

# Introduction

At 93 years of age, Suzano Papel e Celulose continues to constantly seek out growth, to build a better and more sustainable future, and to innovate in all areas of business. As a result, in 2016 we were the first company in Latin America to issue green bonds in dollars and concluded the first round of funding through the issuance of green bonds in the Brazilian market (Green CRA). These two operations allowed us to raise US\$500 million and R\$1 billion, respectively, resources that will be invested in projects that generate environmental and financial gains at our forest and industrial operations.

With the conceived financing strategy, joining sustainability and long-term business development, we reassured our commitment of being transparent in our accountability and in publishing information related to the projects selected to receive these investments. As a result, we present our first annual monitoring report for Green Bonds.

We hope investors and shareholders use this publication as a decision-making tool, understanding the economic and environmental value generated through these initiatives. We also seek to contribute to the growth of the market of green bonds in Brazil, and to stimulate the channeling of resources toward sustainable development and the mitigation of climate change.

Enjoy your reading.

# RECOGNIZED LEADERSHIP

In the 2017 edition of the Green Bond Pioneer Awards, we received the certificate of Country Pioneer New Entrant in the Structured Operation category for the operation



involving Agribusiness
Receivables Certificates
(Green CRA) issued by
securitizer EcoAgro. The
award for our pioneering in
the Brazilian market of green
bonds was given by Climate
Bonds, an initiative that
brings together international
organizations to promote
investments that drive the
transition to a low-carbon
economy, resilient to climate
change.

In 2016, we also received the Golden Tombstone award - Debt category from the IBEF (Brazilian Institute of Financial Executives) for the first issue of dollar-denominated green bonds in Latin America.



A publicly traded company with shares listed on the BM&FBovespa's corporate governance Level 1, Suzano Papel e Celulose is a forest-based company that produces pulp, fluff, printing and writing paper, and paperboard. We are the second-largest producer of eucalyptus-based pulp in the world and leaders in the paperboard and printing and writing paper in Brazil.

Our forests, with elevated levels of productivity, cover 1.2 million hectares, of which 500,000 hectares are natural preservation areas or areas in restoration process. In the remaining areas, we plant eucalyptus in an integrated way with conserving natural resources through the proper forestry management, certified by independent international entities, the mosaic planting that ensures protection of biodiversity, and the constant quest to reduce the consumption of raw materials, such as water and fertilizer.

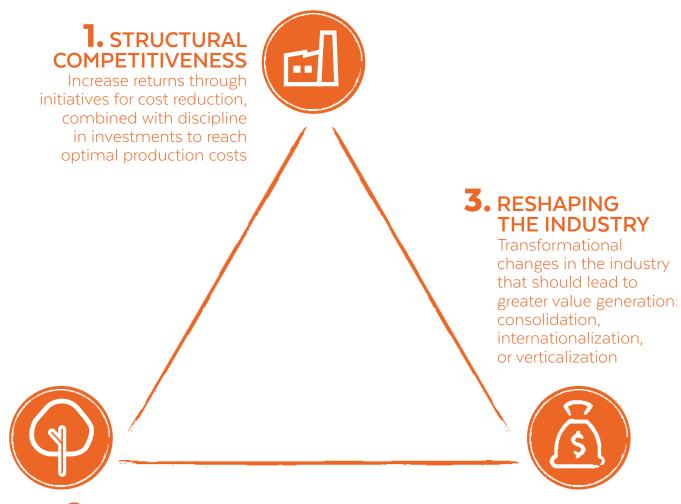
We have 5 industrial units, 20 distribution centers (regional and local), and 6 international offices. We employ approximately 8,000 employees and another 11,000 working at partner companies, and, in addition to serve the local market, our products are sold to more than 60 countries.



# STRATEGY AND SUSTAINABILITY

We have established three strategic pillars to support the growth of our business in a sustainable way and to maximize invested capital.

The sound management of our natural capital together with active and transparent relationships with all stakeholders sustains our strategic pillars. Our culture of sustainability is ensured by governance mechanisms that guide corporate decisions and ensure that socio-environmental aspects are taken into consideration when deciding on investments, managing risks, and forming partnerships.



# 2. ADJACENT BUSINESSES

Investments in adjacent businesses to improve margins and offer high added value products via four new fronts of action: biotechnology, through the FuturaGene subsidiary; short-fiber pulp fluff production; entry into tissue market (sanitary papers); and lignin based biomaterials

## OUR SUSTAINABILITY GOVERNANCE IS GUIDED BY:



# **Policies**

They guide the ongoing construction of a company of excellence, able to harmonize the creation of value with respect for the human being and the environment.

- Social Responsability, Health and Safety Policy
- Quality
- Environment



# **Partnerships**

Relations with recognized organizations that promote active and transparent dialogue on sustainability issues.

- WWF
- NGP (New Generation Plantations)
- Brazilian Tree Industry (IBÁ)
- TNC (The Nature Conservancy)
- CI (Conservation International)
- The Forest Dialogue
- The Forest Dialogue Brazil
- Forestry Forum
- GVces (Center for Sustainability Studies of FGV)
- Ethos Institute
- Itapoty Institute
- Mabuia Institute
- Peabiru Institute
- Ecofuturo Institute
- Mata Branca Nursery /
   Caatinga Ecological Institute
- CEBDS (Brazilian Business Council for Sustainable Development)



# Volunteer commitments

Fronts of corporate action that reinforce the commitment to sustainability.

- Global Compact
- Business Pact for Integrity and Against Corruption
- Brazilian Pact to Eradicate Slave Labor
- Platform for an Inclusive, Green and Responsible Economy
- Atlantic Forest
   Restoration Pact
- Amcham Strategic
   Sustainability Committee
- Business Charter for Conservation and Sustainable Use of Biodiversity
- Brazilian Coalition on Climate, Forests and Agriculture



# **Certifications**

They ensure good forest management and traceability of certified materials.

- FSC® (Forest Stewardship Council®) FSC C010014
- Cerflor (Brazilian Forest Certification Program)
- ISO 9001
- ISO 14001
- OHSAS 18001



Green Bonds are instruments that allow the finance of projects or refinance of on-going projects and assets that generate positive impacts and value in terms of environmental aspects or mitigation of climate change.

In 2016, we issued the first dollar-denominated Green Bonds in Latin America, raising a total of US\$500 million. The net amount, after discounting the operation's financial costs, was of US\$ 492.2 million. Of this amount, R\$ 784.7 million had been allocated as of December 31, 2016, and another R\$ 30.7 million were used to finance projects in the first guarter of 2017.

The issuance was carried out through notes from our wholly-owned subsidiary Suzano Austria GmbH , in line with Green Bond Principles published by the International Capital Markets Association (ICMA). Adherence to the Green Bond Principles is a signal to investors and other market agents that we follow elevated performance standards in sustainability and transparency.

With a maturity of 10 years and interest rate of 5.75% per annum, the proceeds are being used by Suzano Papel e Celulose to invest in environmental projects in our forest areas and industrial units that meet one or more of the following eligibility criteria.

According to a Climate Bonds Initiative study published in 2016, the world has a total of US\$694 billion in bonds that finance environmentally beneficial assets, but only US\$118 billion are labelled "green" bonds. In Brazil, according to the organization, the total is of US\$2.4 billion, with 23% of this total classified as green bonds.

Eligibility criteria				
	Sustainable Forests - Forest Management	Investment related to the sustainable management of forests and compliance with national and international certifications standards		
	Sustainable Forests – Restoration of degraded areas	Expenditures related to restoration of degraded areas and conservation of natural ecosystems		
OB OB	Biodiversity Conservation	Investment in projects of mantenance of natural areas (and their eventual expansion) and preservation of biodiversity and ecosystem services		
	Water Management	Development and instalation of technologies that improve the quality of wastewater or increase efficiency through the reduction of water use and increased re- use in productive processes		
	Energy Efficiency	Projects that increase energy efficiency, including actions to reduce fossil fuels consumption		
<b>6</b> 8)	Renewable Energy	Investments in projects that reduce greenhouse-gas emissions (GHG) through energy generation using renewable sources and/or the substitution of fossil fuels		

Learn more in the following pages about the projects in which the bonds proceeds will be allocated.

In addition to the dollar-denominated green bonds, we also carried out the first issuance of green bonds on the Brazilian market (Green CRA). To learn more about the project, see the pertinent annual monitoring report.

<sup>&</sup>lt;sup>1</sup>Equivalent to R\$1.6 billion on July 14, 2016.

<sup>&</sup>lt;sup>2</sup>New corporate name of Bahia Sul Holdings GmbH.

# Debottlenecking and modernization of Imperatriz unit

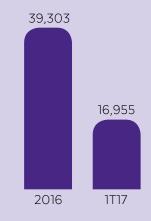
This project aims to reduce production costs through increased operational efficiency and expansion of productive capacity at the Imperatriz Unit in the state of Maranhão.

The main modifications, related to the installation of new equipment, will allow an increased quantity of wood processed in the digester and in the fiber line. As a result, we will increase the generation of black liquor, requiring improvements in the evaporation, causticizing and recovery boiler plants.

In addition to the production increase and efficiency gains, the project will reduce the specific use of inputs used in the production of pulp, such as sodium hydroxide and hydrogen peroxide, among others.

# TECHNICAL DETAILS

# ALLOCATION OF PROCEEDS (R\$ THOUSAND)



# Performance indicators

- Reduction of organic load sent to the WWTP (Waste Water Treatment Plant)
- Reduction in water consumption per tonne of manufactured product
- Reduced use of specific chemical inputs in production process

### Project timeline

- 3Q/2016 Hiring of suppliers and engineering studies for industrial equipment
- 3Q/2017 Conclusion of modifications and project startup

The results will be presented in subsequent annual report following the project startup.





The Imperatriz Unit in Maranhão began its operations on December 2013 and is one of the most modern facility in the world considering production of eucalyptus pulp. Production is geared mainly for European and United States markets.

The Unit began its operations with only one line to treat the wastewater generated, but the construction of a second line began soon after inauguration, preparing the facility to expand its productive capacity.

In 2016, we completed the expansion of the WWTP (Waste Water Treatment Plant) and were able to keep the organic load of wastewater unaltered, even with the increase in pulp output during the same period.

# TECHNICAL DETAILS

# **ALLOCATION OF PROCEEDS**



(R\$ THOUSAND)

2016

### Performance indicators

• Reduction of organic load in final effluent

The results will be presented in subsequent annual reports.





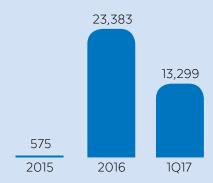
The Mucuri Unit in Bahia has been receiving investment to increase production of paper for writing and printing and to begin the instalation of the tissue line (sanitary papers). The construction of a new WWTP (Waste Water Treatment Plant) will allow the reduction of organic load in final wastewater discharged into Mucuri River, reducing the risk of interrupt operations as a result of droughts.

The new WWTP will work jointly with the existing installation, which use a system of aeration basins. As a result, it will be possible to boost reduction of organic load beyond the 57% when compared with the figures before the project, allowing the discharge of wastewater into the Mucuri River in adequate conditions, even during periods of drought.

The technology that will be used in the project is the activated sludge type, which consists of using air compressors to increase the introduction of oxygen into the system and a return of the sludge to the aeration tanks, speeding up the decomposition of organic matter. In addition, the space needed for the installation of the tanks is considerably smaller in relation to aerated basins.

# TECHNICAL DETAILS





### Performance indicators

- Reduction of organic load in wastewater
- Maintenance of water quality in Mucuri River even during droughts

### Project timeline

- 2Q/2015 Begin construction work
- 3Q/2016 Conclusion of 50% of construction
- 1Q/2018 Conclusion of new WWTP
- 2Q/2018 Full operation of new WWTP

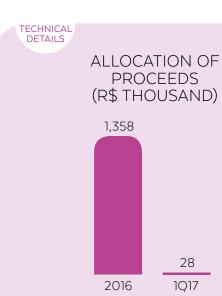
The results will be presented in subsequent annual report following the project startup.





The Limeira Unit in São Paulo has a WWTP (Waste Water Treatment Plant) whose equalization tanks were equipped with 19 less energy-efficient aerators that required the injection of liquid oxygen into the tanks. With the installation of new waterfall-type equipment, the use of energy to treat wastewater will be reduced and there will no longer be a need for artificial oxygenation, generating additional gains through the reduction of treatment costs.

The installation of 23 waterfall aerators in the equalization tank will allow for annual savings of more than 1,800 MWh, enough energy to power approximately 750 houses per year. We will also stop consuming 1.6 million cubic meters of liquid oxygen per year.



## Performance indicators

- Efficiency in energy use in wastewater treatment
- Eliminated use of liquid oxygen in equalization tank
- Reduction of odors

### Project timeline

- 1Q/2016 Start of project
- 4Q/2016 Conclusion of equipment substitution
- 3Q/2017 Full system operation

The results will be presented in subsequent annual reports.



# Forest recovery

Our forest base is responsible for the company's sustainable operations and the development of its businesses. Our forest is composed of 1.2 million hectares, taking into account areas of eucalyptus plantation and preservation areas in owned and leased farms.

Across all our areas of activity, the work of restoration in degraded areas is carried out continuously, both in owned properties as well as leased ones. Although Suzano Papel e Celulose is not legally responsibible for the restoration in leased properties, we are committed to restore natural forests on leased lands, based on our sustainable business model intrinsically linked to the conservation of natural resources. The areas being restored are continually monitored to ensure effective results.

Among the leading benefits of the practices that we adopt, there are, in addition to maintenance of ecosystems, the protection of the soil, recharge of water tables, and the capture and storage of atmospheric carbon. Other positive impacts include the natural control of pests that harm species of flora and the supply of non-wood products that generate income for local communities.

The restoration of areas is also carried out through partnerships with NGOs and other institutions. Since 2009, for example, we are signatories of the Atlantic Forest Restoration Pact, the leading Brazilian movement to restore forests in degraded areas with native species from this biome.

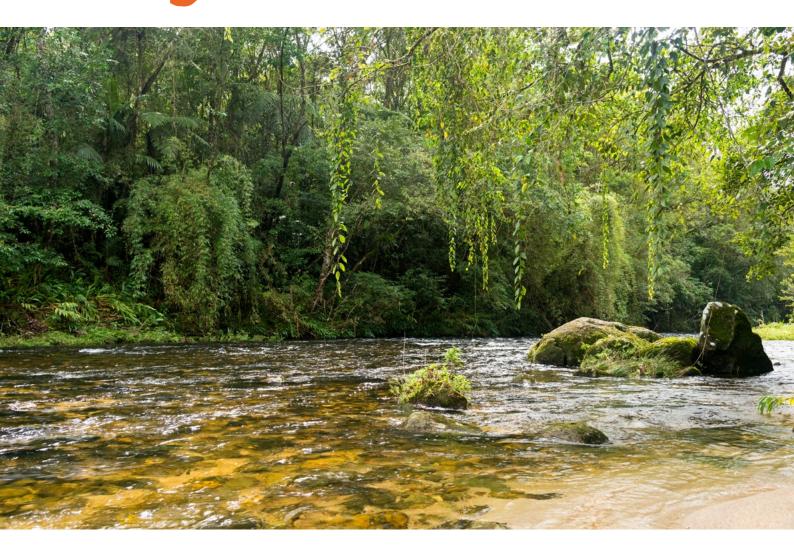




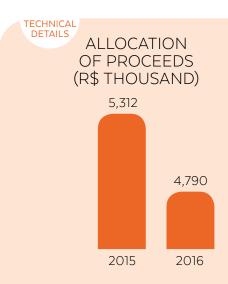
With the maintenance of preserved areas and carrying out studies and research in different Brazilian biomes – Atlantic Forest, Cerrado (Brazilian Savannah), and Amazon – we monitor fragments of natural vegetation that have enormous relevance in the conservation of biodiversity, water resources, and ecosystem services. We have identified and established protection measures of HCVAs (High Conservation Value Areas) at all our forest Units. The technical work we have developed in our own and leased areas subsidize the environmental and management activities aiming to enhance our sustainable production and mitigate possible impacts.

The Neblinas Park, a forest reserve with more than 6,000 hectares of Atlantic Forest close to the city of São Paulo, is one of the major spaces where these activities are developed. Between 2002 and 2016, the location hosted 58 studies that identified more than 1,200 species of fauna and flora. Among the most common animals found in the area were the muriqui (wooly spider monkey), puma, tapir, and deer.

Neblinas Park, property of Suzano Papel e Celulose, is managed by Ecofuturo Institute, an organization founded in 1999 and which has our company as its principal sponsor. One of the main goals of the reserve is to inspire the management of other natural areas, diagnosing vocations and potentialities, proposing management strategies, and developing socioenvironmental planning. The Park is also home to environmental education and ecotourism activities.









### Performance indicators

Maintenance and development of conservation areas	2016	2015
Total of natural areas¹ (hectares)	491,376	479,345
Natural areas / total of owned and leased land	43.9%	44.2%
Natural areas / planted area <sup>2</sup>	108.7%	109.8%

<sup>1</sup>Areas where vegetation coverage is formed by ecosystems that have a predominance of native species, such as tropical forests, Brazilian Savannah, mangrove swamps, and fields, among others, existing on Suzano properties or leased properties.

<sup>2</sup>Considers owned and leased areas.

Management of forest businesses are divided among three Forest Business Units (UNFs): UNF BA (which covers forests in the states of Bahia, Espírito Santo, and Minas Gerais), UNF MA (which covers forests in the states of Maranhão, Tocantins, Pará, and Piauí), and UNF SP (which covers the state of São Paulo).

At the UNFs, we identified and maintained:

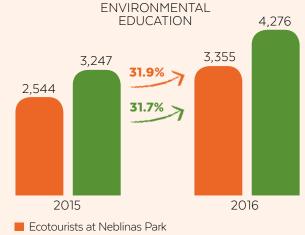
- **30** HCVAs\* in 2015
- 27 HCVAs\* in 2016

\*Areas recognized by Suzano for presenting important environmental attributes such as biodiversity, rare or threatened ecosystems, environmental services, among others. The variation in the number of HCVAs is a result of readjustment of criteria when categorizing these areas.

Number of species of fauna identified at HCVAs and Neblinas Park	2016	2015
Bahia Forest Business Unit (BA, ES, MG)	288	246
Maranhão Forest Business Unit (MA, PA, PI, TO)	802	613
São Paulo Forest Business Unit	319	401
Neblinas Park	371	_

At Neblinas Park, there were carried out:

- 4 researches in 2015
- 3 researches in 2016



■ Beneficiaries of environmental education programs



Forest management in our areas, in line with the strictest national and international standards, contributes to the maintenance of healthy ecosystems and, consequently, to the continuity of natural resources. Among the primary benefits of our activities are the capture and storage of atmospheric carbon, which aids in the mitigation of climate change, maintenance of soil quality, preservation of springs and bodies of water, and the supply of water tables. Additionally, our production ensures that wood from our forests is the result of good management practices, including the promotion of respect for human rights and the mitigation of potential impacts on biodiversity.

One of the primary procedures adopted is that of mosaic planting, where our planted forests are interspersed with areas of native vegetation, where there are located species of fauna and flora that are relevant for local ecosystems. Whenever possible, we also seek to interconnect, through the use of ecological corridors, the main fragments of natural areas. This allows a better flow of fauna, favoring their reproduction and feeding, and a better dispersion of flora.

The certification of responsible forest management is an important tool to ensure customers, shareholders, and other stakeholders in the value chain about the origin of the wood that we use in pulp production, adopting the best socio-environmental practices in our business. Our operation is certified in accordance with national and international standards.

Additionally, Suzano was the first company in Latin America to support the certification of customers. This way, we contribute to make Brazil a reference in forest certification, presenting a higher number of certified companies than countries such as France, the Netherlands, and Canada.

TECHNICAL DETAILS

# ALLOCATION OF PROCEEDS (R\$ THOUSAND)

362,788



340,993

2015

2016

## Performance indicators

- Our planted forests stocked
   55.2 million tonnes of carbon (tCO₂e) in 2015
   54.8 million tonnes of carbon (tCO₂e) in 2016
- 74%\* of our forestry area in 2016 had FSC® (FSC C009927) or PEFC/Cerflor certification

\*Considers the total of owned and third-party areas as a proportion of forests dedicated to industrial supply



