GWh of electricity. In our governance structure, some changes are expected due to the request for judicial recovery.

In addition to operating results, we built a social legacy that transformed the reality of the communities where we operate. We invest in training people and believe that we are able to keep the local economy warm by generating jobs and income, accounting for over 30,000 direct and indirect jobs. Atvos has established itself as a cash-generating company and is very confident in the sugar-energy sector, where it sees opportunities for new investments and a promising future. We thank you for your partnership and your trust and take the opportunity to affirm our commitment through the quarterly reports we will publish throughout this harvest.

Report presentation

For the ninth year, we present our Annual Report – 2018/2019 harvest in order to report, in a transparent manner, how we conduct our activities in line with our strategic objectives and our Business Model, as well as our impacts and value generated for our stakeholders.

Accordingly, the document comprises our performance in the governance, economic, financial, social and environmental dimensions for the period from April 1, 2018 to March 31, 2019 and covers all our operations. Following the best practices, we design content in line with the Global Reporting Initiative (GRI) standards in accordance with the Essential Option Standards and International Integrated Reporting Council (IIRC) premises. **102-45 | 102-46 | 102-50 | 102-54**

In order to bring relevant content to our stakeholders, in line with our management, our challenges and our short, medium and long term opportunities, we reviewed our Materiality Matrix in the harvest. The process has led to the prioritization of 11 themes, which we seek to address in this report clearly and transparently. Additionally, the content complies with the United Nations (UN) Global Compact Progress Communication (COP, in Portuguese) in alignment with the Sustainable Development Goals (SDG). **(Check out the step information and the list of topics in Materiality-based value generation.)**

Comments, questions and suggestions regarding the contents of this report can be sent to comunicacao@atvos.com. **102-53**

Enjoy your reading!

Atvos

About the company

Atvos *Agroindustrial* RJ (Atvos *Agroindustrial* S.A. in 2018/2019) is a company with more than ten years of experience in ethanol production, VHP (Very High Polarization) sugar and renewable electric power generation. Because we understand the challenges and the need for growth of the Brazilian sugarcane industry, our name carries the combination of words that represent our actions to make our company one of the largest producers in our sector: attitude and atmosphere. **102-1 | 102-2**

We operate in four Brazilian states – *Goiás, Mato Grosso, Mato Grosso do Sul* and *São Paulo* – with nine agroindustrial units, distributed in five productive poles, responsible for transforming sugarcane into products that generate sustainable energy to move electrical equipment, vehicles and the lives of millions of people. Our head office is located in the city of *São Paulo* and we also have an office in *Campinas* (*São Paulo*). **102-3 | 102-4**

Through our products, the application of new technologies, process improvements and a team of 10,526 thousand members at the end of the 2018/2019 harvest, we seek to contribute to the renewal of the Brazilian energy matrix to combat climate change through replacement of fossil energy sources and consequent carbon footprint reduction. **102-7 | 102-8**

We cultivate and harvest **sugarcane** in an **area of 510 thousand hectares**, equivalent to the size of **three cities of *São Paulo***

Did you know?

Each ton of Atvos sugarcane avoids the emission of 205 kg of CO_2e.

Performance map and **highlights of the 2018/2019 harvest** 102-4 | 102-7

26.7 million tons of **GROUND** sugarcane

2.08 billion liters of **ETHANOL**

212 thousand tons of **VHP SUGAR**

1.9 thousand GWh of **ELECTRIC POWER** exported

9 agroindustrial **units**

10.5 thousand members who work in **5 polos produtivos** distributed in **4 Brazilian states**

Araguaia Pole

Água Emendada Unit (Perolândia) 10

Morro Vermelho Unit (Mineiros) 11

Goiás Pole

Rio Claro Unit (Caçu) 9

Administrative

Head office (São Paulo) 7

Corporate office (Campinas) 8

Taquari Pole

Alto Taquari Unit (Alto Taquari) 1

Costa Rica Unit (Costa Rica) 2

Mato Grosso do Sul Pole

Eldorado Unit (Rio Brilhante) 3

Santa Luzia Unit (Nova Alvorada do Sul) 4

São Paulo Pole

Alcídia Unit (Teodoro Sampaio) 5

Conquista do Pontal Unit (Mirante do Paranapanema) 6

Our products 102-2 | 102-6 | 102-7

We have the capacity to grind 37 million tons of sugarcane, enough to produce 3 billion liters of ethanol and 700,000 tons of sugar, as well as cogeneration of 3.1 thousand GWh of electricity per harvest.

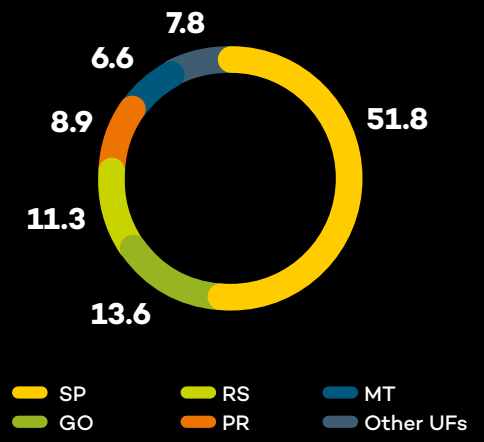
Our products are marketed domestically and abroad, following quality standards determined by regulations and certification systems recognized by customers.

VHP sugar: it represents 8% of our portfolio and is 100% exported to refineries that process the product in their own units.

Electricity generated from sugarcane biomass: clean and renewable source, represents 10% of our portfolio. It supplies the energy demand of agroindustrial units, and the surplus is exported to the National Interconnected System (SIN, in Portuguese). This volume complies with the agreements entered into with traders and distributors operating in the free and captive markets for the purchase and sale of electricity.

Anhydrous or hydrated ethanol: 82% of our portfolio is mainly sold to fuel distributors located in Brazil, who distribute hydrated ethanol to fuel dealers and the addition of anhydrous ethanol to gasoline. The remaining ethanol marketed serves individual customers and distributors who use the product for other purposes, such as biopolymer production, cleaning products, pharmaceuticals and cosmetics.

Ethanol volume distribution (% in sales)



Our purpose 102-16 | 102-40

Following a diagnosis that featured eight one-on-one interviews with Business Leaders (LN, in Portuguese) and a Leaders Meeting that involved 93 leadership members, we created our purpose that reflects our goals, actions, challenges and opportunities to ensure our long-term continuity and value creation for society and the planet.

During the harvest, during the process, leaders also identified the entire Atvos Ecosystem and consolidated the interaction perception with each audience. In addition, the Materiality Matrix review process in 2019 assisted in identifying priority stakeholders for Atvos. **(More information on Materiality-based value generation and Additional content.)** 102-42

Our belief

Clean Energy is essential for the continued progress of humanity.

Our purpose

Search for creative and profitable solutions in the production of clean and sustainable energy for the planet.

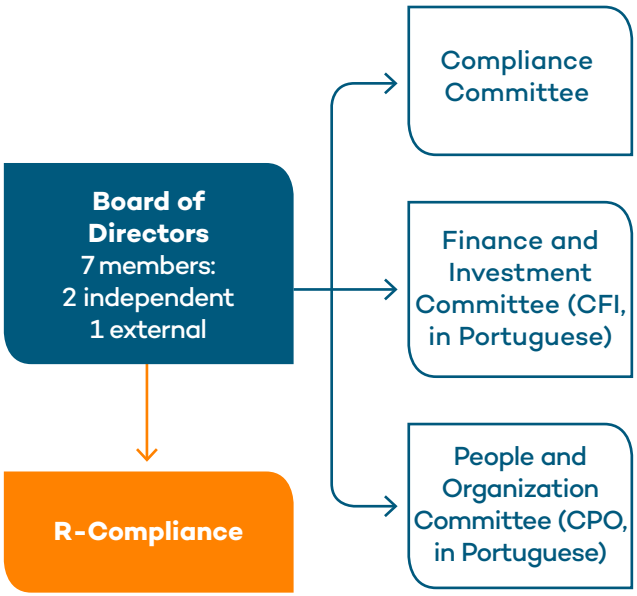
Our principles

- Ethics and integrity: doing what is right, transparently and honestly;
- Appreciation and development of people;
- Sustainable performance in partnership with suppliers, customers and members;
- Commitment to productivity and results to shareholders and society; and
- Serving the customer with innovation and responsibility.

Governance structure 102-18

We are part of the Odebrecht Group, which has global operations in different strategic productive sectors. With autonomy in conducting business and decision-making, in the 2018/2019 harvest, our corporate governance was comprised by a Board of Directors (CA, in Portuguese) and three permanent advisory committees: Finance, Investment and Auditing; People and Organization; and Compliance.

However, as a result of the juidicial recovery request at the beginning of the 2019/2020 harvest, our governance will be restructured to support our objectives. **(More information on the Request for judicial recovery.)**



Board of Directors

102-22 | 102-23 | 102-24

Our CA was responsible for defining our long-term strategy, approving and following our policies and guidelines, as well as disseminating and promoting the concepts of Odebrecht Business Technology (TEO, in Portuguese), which contributes to business growth and perpetuity. It consisted of seven members (two women and five men), of which two are independent, as provided for in our Compliance Policy, and one external. Members are elected through a General Shareholders' Meeting, with a two-year term of office and the possibility of reelection, and none holds an executive position in the company.

Advisory committees

102-22 | 102-24

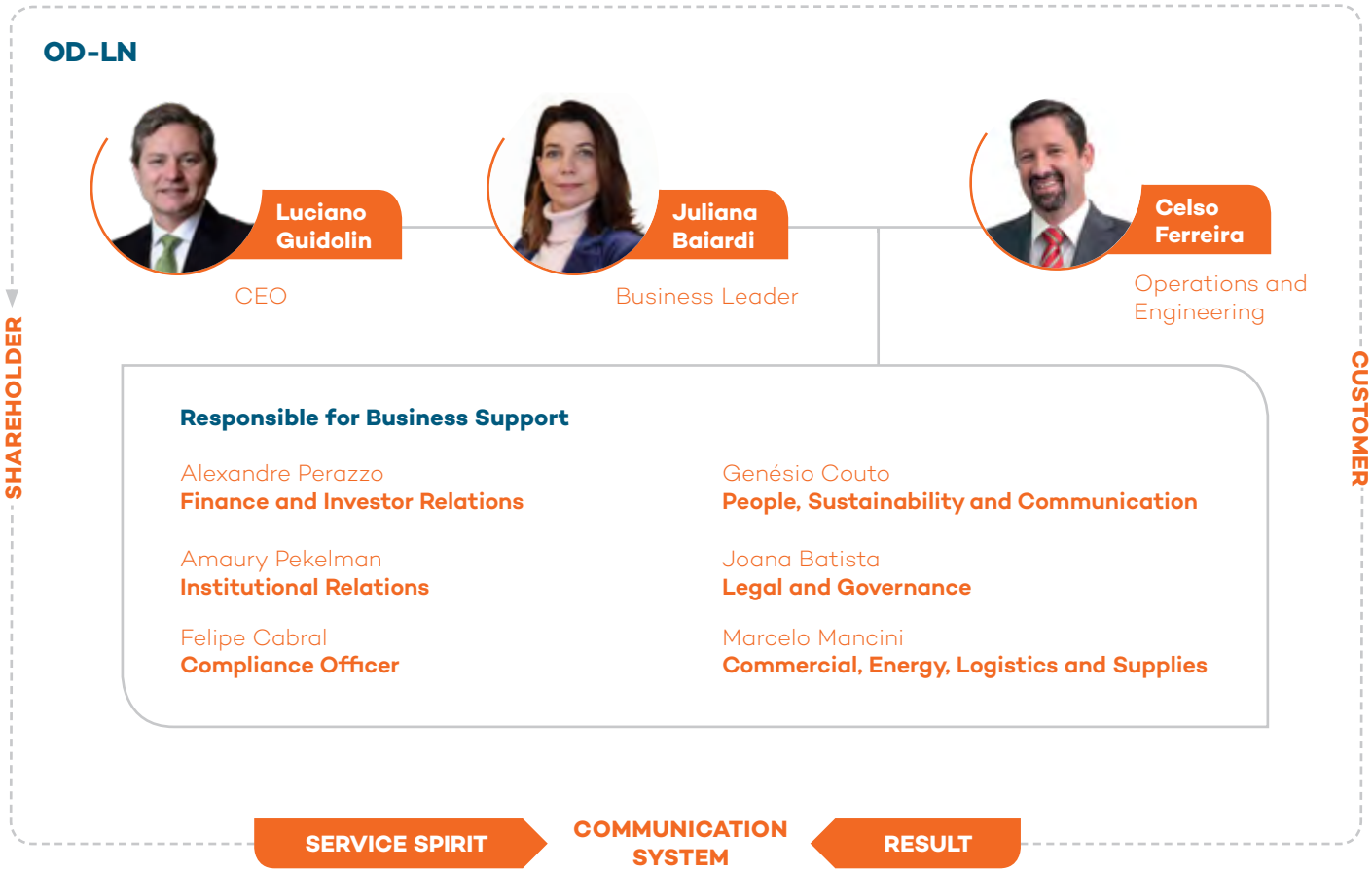
The following three standing committees assist in assessing risks and externalities to contribute to the decision-making and deliberation process and participate in pre-established periodic meetings between members, which are elected by the CA for a two-year term and the possibility of reelection.

Compliance Committee: continuously monitors the implementation of the Compliance System through direct interaction with the Compliance Officer, Atvos leader reporting directly to CA. Comprised by two members: André Amaro and Marcelo Cerqueira.

Finance, Investment and Audit Committee: responsible for monitoring the financial management processes, which are widely discussed at the Committee meetings, consisting of three members: Marco Rabello, Marcela Drehmer and Alexandre Figliolino.

People and Organization Committee: responsible for topics involving the development of our members, compensation strategies and other issues that are sensitive to our human capital. Comprised by two members: André Amaro and Carla Barreto.

Our leadership



Compliance 102-16

At Atvos, we perceive compliance as an asset. We experience the maturity of our processes and evaluate the efficiency of our actions.

In this regard, we have made changes to our due diligence guideline to improve compliance aspects in line with the business reality. To this end, we identified reputational and image risks on environmental, legal, labor and social issues, as well as corruption, terrorism and drug trafficking. The guideline was disseminated to every pole leader – Superintendents, Managers and Coordinators – through specific due diligence training. **205-2**

Check out other initiatives developed during the period:

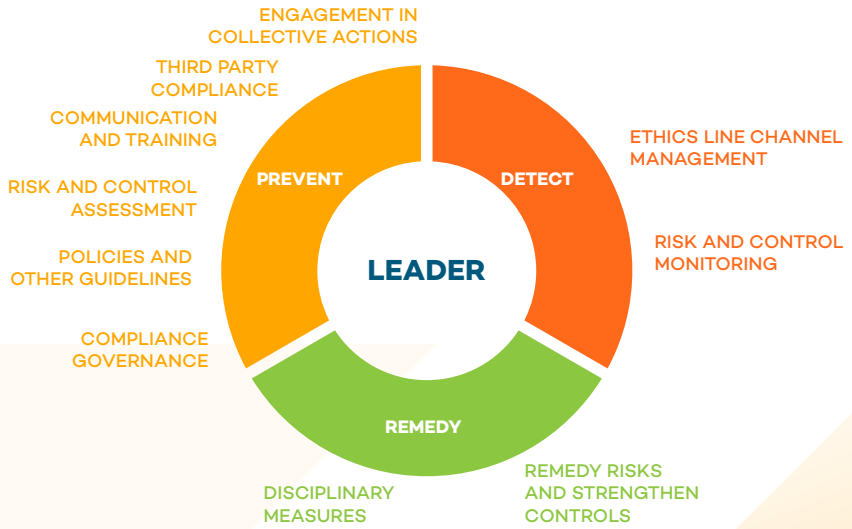
- Creation of private social investment and sponsorship guidelines with clear rules.
- Change of our entire structure to the SAP management system, which ensures greater process robustness and business security.
- Creation of systems access guideline, which contributed to the education and monitoring of possible conflicts in the access release.
- Development of conflict of interest guideline, which included training.
- Approval of a guideline that determines the audit governance, which gained more autonomy in the period, reporting directly to the CA.
- Review of the Supplier Code of Conduct, which comprises our compliance-related practices and policies and whose signature is a fundamental premise for hiring.
- Beginning of the construction of a risk matrix focused specifically on corruption. **103-2 | 103-3: Anti-corruption | 205-1**

It is noteworthy that, regarding suppliers, we also analyze financial and reputational risks through information provided by the supplier portal, and include anticorruption clauses in all our agreements. For the next harvest, the objective is to conduct training on the theme in our value chain. **103-2 | 103-3: Anti-corruption**

Management tools

To guide relations with all our stakeholders, we have a Policy on Compliance with Ethical and Transparent Performance and Integrity, approved in 2017 by the CA, with guidelines for training, prevention and awareness of our members.

To support our members, we have the Compliance System, a set of measures that aims to prevent, detect and remedy ethical risks. The image below shows the integrated non-compliance risk prevention, detection and remediation measures:



Business Pact for Integrity and Against Corruption (Ethos) 102-12 | 102-13

As a continuation of adherence to the Business Pact for Integrity and Against Corruption, an initiative developed by the Ethos Institute of Business and Social Responsibility, we seek to address the management improvement opportunities identified in the previous harvest maturity assessment and the improvement of indicators. To this end, we have developed an internal pact to support Ethos' commitments.

Our goal for the 2018/2019 harvest is to achieve level four maturity in ten of the 13 indicators of the Business Pact for Integrity and Against Corruption. By developing 64 actions in various areas, including cross-cutting goals, we achieved our objective. To this end, we have defined a matrix of terms and responsibilities, ranging from the revaluation of the Supplier Code of Conduct, to the integration of the corruption theme in the value chain, to internal audit in the Accounting area. The commitment goals should extend to the 2020/2021 harvest.

During the period, as the only company in the sugarcane sector, we also signed the letter from the Business Movement for Integrity and Transparency. The movement comprises the creation, by business sectors, of conditions for the deepening and consolidation of programs for integrity, risk management and anticorruption actions, as well as the improvement of legislation.

We have reached maturity **level four** in **ten of the 13 indicators** of the Business Pact for Integrity and Against Corruption

Ethics Line 102-17

To receive complaints about conduct that violates our Commitment to Ethical and Transparent Performance and Integrity, we provide the Ethics Line communication channel, which is part of the Compliance System. Managed by an outside company, ensuring confidentiality and secrecy of the reports and information provided.

Ethics Line Flow

- Reporting via answering machine or third party independent website
- Receipt and verification by the Compliance area
- Definition of disciplinary measure
- Referral of all cases closed to the Ethics Committee, which meets every two months and is responsible for reviewing each one and, if necessary, rectifying the action taken

In support of the channel's management, we have created a reporting investigation protocol for the Compliance area only, with references on how to refine the report and eliminate the subjectivity of the investigation. The initiative also allows case traceability for possible audits.

The information obtained through the Ethics Line also contributes to the continuous improvement of our actions and processes, including training, related to the behavior of our members. In the harvest, we received 465 reports through the channel, of which 148 were well-founded and counted on the appropriate measures – from verbal warning to termination or breach of contract.

Internal communication and integrity building

In the harvest, we focused on controls, training and capacity building of our members to reinforce the guidelines and spread the culture of compliance. We conducted a series of training on due diligence, moral and sexual harassment, money laundering and antitrust practices.

One of the key differentiators to our compliance training program is the customization of content for each type of audience to be engaged. Thus, for teams working in agricultural operations, we continue with the Daily Compliance Dialogues, integrated into the Daily Safety Dialogue (DDS, in Portuguese) practice, which takes place every Friday. Supported by the character Maria, who delivers a clear and accessible message, the *#meucompromisso* campaign encompasses dialogues about harassment, equal opportunity, corruption, conflict of interest, and relationships with others. During the period, 4,903 members concluded the dialogues on nine compliance topics, as well as other topics that make up the DDS. **205-2**

#meucompromisso Campaign

12 months of campaign

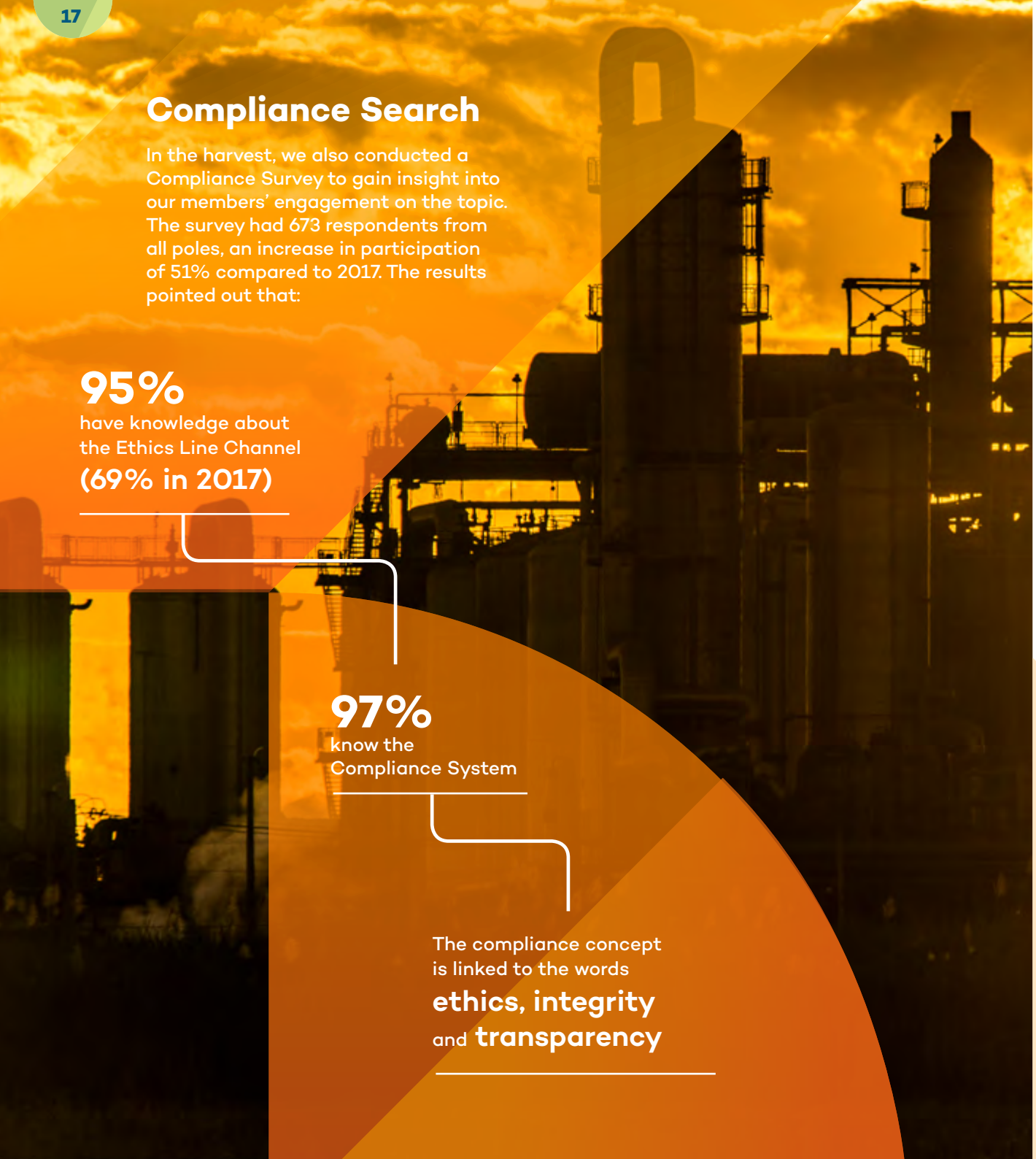
12 topics covered

55 pieces developed

10 videos

Over **2,400** impacts to leaders through WhatsApp

5,655 views of the character Maria on the intranet



Compliance Search

In the harvest, we also conducted a Compliance Survey to gain insight into our members' engagement on the topic. The survey had 673 respondents from all poles, an increase in participation of 51% compared to 2017. The results pointed out that:

95%
have knowledge about the Ethics Line Channel
(69% in 2017)

97%
know the Compliance System

The compliance concept is linked to the words
ethics, integrity and **transparency**

Human rights compliance

103-2 | 103-3: Human rights assessment | 412-1 | 412-2

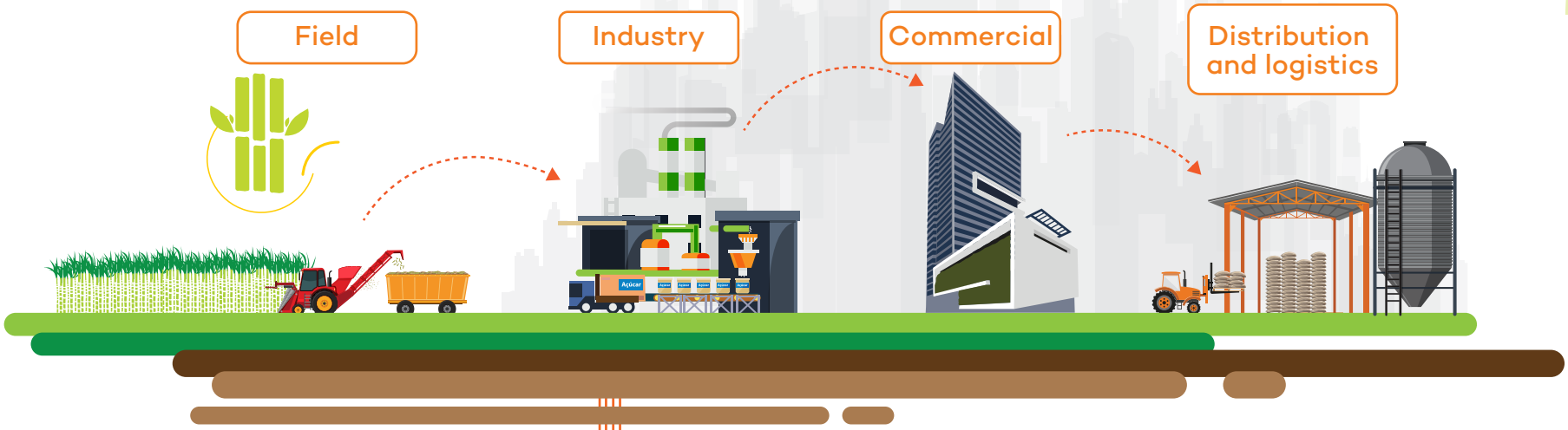
At Atvos, 100% of our operations undergo human rights analysis or impact assessments based on our Code of Conduct as well as all sugarcane supplier operations under the *Parceiros Mais Fortes* program.

During the harvest, 4,646 man-hours of training on policies and aspects related to human rights were dedicated to 5.11% of our staff. Topics such as the fight against drugs, awareness about women in the labor market and sexual abuse were discussed. Their training takes place annually in the productive units of *Mato Grosso do Sul*, in accordance with state laws. **(More information about the initiative aimed at women in the labor market is described in Human capital.)**

Strategy

Business Model

Our Business Model is the structure of our activity for sustainable growth.



Natural capital

16,241 thousand ha of preserved areas

1.5 million tCO_2 avoided

5.5 million tCO_2 avoided by using our products

99% of residue co-processed, sold, reused or recycled

16,120 thousand m³ of recirculated/ reused water

Human capital

10,526 members at the end of the harvest

Over **5,000** third parties

Over **600,000** men-hours of training

4,903 members trained in compliance

Financial capital

R$4.3 billion net revenue

R$610 million of investments mainly in sugarcane fields expansion

R$1.2 billion in operating cash generation

Social and relationship capital

Social Energy Program – 10 years:

- **77 projects**
- **155,000** people benefited
- **R$25.5 million** invested

R$427 million spent on land partners

Stronger Partners:

- **R$565 million** invested
- **46 partners**
- **7.9 million tons** of cane produced

Operational performance

46 thousand new hectares cultivated in the harvest

4% increase in grinding losses compared to the 2017/2018 harvest

100% of harvesting operations and **96%** of mechanized planting

10,842 MW of installed capacity, which represents **7.9%** of sugarcane biomass fueled industries

Grinding capacity of **37 million** tons of sugarcane

Capacity of:

- **Production of 700 thousand** tons of VHP sugar
- **Production of 3 billion** liters of ethanol
- **3.1 thousand GWh** cogeneration of electricity

Materiality-based **value generation**

In 2018, we identified the most relevant topics for our industry and business through a structured consultation process with 155 internal and external stakeholders. These themes integrate our strategy and our management. Thus, our Business Model shows how we generate value for our stakeholders in the short, medium and long term.

Shared value

- We contribute directly to capturing CO_2 from the atmosphere and mitigating the impacts of Greenhouse Gas (GHG) emissions through the recovery of degraded soil, improvements in land quality and the supply of biofuel and energy from biomass, which contributes to the fight against climate change.
- We grow sugarcane on new agricultural frontiers, with innovation and technology, such as satellite monitoring and unmanned aerial vehicles (UAV) and remote sensing, to increase productivity.
- We contribute to the development of supply chains, employment opportunities and income generation. We strengthen the business capacity of our partners and support municipal public management.
- In our units, we increase process efficiency through automation, advanced control and artificial intelligence projects, in order to ensure operational efficiency to consume less natural resources and invest in the development of our members.
- We invest in the development and appreciation of our members by prioritizing internal hiring and qualifying local labor, as well as recognizing their results.
- The supply of clean energy contributes to the renewal of the Country's energy matrix in a way that generates value for our customers and society.
- We create actions that encourage the development of communities in the municipalities where we are present and participate in sectoral discussions in order to contribute to the growth and sustainability of the entire sugar-energy sector.
- We generate revenue through our products and allocate resources towards constant improvements in our processes and operations. Our businesses contribute to the growth of the sugar-energy sector and the generation of wealth for the Country.

SDG and goals

- 5.5, 5.b and 5.c
- 7.2 and 7.3
- 8.4, 8.5, 8.6, 8.7 and 8.8
- 9.1 and 9.4
- 13.2, 13.3 and 13.b
- 16.5, 16.6 and 16.7

See details of our materiality process on the website: **www.atvos.com.br**

Our commitments to sustainability 102-12 | 102-13

The guiding concepts of our operations are in line with global challenges for sustainable development and Odebrecht Business Technology (TEO, in Portuguese). In order to guide the incorporation of sustainability practices into Atvos' strategies and all activities, operations and relationships, we have a Sustainability Policy, approved in 2018 by the Administrative Council (CA, in Portuguese).

The document details the understanding of sustainability applied to the business in line with the global scenario of challenges. Thus, it correlates our business with the 17 Sustainable Development Goals (SDG), which bring together 169 goals to be achieved by 2030.

In this context, in our Materiality Matrix, we contemplate the global agenda of commitments for a perennial future of society. These include the 17 SDG and the ten universal principles promoted by the United Nations (UN), related to ensuring respect for human rights and decent work, protecting the environment and fighting corruption. Thus, we present in this report our Progress Communication (COP, in Portuguese) for the Global Compact – which we have adhered to since 2016.

During the harvest, we focused on the Food and Agriculture Working Group (GTAA, in Portuguese), as part of the team that discusses the creation of a platform for sustainable agriculture, whose first meeting took place at our facilities.

We also actively participate in the GVCes, business initiatives of the Getulio Vargas Foundation (FGV); Companies for the Climate; Center for Sustainability Studies and UN Global Compact Brazilian Network, as well as Ethos Institute. Our sustainability team followed the challenges proposed in the new methodology of GVCes Business Initiatives: business accounts and social and environmental aspects; territorial governance, local development and SDG; and life cycle approach and product portfolio management.

We also adopted the Ethos Institute Business Pact for Integrity and Against Corruption, **the information of which is available in the Compliance chapter.**

Risk management 102-15

To support the management of possible impacts on our operations, we rely on a more relevant risk matrix to guide the definition of action plans for control and mitigation. It includes all strategic, financial, socioenvironmental, compliance and operational risks that may impact the development and continuity of our business.

Our risk rating

Type of risk

- Strategic
- Financial
- Compliance
- Operational

Possible impacts

- Climate changes
- Government and regulatory pricing policies
- Environmental legislation
- Consolidation of renewable sources for electricity generation
- Technological changes
- Changes in consumption patterns

To support monitoring of the aspects mentioned above, which are the responsibility of all members and partners working in the group, we conduct an annual internal audit process to improve controls, policies and other guidelines of the company in line with the strategic planning and the priority risks. In addition to the financial and accounting materiality of the processes, reports to the Ethics Line Channel and the results of previous audits are also considered.

Considering the environmental impacts, a detailed survey was carried out in the harvest that resulted in a list of the five main risks related to the theme. Through the Health, Safety and Environment (HSE) management system, known at Atvos as Attitude, and the Risk Acceptability Matrix, we seek to know, mitigate and avoid the main potential risks to the environment.

Main social and environmental risks 102-15

		Possible impacts			
Risk	**Probability**	**Health and safety**	**Environmental**	**Economic**	**Social – human rights**
Agricultural fires	Very high (> 50%)	Fatality risk	Severe and temporary damage	From R$1 million to R$10 million	None
Vinasse leakage	High (10% to 50%)	Risk of minor injury	Severe and temporary damage	From R$1 million to R$10 million	None
Industrial explosion	Moderate (1% to 10%)	Fatality risk	Small and temporary damage	From R$1 million to R$10 million	None
Environmental or social non-compliance	High (10% to 50%)	Risk of minor injury	Severe and temporary damage	From R$1 million to R$10 million	Criminal actions
Fatal work accident	Moderate (1% to 10%)	Fatality risk	Small and temporary damage	From R$1 million to R$10 million	Criminal actions

The amount of R$14 million was invested in the harvest towards process improvements, waste disposal, monitoring of atmospheric emissions, fertigation and prevention of infrastructure leaks and other risk mitigation initiatives. **(More information is available at Natural capital.)** 102-11

Intellectual
capital and operational performance

Field productivity

Increasing sugarcane productivity is the focus of constant attention on our business model as it directly impacts our costs, environmental aspects and the volume of ethanol, sugar and energy produced in agroindustrial units. Therefore, we seek the best agricultural techniques in order to increase the quantity and quality of sugarcane produced in each hectare.

In this sense, it was a period dedicated to founding a basis for constant and sustainable growth. We devote our energy to the reorganization and standardization of processes, with in-depth diagnosis of our plantation, which allowed us to improve our planning.

We have also advanced in terms of cultural treatment indicators, with constant monitoring of the applied dosage of inputs, sequence of treatment operations and the entire quality portion. In terms of planting, the main focus of our investments, we continue with the sugarcane renewal strategy and the increase in crop productivity, which occupies an area of approximately 510 thousand hectares, adding the areas in which we plant and that are managed by the agricultural partners.

Innovation and quality of operations
We have achieved a significant advance in fertilizer technology – incorporated and scarified –, with improved availability of fertilizer nutrients for sugarcane. Additionally, we created a brushwood monitoring indicator in order to quantify the impact of weeds on sugarcane. We also act towards the prevention of trampling, which occurs when machines pass over sugarcane planting lines, damaging the sprouting of the next cycle. **(More information on Social and relationship capital.)**

With these initiatives, we achieved the best sugar yield in our history, with relatively new assets and focus on operational improvement. In the harvest, the total recoverable sugar (ATR, in Portuguese) performance was 132 kg/hectare, which represents a 2% increase over the previous cycle, and we recorded 65.3 in tons of sugarcane per hectare (TCH, in Portuguese), a performance in line with with the 2017/2018 harvest.

Our harvesting operations are 100% mechanized, as well as 96% of the planting, and have trained members to ensure the quality of the processes and to increase the productivity of the sugarcane fields.

In the **2018/2019 harvest**, the **total** recoverable **sugar** performance was **132 kg/ha**, and we recorded **65.3** of **sugarcane per hectare**

In this sense, we have the *Cana + Forte* program, aimed at professionals working in the field, with ten drivers to be followed in agricultural operations. Created in the previous harvest, the program has led to advances in standardization of indicators – planting failure, timing and sequencing of treatments and sugarcane and ATR predictability goals – and the sharing of best practices across industries.

With more rigor and demand for quality, in the harvest we created the logbook so that the operator himself has autonomy and discernment in the field evaluation. Additionally, we reviewed the Productivity and Quality Program (PPQ, in Portuguese), with performance improvement, considering variables such as fuel consumption, trampling, among others that impact the field.

In order to align the Planning and Quality Management areas in the agroindustrial centers, we hold biweekly Agricultural Production Meetings (RPA, in Portuguese). At the time, corporate support teams monitored and evaluated indicators related to agricultural operations, such as pest control, soil preparation depth, trampling occurrences, fertilized areas and other quality controls of crop treatments.

We also have an Agricultural Advisory Committee, whose main contribution is to bring people with expertise to participate in the agricultural strategy, which allows the exchange of experiences in solving problems. Every two months, we follow the result as a whole of each pole.

Much of the quality of our operations is also guaranteed through investments in innovation and technology in the field, whose harvest volume was R$610 million. During the period, we invested in information technology, remote sensing and satellite imagery for sugarcane monitoring. These innovations contribute to feed mathematical models that ensure better crop predictability, pest and disease monitoring and monitoring of sugarcane growth and evolution in terms of productivity.

In addition, we continue to invest in unmanned aerial vehicles (UAV), which allow for near real-time monitoring of crop development. These are tools and technological equipment that allow for a better study of crop expansion, understanding of vegetation and soil conditions, monitoring of seedling development, quantification of planting or harvesting failures, identification of weeds in the production and post-harvest abnormalities, monitoring of weather abnormalities (such as frost) and increased environmental control.

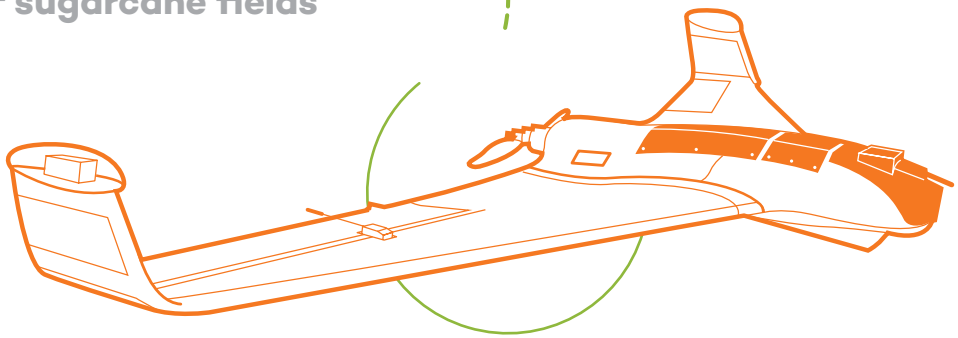
The goal is for 100% of the measurement of planting or harvesting failures to be performed using this equipment.

All units still have the Single Transhipment Queue (FUT, in Portuguese) and harvest, a strategy that optimizes operation through communication between radiocommunication towers and onboard computers installed in the harvesters to indicate the best route to be followed in the sugarcane field.

The application of these technologies allowed the rationalization of operations, with a productivity program that resulted in approximately R$100 million in cost reduction with route optimization and review of input matrix, agricultural practices and people.

R$610 million

of investments mainly in renewal and expansion of sugarcane fields



Focus on expansion

Our goal for the next harvest is to continue with the sugarcane expansion plan in order to fill the capacity of our units in the coming years. In addition to following up on new technologies, we also seek to improve our varietal planting. To this end, we undertake work to **define new varieties appropriate to the regions in which we operate**, which should contribute to a positive impact on productivity.

We understand our challenges in terms of harvesting and grinding, especially with a leaner structure in the support areas. Accordingly, we also focus **on the growth of the agricultural suppliers and partners program.**

In this sense, we ended the 2018/2019 harvest by planting 71,000 hectares, 83% of which focused on renovation. Another important advance in the period was with sugarcane suppliers, which accounted for about 30% of the raw material processed. **(More information on Social and relationship capital.)**

Industry performance

In the 2018/2019 harvest, adverse weather conditions impacted the quality of the sugarcane (sugar, fiber and impurities), which consequently impacted industry indicators. In this scenario, we lost 0.7% in expected industrial efficiency.

On the other hand, we observed the resumption of grinding growth, which reached 26.7 million tons, almost one million more than in the previous cycle, which represents progress in sugarcane fields and evolution in the maturity of operations. For the next harvest, our goal is to grind over 27 million tons of sugarcane and plant 47,000 hectares.

In the period, we obtained 93.9% in Total Corrected Recovery (RTC, in Portuguese), an indicator used by the sugar-energy sector to evaluate the efficiency level of industrial operations, which represents an increase of 0.9% over the previous cycle. This evolution reflects the efforts and investments made mainly in preventive maintenance, equipment regulation and professional qualification.

Product mix orientation

With the drop in sugar prices, our production strategy was to orient our ethanol mix and increase our participation in more profitable markets, such as *Goiás*. We had a record harvest of ethanol production, which reached 240,000 liters in July 2018, with prices above the previous harvest.

Although we reduced our sugar production, our trading team took a good reading of price behavior and set the value more assertively than the market.

As for energy, we produced 100 kW/ton of sugarcane and exported 2.5% more than the previous year: 77% for the regulated market, 21% for the free market and 2% for the Short Term Market (MCP, in Portuguese). **(More market information is presented in Financial performance.)**

Did you know?

In the harvest, the *Costa Rica* Unit was responsible for exporting **1,383.58 MWh** of clean electricity in just one day. This record is enough to supply the entire municipality of *Costa Rica* (*Mato Grosso do Sul*) – with approximately **20,000 inhabitants** – for a month.

Innovation and industry efficiency

In the harvest, we reached the fourth year of a ten-year automation master plan with automation controls ready at all units. We started the advanced control process, with real time simulation, in four units – supported by the implementation of the SAP management system –, which should contribute to operational gains in ethanol, sugar, energy and level of ton of cane ground per member.

In fermentation, we started the *Fermentação + Viva* program, focusing on improving fermentation growth in the industrial process. We also conducted an awareness campaign for our members to disseminate best practices for high performance fermentation, disseminate indicators and goals, and engage them in productivity. At the *Santa Luzia* unit, we began to use redness to improve fermentation.

Steps of *Fermentação + Viva*

1. Follow up and diagnosis
2. Fermentation broth treatment
3. Respect to the fermentation cycle
4. Ensuring adequate amount and concentration of yeast in the tanks
5. Centrifugation in line with centrifuge operating parameters and best practices
6. Ensuring asepsis of the whole process to avoid contamination and productivity losses by the generation of byproducts
7. Preservation of yeast in the best condition during downtime that may occur
8. Slower fermentation during departures and resumptions to ensure fermentation yield

Logistics

The year of 2018 was challenging for logistics, as we covered more than 15 million kilometers safely transporting the ethanol and sugar produced in our agroindustrial units, operating in a multimodal manner (road, rail and pipeline) and seeking to optimize cost-effective delivery to customers.

The truck stoppage in May 2018 added additional complexity to the operation, but Atvos' trust relationship with its logistics partners, which had been built since the company's inception, was critical for all flows to be restored quickly after the end of the stoppage.

Certified units and products

Sustainability permeates our entire production process, and our products are certified according to the most important standards for the sugarcane industry. These include the International Renewable Energy Certificate, which we were the first company in the industry to obtain, and we are able to issue and sell I-RECs to the market.

By doing so, we provide electricity consumers with a traceable way of offsetting emissions from fossil sources. Each I-REC is equivalent to 1 MWh of electricity from renewable sources, and we have the capacity to sell 360,000 I-RECs per harvest through the *Conquista do Pontal* Unit (UCP, in Portuguese).

The other units have the Green Energy seal granted by the Sugarcane Industry Union (UNICA, in Portuguese) to producers with proven clean and renewable energy. Other certifications are Bonsucro™, an international standard with social and environmental criteria for sugarcane production, and the International Sustainability and Carbon Certification (ISCC), a global initiative for sustainability in value chains, both awarded to UCP at the *São Paulo* Pole.

We produce ethanol in line with the requirements set by the US Environmental Protection Agency (EPA), which awards certification under the Renewable Fuel Standard (RFS2) program, and meet the requirements of the Low Carbon Fuel Standard (LCFS) program, managed by California Air Resources Board (CARB), the California state agency responsible for controlling air pollution and combating climate change. **(More information on climate change strategy is available in Looking to the future.)**

Financial
capital

Macroeconomic and sectoral scenario

The 2018/2019 harvest was marked by challenges in the macroeconomic, political and sectoral environments and by the timid start of a growth resumption process in the Country, with an increase of 1.1% in Gross Domestic Product (GDP) in 2018, level 0.1 p.p. higher than 2017. However, in terms of the election period and many uncertainties, the average exchange rate in 2018/2019 was 17.6% higher than the same period last year.

In the field, the harvest in the Center-South region of Brazil was marked by a 3.9% retraction in sugarcane grinding, impacted by the low rainfall at the beginning of the period. Even so, the volume of hydrous ethanol produced in 2018/2019 was a record of 21.8 MM m³, 39.2% higher than the previous harvest (15.7 MM m³). In the case of anhydrous ethanol, there was a 12.3% reduction in production in the period, reaching 9.1 MM m³. The preference for hydrous ethanol production reflects the intense increase in demand from flex fuel vehicle end consumers, who started to consume more ethanol over gasoline as a result of the greater competitiveness of renewable fuel at pumps.

According to the National Agency of Petroleum, Natural Gas and Biofuels (ANP, in Portuguese), hydrous ethanol consumption in the 2018/2019 harvest was 20.7 billion liters, 39.4% more than in the previous period. As for anhydrous ethanol, 10.1 billion liters were consumed, a total of 30.8 billion liters of ethanol. The share of biofuel in the light fuel matrix reached a record level, reaching 44.2% in this harvest.

The international oil and gasoline scenario and the devaluation of the *real* were the main factors that impacted gasoline prices in the Brazilian domestic market, which contributed to a more attractive ethanol price scenario in the Brazilian market.

As a result of the better ethanol remuneration, there was a significant reduction in sugar supply; production ended the harvest at 26.5 MM tons in the Center-South region, a 26.5% reduction compared to 2017/2018. In the global sugar scenario, the global surplus knocked down the international prices of the sweetener, which depreciated the export prices of the Brazilian product. As a result, Brazil stopped exporting almost 8 million tons of the sweetener in relation to the past cycle, according to the Sugarcane Industry Union (UNICA, in Portuguese).

The energy market from biomass was also highlighted. According to the newsletter Bioelectricity in Numbers*, from January to November 2018, the biomass source produced 25,370 GWh for the National Interconnected System (SIN, in Portuguese), a volume 5% higher than the same period in 2017. The newsletter also pointed out that the sugar-energy sector currently has 11,361 MW, which is higher than the installed capacity at the *Belo Monte* Hydroelectric Power Plant (11,233 MW), which represents 7% of the power granted in Brazil and 77% of the biomass source. Thus, it is the fourth most important source of generation in the Brazilian energy matrix, behind the water source, natural gas thermoelectric plants and wind farms.

Source: Sugarcane Industry Union (UNICA, in Portuguese).

Financial performance

103-2 | 103-3: Economic performance

During the 2018/2019 harvest, we focused on the beginning of the financial restructuring process, with deleveraging targets and adjustment of our capital structure in response to our total debt of R$10.5 billion. In this scenario, we maintained a transparent dialogue agenda with our creditor banks, presenting proposals that aim to balance the interests of all stakeholders in a consistent and coherent manner.

Despite factors such as climate variables, pricing policies and truck drivers' strike, our operating cash generation reached R$1.2 billion, a 7% increase compared to the previous harvest.

In the cycle, we reached a total of R$4.3 billion in net revenues and Ebitda of R$1.5 billion.

Income statement – DRE (R$ MM)		
Main indicators	2018/2019	2017/2018
Net revenue	4,281	4,243
Corporate Ebitda	1,367	1,585
Adjusted corporate Ebitda*	1,497	1,576
Total asset	15,144	15,810
Net worth	3,167	4,823
Net debt	(10,367)	(9,325)
Net debt/Ebitda	6.9x	5.9x
Net debt/Net worth	3.3x	1.9x

* No fair value of biological assets.

Direct economic value generated and distributed 201-1			
	2019	2018	Percentage
Sales of goods, products and services	4,751,862	4,737,135	100
Inputs purchased from third parties	(1,987,944)	(1,821,096)	92
Gross added value	2,763,918	2,916,039	106
Depreciation, amortization and exhaustion	(1,546,767)	(1,416,442)	92
Net added value produced by entity	1,217,151	1,499,597	123
Added value received on transfer	147,734	100,374	68
Total added value to distribute	1,364,885	1,599,971	117
Distribution of added value	1,364,885	1,599,971	117
People and charges	770,376	792,861	103
Taxes, fees and contributions	597,984	510,762	85
Assignment of tax losses*	9,857	(1,430,874)	-14,516
Interest and rent	1,453,757	1,233,518	85
Profit for the year	(1,467,089)	479,393	-33
Non-controlling interest	-	14,311	

* Tax losses assigned to Odebrecht Group companies, within the scope of the rules established in the Tax Regularization Program (PRT, in Portuguese) and the Special Tax Regularization Program (PERT, in Portuguese) established by Provisional Measure No. 766/2017 and Law No. 13.496/2017..

Investments

During the period, we made investments of approximately R$610 million, mainly for the renewal and expansion of sugarcane fields, agricultural equipment and industrial improvement, which represents 13% more than in the previous harvest. Of the 46,000 hectares planted in the cycle, 8,000 were devoted to expansion, and the expectation is to increase expansion planting in the coming harvests as part of the planning to operate all agroindustrial units with maximum grinding capacity.

For the next harvest, our goal is to continue short-term investments while maintaining the focus on sugarcane expansion needed to meet the new challenges of the sugar-energy sector.

Investments	2018/2019 harvest	2017/2018 harvest	Δ (%)
Crop formation	(435)	(449)	-3%
Agricultural	(95)	(61)	56%
Industrial	(74)	(48)	54%
Administrative	(7)	(8)	-13%
Divestments	1	2	-79%
Net investments	**(610)**	**(566)**	**8%**
Cultural treatments (TC, in Portuguese)*	(435)	(427)	2%
Investments, net with TC	**(1,045)**	**(993)**	**5%**

* Cash view.

Human capital

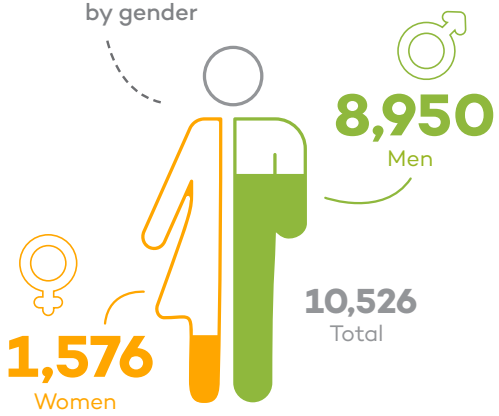
103-2 | 103-3: Employment

Profile 103-2 | 103-3: Employment

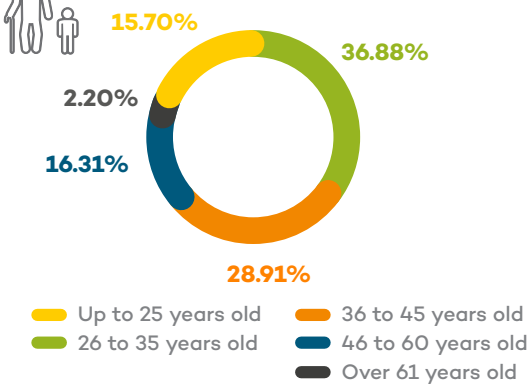
At Atvos, we see our members as the key force for business development and future renewal. By the end of the 2018/2019 harvest, we had a team of 10,526 members (8,950 men and 1,576 women), all covered by collective bargaining agreements, and 5,000 third parties, with leaders dedicated to conveying our values and acting on the development and recognition of our human capital.
102-8 | 102-41

At the end of the **2018/2019 harvest**, we formed a team of **10,526** members and **5,000** third parties

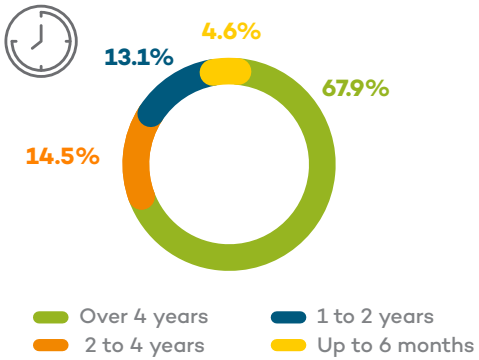
Members by gender



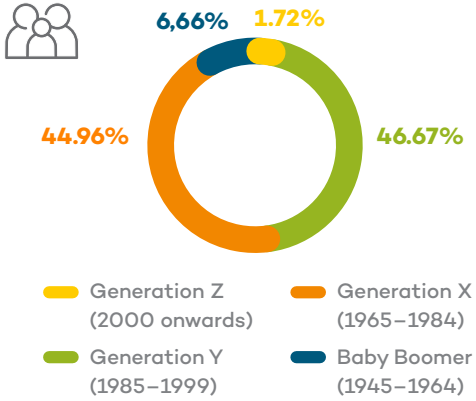
Members by age group



Members by company time



Members by generation



Health and safety

103-2 | 103-3: Occupational health and safety | 403-1 | 403-2

Safety is paramount in the development of our business. In order to ensure that this principle guides all our activities and all our members, we have the Attitude System, which covers all members and third parties and consists of a management system that includes standards, requirements and performance indicators related to Health, Safety and Environment (HSE). **403-8**

Through this action, we act to prevent risks and remedy the impacts caused by accidents occurring in operations. Risk analysis should be updated whenever processes, activities, technology and facilities change or accidents or incidents occur. Every event related to the health and safety of people should be the object of investigation and analysis by the multidisciplinary team, ensuring the adoption of the corrective and preventive actions applicable. Such events, when they occur, must be recorded and communicated internally in order to provide organizational learning.

In addition, among our initiatives is the monitoring of lightning, for which incidence is higher in the off-season. In case of an alert, we interrupt more critical activities and we have a focal point in each unit, detailing the procedures so that the units act in a standardized way and know when to induce the stoppage.

Process energy, agricultural fires and vehicular accidents also gain focus among the main monitored risks. In this sense, we follow, through the planner, the critical events and broaden the scope to give more visibility to the fulfillment of safety procedures in order to gain greater control.

Leaders are responsible for implementing communication processes with each stakeholder. Daily and weekly safety meetings are held to promote unit information sharing as well as critical analysis to promote continuous improvement and evolution in HSE aspects. Additionally, there is an HSE committee that involves the entire leadership for critical analysis of indicator results. **403-4**

Awareness and follow up 403-4

Our leaders contribute daily to all members' safety awareness through field presence and leader-led dialogue focused on team behavior. It is also up to leaders to conduct security checks at the poles by completing the Attitude Card, which encourages leaders to be present in the areas and provide guidance to members.

We have established goals for the Attitude Card, and monthly, the leaders – responsible for the operational areas up to the superintendents – are evaluated according to the results. We have also adopted notification of violations of the Atvos Golden Rules, nine guidelines that all members must follow for safe action. In the harvest, 70% of leaders met the goal and more than 1,500 cards were made per month. Among the highlights is the *Goiás* Pole, with an accident frequency rate of less than one.

Additionally, we have an internal classification in which the highest risk accidents are reported by the responsible superintendent and presented at the Executive Board meeting. In order to improve the integrated management of indicators, we seek to cover all accidents. Factors such as absenteeism, time, attendance and machine repair are accounted for. In the case of environmental accidents, we include fine indicators, sugarcane treatment cost, productivity cost and fire kit replacement, for example.

Based on this calculation, corrective measures and training of members are adopted. Proof of this are the agricultural fires, for which the indicator was already monitored, but in the harvest we included the financial aspect. With this, in addition to process improvements and capacity building, we will implement a pilot project for satellite fire identification.

During the harvest, we provided more than 1.3 million men-hours worked for HSE training, which involved members and partners to ensure not only the occupational safety and health of the worker, but also the quality of operations. The following are the main trainings performed in the period. **403-5**

Main HSE trainings 403-5

	Men-hours worked/training
Fires – brigade – escape routes	397,863
Hazardous energy lockout	341,673
Operations near power grids	126,580
Protection and operation of agricultural equipment – NR-12	86,145
Vehicle safety and Sleep Program	42,927

Vehicle accidents – 2018/2019

Fleets	Accumulated cost* (R$)	Total cost percentage
Light vehicle	203,059.00	17
Support truck	222,649.00	19
Transportation of members	33,190.00	3
Sugarcane transportation	405,744.76	35
Agricultural machine	309,102.00	26
TOTAL	**1,173,744.76**	**100**

Agricultural accident – 2018/2019

Units	Total fires	Burnt area (ha)	Costs* (R$)
São Paulo Pole	10	1,632	6,213,639.69
Goiás Pole	12	210	65,626.66
Santa Luzia Pole	11	70	397,059.92
Eldorado Pole	10	1	359,965.12
Morro Vermelho Unit	6	1,237	650,200.00
Água Emendada Unit	2	64	Not informed
Alto Taquari Unit	6	358	27,237.19
Costa Rica Unit	11	563	145,956.08
ATVOS	**68**	**4,125**	**7,859,684.66**

* Approximate costs, according to survey published in occurrence investigation reports.

Occupational health

103-2 | 103-3: Occupational health and safety | 403-3 | 403-6

At Atvos, we have an Occupational Health Medical Control Program (PCMSO, in Portuguese) to identify and monitor occupational hazards to which workers are exposed under the Environmental Risk Prevention Program (PPRA, in Portuguese). As part of the program, we have Occupational Doctors duly specialized in all units, Occupational Nurses and Nursing Technicians, who ensure access to information from their occupational exams periodically.

During the harvest, we continued to work on controlling the absenteeism rate and we have seen developments in the last four years, with the issuance of 60 certificates per thousand members per month.

In this sense, we have several initiatives related to the control, monitoring and follow up of risks and activities, such as programs focused on medical emergencies, hearing health, respiratory health and ergonomics, as well as special activities – work at height, confined space, electricity, drivers and brigade members. **(More information is available Additional content.)**

Developing members

103-2 | 103-3: Training and education | 404-1

To guide the growth and development of our human capital, we have a People Policy, based on a humanist philosophy, focused on people's values and strength. Among the pillars addressed by the policy are ethical, fair and transparent action; health and safety inside and outside the company; diversity; career; succession; and future. Check out our policy on www.atvos.com/politica-sobre-pessoas.

In addition, our members are guided by the values and beliefs expressed by Odebrecht Business Technology (TEO, in Portuguese), which is based on entrepreneurship and the ability to positively influence actions to the planned delegation. In this line, we have the Action Program (PA, in Portuguese), which brings together objectives and goals to be achieved by the member, with support from the leader, through open and transparent dialogue and monitoring of strategic indicators. The PA includes five steps: planning, pact, monitoring, evaluation and judgment.

With the pact established, each professional seeks their own development, combining the strategic goals of the business with their personal and career goals. Thus, we exercise TEO with the practice of planned delegation, we encourage synergy between areas and evaluate the performance and results achieved by the members.

In addition to investing in youth development through specific programs, we also have programs to train our leaders, which are guided towards productive and result-oriented performance and professional growth.

Average training hours per member in each functional category* 404-1

	2018/2019		2017/2018	
	Men	Women	Men	Women
Directors	6.4	12.8	6.1	11.0
Managers and Coordinators	31.8	19.3	32.1	33.0
Technicians	36.9	83.0	51.0	33.4
Administrative	28.4	19.9	23.9	21.3
Operational Leaders	79.5	52.5	75.1	77.2
Operational/ Production	68.9	61.4	64.5	58.7
Maintenance	38.5	33.3	43.4	38.2
Others	76.3	22.2	137.8	150.3
TOTAL	**60.2**	**43.9**	**59.2**	**51.2**

* Considers members, apprentices and young. partners.

Through the Operational Leadership Program, we invest in training front leaders and supervisors to act as true business owners, generating results and stimulating productivity.

Looking to Atvos' future and on-going performance, we also have a Succession Program, which aims to define mapping criteria for chairs. This indicator makes it possible to identify the percentage of chairs that have substitute successors to occupy them and how many chairs do not have them.

Operational training

103-2 | 103-3: Training and education

In the operational part, we have developed several internal trainings that improve the qualification of the members. In addition, we have partnerships with equipment suppliers that contribute to continuous improvement and safe operation, we also train technical and operational professionals with specific training for the activities of the sugar-energy sector in partnership with the institutions of the S System (National Industrial Learning Service – Senai, Industry Social Service – Sesi and National Rural Learning Service – Senar, acronyms in Portuguese).

In the 2018/2019 harvest, more than 6.6 thousand men-hours of training were given to Coordinators and Managers, an increase of 11.6% over the previous period. Training conducted for the leadership increased by 3.2%. **404-1**

Professional qualification

103-2 | 103-3: Training and education

We develop training programs for the community (*Acreditar*), for young learners (*Acreditar Junior*) and for people with disabilities (*Acreditar na Diversidade*).

Programa Acreditar: we train residents of the cities where we are present through the development of professional qualification programs and technical learning. In the period, the Santa Luzia Unit held the interpersonal relationship course, in partnership with the Rural Union of Nova Alvorada do Sul taught by Senar, with the participation of 13 young people from the PANA District, rural area of *Nova Alvorada do Sul* (*Mato Grosso do Sul*).

Acreditar Júnior: we train and develop young apprentices aged 17-22, promoting professional qualification in partnership with Senai/Senar for cycles of up to one and a half years, during which young people learn new professions in theory and practice. There were 20 classes with industrial learning courses in administrative processes, rural administrative assistant, agricultural machinery mechanic, electromechanical operator, agricultural machinery operator, industrial process operator and sugar and alcohol technician. We totaled over 500,000 men-hours of training and benefited about 500 young people.

Acreditar na Diversidade: we train people with disabilities in the communities in which we operate through the Social Energy program and contribute to their insertion in the labor market. As a result of our work to promote inclusion, we were recognized, for the second time, with the Global Award for Good Practices in the Employment of Persons with Disabilities, an initiative of the *São Paulo* State Secretariat for the Rights of Persons with Disabilities, which was awarded at the United Nations (UN) Headquarters in New York. During the harvest, we started a class at the *Rio Claro* Unit, in *Goiás*, with 18 people trained in the administrative assistant course.

Our Legacy

Our legacy is to generate opportunities that transform people's lives. In order to share inspiring stories about our members and the positive impact we have generated, in the 2018/2019 harvest we launched the *Nosso Legado* web series, available on our YouTube channel: www.youtube.com/atvos-nossolegado.

In addition, we perceive communication as one of the great vectors for recognizing people. Thus, we actively participate in events and carry out campaigns for communication and appreciation of our members, as well as posts on LinkedIn to highlight the leading role of people and the expertise of our leaders.

Gender equality 103-2 | 103-3: Non-discrimination
Diversity and inclusion are important values for us. We are aware of the challenges, especially in the sugar-energy sector, and in order to identify key barriers for Atvos and move forward on the theme, we held Gender Equality Dialog Circles with male leaders and members and the Women's Forum, with female leaders and members.

Forum with Women: the topics covered were: organizational environment, leader vision and community. Based on this, we conducted a qualitative analysis, which resulted in a diagnosis of the main barriers for women, especially in the operational area, regarding gender stereotype issues.

Gender Equality Dialog Circles: covering the topic "Female Empowerment: what do I get out of this?", we seek to provoke men about the presence and participation of women in the workplace to reflect on the origins of beliefs and attitudes about the figure of the woman, as well as inform the gains that gender equality initiatives bring to the business scope.

Participants:
- Forum with Women: 62
- Gender Equality Dialog Circles: 56
- 51 participating leaders (42% of the total), a total of:

- **22% women**
- **78% men**

In addition, in March 2019, the community mobilization action called *Juntos com Elas* was carried out in the communities of all our units in order to provoke debate and reflection on the inclusion of women in the labor market. Through the action, around 1,500 participants were involved between men and women.

Based on this exercise, which resulted in a diagnosis of Atvos, we created guidelines and promoted affirmative initiatives on gender equity.

Social and relationship capital

The credibility of our customers and the pride of our members reinforce our ability to generate value. All of it is only possible because the strength of our brand is based on transparency with all audiences, enabling us to build initiatives and actions that promote the development of partners and the communities in which our operations are present.

Suppliers and partners

102-9 | 102-10

Our value chain 102-9

A specific team is assigned to accompany the agricultural partners, who deliver sugar cane at the company's industries. During the harvest, Atvos' *Parceiros Mais Fortes* program of sugarcane suppliers had 46 partners (28% above the previous harvest), which produced 7.9 million tons of sugarcane and generated expenditures of around R$594 million. In addition to these, the partnership program also includes land partners, whose 1.3 thousand contracts during the harvest totaled R$418 million. **102-9**

Our growth axis is the strategy of continuing the supply program. In addition, almost 100% of our area is leased, which contributes to significant revenue generation for local economies.

Relationship with suppliers

308-1 | 308-2 | 408-1 | 409-1 | 414-1 | 414-2

The agricultural partners form a group of rural farmers who, together with Atvos, work to renew the future and expand the supply of clean energy. These entrepreneurs are an important link in our business model, an increase in sugarcane cultivation capacity in the new frontiers of the sugarcane industry.

Our relationship with these producers, who supply raw materials for our industries, is driven through the *Parceiros Mais Fortes* program, launched in 2016. In addition to monitoring productivity and complying with contracts, the program has enabled the improvement of environmental performance, care for people and compliance with the legal and labor aspects of these partners.

The Commitment to Sustainability in the Sugarcane Chain, signed during the first *Parceiros Mais Fortes* meeting, is the basis of our relationship with suppliers. Based on the ten principles of the Global Compact, this guideline strengthens the involvement of producers around important issues for sustainable development – such as respect for human rights, combating child labor and labor in degrading conditions, preserving natural areas, anti-corruption and legal compliance. **103-2 | 103-3: Child labor | 103-2 | 103-3: Forced or slave-like labor**

Parceiros Mais Fortes Program

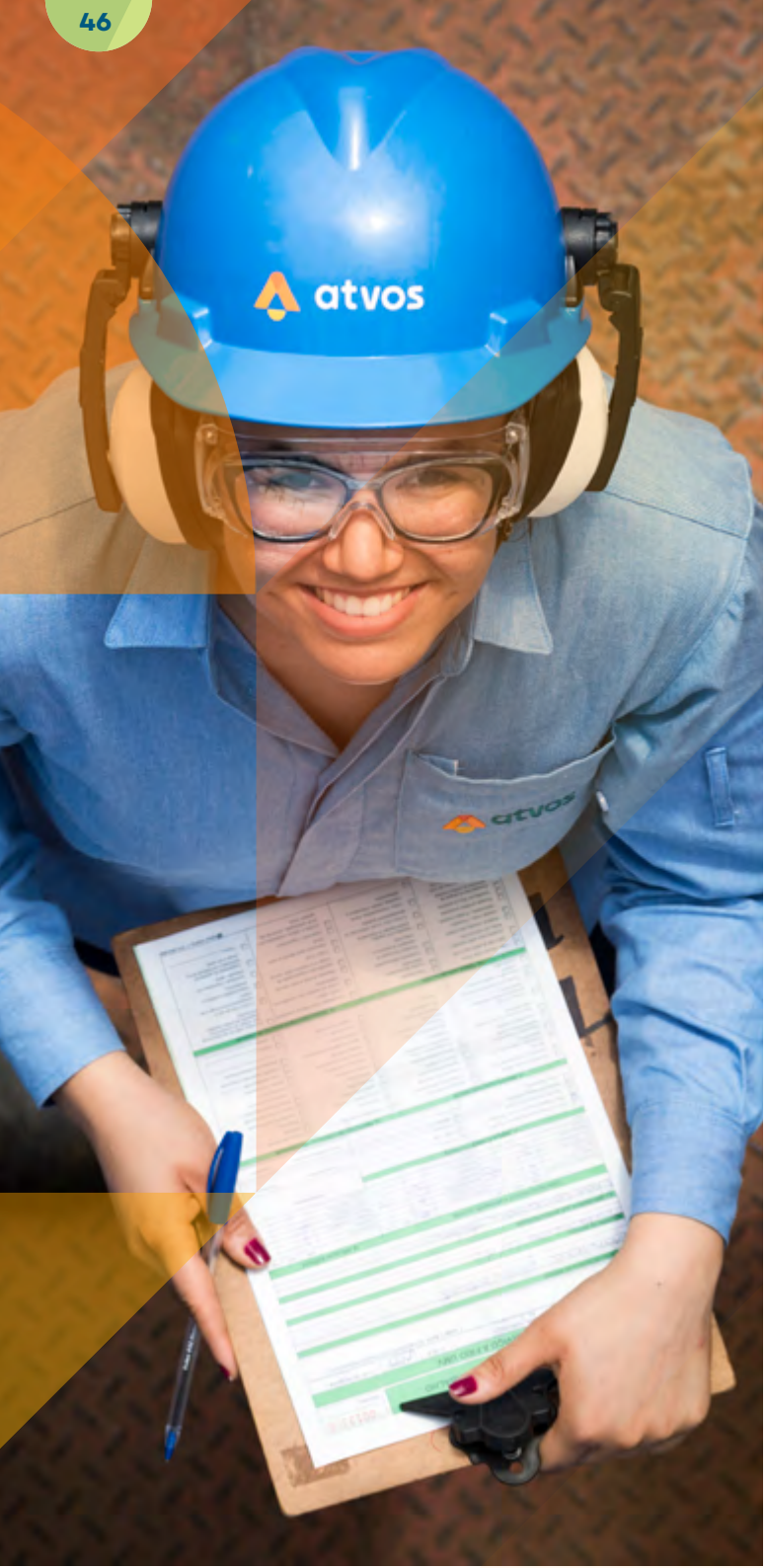
During the 2018/2019 harvest, we created a *Parceiros Mais Fortes* access portal so that the supplier has business and property visibility. It's a direct channel with Atvos. We aim to increase the supplier program so that we can be attractive and maintain good results.

Agricultural Partners Sustainability Verification Round

Every six months we hold the Agricultural Partners Sustainability Verification Round. In addition, the partnership team of each pole conducts visits throughout the harvest for follow-up. In general, producers receive two visits, in which the adherence of activities to the Sugarcane Supply Chain Sustainability Procedure is assessed. An internal document guides the assessment conducted by our members and enables the identification of strengths, good practices and improvement points addressed through action plans signed between Atvos and the partners.

The Sustainability Procedure in the Sugarcane Supply Chain is the result of our Sustainability Guideline, which guided, until the 2017/2018 harvest, the incorporation of good practices in agroindustrial units and in the relationship with partners, suppliers and tenants. In 2018, we launched the Sustainability Policy, a document that enhances our understanding of sustainability applied to our business and relationships. During the period, the document replaced the Sustainability Guideline as a parameter of our management.

In addition, management was improved with the introduction of suppliers in the SAP management system, implemented in the harvest, with the socio-environmental criteria contemplated. We monitor the behavior of suppliers through Health, Safety and Environment (HSE) and social questionnaires. **102-10**



Supplier selection

103-2 | 103-3: Environmental assessment of suppliers | 103-2 | 103-3: Social assessment of suppliers

Respect, trust and discipline permeate our relationships with suppliers and service providers so that we can meet the interests of both sides. Therefore, our members must act diligently in identifying, hiring and maintaining product suppliers or service providers, based on fair and transparent technical and professional criteria, such as competence, quality, compliance with deadlines, price, financial stability, reputation, among others.

New suppliers go through selection processes that include environmental and socio-environmental criteria. We started this monitoring during the selection of partners and continued throughout the period of performance through *Parceiros Mais Fortes*. For us, this partnership makes it possible to accelerate the expansion of planted areas.

For farmers, it represents an important opportunity for risk diversification and dilution, including due to long-term contracts, as well as being attractive for establishing what prices and conditions they will pay for sugarcane, dampening the oscillation. During the harvest, 2,310 suppliers were selected based on environmental and labor practices criteria, representing 91.7% of the total (data from April to December 2018), against 66.8% in the previous harvest. The increase is due to greater consolidation of the homologation process. We carried out 682 socioenvironmental assessments, which ensure greater security to the hiring processes, since quotations can only be made with duly approved suppliers, who fulfill the analysis requirements related to environmental and operation licenses. **308-1 | 414-1 | 414-2**

91.7%

of suppliers selected based on environmental criteria

Potential supplier candidates are selected and then visits are made; a checklist is used that includes socioenvironmental issues, which include themes such as living area, storage of pesticides, among others. Then there is a schedule to be met, and non-compliant vendors receive notifications and can be excluded after the third notification.

Due diligence in hiring

In line with our compliance guidelines, our members should not directly hire suppliers (individuals or companies) who are owned or of their interest or that have close relatives who control them or have significant influence over them. If the member needs to hire suppliers in one of these situations, they should discuss it with their leader and obtain their prior written permission.

Contracts with suppliers must be objective, without margin for ambiguity or omission, and should contain specific clauses on their commitment to comply with local laws, including anti-corruption laws.

In addition, we have consolidated a reputational due diligence process with our suppliers to assess conflicts of interest or risks. For transportation, we require strict HSE certifications, as well as a checklist for each vehicle.

The *Santa Luzia* Unit, in *Nova Alvorada do Sul*, was recognized as the **best agro-industrial unit** in the Center-South region of the Country by the ***Visão Agro* 2018 Award.**

Communities

103-2 | 103-3: Indirect economic impacts | 103-2 | 103-3: Local communities | 203-1 | 203-2 | 413-1 | 419-1

Local development

103-2 | 103-3: Indirect economic impacts | 203-1 | 203-2

Our presence on Brazil's agricultural frontiers contributes to renewing the future of municipalities and communities with employment and income generation opportunities. We are committed to society to work collaboratively to promote sustainable growth, making people protagonists in building a world that moves with clean and renewable energy. We support and invest in the education, culture, health and training of those close to us on this journey.

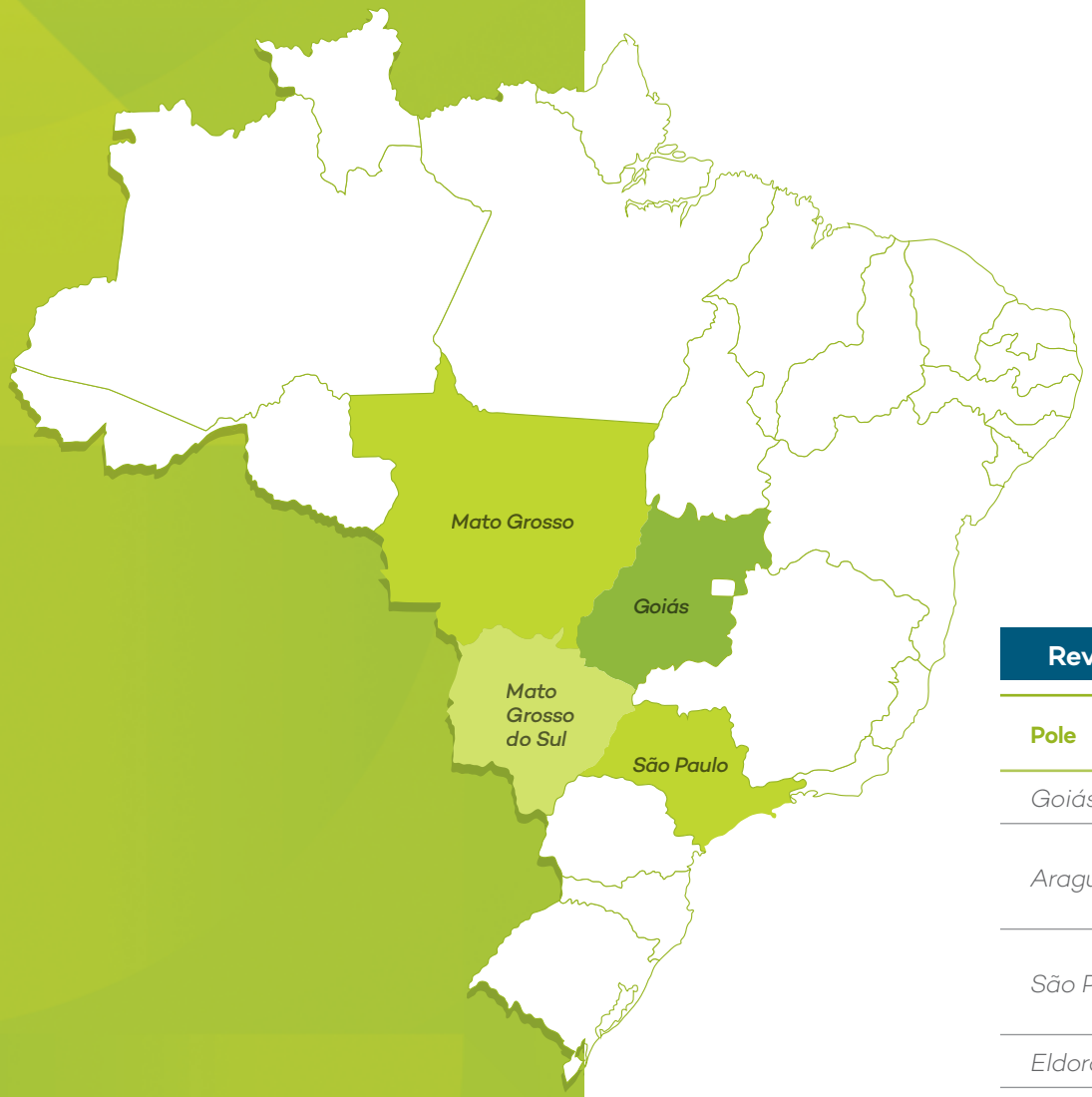
During the harvest, *Nova Alvorada do Sul* and *Rio Brilhante*, both in *Mato Grosso do Sul*, had high growth rates, according to a study released by the Ministry of Agriculture, Livestock and Supply (Mapa, in Portuguese). According to the survey, the two cities are among the ten that recorded, between 2014 and 2016, the largest growth in the group of one hundred municipalities that are the main agricultural producers in Brazil.

In *Nova Alvorada do Sul*, through the *Santa Luzia* Unit, we are responsible for generating 1.6 thousand direct jobs and more than 4.5 thousand indirect ones. In addition, we constantly invest in training local labor. In *Rio Brilhante*, where the *Eldorado* Unit is located, we employed more than 1.2 thousand people and generated another 3.5 thousand indirect jobs. In addition, we foster positive changes in the municipalities' economies by expanding people's professional qualifications and generating income and services in the region.

Additionally, the *Santa Luzia* Unit was recognized as the best agroindustrial unit in the Center-South region of the Country by the *Visão Agro* 2018 Award. The award aims to recognize companies that have excelled in the areas of transformation and production in the sugar-energy sector. We have been in the region for nine years and have fostered positive changes in the local economy.

At the *São Paulo* Pole, in turn, we generated over 2,000 direct jobs and about 6,000 indirect ones and contributed to the sustainable development of *Pontal do Paranapanema*.

The contribution to sustainable cities and communities is strengthened by the empowerment of community councils, which implement and monitor actions in each locality. The councils involve the participation of the agroindustrial pole leader, the head of the People and Administration area, the Mayor, the Municipal Secretary and two representatives of civil society. We also have thematic committees on culture, education, productive activities, health, safety and environmental preservation.



Economic impact generated

103-2 | 103-3: Indirect economic impacts | 203-2

Atvos drives the local economy by developing local suppliers and service providers and generating revenue for landowners through the land leasing model. The employment and revenue generation in this operation format is very expressive and favors the inclusion of sugarcane as an important regional crop. In outsourced activities, we generated R$36.45 million in Tax on Services of Any Nature (ISSQN, in Portuguese) for local communities.

Revenue generated (R$ millions) – Agricultural partnerships – 2018/2019

Pole	Unit	Lease	Cane supply	Third party service	Total
Goiás Pole	*Rio Claro*	55.7	21	145	222.0
Araguaia Pole	*Morro Vermelho*	38.6	102	81	222.0
	Água Emendada	24.6	77	61	163.0
São Paulo Pole	*Alcídia*	19.5	77	115	271.0
	Conquista do Pontal	59.5			
Eldorado Pole	*Eldorado*	49.6	95	75	219.6
Santa Luzia Pole	*Santa Luzia*	80.1	90	117	287.1
Taquari Pole	*Alto Taquari*	44.2	68	65	177.2
	Costa Rica	46.3	64	70	180.3
TOTAL		**418.1**	**594**	**729**	**1,741.1**

* In outsourced activities, we generated R$36.45 million in ISSQN for local communities..

Municipal Development Index Monitoring 203-2

One of the ways to monitor the municipalities where we operate is through the FIRJAN Municipal Development Index (IFDM, in Portuguese), a study of the FIRJAN System that annually tracks the socioeconomic development of over 5,000 Brazilian municipalities in three areas: Employment and income; Education; and Health. Created in 2008, it is made solely on the basis of official public statistics provided by the Ministries of Labor, Education and Health.

Pole	Municipality	Growth in the last 10 years (%)	IFDM* (base: 2016)
Araguaia	*Mineiros*	19	0.77
	Perolândia	9	0.70
Taquari	*Costa Rica*	15	0.79
	Alto Taquari	9	0.70
São Paulo	*Teodoro Sampaio*	14	0.71
	Mirante do Paranapanema	20	0.71
Goiás	*Caçu*	6	0.70
	Cachoeira Alta	31	0.75
Santa Luzia	*Nova Alvorada do Sul*	7	0.73
Eldorado	*Deodápolis*	23	0.70
	Glória de Dourados	19	0.67

* The IFDM ranges from 0 (minimum) to 1 point (maximum) to classify the level of each locality into four categories: low (from 0 to 0.4), regular (0.4 to 0.6), moderate (from 0.6 to 0.8) and high (0.8 to 1) development. Therefore, the closer to 1, the greater the development of the locality.

Social Energy

103-2 | 103-3: Local communities | 413-1

We work with a participatory governance model: government, society and company. We identify the demands of the community in order to adopt strategies that move the world differently through culture, education, health and environmental preservation with the protagonism of the people. With the Social Energy Program, we bring as a social transformation the change in the regions where we operate.

Created in 2009, the program defines the guidelines for the application of financial resources for donations and support to socioenvironmental projects. The initiative has a participatory management structure that brings together representatives of Atvos, local government and local communities.

One of the main benefits of participatory management is that it encourages community protagonism, which allows the dialogues held within the Thematic Commissions to reflect on what is really relevant to be worked on in that region.

In addition, the program aims to improve the socio-economic and environmental conditions of the regions in which it operates, integrate and strengthen the company's ties with the community and promote greater knowledge and maturity of people to build local development based on the principles of sustainability.

Energia Social atvos

Innovation in private social investment

In November 2018, we published our Private Social Investment Guideline, which encompasses two forms of investment. One is through Social Energy, going through the whole process of project design, approval of the thematic committee and community council, as well as implementation and monitoring. The second form of investment is called Community Support; as it is a low cost, low complexity investment, punctual and immediate, it does not fit the Social Energy model.

Along with the guideline, an online tool was launched, available on our website **(www.atvos.com/sustentabilidade/apoio-comunitario)**, so that any request for community support can be registered this way. In addition to the request, order approval is also performed through the tool, which ensures the traceability, history and transparency of all orders.

Harvest highlight

To mark the beginning of the activities of the Social Energy program in the *Mato Grosso do Sul* region, *Eldorado* Unit, we organized a meeting of 42 representatives from the community, the government and the company to form thematic committees that will be responsible for guiding the program locally. In addition, a study of economic, social and environmental data was conducted by a partner company, which consolidated all the information collected and developed a matrix of the two municipalities.

In November 2018, the *Eldorado* Unit began the activities of the Social Energy program in the region. The first Thematic Commission implemented was Education and Culture to prioritize initiatives focused on local development, such as professional qualification courses and activities promoting local culture. For this phase, four meetings were held, with more than 100 participants, in which the details of the first project to be implemented were discussed.

Value to the **community**

77
projects developed

R$211.4 thousand
invested in four new projects in the 2018/2019 harvest

Over
155,00
people benefited

Over 1,560
community mobilization events

Investment of around
R$25.5 million

Institutional relations 102-13

Throughout the last harvest, we have maintained engagement with the main sector entities and the regions in which they operate. We are part of the working groups and the governance of the *Mato Grosso do Sul* Bioenergy Producers Association (Biosul), the *Goiás* State Ethanol Manufacturing Industry Union (SIFAEG, in Portuguese), the *Mato Grosso* State Sugar and Alcohol Industry Union (Sindalcool-MT) and the Sugarcane Industry Union (UNICA, in Portuguese).

We also have a representative in the Union of Bioenergy Producers (UDOP, in Portuguese), in the Sectoral Chamber of the Sugar and Alcohol Productive Chain, of the Ministry of Agriculture, Supply and Livestock (Mapa, in Portuguese), and in the governing body of the National Sugar-Energy Forum (FNS, in Portuguese), and we follow the discussions within the National Confederation of Industry (CNI, in Portuguese), the Parliamentary Front for the Valuation of the Sugar-Energy Sector in the National Congress, the Institute for Industrial Development Studies (IEDI, in Portuguese) and the Ethanol Supply Monitoring Committee (CMAE, in Portuguese).

In addition, among the highlights, we have been acting as one of *RenovaBio's* precursors, the National Biofuels Policy, which aims to promote the expansion of biofuel production and use in the national energy matrix. In line with the Paris Agreement, we are also committed to contributing to the reduction of Greenhouse Gases (GHG), whose target for participating countries is to achieve a 37% reduction by 2025 compared to 2005 levels. **(More information at Looking to the future.)**

Natural
capital

Sustainability is our own business. We offer bioenergy and biofuels made from sugarcane, a clean and renewable source that contributes to reducing the concentration of CO_2 in the atmosphere. In addition, we cultivate responsibly and in the industry we seek to optimize resource use in our production.

Responsibility in cultivation 103-2 | 103-3: Effluents and waste | 103-2 | 103-3: Environmental compliance

In the 2018/2019 harvest, we continued our planting expansion plan and ended the harvest with 71,000 hectares, between our own and partner areas, of which 83% were renewed.

In order for our sugarcane fields to grow strong and productive, we monitor different indicators related to our activities in the field. By ensuring the quality of the sugarcane crop, we contribute to greater efficiency in the operation. Thus, our first step is to take care of the soil and ensure not only its enrichment but also the preservation and restructuring of the vegetation.

Initiatives for more sustainable production include managing the diesel fuel consumption indicator in mechanized cutting and harvesting operations. In the harvest, we reached a consumption of 1.73 liters of oil/ton of harvested sugarcane.

We reuse the byproducts generated in the production process in agricultural activities, eliminating the disposal of waste.

Vinasse, wastewater, filter cake and biomass boiler ash are applied instead of fertilizers and inputs. In addition to environmental preservation, this reuse leads to a reduction in soil treatment costs. The indicators to monitor this performance have been improved with each harvest.

In line with our commitment to ensure compliance with all legal requirements applicable to the sector, in the 2018/2019 harvest we performed a diagnosis of compliance with the Vinasse Application Plan of each unit, not only considering its adherence to the environmental requirements of each state, as well as the effective fulfillment of the planning carried out by the operation. This work has allowed us to evolve consistently, as well as promoting greater empowerment of the entire team to adopt standardized practices. **304-2**

A new indicator was implemented throughout the harvest - leaks of vinasse/ton of ground sugarcane - to monitor the evolution of the management of the vinasse distribution system and areas of greater vulnerability, guiding the entrepreneur in decision making. This indicator is being used as a guide to the operation for operational improvement and investments to reduce environmental vulnerability. **(The complete table and environmental compliance information is presented in Additional contents.) 306-3 | 307-1 | 103-2 | 103-3: Environmental compliance**

Fire control and mitigation

One of the main environmental risks of sugarcane activity is the incidence of fires. In order to mitigate fire occurrences and ensure the preservation of areas of natural vegetation and fauna, our harvest is 100% mechanized and we do not perform controlled burning for sugarcane cutting, which can result in fires.

We have guidelines and protocols for the safety of our operations in our Attitude System, which also includes a specific procedure (Critical Activity Requirements - RAC, in Portuguese, of agricultural fires) for fire prevention and fighting, as well as technical training of operators and brigade members. The document defines basic requirements to be adopted. Focused on mitigating environmental impacts and preserving the physical integrity of its members.

All units have a dedicated brigade, with trained professionals who offer support in the largest occurrences. In addition, each harvest front has its own agricultural firefighting truck, with their own trained brigade and first responders.

Among the fire prevention practices we can highlight: cleaning the carriers, making fire breaks on machines prior to 100% of the maintenance of equipment requiring ignition source tools, dry cleaning and daily washing of the harvesters, monitoring the temperature of the harvesters, monitoring of environmental variables to detect the proximity of the condition referred to as "fire triangle" and taking appropriate preventive actions.

Despite the efforts, during the harvest, we registered 22 fires, five more than the previous harvest, which corresponds to an indicator of 1.12 occurrences/million tons of harvested sugarcane, 7% better than the previous harvest.

Our harvest is
100% mechanized
and **we do not practice**
controlled **burning**
to cut **sugarcane**

Eco-efficiency

At Atvos, we strive to continually improve our processes with the efficient use of resources essential to our operation in order to produce responsibly, achieve cost savings and add value to our business model.

We operate in line with the circular economy concept, as our waste is transformed into by-products and all effluent generated in our industries is reused in our production process. The following are some of our initiatives, as well as the performance of our indicators.

Use of materials

103-2 | 103-3: Materials | 301-1

The materials we use in our operations, both in the field and in industry, include sugarcane, agricultural and industrial inputs and fuels, part of them with renewable sources. In the 2018/2019 harvest, we used 27,233.19 tons of materials, a slight increase over the previous harvest (26,559.36 tons).

In order to increase the value of the sugarcane ton per hectare (TCH, in Portuguese) and increase the areas of reform and productivity of sugarcane fields, we intensified the application of agricultural inputs, especially the increased use of nitrogen and limestone fertilizers. This intensification resulted in increased equipment use, i.e., higher fuel consumption throughout the operation. In contrast, the share of renewable materials was higher than the use of non-renewable ones, as shown in the side table.

Materials consumed (ton) 301-1

Materials	2018/2019	2017/2018
Sugarcane		
Our own cane processed	18,074,216	19,053,194
Agricultural partners cane processed	8,592,981	6,776,624
SUBTOTAL	**26,667,197**	**25,829,818**
Agricultural inputs		
Correctives	384,952	491,763
Insecticides	322	486
Fungicides	15	36
Herbicides	3,819	4,763
Fertilizers	103,435	155,863
Other organic fertilizers	1,305	1,910
SUBTOTAL	**493,848**	**654,821**
Industrial inputs		
Lime	8,843	9,342
Sulfuric acid	11,152	11,782
Hydrochloric acid	125	133
Soda	1,079	1,140
Antibiotics	21	22
Inorganic chemicals	876	925
Organic chemicals	488	516
SUBTOTAL	**22,584**	**23,860**
Fuels		
Diesel	42,608	48,791
Ethanol	2,070	2,070
SUBTOTAL	**44,678**	**50,862**
Totais		
Materials from renewable sources	26,674,151	25,835,943
Materials from non-renewable sources	559,040	723,417
TOTAL	**27,233,191**	**26,559,360**

Energy consumption

103-2 | 103-3: Energy | 302-1

We produce electricity in our industrial units from biomass (sugarcane bagasse), a clean and renewable source. Thus, our industrial operations are 100% internally supplied. In the harvest, we generated a total of 70,597,489 GJ, which represents 90.3% of the energy consumed in the period and a 4.3% increase in energy generated from renewable sources compared to the previous harvest.

Power generation and consumption (GJ) 302-1

	2018/2019	2017/2018
Energy generated by burning fuels		
Sugarcane bagasse	68,138,748	65,286,406
Diesel	2,045,804	2,147,976
Biodiesel	206,854	171,751
Ethanol	55,996	55,996
Total energy generated from fuel combustion	70,597,489	67,662,130
Percentage of energy generated from renewable fuels	97	97
Electricity acquired		
Electricity	21,542	54,993
Electricity sold		
Exported electricity	6,847,539	6,658,950
TOTAL ENERGY CONSUMPTION	**63,749,949**	**61,058,173**

Did you know?

With a 97% energy matrix made up of renewable sources, we were the first company in the sugar-energy sector to receive the I-REC certificate, which guarantees the traceability of renewable energy generated from biomass.

As sugarcane fields sequester carbon during their growth, emissions from this stage of the production process are biogenic and therefore considered neutral. In addition, the bioelectricity generated from sugarcane has the capacity to increase the national energy matrix with a renewable source in periods considered critical for hydroelectric plants due to the low levels of rain that impact the reservoirs.

I-REC STANDARD

Water intake and consumption

103-2 | 103-3: Water | 303-1 | 303-3

Used for cooling equipment, water is also one of the main resources we use in the industries for sugar, ethanol and electricity production. We capture the input in rivers and underground wells, in accordance with the requirements of the environmental agencies, and invest in recirculation systems, in order to contribute to the reduction of our consumption.

In the 2018/2019 harvest, our total water withdrawal was 37,357 thousand m³, which represents an increase of 11.8% over the previous period due to higher operational instability because of higher rainfall. Regarding water consumption, our goal is to reach 1 m³/ton of ground sugarcane by 2021. In the accumulated harvest, the indicator closed at 1.14 m³/ton of ground sugarcane, 8% below the harvest target (1.06 m³/tc) and the same percentage below the previous period.

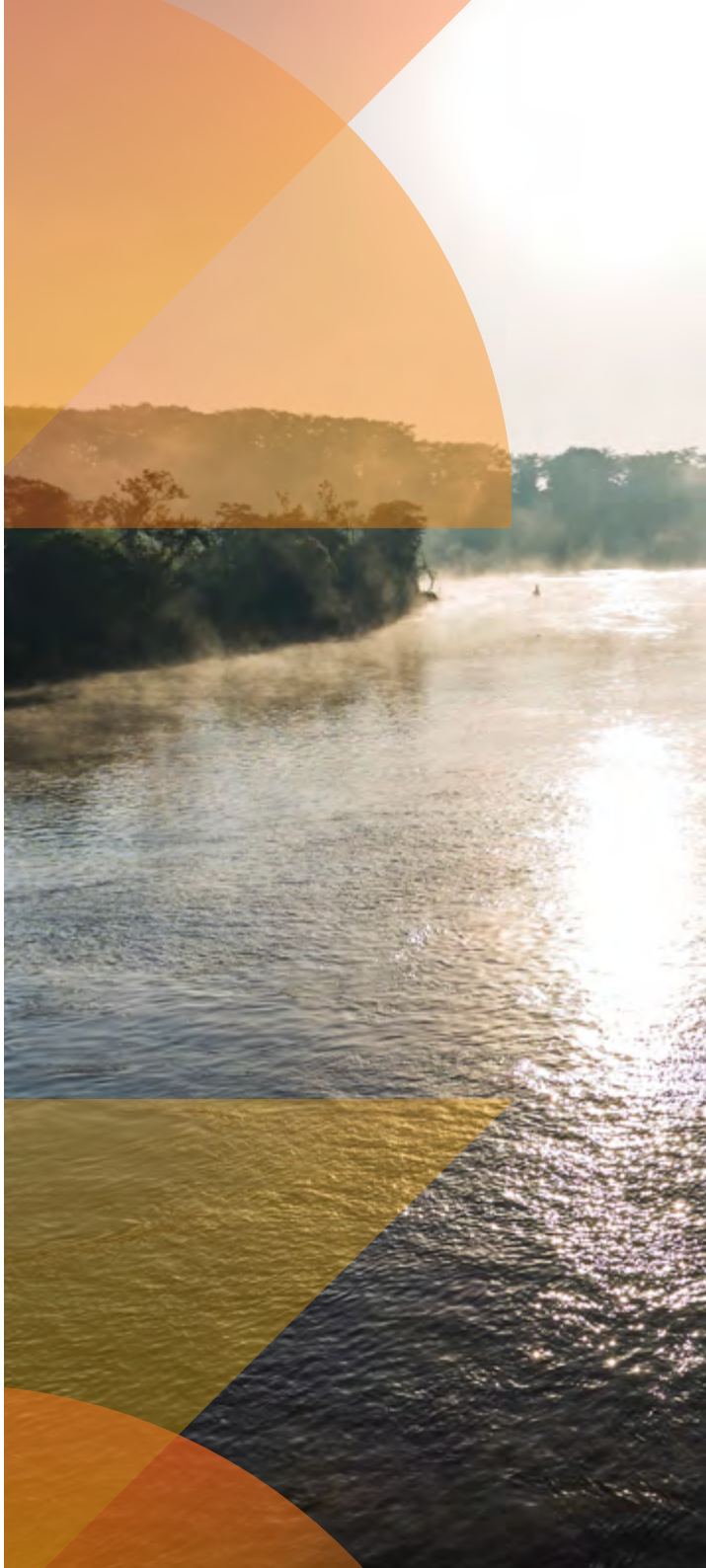
It is noteworthy that all the effluent generated in our industries is reused in our production process, since the wastewater is mixed with the vinasse for application in sugarcane field fertigation. In the period, the total recirculated water was 16,120 thousand m³, which represents 37% of the total collected. The 22.8% reduction over the previous harvest was also a result of greater operational instability due to the rainfall in the period.

Water collection (thousand m³) 303-1

Collection source	2018/2019	2017/2018
Surface water	36,875	32,852
Groundwater	481	568
TOTAL WATER COLLECTED	**37,357**	**33,420**

Recycled and reused water 303-3

Water recirculation	2018/2019	2017/2018
Reused volume (thousand m³)	13,970	18,091
Percentage over total collected	37	54



Waste management

103-2 | 103-3: Effluents and waste | 306-2

In order to reduce waste generation and the disposal of these materials to landfills, we have seen important advances arising from our management practices. Only two of our units sent part of the waste to landfills, and over 99% of the waste generated was co-processed, sold, reused or recycled, resulting in 78% conversion into revenue. We also have awareness actions at the units to reduce waste generation.

During the harvest, the total harvest residue was 5,667 tons (6,473 in the previous harvest), a result of better environmental and economic solutions in relation to the theme. Regarding contaminated waste, for example, we perform the cleaning and reuse of oil drums; flushing and separating contaminated parts of hydraulic oil hoses; the replacement of tow by reusable towels in the internal workshop; and team awareness through campaigns in the units and in the field.

Discarded waste (ton) 306-2

	2018/ 2019	2017/ 2018
Dangerous		
Recycling	214	61
Recovery	254	376
Incineration	35	14
Co-processing	212	227
Reuse	15	13
Others	57	140
SUBTOTAL	**787**	**831**
Not dangerous		
Recycling	4,140	4,760
Recovery	0	0
Incineration	53	33
Co-processing	465	603
Landfill	17	41
Composting	123	145
Others	83	60
SUBTOTAL	**4,881**	**5,642**
Totals		
Dangerous	787	831
Not dangerous	4,881	5,642
TOTAL	**5,667**	**6,473**

12.5%
reduction
in total
harvest residue

78%
conversion of waste
into revenue during
the harvest

Emissions management

103-2 | 103-3: Emissions | 305-1 | 305-2 | 305-3 | 305-4 | 305-5

Due to the nature of our business, one of the main environmental benefits we provide is the capture of CO_2 from the atmosphere, as well as Greenhouse Gas (GHG) emissions that are avoided by using ethanol and biomass instead of fossil fuels.

For the management of GHG emissions, we conducted an inventory of emissions according to two methodologies: the Brazilian GHG Protocol Program, applied to the fiscal year data, and another developed by the State University of Campinas (Unicamp) specifically for agribusiness, whose information is calculated by harvest-year.

The main GHG emissions are caused by the use of nitrogen fertilizers and diesel consumption, as well as production and logistics processes. In order to reduce the impacts caused by the use of trucks on the highways, we continually seek to increase the use of rail transportation and ethanol pipeline in our logistics process.

Prior to *RenovaBio's* regulation, we prepared to closely monitor these indicators. Workshops and trainings were given by the Sustainability and Business Planning team for corporate offices; and, at the units, we promoted training on *RenovaCalc*, *RenovaBio's* carbon calculator. **(Check out our initiatives for a sustainable low carbon economy at Looking to the future.)**

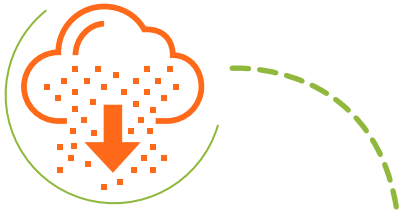
In 2018 Atvos emitted a total of 764.32 tCO_2e, equivalent to 36.4 kg CO_2e per ton of ground sugarcane, below the intensity of emissions recorded in the previous harvest of 38.3 kg tCO_2e/tc. Among the highlights are the 5.47 million tCO_2e avoided by the use of ethanol produced and electricity exported. In addition, by cogenerating renewable energy from bagasse in our boilers, we avoid the acquisition of electricity. Accordingly, our indirect emissions from electricity totaled only 1.69 thousand tCO_2e, compared to 2.24 thousand tCO_2e in the previous period. **(Check out the full inventory at Additional contents.)** **305-4 | 305-5**

Carbon Footprint for Land Use Change (MUT, in Portuguese)

The Sustainability team participated in preparing a guidance to calculate the effects of land use change on sugarcane production entitled The Accounting for Natural Climate Solutions.

The guidance provides 12 recommendations to ensure greater consistency in the calculation.

https://quantis-intl.com/metrics/initiatives/ncs-guidance.



5% reduction

in carbon intensity compared to previous harvest

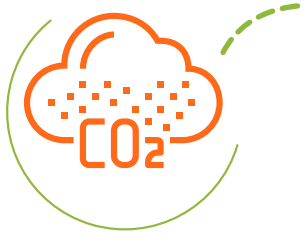
Almost **6 million tCO_2** net mitigation effect

Looking
to the future

Climate change and *RenovaBio*

Aware of the increased concentration of Greenhouse Gases (GHG) in the atmosphere, the main factor for climate change, we understand and contribute to the current and future demands of society and the planet through our business. We produce sugarcane ethanol and clean, renewable electricity from biomass, products that emit less GHG than fossil fuels.

In this scenario, we see the opportunity to act as agents of change for a sustainable low carbon economy. One of our fronts will be to act as catalysts of Law No. 13.576/2017, the National Biofuels Policy (*RenovaBio*), which aims to promote the expansion of production and use of biofuels in the national energy matrix. Through this initiative, Brazil will seek to achieve the 10% reduction in CO_2 emissions from the national fuel matrix.

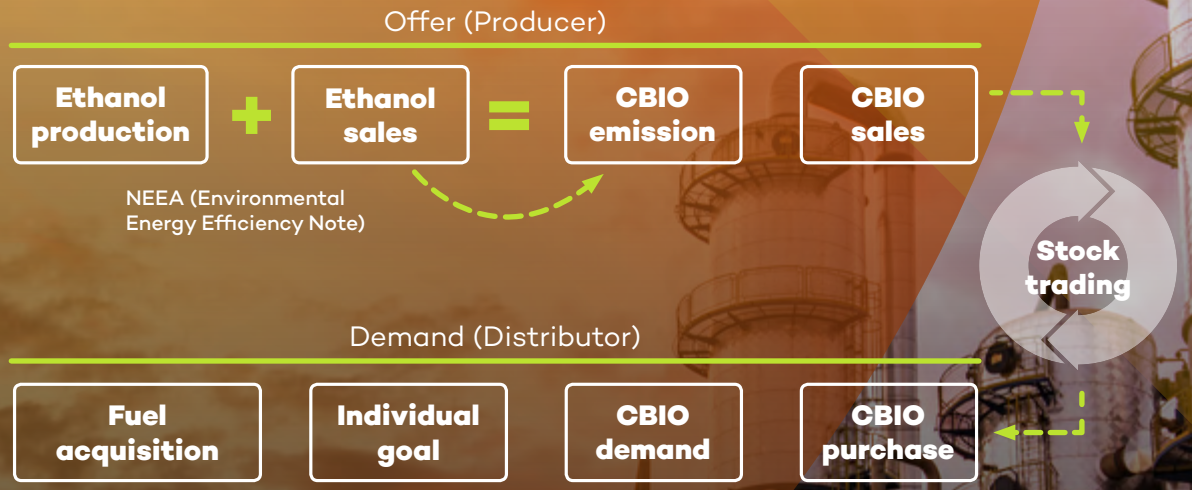


Brazil will seek to achieve a

10%

reduction goal in CO_2 emissions

RenovaBio
How it works



Benefits 2030

43% reduction in emissions

- Biofuel supply expansion = **R$ 1.4** **trillion** in investments
- Economy to trade balance = mport of gasoline and diesel[1] avoided **300** **billion liters**
- Energy security = **18%** bioenergy share in energy matrix
- **847** mi t CO_2 reduction with ethanol[2] and biodiesel[1] = **6** **bi** trees planted
- **1.4 million** new jobs
- **Ethanol, biodiesel and biogas production + productive investments**

Sources: Ministry of Mines and Energy - Explanatory Note on Proposed National Biofuel Policy Creation.
1. Brazilian Vegetable Oil Industries Association (Abiove, in Portuguese).
2. Sugarcane Industry Union (UNICA, in Portuguese).

We are prepared for *RenovaBio*

● Internal initiatives ● External initiatives

2012
First Bonsucro certification

2013
Publication of the first GHG Emissions Inventory

2015
Public Registry of the Brazilian GHG Protocol Program Emissions (silver level)

2016
- First External Verification of Emissions Inventory (GHG Protocol gold level)
- Participation in the Emissions Trading System (SCE, in Portuguese) of the Center for Sustainability Studies (FGVces)
- Analysis of emissions by agroindustrial unit
- Annual management presentation to operation leaders

2017
- Study of Low Carbon Economy financial opportunities
- Internal Carbon Pricing Study considering scenarios with and without *RenovaBio*
- Atvos Ethanol Life Cycle Analysis Study with FGVces presented at Life Cycle Management (LCM) in Luxembourg
- Analysis of emissions with projections per agroindustrial unit aligned with the Agricultural Ten Year Plan
- Emissions management workshop at all agroindustrial units
- Emissions management workshop for sugarcane suppliers
- Inclusion of the Carbon Intensity (CI) indicator as an eco-indicator and consolidated to monitor the Business Leader
- *RenovaBio* regulation follow-up and public consultations

2018
- Monitoring of the World Bank and Ministry of Finance Partnership for Market Readiness (PMR) agenda
- Financial Market and Climate Change agenda monitoring (Task Force on Climate-related Financial Disclosures - TCFD)
- Participation in public consultation for CARB calculator change
- International guide for Land Use Change in partnership with Braskem, Embrapa and Quantis
- I-REC (Renewable Energy Certificate) Issuance of the *Conquista do Portal* Unit (UCP, in Portuguese)
- Inclusion of reduction goal in the CEO's action plan
- Creation of an agenda with the financial area to simulate *RenovaBio's* revenue impact
- *RenovaBio* impact workshop for corporate office teams
- New GHG Emissions Inventory format

2019
- *RenovaBio* workshop for small business teams in preparation for certification
- *RenovaCalc* manual creation

Additional contents

Capitals

Natural capital: for sugarcane cultivation, we depend on favorable weather conditions, soil with nutrients for crop development and water.

Manufactured capital: we produce VHP (Very High Polarization) sugar, ethanol and electricity in state-of-the-art industrial facilities.

Human capital: our members are the driving force for business development in line with our values, ethics, transparency and integrity.

Intellectual capital: in order to ensure the productivity and quality of our agricultural and industrial operations, we invest and strive for the best use of technology and innovation.

Social and relationship capital: in addition to the indirect economic impact of our operations, we have built initiatives and actions that encourage the development of communities in the municipalities where we operate.

Financial capital: the commercialization of the products and the trust of our clients, together with the operations carried out with the financial institutions, promote revenue generation and resource allocation according to the investment pipeline.

Materiality process

Our Materiality Matrix was revisited in 2018 to further reflect our impacts, risks and opportunities, as well as meet the expectations of our audiences. As a result of this process, 11 themes were considered material, of which three are priority and eight very important.

The review process for our Materiality Matrix during the harvest considered the Global Reporting Initiative (GRI) guidelines as well as the assumptions of the International Integrated Reporting Council (IIRC). The process included the following steps:

In the first step, a list of 24 themes was drawn up based on consultation with Atvos' annual report and the materiality process from the previous year, the Dow Jones Sustainability Index (DJSI), the New York Stock Exchange and the Corporate Sustainability Index (ISE, in Portuguese) questionnaires of B3 S.A. – *Brasil, Bolsa, Balcão* (B3), in addition to internal documents and external materials, such as the Sustainability Accounting Standards Board (SASB) – Agricultural Products and SASB Biofuels, The Sustainability Yearbook 2018, by RobecoSAM (company operating globally in the Strategy sector sustainability investments), a guide for Bonsucro and sector documents and benchmarks. The themes raised are current for the sugar-energy sector and for the future demands of society.

Online consultation with

91 members and

64 external stakeholders

In the prioritization phases (steps 2, 3 and 4), an online consultation was conducted with 91 members and an interview was made with ten company executives. Through an online research we externally surveyed 64 stakeholders – agricultural partners, suppliers, the financial market, customers, civil society, the press, development banks, class entities and government representatives – and conducted interviews with six financial market executives. **102-40 | 102-42 | 102-43**

In the validation phase (steps 5 and 6), the top 11 themes considered material for Atvos were validated by senior management from the perspective of our stakeholders. The steps can be verified below.

The Materiality Matrix review process 102-46

Material themes and limits 102-44 | 102-46 | 102-47 | 103-1

Capitals	Relevance order	Material theme	GRI Topic	GRI Standards	Impact inside Atvos	Impact outside Atvos
Intellectual/ Financial	1st	Productivity and technology in the field and industry			Yes	Agricultural suppliers and partners
	3rd	Debt level			Yes	Investors, lenders, suppliers, agricultural partners and customers
Social and relationship/ human	2nd	Ethical, fair and transparent performance	Ethics and integrity/Anti-corruption	102-16, 102-17, 205-1, 205-2 and 205-3	Yes	Agricultural suppliers and partners
	4th	Guarantee of human and labor rights	Freedom of association and collective bargaining/Child labor/Forced or slave-like labor/Rights of indigenous and traditional peoples/Human rights assessment	408-1, 409-1, 411-1, 412-1 and 412-2	Yes	Communities
	5th	Health and safety	Occupational health and safety/Safety practices	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9 and 403-10	Yes	
	6th	Training and appreciation of people	Employment/Training and education/ Non-discrimination/Freedom of association and collective bargaining	401-1, 404-1 and 406-1	Yes	
	7th	Relationship and risk management with partners and in the supply chain	Supplier environmental assessment/ Supplier social assessment	308-1, 308-2, 414-1 and 414-2	Yes	Agricultural suppliers and partners
Natural	8th	Clean energy and energy efficiency	Energy	302-1	Yes	Customers and society
	9th	Controls and prevention of environmental risks	Materials/Energy/Water/Biodiversity/Emissions/ Effluents and waste/Environmental compliance/ Supplier environmental assessment	301-1, 302-1, 303-1, 303-3, 304-1, 304-2, 304-3, 305-1, 305-2, 305-3, 305-4, 305-5, 306-2, 306-3, 306-5, 307-1, 308-1 and 308-2	Yes	Society, customers, suppliers and agricultural partners
	10th	Responsible land use	Effluents and waste	306-2, 306-3 and 306-5	Yes	Community and society
	11th	Water management	Water	303-1 and 303-3	Yes	Community and society

Membership by gender, employment contract and region* 102-8

	Undetermined time	Determined time	Undetermined time	Determined time
	2018/2019		2017/2018	
By gender				
Men	8,746	204	9,222	121
Women	1,402	174	1,548	114
TOTAL	**10,148**	**378**	**10,770**	**235**
By region				
Southeast	2,223	76	2,371	75
Midwest	7,925	302	8,399	160
TOTAL	**10,148**	**378**	**10,770**	**235**

* Considers members, apprentices and young partners. All members with an indefinite contract work full time and all those with a fixed term contract work part-time.

In the period, our turnover rate was 12.72% due to 1,428 disconnected members. It is noteworthy that between 2012/2013 and the last harvest, we observed a reduction of 98.6% in our turnover. Part of the turnover also occurs internally, as we prioritize our members to fill vacancies in the company. **401-1 | 103-2 | 103-3: Employment**

Number of hires and dismissals* 401-1

	2018/2019		2017/2018	
	Hires	Dismissals	Hires	Dismissals
By gender				
Men	1,607	1,223	1,619	1,605
Women	222	195	293	304
TOTAL	**1,829**	**1,418**	**1,912**	**1,909**
By age group				
Up to 30 years old	798	462	897	600
Between 30 to 50 years old	947	836	928	1,141
Over 50 years old	84	120	87	168
TOTAL	**1,829**	**1,418**	**1,912**	**1,909**
By region				
Southeast	204	207	285	300
Midwest	1,625	1,211	1,627	1,609
TOTAL	**1,829**	**1,418**	**1,912**	**1,909**

* It considers only professionals with an indefinite contract (members and young partners) and does not consider layoffs for downsizing.

Hiring and turnover rates (%) 401-1

	2018/2019		2017/2018	
	Hires[1]	Turnover[2]	Hires[1]	Turnover[2]
By gender				
Men	88	11	85	12
Women	13	2	15	2
TOTAL	**100**	**13**	**100**	**14**
By age group				
Up to 30 years old	44	4	47	4
Between 30 to 50 years old	52	8	49	8
Over 50 years old	4	1	5	1
TOTAL	**100**	**13**	**100**	**14**
By region				
Southeast	11	2	15	2
Midwest	89	11	85	12
TOTAL	**100**	**13**	**100**	**14**

1. Number of hires in the category/total hires in the period. It considers only professionals with an indefinite contract (members and young partners) and does not consider layoffs for downsizing.
2. Number of dismissals/average headcount. It considers only professionals with an indefinite contract (members and young partners) and does not consider layoffs for downsizing.

Occupational health

103-2 | 103-3: Occupational health and safety | 403-3 | 403-6

We have a Health and Collective Care Promotion Program (PPSAC, in Portuguese), which includes monitoring of workers identified with Chronic Noncommunicable Diseases (NCDs, in Portuguese), vaccination programs and monitoring of workers on leave. The Restriction and Rehabilitation at Work Program (PRRT, in Portuguese) covers the monitoring of workers returning to work, in conjunction with the National Institute of Social Security (INSS, in Portuguese). Psychosocial assessments and follow-up are also performed to ensure the social and mental health of workers and partners, including those on leave.

Sleep Program 403-2

Given the risks of vehicular accidents, we continued the Sleep Program, which consists of the evaluation of members susceptible to fatigue and drowsiness at work. During the period, we evaluated 100% of truck and heavy fleet drivers, with three classifications: normal, predisposing and predisposed to fatigue and drowsiness.

The heavy fleet drivers were evaluated by the Labor Physicians of the units based on questionnaire validated by the National Traffic Department (Denatran, in Portuguese), along with clinical and psychosocial exams. From 250 assessments, three cases predisposed to the risk of drowsiness were detected, resulting in control and follow-up measures for mitigation. For the next harvest, our goal is to broaden the scope to other functions, such as machine operators and light fleet drivers.

Work related injuries* 403-9

	All members		Workers who are not members but whose work and/or place of work is controlled by the company	
	Total number	Rate	Total number	Rate
Deaths as a result of work-related injuries	0	0	0	0
High severity work-related injuries (excluding deaths)	3	0.13	0	0
Work-related injuries recorded	45	2.02	6	0.51
Types of work-related injuries	Pressings, different level falls and burns		Different level fall and vehicular accidents	
Number of hours worked	22,275,987.42		11,659,617.38	

* The severity rate, as well as the accident rate, presents a calculation basis that takes into account men-hours worked; however, in this indicator, the numerator used is the sum of lost/recovery days plus debited days, according to NBR 14280, in case of incapacitating injuries.

Supply providers

We manage other companies that provide products and services to Atvos corporately through the Supply area. During the harvest, payments to 2,519 thousand suppliers hired totaled R$1,948.9 billion, in line with previous harvest amounts. The distribution of these suppliers by product/service type and region is as follows.

Suppliers by product/service type contracted in the period[1] 102-9

	2018/2019[2]	
	Number of suppliers	Paid value (R$)
Industrial equipment	261	13,060,344.97
Agricultural equipment	292	6,100,246.80
Rental of agricultural machinery and equipment	33	73,611,043.68
Agricultural services	62	112,194,652.16
Inputs	301	680,235,425.90
Sugarcane transportation	12	298,367,911.41
Machine and equipment services	716	69,281,238.91
Material	4,280	169,137,003.58
General services	1,521	350,814,993.36
Logistics services	131	176,106,151.55
TOTAL	**2,519**	**1,948,909,012**

1. It does not include sugarcane suppliers or those that send us simple shipments, returns, donations, gifts, lending, returns, transfers and intercompany transactions, Land Company and Bahiamido. The same supplier may operate in more than one category.
2. Due to adaptations to the end-of-season SAP system deployment to replace the Oracle, the data presented were taken from the April-December 2018 entry-level report.

Suppliers distributed by region*	2018/2019 (Apr-Dec 18)
North	1
Northeast	26
Center-West	853
Southeast	1.492
South	146
Abroad	1
TOTAL	**2.519**

* Due to adaptations to the end-of-season SAP system deployment to replace the Oracle, the data presented were taken from the April-December 2018 entry-level report.

Commitment to our partners

Preserving a preventive and proactive stance, we implemented the drafting system (Ariba Contract) in July 2018 in order to eliminate the circulation of documents by e-mail. Thus, we gain speed, transparency and traceability in the process of contractual drafts validation. Additionally, we now use the Docusing system to electronically sign contracts, recognized under Brazilian law. During the period, more than 2,000 documents were prepared and signed by this new process.

For other suppliers, the homologation process verifies the legal compliance of the companies prior to their hiring, especially in aspects related to labor and tax obligations and environmental licensing, when applicable. Implemented in the 2015/2016 harvest, the system has been consolidating: the number of contracted suppliers that went through this assessment was 682 in the last period (data from April to December 2018 extracted from the Oracle system). **414-1**

Social Energy 413-1

Check out the following Social Energy initiatives in the 2018/2019 harvest:

Reactivation of the Glória de Dourados Martial Band: aims to promote the socialization and integration of young people with music, in addition to rescuing the municipality's culture. Scheduled for release in 2019, the expectation is to annually serve 50 children and young people from the age of 8 onwards.

Itinerant Cinema: it will offer the residents of Deodápolis (*Mato Grosso do Sul*) the opportunity to have access to films related to social responsibility, human rights, community development, education, environment, culture and entertainment. Scheduled to open in 2019, the project uses cinema as a cross-cutting language and helps complement education and develop critical awareness.

Qualification in Dressmaking: consists of the professional qualification of 45 women in socially vulnerable situations through a modeling, cutting and sewing course in order to promote the qualification of the local workforce and favor the generation of jobs and income.

Support to University Students of *Cachoeira Alta*: consists of supporting the transportation of university students from the municipality to the university located in *Rio Verde* with the objective of fostering access to quality higher education for young people in the region.

During the harvest, we also held the Culture Day in the city of *Nova Alvorada do Sul*, with several presentations of the projects developed by *Ponto de Cultura* with young people from the *Santa Luzia* Pole region.

Together for the community 413-1

We act intensely in the surrounding regions where we operate through the Together for the Community program. During the harvest, we worked to raise awareness of the fire theme. The *Santa Luzia* Unit promoted, in July and August, in the municipality of *Nova Alvorada do Sul*, a morning of clarification against fires.

The objective was to provide the population with explanatory pamphlets with tips on how to prevent and stop situations involving the burnings. The local mobilization action clarified the main doubts of the population and was marked by the presence of young people from the Firefighter project at the School – *Aluno Cidadão* and members of the unit's Fire Brigade.

Economic and social laws and regulations

103-2 | 103-3: Socioeconomic compliance | 419-1

In the context of labor, Atvos disbursed the total amount of R$195 thousand of Private Social Investment due to two agreements made with the Labor Prosecutor's Office on working hours. The most significant, R$150,000, was made by the *Eldorado* Unit to renegotiate the fine provided for in a court settlement made in 2016, however, the amount does not correspond to any fine/punishment.

At all hubs, teams conduct periodic field assessments to verify compliance with legal requirements and hold monthly or bimonthly meetings with the leadership (depending on each pole) to discuss received cases and possible improvement actions.

In the tax area, proactivity and preventive action in identifying possible contingencies were essential to avoid financial and image damage to the company, especially with the increase of indicators and technologies developed to facilitate the cross-checking of information used by public agencies in the verification of risks, misconceptions and disagreements. In the last harvest, the efforts of the tax area resulted in the definitive success of approximately R$657 million resulting from favorable administrative decisions. Regarding the assessments, although the amount has increased, considering the indicators and the crisis that plagues the Country, the company presented a defense for practically all cases, having paid the amount of R$151 thousand for the breach of ancillary obligations.

Biodiversity preservation

103-2 | 103-3: Biodiversity | 304-1 | 304-2 | 304-3

Our own and leased areas in the five agroindustrial poles total 94,791.5 thousand hectares, including Permanent Preservation Areas (PPA) and Legal Reserves, and 16,241 thousand hectares of area mapped as protected or restored. The protected areas serve to create ecological corridors, as in the case of the *São Paulo* Pole, in order to favor the movement of animal species.

As for the risk of fauna being run over, we mitigate it through the Vehicle Safety Program, which includes, among other tools, machine speed limitation, georeferencing and incident tracking.

From time to time, we present to the state environmental agency a Self-Monitoring Report, with results of analysis in the influence area of each unit and monitoring of local fauna and flora, among other evidences that ensure the absence of negative impacts.

Considering that the areas of sugarcane expansion are already converted to pastures or agriculture, there is no impact capable of altering the existing biodiversity in the region. It is noteworthy that we continually evaluate the preservation and spring areas in our units through constant monitoring. Additionally, we analyze water quality in the areas of direct influence of the units, as well as survey fauna, flora and other factors.

In our operations, we have 1,279 farms: 33 of our own, 1,156 from partnerships and 90 from suppliers. At the end of the harvest, 100% of our own and supplier farms were registered in the Rural Environmental Registry (CAR, in Portuguese). Regarding the partnership farms, only three had their registration pending, but are in the process of being completed.

Biodiversity valuation

During the harvest, the *São Paulo* Pole launched the *Corredores da Vida* Project: Biodiversity Rescue and Income Generation at *Pontal do Paranapanema* (*São Paulo*), in partnership with the Institute for Ecological Research (Ipê, in Portuguese). In order to reinforce our commitment to biodiversity in the *Pontal do Paranapanema* region, to expand its preservation activities, the project will link the two largest conservation units in the Brazilian biome: the *Morro do Diabo* State Park (PEMD, in Portuguese) and the Ecological Station of *Mico-Leão-Preto* (ESEC MLP, in Portuguese).

The conservation of forest and water resources, the neutralization of CO_2 (carbon dioxide) emissions and the guarantee of environmental services in public-private areas in the middle of the Atlantic Forest Conservation Units of the extreme west of *São Paulo* will be promoted.

Green seal

In recognition of our initiatives, we received, during the period, the Green Seal of the State of *São Paulo*, an initiative of the State Secretariat of the Environment, which recognizes companies whose activities value respect for the environment and its preservation.

Operational sites within or adjacent to conservation or high biodiversity value areas 304-1

In four agroindustrial poles, we have our own areas around other conservation units:

- ***São Paulo* Pole:** 2,138 hectares adjacent to PEMD and ESEC MPL, both important for the preservation of the Atlantic Forest.
- ***Eldorado* Pole (unit):** 392 hectares in the Environmental Preservation Area (APA, in Portuguese) of the *Ivinhema* River floodplains, in the municipality of *Deodápolis* (*Mato Grosso do Sul*), which is part of the *Paraná* River hydrographic basin.
- ***Araguaia* Pole:** 7,397 hectares in the Emas National Park Buffer Zone, which contributes to the preservation of the *Cerrado* and the protection of the *Guarani* aquifer recharge areas.
- ***Taquari* Pole:** 84,865 hectares near the APA and the Emas National Park, relevant for the protection of springs in the region and for the conservation of the *Cerrado* biome.

Information about operations in protected areas is updated periodically. In addition to the topography of the units, the area's buffer zone maps, APA and units database are used. All data are in line with information from state environmental agencies and the Ministry of Environment.

Protected or restored habitats* 304-3

Unit	Protected or restored habitat areas (hectares)	Locations
Eldorado Pole	71.99	*Santa Tereza do Jaborandi* Farm, in the municipality of *Nova Alvorada do Sul*
Santa Luzia Pole	54.08	*Dallari I, Simental, União, Michelli* and *Boa Esperança* Farm
Araguaia Pole	20.00	Legal reserve
Taquari Pole	210.94	*Costa Rica* Unit: HGW and *Granada* Farm
São Paulo Pole	15,196.02	*Conquista do Pontal* Unit
Goiás Pole	687.93	*Rio Claro* Unit: Municipalities of *Caçu, Cachoeira Alta, Paranaiguara* and *Itarumã*

* Restoration measures are approved by independent external professionals.

Significant spills 306-3

Vinasse	2018/2019
Total number	21 leaks
Total volume	2,007 (m³)
Location	Sugarcane field – Level Curve
Sulfuric acid	
Total number	3 leaks
Total volume	38.1 (m³)
Location	Chemical plant
Hydrochloric acid	
Total number	1 leak
Total volume	1.5 (m³)
Location	Chemical plant

Contribution for climate change

GHG Emissions (thousand tCO_2e) 305-1 | 305-2 | 305-3	2018	2017
Direct emissions – Scope 1		
Gross direct emissions	641.37	692.63
Biogenic emissions	5,614.79	5,484.47
Biogenic removal (land use change)	1,440.00	1,433.16
Indirect emissions – Scope 2		
Indirect emissions (electricity consumption)	1.69	2.24
Other indirect emissions – Scope 3		
Indirect emissions (others)	121.26	109.00
Biogenic emissions	9.87	8.89

Net mitigation effect (millions of tCO_2e)[1] 305-5	2018/ 2019	2017/ 2018
Production, processing, transportation and input emissions	0.97	0.99
Emissions avoided by using ethanol as fuel and surplus electricity	5.47	4.95
Carbon stock due to Land Use Change (LUC)[2]	1.49	1.43
Net mitigation effect (A-B-C)	5.99	5.39

1. It considers the three main Greenhouse Gases – GHG (CO_2, CH_4 and N_2O) and are used as characterization factors for the conversion to tCO_2, and the global warming potentials for a one hundred year horizon (AGWP100) defined by the Intergovernmental Panel on Climate Change (IPCC) – 2013). The methodology was proposed by researchers Isaias C. Macedo, Joaquim E. A. Seabra and João E. A. R. Silva.
2. LUC estimates have uncertainties due to the lack of soil equilibrium carbon stock data. The calculation method used considered IPCC Tier 1 default factors and was improved with the latest and most recent Harmonized World Soil Database (HWSD) regional data.

Environmental laws and regulations

307-1 | 103-2 | 103-3: Environmental compliance

During the harvest, Atvos received six fines for alleged nonconformities. Two of them to the *Santa Luzia* Unit: the first for allegedly setting fire to an agropastoral area, in the amount of R$521 thousand, which was evidenced as arson; and a Public Civil Action (ACP, in Portuguese), filed by the Public Prosecutor of *Nova Alvorada do Sul*, where the parties are in negotiations to close the case. And, finally, two other fines totaling R$170 thousand to the *Conquista do Pontal* Unit referring to the alleged breach of environmental compensation for which Atvos filed a defense.

Advances in the harvest

At the end of 2018, the government published in the Official Gazette (DOU, in Portuguese) Resolution No. 758/2018, approved by the Board of the National Agency of Petroleum, Natural Gas and Biofuels (ANP, in Portuguese), which deals with the criteria for Certification of Efficient Production of Biofuels, the definition of requirements for the certification of inspection companies responsible for certification, as well as the standards for the calculation of the Energy-Environmental Efficiency Rating of biofuel producers that join *RenovaBio*.

For certification, interested companies must calculate their Energy-Environmental Efficiency Notes through *RenovaCalc* and carry out the certification process, which will result in the issuance of the Certificate of Efficient Biofuels Production. With this, it will be possible to request the issuance of the Decarbonization Credits (CBIO, in Portuguese), which may be traded in accordance with the regulations that are being developed.

At Atvos, we had already begun our preparation during the previous harvest through a study in partnership with the Fundação Getulio Vargas (FGV) on the carbon and water footprint of hydrous ethanol production, in line with the demand for Life Cycle Analysis (LCA, in Portuguese) of biofuels of regulatory bodies. We have also developed an internal study to assess the possible impacts of carbon pricing on our revenues, our investments and our operations. The result pointed to opportunities for financial gains due to the capacity to reduce GHG emissions.

Additionally, we have a ten-year emissions plan, which estimates the projected GHG emissions for our operations over the next decade and points out opportunities for the development of improvement actions, considering our agricultural plan and the forecast for sugarcane field expansion.

Thus, the next harvest should be a milestone for us and for the Country. We are the second largest ethanol producer in Brazil and the first supplier in the Country with the largest ethanol mix. We have the necessary structure to meet this demand and contribute to the adequacy of national energy efficiency, as well as the reduction of emissions, in order to continue our goals of adding value to our natural, financial, social and relationship capital.

GRI
content index 102-55

GRI 101: Foundation 2016					
GRI 102: General disclosures 2016	**Standard**	**Page**	**Omission**	**UNGC**	**SDG**
Organizational profile					
	102-1: Name of the organization	8			
	102-2: Activities, brands, products, and services	8, 10			
	102-3: Location of headquarters				
	102-4: Location of operations	8, 9			
	102-5: Ownership and legal form	Atvos is a privately held corporation that is part of the Odebrecht Group.			
	102-6: Markets served	10			
	102-7: Scale of the organization	8, 9, 10			
	102-8: Information on employees and other workers	8, 36, 66		6	8
	102-9: Supply chain	44, 70			

GRI 102: General disclosures 2016	Standard	Page	Omission	UNGC	SDG
Organizational profile					
	102-10: Significant changes to the organization and its supply chain	44, 45 At the corporate level, Odebrecht *Energia Renovável* and OER *Mineiros* were merged, the only energy assets that had not yet been incorporated without impact on the companies' capital stock. In addition, Odebrecht *Terras* was incorporated by Odebrecht *Investimentos S.A.*			
	102-11: Precautionary principle or approach	23			
	102-12: External initiatives	15, 21			
	102-13: Membership of associations	15, 21, 51			
Strategy					
	102-14: Statement from senior decision-maker	3			
	102-15: Key impacts, risks, and opportunities	22, 23			
Ethics and integrity					
	102-16: Values, principles, standards, and norms of behavior	11, 14		10	16
	102-17: Mechanisms for advice and concerns about ethics	16			

GRI 102: General disclosures 2016	Standard	Page	Omission	UNGC	SDG
Governance structure					
	102-18: Governance structure	12			
	102-22: Composition of the highest governance body and its committees	12, 13			
	102-23: Chair of the highest governance body	Atvos' Chairman of the Board of Directors does not serve as CEO of the company.			
	102-24: Nominating and selecting the highest governance body	12, 13			
Stakeholder engagement					
	102-40: List of stakeholder groups	11, 64			
	102-41: Collective bargaining agreements	36		3	8
	102-42: Identifying and selecting stakeholders	11, 64			
	102-43: Approach to stakeholder engagement	64			
	102-44: Key topics and concerns raised	65			

GRI 102: General disclosures 2016	Standard	Page	Omission	UNGC	SDG
Reporting practice					
	102-45: Entities included in the consolidated financial statements	Atvos' annual report covers the following entities: *Atvos Agroindustrial S.A.; Atvos Agroindustrial Participações S.A.; Agro Energia Santa Luzia S.A.; Brenco Companhia Brasileira de Energia Renovável S.A.; Destilaria Alcídia S.A.; Pontal Agropecuária S.A.; Rio Claro Agroindustrial S.A.; Usina Eldorado S.A.; Usina Conquista do Pontal S.A.*; and Odebrecht *Agroindustrial* International Corp. During the harvest, the Extraordinary General Assembly approved the merger of OER *Mineiros Energia S.A.* (OER *Mineiros*) at book cost by *Brenco Companhia Brasileira de Energia Renovável S.A. (Brenco)*, which held an 82.98% stake in OER *Mineiros*. This move did not result in a share capital increase or issuance of new shares, since the incorporating company already held 100% of the merged company's equity, since the investment held by the minority shareholder of OER *Mineiros* was capitalized at *Brenco* during the harvest.			
	102-46: Defining report content and topic boundaries	6, 64, 65			
	102-47: List of material topics	65			
	102-48: Restatements of information	There were no restatements in the period.			
	102-49: Changes in reporting	There were no significant changes from periods covered by previous reports.			
	102-50: Reporting period	6			

GRI 102: General disclosures 2016	Standard	Page	Omission	UNGC	SDG
Reporting practice					
	102-51: Date of most recent report	The latest report was published in 2018 for the 2017/2018 harvest.			
	102-52: Reporting cycle	Atvos publishes its report annually.			
	102-53: Contact point for questions regarding the report	6			
	102-54: Claims of reporting in accordance with the GRI Standards	6			
	102-55: GRI content index	76			
	102-56: External assurance	Only economic and financial data were externally and independently verified. The information that meets the prioritized GRI indicators has been validated by Atvos' technical and administrative areas.			

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 201: Economic performance 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	33		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	33			
	201-1: Direct economic value generated and distributed	34			2, 5, 7, 8, 9
GRI 203: Indirect economic impacts 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	47, 48		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	47, 48			
	203-1: Infrastructure investments and services supported	47			2, 5, 7, 9, 11
	203-2: Significant indirect economic impacts	47, 48, 49			1, 2, 3, 8, 10, 17

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 205: Anti-corruption 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	14		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	14			
	205-1: Operations assessed for risks related to corruption	14		10	16
	205-2: Communication and training about anti-corruption policies and procedures	14, 16		10	16
	205-3: Confirmed incidents of corruption and actions taken	In the 2018/2019 harvest, there were no confirmed cases of corruption at Atvos.		10	16
GRI 301: Materials 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	55		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	55			
	301-1: Materials used by weight or volume	55		7 | 8	8, 12

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 302: Energy 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	56		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	56			
	302-1: Energy consumption within the organization	56		7 | 8	7, 8 , 12 ,13
GRI 303: Water 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	57		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	57			
	303-1: Water withdrawal by source	57		7 | 8	6
	303-3: Water recycled and reused	57		8	6, 8, 12

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 304: Biodiversity 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	72		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	72			
	304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	72, 73		8	6, 14, 15
	304-2: Significant impacts of activities, products, and services on biodiversity	53, 72		8	6, 14, 15
	304-3: Habitats protected or restored	72, 73		8	6, 14, 15

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 305: Emissions 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	59		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	59			
	305-1: Direct (Scope 1) GHG emissions	59, 74		7 | 8	3, 12, 13, 14, 15
	305-2: Energy indirect (Scope 2) GHG emissions	59, 74		7 | 8	3, 12, 13, 14, 15
	305-3: Other indirect (Scope 3) GHG emissions	59, 74		7 | 8	3, 12, 13, 14, 15
	305-4: GHG emissions intensity	59		8	13, 14, 15
	305-5: Reduction of GHG emissions	59, 74		8 | 9	13, 14, 15

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 306: Effluents and waste 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	58		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	58			
	306-2: Waste by type and disposal method	58		8	3, 6, 12
	306-3: Significant spills	53, 73		8	3, 6, 12, 15
	306-5: Water bodies affected by water discharges and/or runoff	Effluent discharges and/or launches are not performed directly into water bodies. Thus, there is no surface and subsurface water runoff throughout the units' Direct Influence (DI) and Indirect Influence (II).		8	6, 15
GRI 307: Environmental compliance 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	53, 74		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	53, 74			
	307-1: Non-compliance with environmental laws and regulations	53, 74		8	16

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 308: Supplier environmental assessment 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	46		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	46			
	308-1: New suppliers that were screened using environmental criteria	44, 46		8	
	308-2: Negative environmental impacts in the supply chain and actions taken	44		8	
GRI 401: Employment 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	35, 36, 66		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	35, 36, 66			
	401-1: New employee hires and employee turnover	66, 67		6	5, 8

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 403: Occupational health and safety 2018					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	37, 39		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	37, 39			
	403-1: Occupational health and safety management system	37			8
	403-2: Hazard identification, risk assessment, and incident investigation	37, 68			3, 8
	403-3: Occupational health services	39, 68			3, 8
	403-4: Worker participation, consultation, and communication on occupational health and safety	37, 38			8
	403-5: Worker training on occupational health and safety	38, 39			
	403-6: Promotion of worker health	39, 68			

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 403: Occupational health and safety 2018					
	403-7: Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Impact prevention and mitigation occurs through the Attitude System, which mandates that all people who relate to Atvos should follow the minimum Health, Safety, and Environment (HSE) standards, whether they are members, logistics operations or suppliers and partners - whose contracts must consider compliance with legal requirements.			
	403-8: Workers covered by an occupational health and safety management system	37			
	403-9: Work-related injuries	68			
	403-10: Work-related ill health	Atvos does not recognize occupational or work-related illnesses in its operations. However, it promotes prevention and control actions through occupational health programs.			
GRI 404: Training and education 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	40, 41		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	40, 41			
	404-1: Average hours of training per year per employee	40, 41		6	4, 5, 8

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 406: Non-Discrimination 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	42		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	42			
	406-1: Incidents of discrimination and corrective actions taken	During the period, there was no record of incidents related to discrimination.		6	5, 8, 16
GRI 408: Child labor 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	44		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	44			
	408-1: Operations and suppliers at significant risk for incidents of child labor	44		5	8, 16

Material topics	Standard		Page	Omission	UNGC	SDG
GRI 409: Forced or compulsory labor 2016						
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary		65			
	103-2: The management approach and its components		44		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach		44			
	409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labor		44		4	8
GRI 411: Rights of indigenous peoples 2016						
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary		65			
	103-2: The management approach and its components	There were no identified incidents involving the rights of indigenous peoples during the reporting period..			1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	There were no identified incidents involving the rights of indigenous peoples during the reporting period.				
	411-1: Incidents of violations involving rights of indigenous peoples	There were no identified incidents involving the rights of indigenous peoples during the reporting period.			1	2

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 412: Human rights assessment 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	17		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	17			
	412-1: Operations that have been subject to human rights reviews or impact assessments	17		1	
	412-2: Employee training on human rights policies or procedures	17		1	

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 413: Local communities 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	47, 48, 49		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	47, 48, 49			
	413-1: Operations with local community engagement, impact assessments, and development programs	47, 49, 70		1	
	413-2: Operations with significant actual and potential negative impacts on local communities	The main negative local impacts and potential risks in the locations where Atvos operates are consolidated in the company's risk matrix. All these aspects are continually monitored and mitigated to contribute to the company's good relationship with local audiences and institutional reputation. Among the measures adopted are the development of the Social Energy program, which prioritizes, in a participatory and inclusive way, social investments in the municipalities; responsible cultivation practices that mitigate the risk of soil and water contamination; fire prevention; and ensuring the promotion of human rights.		1	1, 2

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 414: Supplier social assessment 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	46		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	46			
	414-1: New suppliers that were screened using social criteria	44, 46, 70		2	6, 8, 16
	414-2: Negative social impacts in the supply chain and actions taken	44, 46		2	6, 8, 16

Material topics	Standard	Page	Omission	UNGC	SDG
GRI 415: Public policy 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	According to Electoral Legislation, Atvos cannot fund political campaigns and therefore has not made any political financial contributions.		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	According to Electoral Legislation, Atvos cannot fund political campaigns and therefore has not made any political financial contributions.			
	415-1: Political contributions	According to Electoral Legislation, Atvos cannot fund political campaigns and therefore has not made any political financial contributions.		10	16
GRI 419: Socioeconomic compliance 2016					
GRI 103: Management approach 2016	103-1: Explanation of the material topic and its boundary	65			
	103-2: The management approach and its components	70		1 | 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	70			
	419-1: Non-compliance with laws and regulations in the social and economic area	47, 70			16

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