



# Climate change and air quality

Minimizing the impact on air quality and contributing to the mitigation of and adaptation to climate change by implementing actions focused on reducing the emissions, permanently searching for the highest energy efficiency, implementing clean technologies, efficiently using the commodities in Grupo Nutresa's operations, and adapting the products intended for consumers with a higher level of awareness.

Commitment to the SDGs



Electric vehicle used for recovering waste at the production facilities of the Chocolates Business in Rionegro, Colombia.

## Strategy

[GRI 103-2]

## Progress achieved in 2020

[GRI 103-3]

Climate change governance.

- » **Renewal** and definition of roles, responsibilities and structure for climate governance based on the framework of the Task Force on Climate-related Financial Disclosure (TCFD).

Raising awareness about climate change.

- » **345** suppliers participated in the sessions for learning and the exchange of good practices related to environmental sustainability.
- » **1.500** employees received training in strategies to mitigate climate change through virtual actions.

Reducing the emissions of greenhouse gases.

- » **Grupo Nutresa** achieved a 46,4% accumulated reduction in terms of GHG (scopes 1 and 2) between 2010 and 2020 in Colombia, and 1,6% between 2019 and 2020 in Mexico, Chile, the Dominican Republic, Panama, Peru and Costa Rica.
- » **Renewal** of the green electric power certificate for a period of nine years, and expansion of the scope to new acquisitions in Colombia.
- » **100%** reduction in the scope 2 emissions in Colombia.
- » **Implementation** of an agreement for the purchase of non-conventional renewable energies in Tresmontes Lucchetti in Chile.

Expanding the use of lower-impact commercial assets.

- » **Accumulated** acquisition of 4.593 more environmentally friendly refrigerator units at Comercial Nutresa, reducing electricity consumption by more than 800.000 kWh/year.

Mitigating the impact of the products on the climate throughout their entire life cycle.

- » **Continuity** of the carbon neutral certification for four brands, Livean, Zuko, Evok and Tosh, which calculate, reduce and offset the GHG emissions produced throughout their life cycle. In total, 38.716 tons of CO<sub>2</sub> eq. were offset.

Climate, physical and regulatory risk assessment.

- » **Definition** of the assessment scale according to the Integrated Risk Management Model to assess the probability of occurrence and the consequences in relation to the EBITDA.
- » **Assessment** of secondary climatic risks and formulation of the climate action plan.
- » **Identification** and assessment of externalities associated with land use and climate change.

Reducing the impact on air quality.

- » **Reduction** of 1.060 tons of CO<sub>2</sub> eq. thanks to the acquisition of electric and natural gas vehicles, and the planting of native trees in wetlands in Colombia.

## The Company works on initiatives for the mitigation and adaptation that will be achieved through the understanding of the climate resilience strategy.

### Risks and opportunities [GRI 103-1]

Grupo Nutresa, working jointly with the consulting firm Ecoacciones, consolidated the methodology for the analysis of financial risk derived from climate change. The methodology was first aligned with Grupo Nutresa's Comprehensive Risk Management methodology, and other processes such as *"The climate change risk management matrix: a process for assessing impacts, adaptation, risk and vulnerability,"* an initiative devised by government of the state of Queensland, Australia, and the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD).

As a result of this activity, the Climate Resilience Strategy for Grupo Nutresa was created and the main risks and opportunities related to climate change that may affect the Organization's ability to generate value were identified. Additionally, the climate action plan was formulated in order to establish actions with adaptation approaches based on infrastructure, technology or nature, mitigation, science and technology.

In the analysis, the Company evaluated fifteen climatic variables for Colombia. The risk assessment showed scores ranging from acceptable to moderate. The risk level result for the flooding increase variable was "important risk," since it may lead to the restriction of access to supplies or the marketing of products due to damaged roads, damage to crops and/or plantations, increased cultivation costs, damage to physical assets at farms and adverse effects on the operations.

### Future outlook and goal for 2030

Grupo Nutresa has set a new commitment for 2030: to reduce by 40% the specific emissions (kg of CO<sub>2</sub> eq./t.p.) of GHG (scopes 1 and 2) produced in the operations, and ensuring that 100% of the main commodities are obtained productively and sustainably, while conserving biodiversity.

That is why the Company will continue working on initiatives from a mitigation and adaptation approach, which will be achieved through understanding the climate resilience strategy and other tactics. Likewise, the Organization hopes to continue contributing with these actions to the fulfillment of the Sustainable Development Goals (SDGs) and to Colombia's commitment to reduce GHG emissions by 51% over the next ten years, compared to the base year 2010.

Another approach is the promotion of culture and the linking of more related groups, ensuring the continuity of initiatives such as the participation of suppliers in the exchange of sustainability practices, training and awareness-raising activities, creation of guides on environmental sustainability, development of web sites with relevant information on GHG mitigation and offsetting.

## Success stories and acknowledgments [GRI 103-3]



### New transport fleet powered by green energy

This new distribution fleet is made up of 14 electric vehicles from Comercial Nutresa and the Coffee Business that allow reducing GHG emissions by more than 375 tons of CO<sub>2</sub> eq. over a three-month period.



### Renewable energy generation

The Biscuits Business installed the first pilot phase of photovoltaic solar energy, generating 28.000 kWh per month and decreasing 22 tons of CO<sub>2</sub> eq. over the year.



### Less water, fewer emissions

The Company implemented the dry cleaning of vehicles at Opperar's facilities, thus reducing commute distances and emissions by 51,0 tons of CO<sub>2</sub> eq. per year.



### Environmental commitment of the Cold Cuts Business's El Morro pig farm

The Cornare Environmental Corporation awarded this recognition for the execution and development of the activities that are part of the evaluation and categorization of pigs of the Green Growth and Climate Change Agreement of the pig sector in the eastern Antioquia region in Colombia. This acknowledgment program is led by the local environmental authority and aims to promote both green growth and sustainable development, particularly reducing the emission of GHG from the production activities, thus favoring a type of development compatible with the climate of the region. The results were achieved through the implementation of good energy practices such as natural lighting and LED lighting, as well as the replacement of refrigeration equipment.



Maintenance performed on commercial assets to contribute to reducing the environmental impact.

## Material topic details [GRI 103-3]

### Governance and organizational culture

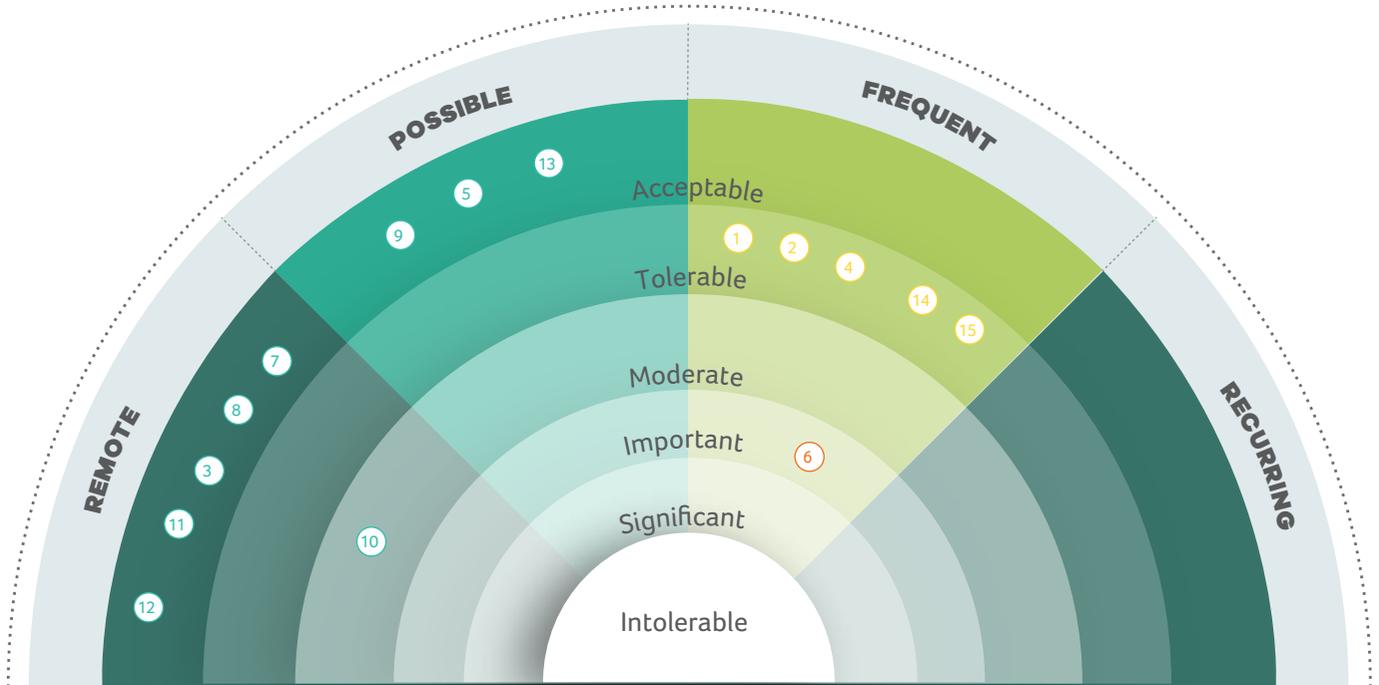
Grupo Nutresa confirms its commitment acquired through the [Climate Change Policy](#), which establishes the corporate guidelines related to the integral management of climate change for achieving a low-emission and climate-resilient development by 2030. The Company defined and renewed the roles, responsibilities and structure for climate governance based on the framework of the TCFD, allowing the implementation of a climate management model within the Organization.

As to the roles, Grupo Nutresa's Board of Directors has the responsibility of steering and supervising the comprehensive climate change strategy. For its part, the Senior Management is in charge of ensuring that the strategy is put into practice by creating incentives, establishing metrics and measuring

the performance of the employees who participate in its implementation. Likewise, the Businesses are responsible for executing the strategy through mitigation and adaptation programs and initiatives, and the allocation of resources to carry them out in their operations.

In 2020, the Organization identified and assessed the risks and opportunities posed by climate change for both the Company and its value chain. The assessment includes all physical, financial and regulatory risks and opportunities, as well as those related to market access and to the changes in the preference of consumers. The risks included and the assessment results are shown below.

Map of climate risks



- ③ 3,2 mm rise in the ocean levels by 2040.
- ⑤ Increase in the intensity and frequency of wildfires.
- ⑦ Increase in the intensity and frequency of tropical storms.
- ⑧ Negative feedback from the stakeholders in relation to meeting the expectations of customers and society in terms of climate action or the failure to do so.
- ⑨ Uncertainty related to the market signals.
- ⑩ Not developing new low-carbon production solutions (transition to low-carbon technologies that allow improving the efficiency in terms of the use of resources, production and distribution processes).
- ⑪ Not implementing agricultural practices that sequester carbon.
- ⑫ Not implementing technologies that allow improving the adaptive capacity and resilience of crops and plantations with regard to climate change.
- ⑬ Requirements that demand providing detailed environmental information of the products.

- ① 1,4 °C increase in the average temperature.
- ② Increase in the intensity and frequency of droughts.
- ④ Increase in the intensity and frequency of rainfall.
- ⑥ Rise in the intensity and frequency of floods and sudden water-level increases.
- ⑭ Changes in the preferences of consumers towards low-carbon and environmentally friendly products.
- ⑮ Increase in the emissions of CO<sub>2</sub> eq. (332,420 Gg of CO<sub>2</sub> eq. by 2030).

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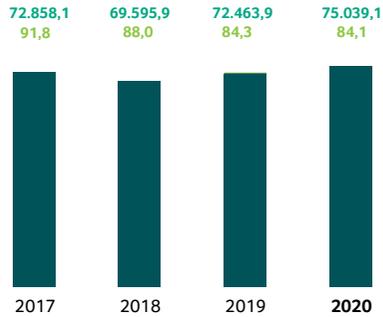
Furthermore, through its impact measurement model under the *true value* methodology, the Organization assessed the externalities associated with land use, climate change and air quality in the value chain. This allowed identifying the positive and negative impacts associated with the intervention of natural capital and soil ecosystem services and the purchase of certified *commodities*, as well as those associated with GHG emissions and air pollutants in the chain, eco-efficiency initiatives, emission offsetting and the use of clean energies.

Moreover, the Company organized and held training and culture sessions aimed at raising awareness about circular economy, sustainable mobility and climate change. More than 1.500 employees participated in such activities. Grupo Nutresa also organized panel discussions with experts on these matters with the purpose of promoting better habits among the employees.

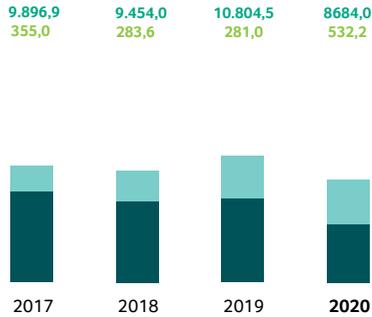
**Direct and indirect emissions (scopes 1 and 2)**  
[GRI 305-1] [GRI 305-2] [GRI 305-4] [SDG 13.1] [SDG 12.2]

■ Scope 1 emissions (tons of CO<sub>2</sub>eq.) ■ Scope 2 emissions (tons of CO<sub>2</sub>eq.)  
Total (scope 1 and 2) emissions (tons of CO<sub>2</sub>eq.) Total (scope 1 and 2) emissions (kg of CO<sub>2</sub>eq./t.p.)

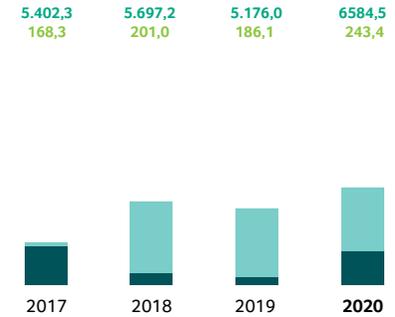
**Colombia**



**Colombia - Restaurants**



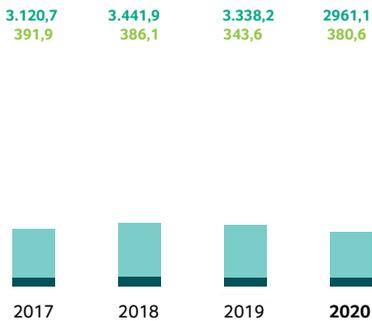
**Mexico**



**Costa Rica**



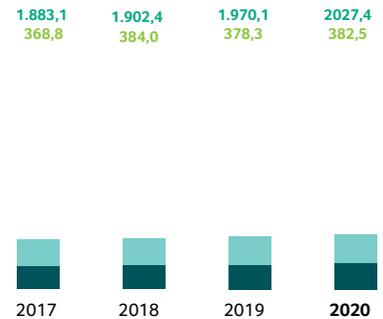
**Dominican Republic**



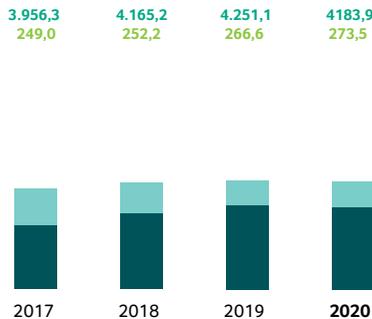
**Chile**



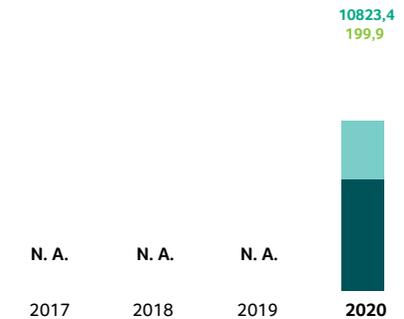
**Panama**



**Peru**



**United States**

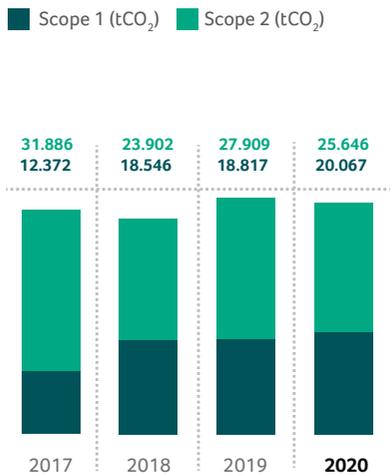


\* Consumption intensity for restaurants (tons of CO<sub>2</sub> eq./main course)



Chocolates Business facilities in Rionegro, Colombia.

### Logistics operations in Colombia



The goals were achieved thanks to the improvement of production processes, replacement of more environmentally friendly fuels and refrigerants, energy eco-efficiency projects, implementation of environmental practices and innovation in processes and products.

### Reduction of industrial process emissions [GRI 305-5] [SDG 13.1]

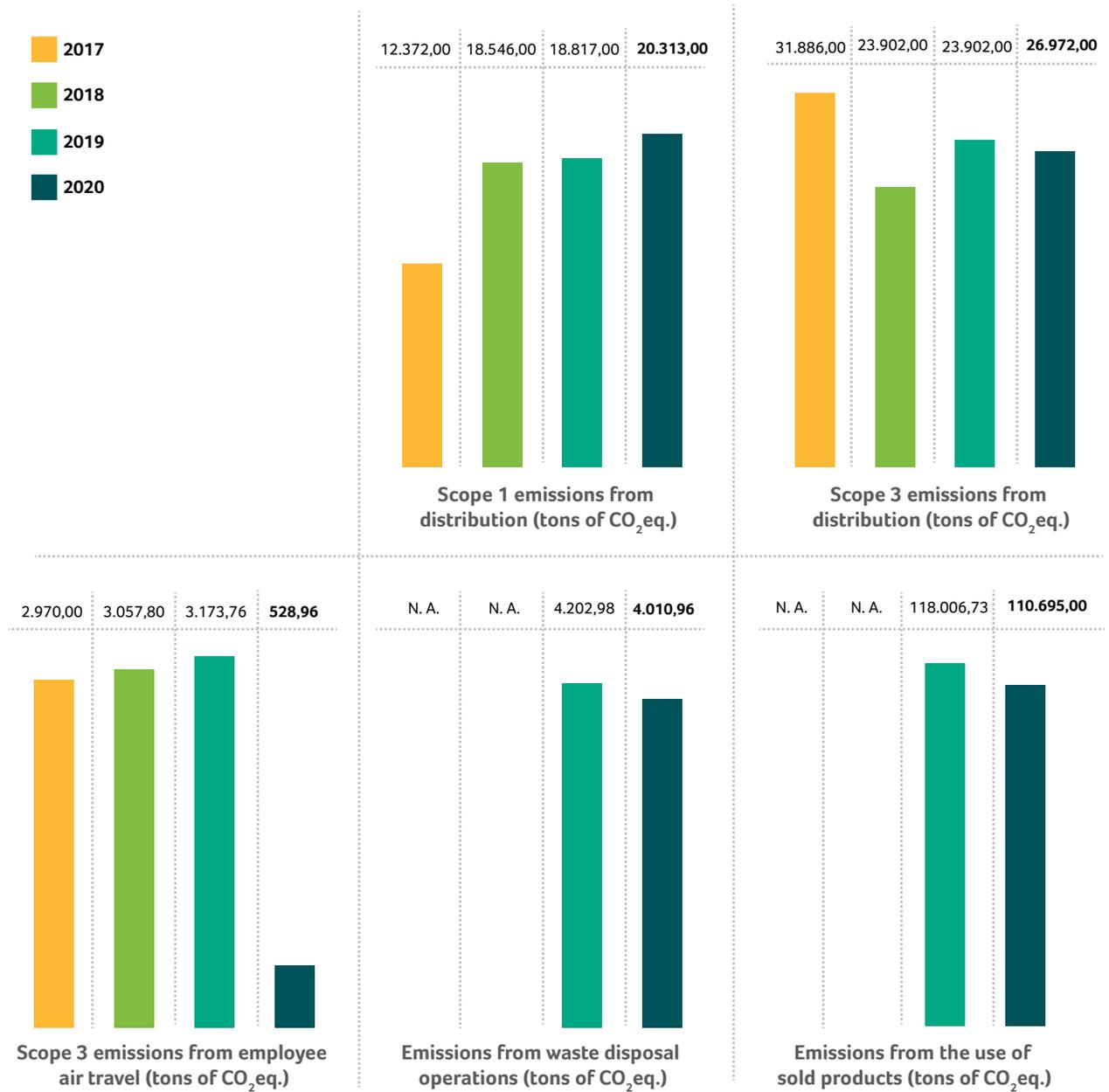
Grupo Nutresa achieved a 46,4% accumulated reduction in terms of GHG (scopes 1 and 2) between 2010 and 2020 in Colombia, and 1,6% between 2019 and 2020 in Mexico, Chile, the Dominican Republic, Panama, Peru and Costa Rica.

Additionally, the Company renewed the green electric power certificate for a period of nine years and the scope was expanded to new acquisitions in Colombia.

### Reduction of greenhouse gas emissions [GRI 305-5] [SDG 13.1]

Net emissions reduction in tons of CO <sub>2</sub> eq.	2018	2019	2020
From scope 1 thermal energy	757,6	-	64,8
From scope 2 electrical energy	61,7	2.846,9	6.561,7

Other scope 1 and 3 greenhouse gas emissions [GRI 305-3] (SDG 13.1)



## Grupo Nutresa achieved an accumulated acquisition of 4.593 refrigerator units that are environmentally friendlier through Comercial Nutresa.

### Carbon neutrality in products and processes

The Biscuits and Chocolates Businesses in Costa Rica have the Carbon Reduction Plus and Carbon Neutral corporate certifications, respectively, and they offset 431,7 tons of CO<sub>2</sub> eq.

In the industrial operations, multiple projects were developed in line with the Climate Change Policy. The following are some of such projects that stand out:

- In the Chocolates Business in Costa Rica, the coating process and the corresponding tank were automated, which allowed decreasing 3,8 tons of CO<sub>2</sub> eq. per year.
- The Coffee Business in Bogotá increased the equipment's green coffee load capacity, going from 320 kg/batch to 360 kg/batch. In addition to increasing productivity and allowing an efficient consumption of natural gas, this leads to a decrease of 260 tons of CO<sub>2</sub> eq. per year.

### Carbon footprint of products

Grupo Nutresa completed the measurement, reduction and offset of the carbon footprint of four of its brands. In total, 38.716 tons of CO<sub>2</sub> eq. were offset through the following projects:

- The Valdivian Coastal Conservation Reserve project in Chile.
- Guatemala Water Filtration and Improved Cookstoves, Gold Standard, in Guatemala.
- West India Wind Power in India.
- Iniciativa Banco 2 (Bank 2 Initiative), forest conservation project in eastern Antioquia in Colombia.
- Bosque Vivo Osa (Living Forest Osa), FONAFIFO. Payment scheme for environmental services in Costa Rica.
- I-REC certificates, electric power from renewable sources.

The Organization achieved a 28,75% reduction of the Tosh brand's carbon footprint of compared to 2017, as a result of the improvement in formulations, mainly

reducing the content of sugar and other components and optimizing the use of packaging materials and the production processes.

Thus, the carbon offset for the Tosh brand has totaled 73.066 tons of CO<sub>2</sub> eq. since 2017, and in the case of Zuko and Livean, it has totaled 38.565 tons of CO<sub>2</sub> eq. since 2019.

### Lower-impact products

Grupo Nutresa achieved an accumulated acquisition of 4.593 refrigerator units that are environmentally friendlier through Comercial Nutresa. This allowed reducing electricity consumption by more than 800.000 kWh/year.

### Sustainable livestock farming

Since 2019, Grupo Nutresa operates under the guide of strategic recommendations for environmental sustainability in the primary production of beef. This has allowed the Organization to diagnose 29 suppliers from the integrated livestock farming model of the Cold Cuts Business and identify opportunities related to good environmental sustainability practices. The following are examples of such opportunities: silvopasture systems, use of diverse forage species, erosion control, management of vegetation cover in soils, among other, all of which contribute to the mitigation of GHG emissions associated with the livestock farming sector.

In addition, through the Cold Cuts Business in Colombia, the Company secured the certification for good livestock practices for five of its livestock ranches. This aims to manage biological, physical and chemical risks generated at the ranches and also produce environmental benefits such as the protection and conservation of hydrological sources, animal welfare and the minimization of environmental impacts.

## Air quality

The Organization developed initiatives to improve air quality that helped to reduce approximately 1.060 tons of CO<sub>2</sub> eq. in 2020, such as:

- Incorporation of eleven electric vehicles and five natural-gas-powered tractors by Comercial Nutresa, Opperar and the Pastas and Cold Cuts Businesses.
- The Chocolates Business in Colombia planted seven hundred native trees in the wetlands of the Piamonte area in Rionegro, in the Colombian state of Antioquia.
- Implementation of dynamic routing (route optimization) by Comercial Nutresa, Opperar and the Ice Cream and Cold Cuts Businesses.
- Improvements in the control of atmospheric emissions.

- Acquisition of 22 natural-gas-powered vehicles by Opperar, Comercial Nutresa and the Pastas Business, which entailed a reduction of 12 tons of CO<sub>2</sub> eq./year.
- Dynamic routing or route optimization by Opperar, Comercial Nutresa and the Cold Cuts and Ice Cream Businesses, which has allowed a reduction of more than 7 tons of CO<sub>2</sub> eq. over a two-month period.
- Optimization of the programming for vehicle pre-cooling process, which represented a reduction of 9,8 tons of CO<sub>2</sub> eq.
- 4.974 employees working from home and 658 telecommuters, who represented an approximate reduction of more than 4.900 tons of CO<sub>2</sub> eq. per year.

Additionally, the Organization maintained the control and monitoring of the pollutants emitted into the atmosphere, which is carried out at each of the production plants through isokinetic monitoring systems.

## Air pollutant emissions [GRI 305-7]

Country	Colombia		Chile		Costa Rica		Peru		Mexico	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
PM: Particulate material (kg)	33.467,00	<b>40.037,16</b>	5.240,00	<b>4.293,25</b>	305,40	<b>220,75</b>	142,00	<b>149,60</b>	61,00	<b>153,11</b>
SO <sub>2</sub> : Sulfur dioxides (kg)	7.629,00	<b>10.685,37</b>	6.817,00	<b>4.525,07</b>	43,40	<b>31,72</b>	11,00	<b>11,81</b>	289,00	<b>69,79</b>
NOX: Nitrogen oxides (kg)	78.691,00	<b>94.894,44</b>	36.203,00	<b>32.441,78</b>	5.686,00	<b>4.113,56</b>	936,00	<b>984,22</b>	846,00	<b>530,68</b>
VOC: Volatile organic compounds (kg)	2.130,00	<b>2.111,63</b>	15.097,00	<b>0,00</b>	0,00	<b>0,00</b>	0,00	<b>0,00</b>	1.103,00	<b>0,00</b>

The emissions are derived from the heating sources at each production plant (furnaces and boilers) and from the coffee roasting process. For the calculation, the Organization uses the AP-42 emission factors established by the Environmental Protection Agency (EPA).



## Expenses and investment in emission control systems

Grupo Nutresa made two investments focused on emission control systems:

- **COP 94.934.102** in improvements in the emission control systems (cyclone dust collector units, boiler sleeves and drying chamber) in Tresmontes Lucchetti in Chile.
- **COP 3.431.912** associated with the change of the air surge in the filter of the sleeves of sprayer No. 2 in the Chocolates Business in Colombia.

### Closing of the strategy for 2020



Greenhouse gases (CO<sub>2</sub> eq./t.p.)

Goal: -33%

2020: -46,4%

Grupo Nutresa resolved to reduce its GHG emissions (scopes 1 and 2) by 33% between 2010 and 2020. As of the end of such period, the Organization fulfilled its objective having achieved an accumulated reduction of more than 46,4%. This achievement was accomplished thanks to the commitment to implementing projects, practices, operational controls and investments, in addition, of course, to the mobilization of the culture and the participation of the Company's network of allies.



1



#### Transport

- **Acquisition of 22 natural-gas-powered vehicles** and 14 electric vehicles for the distribution operation of Comercial Nutresa, Opperar and the Cold Cuts, Pastas, Coffee Businesses. Operation of an electric vehicle by Comercial Nutresa, which allowed achieving a decrease of more than 375 tons of CO<sub>2</sub> eq. over a three-month period.
  - **Efficient driving training** sessions.
  - **Sustainable corporate mobility** strategies.

2



#### Industrial Operations

- **The boiler fuel replacement process** led to a reduction of 6.134 tons of CO<sub>2</sub> eq. per year in the Chocolates Business.
- **Technological incorporation** through economizers installed in boilers in the Chocolates and Cold Cuts Businesses.
- **Use of coffee biomass** in the Coffee Business and Tresmontes Lucchetti, as well as the use of wheat bran and tea biomass in Tresmontes Lucchetti. In the case of the Chocolates Business in Costa Rica, the biomass comes from wood chips certified under sustainable forest management standards.
- **Generation of solar energy** in the Chocolates and Biscuits Businesses as part of an alliance with Celsia.
- **Migration** to greener refrigerants.
- **Energy efficiency** in production processes.
- **Boiler fuel replacement project** in the Chocolates Business in Costa Rica, as well as in the Coffee Business and Tresmontes Lucchetti.