



# CLIMATE-CHANGE MANAGEMENT POLICY

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# 1 COLOMBINA'S GOAL

Colombina is dedicated to implementing Climate-change Management that aligns with domestic and international policies and standards through:

- GHG-emission Reduction
- Climate-change Adaptation

## 2 SCOPE

Colombina is well aware that the food industry plays a crucial role in sustainable Climate-change Off-set Solutions. This awareness has aligned the Colombina Climate-change Management Policy with domestic and international climate-change concerns and standards. Such mindful policy alignment is intended to contribute in limiting global warming to 2 °C over pre-industrial levels, and to fostering resilient adaptive-operational growth in the face of varying climate conditions.

## 3 CLIMATE-CHANGE GLOSSARY, EVIDENCE AND RESPONSE

### 3.1 GLOSSARY<sup>1</sup>

Colombina's guiding policy principles form a technical basis for ensuing implementation:

**Scope 1:** Operations emissions from Colombina-owned sources

**Scope 2:** Non-operations third-party emissions from electricity, heat or steam consumption

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<sup>1</sup> Glossary IPCC. 2014. [https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5\\_SYR\\_glossary\\_ES.pdf](https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_glossary_ES.pdf)

**Climate Change:** A change in climate determined from statistical testing: changes in the mean and/or variability of properties, and that persist over an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, such as modulations of solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use. Climate change could modify the average frequency and intensity of characteristics of extreme meteorological and hydro-climatic phenomena, which would be expressed gradually through their spatial behavior and annual cycle.

**Greenhouse-gas Effect:** A phenomenon in which the atmosphere of a planet traps radiation emitted by its sun, caused by gases such as carbon dioxide, water vapor, and methane that allow incoming sunlight to pass through but retain heat radiated back from the planet's surface.

**Greenhouse Gases (GHG):** Gaseous components of the atmosphere, of natural or anthropogenic origin, that absorb and emit solar energy reflected by the surface of the earth, the atmosphere and the clouds. Main greenhouse gases are carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydro-fluorocarbons (HFC), per-fluorocarbons (PFC) and sulfur hexafluoride (SF<sub>6</sub>).

**Climate-change Management:** The coordinated process of design, implementation and evaluation of GHG-mitigation Measures and Climate-change Adaptation aimed at reducing the vulnerability of populations, infrastructures and ecosystems to the effects of a changing climate. Such management even includes actions geared toward leveraging opportunities generated by climate change.

**Economic Instruments:** Economic instruments are those multi-level governance design, development and application mechanisms that fall within the Scope of Competencies aimed at legal or natural persons, public or private, that manifest behavior changes that assume Climate-

change Adaptation and GHG costs and benefits: Carbon Tax and its non-accrual fall within this category.

**Mitigating Climate Change:** Atmosphere GHG-emission Reduction Management achieved by limiting or reducing GHG-emission sources and by increasing, or improving, sinks and GHG reserves. In Colombia, mitigating climate change entails policies, programs, projects, incentives / disincentives, as well as measures applied vis-a-vis the Colombian Low-carbon Development Strategy and the National REDD + Strategy (ENREDD +).

**Means of Implementation:** As per the United Nations Framework Convention on Climate Change, UNFCCC, “Means of Implementation” involves tools that enable Climate-change Mitigation implementation and adaptation measures, such as financing, technology transfer and capacity building: the foregoing Colombina policy encompasses financing, capacity building, governance, measurement and transparency.

**Resilience:** The capacity of social, economic and environmental systems to cope with, respond to, or even re-organize, a hazardous event, trend or disturbance and maintain essential function, identity and structure, while also fostering the capacity for adaptation, learning and transformation.

**Associated Climate-change Risk:** The potential for consequences where something of value is at stake and where the outcome is uncertain, while recognizing value diversity. Climate-change Risk is represented as the trifecta interaction of vulnerability, exposure and hazard.

**Disaster-risk Reduction:** Risk management encompassing intervention aimed at modifying or diminishing existing risk conditions, i.e. Risk Mitigation, and at avoiding fresh risk within a territory, i.e. Risk Prevention. Risk Mitigation and Risk Prevention measures are on-boarded ahead of time to offset threat and exposure, as well as to lessen the

vulnerability of people, livelihoods, assets, infrastructure and environmental resources, so as to avoid or minimize damage and losses from physical events. Risk Mitigation contains corrective intervention for any existing risk, the prospective intervention of new risk, as well as any financial protection.

**Climate Variability:** Variations in the mean state and other statistics, such as standard deviations, the incidence of extremes, etc., of the climate on all spatial and temporal scales beyond that of individual weather events. Variability may be due to natural internal processes within the climate system (Internal Variability), or to variations in natural or anthropogenic external forcing (External Variability).

**Vulnerability:** Susceptibility or physical, economic, social, environmental or institutional fragility to adverse effects brought about by a hydro-climatological phenomenon: the predisposition to suffering loss or damage brought about by human beings and their means of subsistence deteriorates eco-systems, biodiversity, eco-system services, water resources, as well as physical, social, economic and support systems.

### **3.2 EVIDENCE FOR CLIMATE CHANGE AND CLIMATE VARIABILITY**

Studies published by the Intergovernmental Panel of Experts on Climate Change (IPCC) reveal that climate change is indeed caused by human interference with climate systems, and so poses a risk for both human and natural systems.

In its AR5 report, the IPCC sets forth credible evidence that climate change has generated an increase in the frequency and magnitude of extreme weather phenomena, such as heat waves, droughts, floods, cyclones, and forest fires: these have generated economic impact on a large number of countries.

Climate change is expected to intensify disruption to our water, eco-systems, and food supply and production, as well as heighten damage to human infrastructure and settlements: the past

30 years of historical evidence in Colombia confirms a significant increase in both droughts and heavy rainfall.

### **3.3 COLOMBINA'S RESPONSE TO CLIMATE CHANGE**

Climate has shuffled global investment, and is provoking a re-assessment of both physical and transition policy risks in the midst of Climate-change Mitigation / Adaptation Technology and Market Dynamics: such risks may come to bear on Colombina's finances and reputation; the recent Carbon Tax, possible constitution of permissible GHG-industry Limits, physical risks, and severe-weather risks (flooding) could affect operations.

Colombina is committed to doing its part in the grand scheme of limiting global warming to 2 °C over pre-industrial levels: a goal that begs changes in Development Models, as well as in international, domestic, industry and business policy, and one that calls for untiring multi-level articulation amongst national and local governments, civilians, businesses, universities, research centers and the financial sector.

In recent years, Colombina has both instigated constructive measures within the framework of its own Sustainability Strategy to maintain the ecological balance, and also moved forward on its Colombina Climate-change Management Policy with:

- \* Combustion-boiler Atmospheric Emissions Analysis
- \* Fuel-supply Control Program
- \* Total compressed-air system
- \* On-demand Equipment Air-ignition
- \* LED Lighting

Colombina has also set up Action Lines to abide by throughout the coming years as a way of cultivating contributions to both global and domestic climate-change goals by:

- GHG Mitigation
- Climate-change Adaptation
- Policy-compliance Means: Financing and Capacity Building
- Leveraging Science, Technology and Innovation
- Governing, Measuring and Transparency

Below are Colombina's Guiding Principles of its Climate-change Management Policy. They are set up as a framework for advancing towards low-carbon output coupled with climate resilience, and are a prelude to Colombina's formulation of its collaborative short-, medium- and long-term goals:

**Self-management:** National measures on climate-change are largely voluntary, but Colombina is forging ahead with a set of measures geared toward multi-level contribution for national, sector and departmental concerns and challenges.

**In-house Measures:** Colombina shall implement in-house Climate-change Management and Coordination.

**Co-responsibility:** All Colombina employees shall pro-actively integrate with in-house Climate-change Management and Coordination.

**Cost-benefit:** Colombina shall pinpoint Climate-change Adaptation measures that bring about impact-reducing benefits, and shall furthermore prioritize their execution.

**Cost-effectiveness:** Colombina shall prioritize the execution of GHG-mitigation Measures for lower costs-per-ton of GHG, so as to provide greater potential for reduction / capture.

**Graduality:** Colombina shall carry through with all provisions set forth in its Climate-change Management Policy in a gradual manner, and do so in accordance with its governance, administrative, financial and management capacities.

**Responsibility:** Colombina shall assume responsibility for its own GHG-reduction Goal Compliance as set forth in the foregoing policy, as well as the accountability set forth in international and domestic scenarios, and shall do so with an eye to complying with the Paris Agreement. It shall, at the same time move ahead with measures aimed at reducing its own operational risk and vulnerability from climate change and its variability.

## 4 GOALS AND COMMITMENT

### 4.1 SCIENCE-BASED AND PROJECTION-BASED GOAL

The Paris Agreement was signed in 2015. It stipulates that goals adopted by companies are to be considered science-based, when they are aligned with the level of decarbonisation necessary to limit global warming to 2 °C over pre-industrial levels, as described in the Fifth Report issued by the Intergovernmental Panel of Experts on Climate Change<sup>2</sup>.

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<sup>2</sup> IPCC AR5 <https://www.ipcc.ch/report/ar5/>

Colombina is on board with this global initiative. It has presented its science-based 2030 13% Goal - in line with the National Contribution of Colombia to reduce Scope 1 and 2 emissions by 13%.

## **4.2 GHG MITIGATION**

GHG Mitigation at Colombina:

- ✓ Periodically measure Colombina GHG emissions (including Scopes 1 & 2) using internationally recognized methods
- ✓ Propose Colombina Customer-integrated and Vendor-integrated goals for reducing emissions and implementing activities in line with short-, medium- and long-term GHG Protocols
- ✓ Outline a Colombina GHG-mitigation Measuring Portfolio that is subject to the corporate-defined goal addressing main emission sources
- ✓ Check Colombina GHG-reduction Goal in 2024 and 2028 using internationally recognized methods to pinpoint any deviation from stated goal
- ✓ Implement renewable or alternative-energy technologies at Colombina plant and supply operations
- ✓ Gradually incorporate Colombina's supply chain into the processes of measuring and reporting GHG, and in establishing GHG-reduction Goals
- ✓ Implement plans, programs and projects from the Colombina portfolio that allow for GHG-emission Reduction
- ✓ Work alongside the Colombian national government on strategies for GHG-emission Reduction, including those on a decrease in deforestation

### **4.3 CLIMATE-CHANGE ADAPTATION**

Colombina will gear its Climate-change Adaptation as follows:

- ✓ Develop an Anticipatory Infrastructure-risk Analysis able to tackle climate change and its variability
- ✓ Carry out an Action Plan that covers scenarios, vulnerabilities and risks laid out in the most recent Colombian Communiqué on Climate Change presented to the United Nations Framework Convention on Climate Change
- ✓ Draw up an Adaptation-measure Portfolio on all pinpointed risks and vulnerabilities
- ✓ Implement adaptation measures in line with goals set forth in the Contribution of Colombia
- ✓ Participate as allowed in the National System of Climate Change

### **4.4 FINANCING AND CAPACITY BUILDING**

Colombina will gear its financing and capacity building as follows:

- ✓ Incorporate the carbon price set for Colombia in Colombina operations and develop a new infrastructure as an additional decision-making tool
- ✓ Participate effectively in the Carbon Tax and its non-accrual as a strategy to reduce company GHG emissions
- ✓ Participate in tax-benefit structuring and application, when applicable, for new-infrastructure development, including renewable energy and energy efficiency
- ✓ Include direct or associated climate-change investments as a core element in Colombina's Annual Report, as a means to divulge commitment within our budget
- ✓ Build capacity for climate change by raising awareness amongst workers, customers and vendors of the importance of GHG Mitigation and Climate-change Adaptation

- ✓ Analyze and disseminate transitional and physical climate risks for the *“Task Force on Climate-related Financial Disclosures”*, now integrated to the *Carbon Disclosure Project* (CDP)

#### **4.5 LEVERAGING SCIENCE, TECHNOLOGY AND INNOVATION**

Colombina recognizes that an effective Climate-change Management Policy must be guided by scientific oversight. Colombina leverages scientific knowledge and research both in-house and through its wider industry participation in development research, dissemination and transfer of knowledge and technology: such involvement has positioned Science, Technology and Innovation as Colombina policy pillars to aid in minimizing GHG emissions, as well as in achieving valuable adaptation to climate change and variability.

Colombina is aware that renewable-energy technologies demonstrate substantial energy-efficiency improvements throughout numerous industries, and that it contributes to cost reduction - an added value that has grown in scale and magnitude around the world. Given this, Colombina will concentrate on exploring top sustainability alternatives that allow for on-going low-carbon emission business resiliency.

## **5 GOVERNING, MEASURING AND TRANSPARENCY**

Colombina's Climate-change Management begins with its Board of Directors and runs through all its organizational levels to then be applied to its vendor levels.

Colombina is cognizant of the fact that:

- Climate-change Management has a broader scenario within which it is conjointly responsible

- the UNFCCC Paris Agreement goals can only be attained in a timely manner, and to the benefit of the whole, through proper governmental-business-citizen articulation

Colombina is well-informed on government issued Paris-agreement compliant regulations, and is aware that sectors, companies - including Colombina - must conjointly apply them in working toward offsetting carbon emissions. Colombina also knows that it must do so while remaining resiliently ahead of the game in a risk-variable climate, even as it retains an overriding focus on enhancing resource-usage efficiency.

Colombina's commitment to seeking out and using increasingly sustainable low carbon-footprint products extends throughout its value chain to its vendors, and customers.

Colombina's Board of Directors shall stipulate strategic direction for, and execute oversight on, overall progress on the Colombina Climate-change Management Policy. Corporate-level implementation shall be spearheaded by Colombina's Executive President. Both these levels of pro-active surveillance shall proceed with an eye to meeting deadlines and governance of a tri-level international-domestic-company allegiance.

Colombina is committed to GHG Measuring and Transparency. Colombina shall employ government defined Climate-change Adaptation Reporting tools for mitigation, reduction and climate-financing data purposes.

As Colombina builds in-house capacities, it shall become party to wider Specialized Climate-change Reports.

Colombina shall include its progress on its Climate-change Management Policy in its Annual Report posted on the web.