



SUSTAINABILITY
REPORT

Amigo do clima



EcoRodovias participated in the *Amigo do Clima* program for the fourth consecutive year in 2016. Building on a range of initiatives over recent years to reduce greenhouse gas (GHG) emissions – including energy and fuel efficiency programs – we continued our efforts to offset environmental impact from emissions in 2016.

The Group successfully offset emissions of **11,230.68 tCO₂e** in 2016. All offsets were achieved by voluntarily purchasing and canceling carbon credits linked to the UN Clean Development Mechanism (CDM) under the Kyoto Protocol.

CDM projects used to offset GHG emissions in 2016 included¹:

- i. **Manaus Landfill**: biogas produced in the landfill is collected and burned using a high efficiency process to produce electricity, thereby preventing methane emissions and delivering clean energy;
- ii. **Pig Farms**: methane emissions are prevented using biodigester technology at pig farms in the states of Sao Paulo, Minas Gerais and Espirito Santo;
- iii. **Industrial Energy Mix**: decarbonizing the industrial energy mix in Sorocaba (SP) by replacing fuels (coal/oil fuels) with natural gas.

iv. **Pig Farms**: methane emissions are prevented using biodigester technology at pig farms in the states of Goias, Minas Gerais and Mato Grosso;

v. **PCH Ouro**: generating electricity from renewable sources in Barracao-RS is helping to meet Brazil's electricity demand while contributing to sustainable development;

vi. **CERPA**: This plant in Serrana (SP) produces sugar and hydrated and anhydrous ethanol, and uses sugar cane bagasse to produce its own electricity.

Notably, Ecoporto offsets all direct emissions (Scope 1) and indirect emissions from purchased electricity (Scope 2). Our toll road concession operators² offset all direct emissions (Scope 1), indirect emissions from purchased electricity (Scope 2) and other indirect emissions (Scope 3).

Our Offsetting Initiatives can be viewed using the tracking code **AC17062** at www.amigodoclima.com or by scanning the QR Code:



¹ Learn more about our projects: (i) Manaus Landfill (<https://cdm.unfccc.int/Projects/DB/SGS-UKL1291802325.34/view>); (ii) Pig Farms (<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1146252676.38/view>); (iii) Industrial Energy Mix (<https://cdm.unfccc.int/Projects/DB/DNV-CUK1146692785.9/view>); (iv) Pig Farms (<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1142952459.35/view>); (v) PCH Ouro (<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1309173511.07/view>); (vi) CERPA (<https://cdm.unfccc.int/Projects/DB/DNV-CUK1135325819.41/view?cp=1>).

² Ecosul, Ecovia, Ecocataratas, Ecovias, Ecopistas, Eco 101 and Ecoponte



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IIRC Capitals

This report features icons in each chapter denoting the capitals used by the company under the Integrated Reporting Framework. The five capitals are:



Sustainable Development Goals

Each chapter also uses icons to reference the 17 UN Sustainable Development Goals (SDGs).

Global Compact

The 10 principles of the United Nations Global Compact are linked to the content of the report using codes (e.g. UNGC-10).

STATEMENT FROM THE CEO

G4-1

EcoRodovias Group is celebrating its 20th anniversary in 2017. Our successful bid in 1997 for *Ecovia Caminho do Mar*, in Paraná, marked our entry into the Brazilian toll road market. Throughout the past 20 years of operations, EcoRodovias has contributed decisively to the development of the country's road infrastructure. Services recognized for quality have placed our highways among the highest ranked in Brazil. The Group has also built a reputation for a high level of compliance with contractual schedule and investment requirements. In total, 1,768 kilometers of toll roads are managed by Company-owned toll-road concession operators in the South and Southeast. These are among Brazil's primary corridors for imports and exports as well as tourist routes to beach towns and other holiday destinations.

Against an unfavorable economic and political backdrop in 2016, EcoRodovias took important steps towards delivering our corporate strategy by focusing efforts on the toll road business, costs optimization programs, efficiency improvements, operational excellence, capital discipline and reducing leverage – preparing the Company for future growth opportunities.

Our strategy also included disinvestment from the logistics business, which resulted in the sale of Elog Sul to Multilog S.A. In 2017 our disinvestment efforts will be focused on Elog Sudeste.

The Company has been joined by a new shareholder, Gavio Group, a toll road player with extensive experience in the Italian market. Gavio Group now co-owns the Company with CR Almeida through Primav Infraestrutura. The investment has demonstrated confidence in our ability to deliver results and has enhanced the financial strength of our parent company by reducing indebtedness to comfortable levels that are consistent with the business outlook.

Despite the economic slowdown and the resulting impact on freight and passenger vehicle traffic on our toll roads, and on demand for logistics services, we successfully balanced our financial position by continuing to focus on operating excellence, building on cost reduction and process optimization initiatives initiated in 2015. We ended 2016 with gross revenue of R\$ 3.1 billion and comparable *pro forma* EBITDA of R\$ 1.5 billion – an increase of 9.4 percent – and an EBITDA margin of 63.9 percent.

We explored a range of business expansion opportunities created by a potential new cycle of infrastructure investment. These include both opportunities within existing toll road concessions, such as new contractual addenda, as well as new auctions and secondary market opportunities.

On another front, we performed an annual review of our risk matrix to include issues such as compliance and regulatory requirements, with a focus on protecting the business and a clear objective of creating value for shareholders and investors.

As part of our efforts to build a reputation for socially responsible business management, EcoRodovias Group also delivered important initiatives that have continued to place us among the few companies in our industry that are constituents of the BM&F Bovespa Corporate Sustainability Index, and have earned us a place on the A-List of the Carbon Disclosure Program, a global non-profit organization that recognizes international listed companies as “A grade” for their actions in managing greenhouse gas emissions. Out of 5,500 participating companies, only 193 organizations met the A list requirements. In Brazil, only two companies are among this select group, one of them being EcoRodovias.

Through actions that include recycling waste, developing asphalt solutions creating less impact, protecting green areas, looking to renewable energy sources and committing to reduce emissions, we demonstrate our recognition that managing natural capital rather than merely mitigating risks can create opportunities for the Company. In 2016, our recently acquired concessions, ECO101 and Ecoponte, initiated a process to obtain quality (ISO 9001), environment (ISO 14001) and health and safety (OHSAS 18001) certification, with all other businesses retaining certification.

The year also saw excellent results in reducing road accidents, in line with the United Nations Decade of Action for Road Safety, which aims to reduce road traffic deaths and injuries globally by 50 percent by 2020. Significantly, road traffic accidents declined by 37 percent across our concessionaires.

The same concern extends to our human capital of almost 4,500 employees throughout the South and Southeast of Brazil. We have safe behavior and employee policies in place that are designed to recognize talent and encourage diversity; we also run regular risk mitigation campaigns and support management committees at our business units.

In 2016, EcoRodovias engaged directly with stakeholders – including suppliers, users and communities – to map the economic, social, and environmental issues we need to prioritize. This exercise, known as a materiality process, helps to align our strategy with the interests of Brazilian society through a list of impacts and key issues to be addressed by our management over the coming years.

For the many challenges overcome in 2016, we are especially indebted to our employees for their dedication and commitment, our shareholders for their confidence in our management, our directors for their guidance and support in making important decisions, and our customers, users, regulators and other institutions for their continued trust.

Marcelino Rafart de Seras
Chief Executive Officer

In addition to our value creation commitments, EcoRodovias Group has set specific targets related to reducing road accidents, improving resource efficiency and progress in management and certification

PERFORMANCE

SUMMARY

PROFILE, GOVERNANCE AND MANAGEMENT

Code of Conduct Review

In 2016, our Code of Conduct underwent an open review by employees and leadership covering key issues in fighting corruption and promoting ethics within the Group

Ethics Channel

Our Ethics Channel receives reports, complaints and concerns by email (comitedeetica@ecorodovias.com.br) and via the Internet (<http://www.ecorodovias.com.br/Codigo-de-Conduita/Comite-de-Etica>), which are then investigated and communicated to Group leadership

4,500
direct employees

4,300
active suppliers

7 toll road concessions in
6 Brazilian states

ETHICS AND INTEGRITY

Three programs aimed at disseminating ethics and integrity across the Group:

- Compliance Program
- Corporate Anti-Corruption Program
- Ethics and Integrity Program

100%
of employees trained on anti-corruption issues

**All Group
business units**
undergo risk assessments

PERFORMANCE

SUMMARY

RECOGNITION IN 2016

CORPORATE

Guia Exame de Sustentabilidade – EcoRodovias was featured in this publication for the fifth consecutive year in 2016, along with approximately 60 companies recognized for their social and environmental practices. Some of the featured projects include road safety programs such as *De Bem com a Via*, a program run by Ecovias, Ecopistas and ECO101.

Top of Mind – For the third consecutive year, EcoRodovias ranked among the Top 5 in the Environmental Management and Sustainability category. The winners are chosen by human resources professionals from some of Brazil's leading companies.

Na Mão Certa – in the tenth program conference organized by Childhood Brasil – which EcoRodovias has attended since 2014 – the Group was presented with an award for the extensive reach of our work toward protecting children and adolescents at the roadside.

ABRASCA Annual Reporting Awards – EcoRodovias' 2015 report ranked among the top ten in the Listed Company category in the 18th edition of the program, which is organized by the Brazilian Association of Publicly Traded Companies (ABRASCA) to recognize Brazilian companies for their reporting practices.

CDP – EcoRodovias has made the "A List" of the Carbon Disclosure Program (CDP), an organization that connects thousands of companies and approximately 850 institutional investors from around the globe to drive the transition to a low-carbon economy.



AWARDS BY BUSINESS

ECO101

Marcas de Valor ("Brand Value", *Rede Gazeta*) – in the Public Service Concession category

Ecopistas

Ayrton Senna-Carvalho Pinto Corridor named Brazil's fourth best road link in the National Transportation Confederation (CNT) Survey

ARTESP Concessionaire of the Year Award – in the Innovation Category

Ecovia

Certificate presented by the Municipal Council of Colombo – the certificate recognized the work of Ecovia's Sustainability Committee in defense of people with special needs

PERFORMANCE

SUMMARY

STRATEGY & INVESTMENTS

COMMITMENT TO SUSTAINABILITY

A range of social and environmental indicators denote our corporate organizational and leadership goals, such as:

- the Group's remaining a constituent of the Corporate Sustainability Index
- reducing greenhouse gas emissions
- reducing accidents on Group-operated toll roads

FOCUS ON EXPERTISE

A keen eye to opportunities in the toll road segment was an important part of our activities during the year toward our goal of fully focusing on assets that leverage our expertise.

ECORODOVIAS' COMPETITIVE ADVANTAGES

- Strategic location
- Financial strength and value-creating capacity
- Focus on toll road concessions
- Alignment with and support from experienced shareholders
- Engagement with government and society
- Commitment to sustainability

SIGNIFICANT INVESTMENTS

- Ecocataratas (PR): twinning of 15.2 kilometers of the BR-277 highway
- Ecovias (SP): third lanes on the Padre Manoel da Nóbrega highway, on the southern coast of São Paulo
- Ecopistas (SP): extension work on the Carvalho Pinto Highway (Ayrton Senna-Carvalho Pinto Corridor)
- Ecoponte (RJ): lighting system modernization, toll plaza and bus stop improvements and radar installations; commencement of construction of an underpass beneath Praça Renascença, in the center of Niterói
- ECO101 (ES/BA): construction of a new 8 kilometer, two-lane section of highway skirting the town of Iconha, due to be completed in 2017; and construction of two bridges along the Viana section of the BR-101 Highway to remove two traffic lighted intersections, also scheduled to be completed in 2017

New materiality process

178 participants in panels organized in **4 cities:**

Cascavel (PR), Curitiba (PR), Pelotas (RS) and São Bernardo do Campo (SP),

including communities, suppliers, employees, government, users and NGOs

7 high-level material issues mapped:

- governance
- economic performance
- environment
- labor practices
- human rights
- society
- service responsibility



R\$ 2,647,922.85

invested in infrastructure projects and services
for pedestrians, road users and members of
surrounding communities

RESULTS



2,900
employees
underwent
performance
assessment cycles

6,000
candidates registered
for the EcoRodovias
Trainee Program

TRAINING

83,233
hours of training in 2016
in a total investment of
R\$ 1 million

All Group companies other
than Ecoponte, ECO101
and Elog have health and
safety certification to
OHSAS 18001

6 of our **9** business
units

(Ecovias, Ecopistas,
Ecovia, Ecocataratas,
Ecosul and Ecoporto
Santos) certified
to ISO 9001, ISO
14001 and OHSAS
18001. Ecoponte
and ECO101 are
currently undergoing
certification, to be
completed in 2017

GOOD PRACTICE

- Water reuse and recycling
- Telemetry project: monitoring our vehicle fleet and performance
- 100 percent of our light vehicles migrated to ethanol
- Energy Efficiency Program
- Emergency Preparedness and Response Program

WATER CONSUMPTION (M³)

	2015	2016
	248,694.56	188,058.31

R\$ 8,661,590
invested in our Energy Efficiency
Program in 2016



Financial and manufactured capital

285.2 million
paying equivalent vehicles

178,700
tow truck calls

R\$ 3.1 billion
in gross revenue

R\$ 269.7 million
in comparable net income



Social capital

TOLL ROADS WITH HIGHEST CUSTOMER SATISFACTION RATINGS

Ecopistas	Ecoponte	Ecovias
93.10%	92.78%	89.10%

SOCIAL INVESTMENT (tax-deducted)

2015	2016
R\$ 7.9 million	R\$ 9.1 million

ECOVIVER

190
SCHOOLS
in 18 surrounding cities engaged directly around social and environmental issues

85
SUPPLIERS
assessed for environmental risks, practices and impacts

ECORODOVIAS GROUP

**BUSINESS
MODEL**

**GOVERNANCE
AND ETHICS**

With nearly 20 years of
successful operating history,
EcoRodovias is a leading player
in Brazil's infrastructure industry



ECORODOVIAS GROUP

Sustainable Development Goals (ODS) reported in this chapter:



Originally organized in 1997 and reorganized in 2000, EcoRodovias Infraestrutura e Logística S.A. is today a leading infrastructure player in Brazil with a major presence in the toll road segment across six Brazilian states. G4-3

With a workforce of 4,500 employees, the Group operates seven toll road concessions, an intermodal logistics business and a port terminal (Ecoporto Santos).

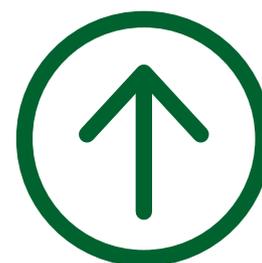
Our company traces its roots to our early shareholders Primav Construções e Comércio Ltda., a subsidiary of Grupo CR Almeida, and Italian-based Gruppo Impregilo S.p.A, which held a stake in EcoRodovias up to 2013. Our toll road experience dates back to 1997 with the acquisition of Ecovia Caminho do Mar, a concession operating 137 kilometers of roadways between Curitiba and the Port of Paranaguá, in the state of Paraná.

The company has since built a presence in significant touristic and trade corridors in the states of São Paulo, Rio Grande do Sul, Paraná, Rio de Janeiro, Espírito Santo and Bahia. Our most recent acquisition, Ecoponte, marked our entry into the Rio de Janeiro state market through a concession to operate the primary road link between the state capital and its twin city, Niterói.

EcoRodovias Group is currently majority-owned by Primav Infraestrutura (64 percent), which in turn is owned by Grupo Gavio and CR Almeida. The remaining 36 percent of the Company's share capital is listed on BM&FBovespa's *Novo Mercado* under the ticker symbol ECOR3.

In addition to toll road concessions, EcoRodovias has operations in logistics including bonded logistics centers, a port terminal, multimodal platforms, dry ports, and distribution centers. In the second half of 2016 the Group completed the sale of Elog Logística Sul Ltda. to Multi-log S.A., in line with our strategy of focusing on the toll road concession business. As a result, Elog business units have been reduced from 15 to six, with most divested assets located in the southeast of Brazil. G4-13

Reflecting the adverse macro economic environment, EcoRodovias Group recorded net revenue of R\$ 2.8 billion, a slight increase from R\$ 2.7 billion in 2015. Consolidated comparable *pro forma* EBITDA was R\$ 1.5 billion, an increase of 9.4 percent, and EBITDA margin was 63.9 percent. Comparable net income was R\$ 269.7 million.



Our essence

G4-56

Vision

Create sustainable value through enterprise and by leveraging synergies across a high-quality infrastructure business portfolio that is aligned with the Group's culture, management and governance principles

Mission

To be a leading integrator and developer of high-quality infrastructure assets while building a reputation as a transparent and ethical company operating to the highest standards of governance and sustainability, focused on portfolio management, innovation and operating excellence as key drivers of shareholder value

4,500

**employees make up
our workforce**



Code of Conduct

OUR ASSETS

G4-4, G4-6, G4-8, G4-9



Manufactured capital

EcoRodovias Concessões e Serviços

- **7 toll road** concessions
- **2,560** employees (all concessionaires)

EcoRodovias Concessões e Serviços controls our seven toll road concession operators, as well as providing services and operational management support in areas such as information technology, engineering, HR, procurement and sustainability.

Ecovias dos Imigrantes (SP)

- **1998** – start of concession agreement
- **176.8 km** in length
- **60.7 million** paying equivalent vehicles in 2016
- **13th best ranked roadway** in Brazil (19th CNT survey, 2016)

Ecovias dos Imigrantes operates the Anchieta-Imigrantes highway system, the largest corridor for imports and exports in Latin America, linking Greater São Paulo and the industrial cluster of Santo André, São Bernardo do Campo, São Caetano do Sul and Diadema to the Port of Santos and the Cubatão Petrochemical Complex. It also has links to the South section of the Mário Covas beltway.

Ecopistas (SP)

- **2009** – start of concession agreement
- **134.9 km** in length
- **80.7 million** paying equivalent vehicles in 2016
- **3rd best ranked roadway** in Brazil (19th CNT survey, 2016)

Ecopistas operates the Ayrton Senna and Carvalho Pinto (SP-070) toll roads connecting São Paulo City to the state's northern coast, the Paraíba Valley and the state of Rio de Janeiro as well as key locations such as the Guarulhos International Airport, the Port of São Sebastião and the tourist town of Campos do Jordão.

Ecovia Caminho do Mar (PR)

- **1997** – start of concession agreement
- **136.7 km** in length
- **16.1 million** paying equivalent vehicles in 2016

The Group's first toll road concession, Ecovia Caminho do Mar, links the southern city of Curitiba to the coast of Paraná and Praia de Leste (BR-277). It is currently one of the primary outbound routes for Brazil's soybean and corn exports.

Ecocataratas (PR)

- **2007** – start of operation by Eco-Rodovias
- **387.1 km** in length (BR-277)
- **26.8 million** paying equivalent vehicles in 2016

Ecocataratas is located at the Brazil-Argentina-Paraguay tripoint and connects a number of towns in Paraná to Guarapuava and Iguazu Falls. The concession agreement also includes the maintenance of 71.8 km of state highways (PR-874, PR-590, PR-180 and PR-474).

Ecosul (RS)

- **1998**– start of concession
- **457.3 km** in length within the Pelotas Roadway Hub
- **R\$ 187 million** in additional investment between 2015 and 2026
- **25.9 million** paying equivalent vehicles in 2016

Ecosul operates two highways that are important tourist and trade routes within the Pelotas Roadway Hub: BR-116/RS (Camaquã/Pelotas/Jaguarão, known as the Mercosur Corridor) and BR-392/RS (Rio Grande/Pelotas/Santana da Boa Vista).

Ecoponte (RJ)

- **2015**– start of concession agreement
- **23.4 km** in length
- **28.8 million** paying equivalent vehicles in 2016

The Ecoponte concession began in June 2015. The concession agreement covers the 13.2 km Rio-Niterói Bridge as well as road sections approaching the bridge, connecting Rio de Janeiro to the Lagos or "Sun Coast" region, Niterói and São Gonçalo.

ECO101 (ES/BA)

- **2013** – start of concession term
- **475.9 km** in length
- **46.2 million** paying equivalent vehicles in 2016

ECO101 operates 458.4 km of the BR-101 highway in Espírito Santo and 17.5 km in Bahia. It traverses 25 cities and has links to coastal holiday destinations as well as five ports in the region: Vitória, Tubarão and Barra do Riacho (in Espírito Santo), Açú (under construction in Rio de Janeiro) and Ilhéus (in Bahia). ECO101 is required to complete the twinning of the highway by the end of the concession agreement.

Elog (SP)

- Founded in **2010**
- **6 subsidiaries** following the sale of Elog Sul

Elog provides logistics management, information, foreign trade and tailored engineering services to industrial enterprises. The division has a wide range of logistics operations including dry ports (Barueri/SP), bonded logistics centers (Campinas/SP, São Paulo/SP and Santos/SP), the Ecopátio Cubatão intermodal terminal and a distribution center. In 2016, nine Elog Sul business units in Rio Grande do Sul and Paraná were sold to Multilog S.A. in a R\$ 115 million deal.

Ecoporto Santos (SP)

- **2012** – acquisition
- **136,400 m²** in total area
- **540,000**-container annual handling capacity

Located on the right bank of the Port of Santos, Ecoporto Santos comprises two separate companies – Ecoporto Santos and Ecoporto Alfandegado – operating under lease agreements for the provision of port and logistics terminal services, including import and export port handling and warehousing operations.

OUR HISTORY

1997

Start of Group operations with the Ecovia Caminho do Mar concession (PR)

1998

Two new concessions: Ecovias (SP) and Ecosul (RS)

1999

Twinning of the Imigrantes Highway (US\$ 250 M)

2000

EcoRodovias Group holding company created

2009

The Ayrton Senna-Carvalho Pinto Corridor Concession (SP) begins operation, obtains ISO 9001 and ISO 14001 certification and joins the Brazilian Business for Climate platform

2010

EcoRodovias Group lists on BM&FBovespa's *Novo Mercado* (IPO) and creates Elog following the acquisition of Columbia and Eadi Sul

2011

EcoRodovias Group becomes a constituent of BM&FBovespa's Corporate Sustainability Index (ISE) and secures ISO 9001, ISO 14001 and OHSAS 18001 certification across all concessions



2001

Ecovias secures ISO 14001 certification

2003

EcoRodovias registers with the Brazilian Securities Commission (CVM) and lists on the São Paulo Stock Exchange (BM&FBovespa)

2004

Ecovia Caminho do Mar (PR) secures OHSAS 14001 Certification

2006

First issue of Ecovias debentures. Ecosul obtains ISO 9001 and 14001 certification

2007

Ecocataratas acquisition and certification to ISO 9001 and ISO 14001

2012

Successful bid for ECO101 and acquisition of Ecoporto Santos

2013

Conclusion of concession agreement and start of works on BR-101 (ECO101)

2014

EcoRodovias Group ranks among the 10 most transparent companies in Brazil (CDP Latin America) and subscribes to the UN Global Compact

2015

Concession agreement signed for the Rio-Niterói Bridge (Ecoponte)

2016

EcoRodovias receives recognition from the Carbon Disclosure Program (CDP) and is the first Brazilian company to make the "A-List"



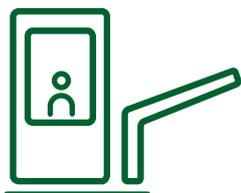
HOW WE CREATE VALUE

CAPITALS USED



FINANCIAL

- Financing
- Shareholder contributions
- Net revenue and operating cash generation



MANUFACTURED

- Toll road concessions
- Own assets and infrastructure



NATURAL

- Raw materials for roadworks
- Energy and water resources



HUMAN & INTELLECTUAL

- Corporate Academy
- Leadership development program
- Innovative engineering research with a focus on construction
- New road surfacing, signage and road monitoring technologies



SOCIAL

- Relations with key stakeholders (communities, partners, the market, grantor authorities, and regulatory agencies)

OUR APPROACH



OPERATING EFFICIENCY

- Financial solidity
- Best sustainability practices
- Efficient resource management

BUSINESS INTELLIGENCE

- A focus on high-growth infrastructure segments and leveraging our toll road expertise

RELATIONS

- A collaborative work environment
- Building solutions together with governments and communities
- Strategic relations with the supply chain

DELIVERIES



SERVICES

Engineering, design, roadworks, operation, maintenance, tolling, user assistance, traffic inspection, pre-hospital care, weighing service and mechanical assistance services



MOBILITY SOLUTIONS

Integrated systems with a focus on toll road concessions catering to holiday and trade corridors

RESULTS

✓ **SUSTAINABILITY**
✓ **VALUE CREATION**
shareholders

✓ **CREDIBILITY**
✓ **INNOVATION**
✓ **QUALITY OF MANAGEMENT**
✓ **HIGH-QUALITY ROAD INFRASTRUCTURE**
government and grantor authorities

✓ **EFFICIENT OPERATIONAL TRAINING**
✓ **SKILLS DEVELOPMENT**
employees

✓ **COMFORT**
✓ **SECURITY**
✓ **SMOOTH TRAFFIC FLOW**
users

✓ **COMMITMENT TO SOCIAL WELL-BEING**
✓ **SOCIAL AND ENVIRONMENTAL LICENSE TO OPERATE**
communities

GOVERNANCE AND ETHICS UNGC-10

Improvements in recent years have further aligned the Group with world-leading best practice

5

statutory and non-statutory committees make up our governance advisory framework

Our membership of *Novo Mercado* since 2010 and registration with the Brazilian Securities Commission (CVM) in 2003 reflect our continuing commitment to local and international best practice in corporate governance. Aspects such as transparency, sound decision-making, ethics and integrity are recognized as being strategic to our business – and are among the material issues identified by our stakeholders (*read more in Sustainability management, page 45*). G4-7

With businesses increasingly facing challenges in managing their reputation and compliance risks in recent years, EcoRodovias has taken steps to ensure our governance practices are world-class, efficient and well perceived by shareholders, investors and society.

EcoRodovias has policies in place that are aligned with the guidelines laid down by BM&FBovespa, such as ensuring that at least 20 percent of the board of directors are independent members, at least 25 percent of the Company's shares are free float, and financial statements are prepared in accordance with International Financial Reporting Standards (IFRS).

Among the standards adopted by the Company are the guidelines established for listing on *Novo Mercado*, Brazil's most demanding listing segment, and the Code of Best-Practice Corporate Governance published by the Brazilian Institute for Corporate Governance (IBGC).

ORGANIZATIONAL STRUCTURE

G4-34

EcoRodovias' main governance bodies are the Board of Directors; the Executive Board; statutory committees (Audit, Governance, People Management, Investment, Finance and Risk); non-statutory committees (Ethics and Sustainability); and working committees under the Executive Board. In accordance with good governance practices, statutory committees are coordinated by independent directors.

The Board of Directors, our highest decision-making body, is composed of eight members including three independent members (in accordance with IBGC requirements), four alternates and a non-executive chairperson. Its responsibilities include providing strategic guidance for the business, overseeing and assessing business and Executive Board performance and approving investment decisions. The Board meets on a quarterly basis.

Board of Directors Members	Positions	Date appointed
Marco Antônio Cassou	Chair	4/28/2016
Cesar Beltrão de Almeida	Member	4/28/2016
João Alberto Gomes Bernacchio	Member	4/28/2016
Eduardo Rath Fingerl	Member	4/28/2016
Raimundo L. M. Christians	Member	4/28/2016
Eros Gradowski Junior	Alternate	4/28/2016
Beniamino Gavio	Member	4/28/2016
Alberto Rubegni	Member	4/28/2016
Paolo Pierantoni	Member	4/28/2016
João Francisco Rached de Oliveira	Member	10/13/2016
Marcello Gavio	Alternate	4/28/2016
Nereu Miguel Ribeiro Domingues	Alternate	9/12/2016
Edda Gandossi	Alternate	9/12/2016

The Executive Board represents the Group, implements plans and decisions in line with our strategic direction, and manages the day-to-day operations of business units. In accordance with the Company's Bylaws, the Executive Board comprises six to eight members who are appointed by the Board of Directors. Board members are required to be resident in Brazil and may be shareholders or otherwise. The Board holds weekly meetings to discuss business performance. Executive Board duties are currently exercised by three members appointed in April 2015 (see chart).

Executive Board	Positions	Date appointed
Marcelino Rafart de Seras	Chairman and CEO, Executive Director for Highway Businesses, Executive Director for Logistics Businesses and Executive Director for Business Development	4/24/2015
Marcello Guidotti	Executive Director for Finance, Investor Relations and People Management	4/24/2015
Marcelo Lucon	Executive Director, Legal	4/24/2015

The statutory committees advising the Board of Directors are non-decision-making bodies tasked with discussing, monitoring and recommending action on matters within their scope of competence.

Board Committees

Responsibilities

STATUTORY

<p>Audit</p>	<p>The Audit Committee is responsible for: supporting the Board in ensuring the business is managed in accordance with applicable law, ethical standards and the Company's internal controls and that errors, losses and fraud are prevented; overseeing and evaluating the activities of, and making recommendations on the engagement of, independent auditors; monitoring the preparation of financial statements; monitoring internal audit engagements and ensuring their independence and performance; and evaluating internal control systems and compliance initiatives</p>
<p>Governance and People Management</p>	<p>The Governance and People Management Committee advises the board on aspects such as goal setting, performance assessment, compensation packages, board succession, and matters related to the corporate governance model. Specific responsibilities include recommendations on compensation for board members, appointing new independent board members and directors, monitoring and reviewing succession plans for key positions, evaluating effectiveness in talent retention, and integrating new board members</p>
<p>Investments, Finance and Risk</p>	<p>The committee's basic function is to support the board on investment decisions, corporate finance, distribution of income, and risk management practices. Specific responsibilities include assessments on mergers and acquisitions, evaluating the annual budget and financing, dividend distribution policy and assessing risk tolerance and the effectiveness of the Company's risk management plan</p>

NON-STATUTORY

<p>Ethics G4-49, G4-50, G4-56, G4-57, G4-58</p>	<p>The Ethics Committee is responsible for implementing, disseminating and coordinating reviews of, our Code of Business Conduct, in addition to ensuring compliance with internal policies. The Committee is formed by a member of the Board of Directors and two members appointed by the Executive Board. The committee assesses reports submitted via our website (www.ecorodovias.com.br) or by <i>e-mail</i> (comitedeetica@ecorodovias.com.br)</p>
<p>Corporate Sustainability G4-45, G4-48</p>	<p>The Corporate Sustainability Committee meets four times a year and is responsible for: proposing sustainability policies and guidelines; evaluating and developing social and environmental programs, discussing corporate sustainability policies and guidelines; approving the sustainability projects of business units and tax-deducted investments; overseeing the preparation of <i>Annual Sustainability Reports</i> and action plans to remain a constituent of the Corporate Sustainability Index (ISE); and proposing initiatives aimed at disseminating a culture of sustainability. The Committee comprises five members, one representing the largest shareholder, two executive directors, one independent director and the Company's Sustainability advisor</p>



SUSTAINABILITY & GOVERNANCE G4-45

In addition to the Corporate Sustainability Committee, the Group has developed mechanisms to enhance the embedding of social and environmental criteria into strategic decisions. Our Sustainability department holds weekly meetings with the Executive Board and Thematic Committees to support executives on matters such as compliance with industry standards (ISE, Global Compact, CDP and Global Repor-

ting Framework) and program and project assessment.

Sustainability committees at each toll road business unit discuss local issues with the engineering, procurement, human resources and other departments. Higher impact decisions – such as projects to be supported and social and environmental investments – are submitted to the corporate committee for approval.

APPOINTMENT, ASSESSMENT AND PERFORMANCE

G4-40, G4-43, G4-44

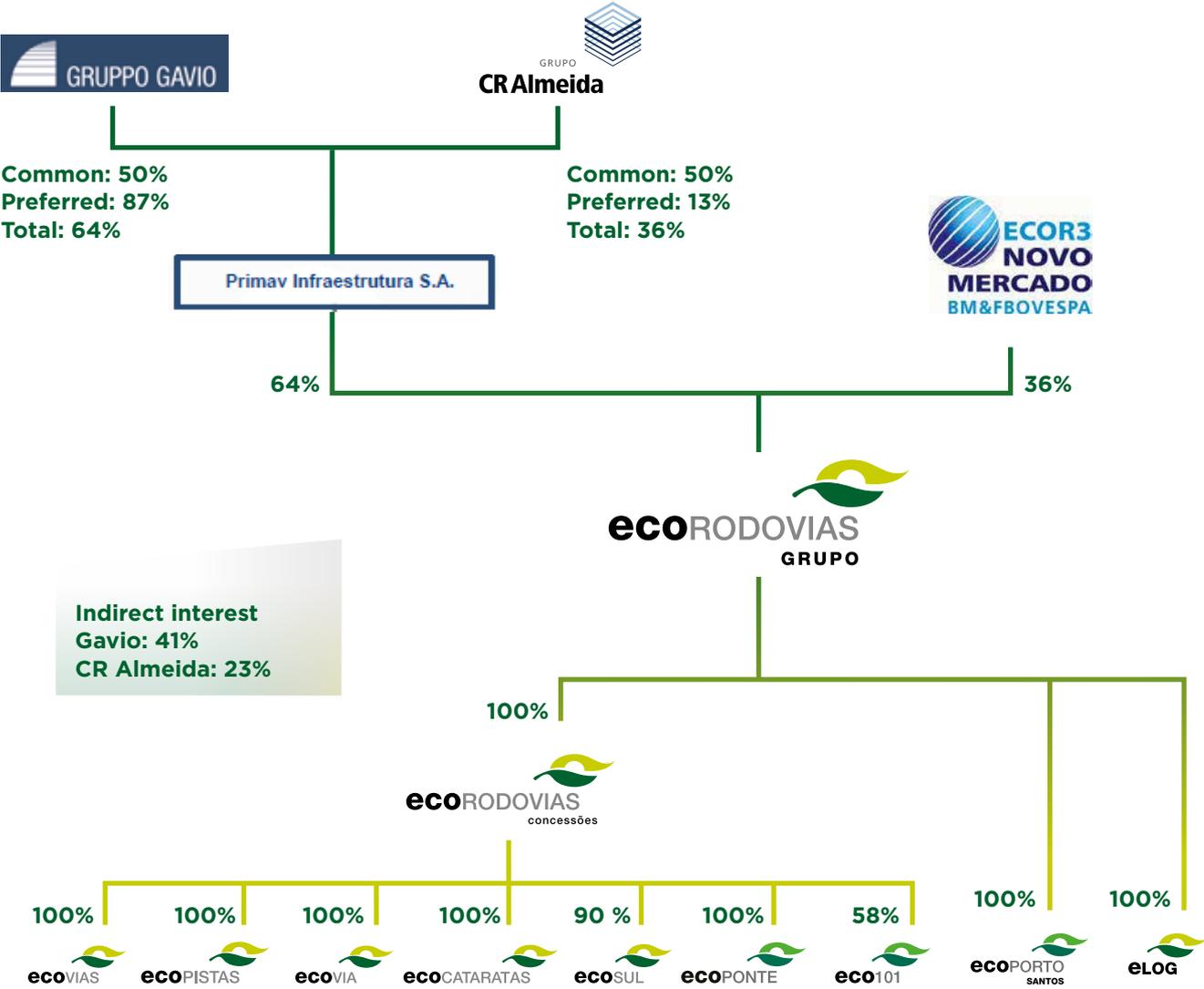
The Board of Directors selects and approves its members based on documented criteria, in accordance with industry standards. To be a member of the Company's highest governing body, candidates must have a reputation for integrity and recognized market experience in matters within the scope of competence of the Board.

Board members undergo self-assessment using a questionnaire completed individually and discussed as a group as a way of improving governance practices. Members' fixed and variable compensation is discussed by the appropriate statutory committee. Among the assessment criteria are sustainability aspects such as reducing CO₂ emissions and continuing as a constituent of the ISE.

Read

the internal regulations of the committees and other governance policies and guidance at <http://ri.ecorodovias.com.br>

OWNERSHIP STRUCTURE



INTEGRITY AND ANTI-CORRUPTION UNGC-10



Social and relationship capital

In recent years, EcoRodovias Group has worked to implement policies, guidance and strategies aimed at fostering integrity and ethical business conduct. In 2016 we continued our Compliance Program and Corporate Anti-corruption Program and completed a further review of our Code of Business Conduct. We also provide annual training to all employees on our Code of Business Conduct and the Brazilian Anti-corruption Act (Act 12.846/2013), and have channels in place for reporting concerns about the organization and its representatives.

Our non-statutory Ethics committee ensures concerns are submitted to senior management, which is responsible for taking corrective action and investigating incidents, reports and concerns.

Building on a process initiated in 2015, our Compliance Program is driving continual improvement and has developed department- and business unit-specific work plans that are directly connected to our risk management model (*read more in Risks and opportunities, p. 38*). As part of this initiative, all business units are required to undergo corruption risk assessments.

Within the Compliance Program, our Ethics and Integrity Program also seeks to engage employees and business partners (such as suppliers) around ethics. EcoRodovias has an Ethics & Integrity portal available on the Intranet to all Group employees, providing a range of information, knowledge assessments and tips on preventing instances of noncompliance. The platform also provides online training, and books, educational videos and a video play on anti-corruption.

In 2016 a comprehensive review of our Code of Conduct was performed with all employees and leadership invited to participate. After suggestions were discussed and validated by senior management, the Legal and Governance functions toured the Group's business units to provide training. G4-SO4

The Code addresses issues such as anti-corruption, dealing with conflicts of interest and measures to protect the assets and reputation of the Company and shareholders. In 2016, all employees were trained on our Code of Conduct. Service providers have also been informed about anti-corruption procedures.

In 2016 there were no terminations or disciplinary action taken as a result of corruption-related behavior, and no corruption reports or concerns were received. G4-SO5

100%

of business units undergo corruption assessments G4-SO3

Ethics Channel

G4-56, G4-57, G4-58

An Ethics Channel is available to both internal and external stakeholders to submit questions, complaints, and recommendations related to our practices. Concerned stakeholders can contact the relevant business unit's ombudsman's office, the Contact Us sections of Group websites or the Ethics Committee:

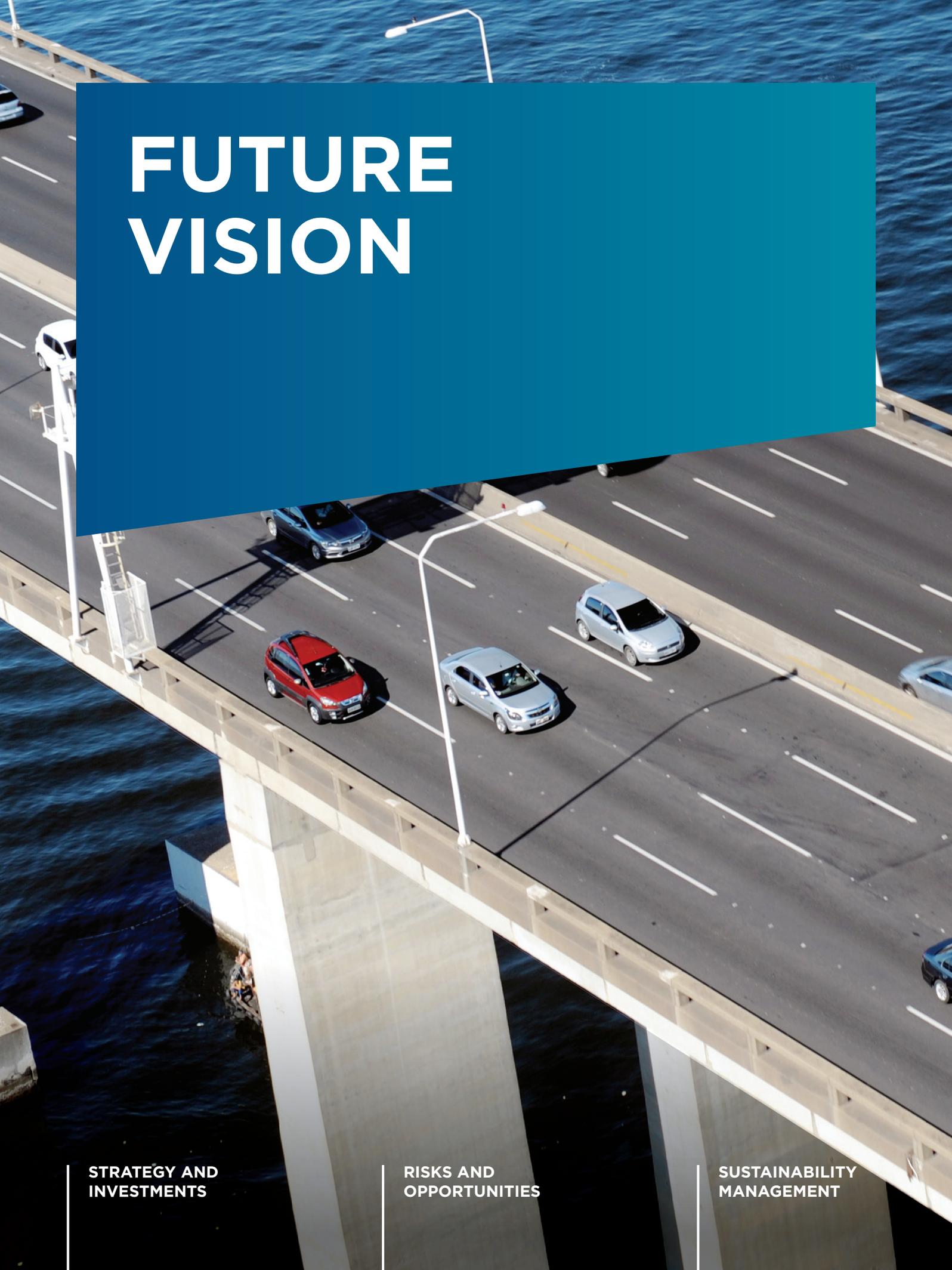
Email: comitedeetica@ecorodovias.com.br

Web: <http://www.ecorodovias.com.br/Codigo-de-Conduto/Comite-de-Etica>

In 2016, a total of 53 concerns were submitted to the Ethics Committee and investigated. Of these, 40 percent were related to people management issues. Compliance issues were confirmed in 15 cases, and all were addressed through guidance, warnings, suspension or termination.

Read about

other management policies on the EcoRodovias Investor Relations website

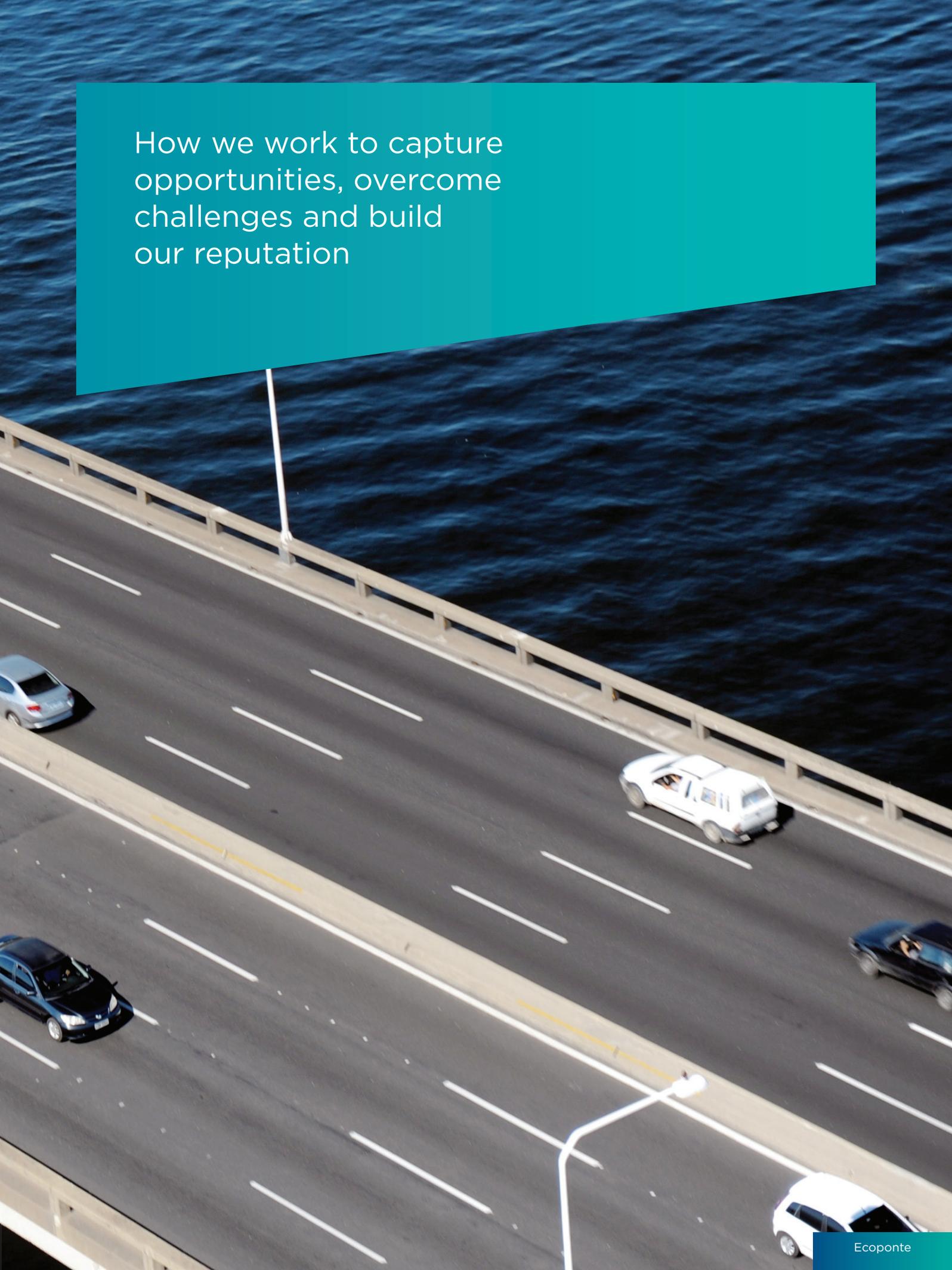
An aerial photograph of a multi-lane highway bridge spanning a body of water. The bridge has several lanes of traffic, with cars in various colors (red, silver, blue, white) visible. A large teal rectangular overlay covers the upper portion of the image, containing the title text. The bridge's concrete pillars are visible in the water below.

FUTURE VISION

**STRATEGY AND
INVESTMENTS**

**RISKS AND
OPPORTUNITIES**

**SUSTAINABILITY
MANAGEMENT**

An aerial photograph of a multi-lane highway bridge crossing a body of water. The bridge has several lanes with white lane markings and a concrete guardrail. Several cars are visible on the bridge, including a silver sedan, a white SUV, a dark sedan, and a white van. A teal-colored rectangular overlay is positioned in the upper left quadrant, containing white text. The water is dark blue with some ripples.

How we work to capture opportunities, overcome challenges and build our reputation

FUTURE VISION

Sustainable Development Goals (SDGs) reported in this chapter:



In 2016 we continued to pursue a forward-looking strategy in the challenging business environment still lingering from the previous year

EcoRodovias Group has a strategic vision underpinned by accountable business planning and execution that creates value for shareholders, customers and society and contributes to the development of Brazil's infrastructure and key economic segments.

A strategic roadmap, prepared and periodically reviewed by senior management, sets out our goals, targets and indicators to measure effectiveness in delivery and investment. This is anchored on four pillars: financial management, stakeholder relations; internal processes and learning and development. The current plan is for the period 2015-2025. [G4-42](#)

Our Strategy & Management Committee - which advises the Board of Directors - conducts bimonthly meetings to discuss scenarios, risks and opportunities, measure our performance in delivery against industry benchmarks and our establi-

shed strategy, explore new business opportunities and reconsider our investment in non-core industries. [G4-47](#)

Economic Value Added is another indicator used to assess value creation in business as usual and in the context of changes in our capital structure, new business opportunities and business transformation.

The Executive Board is responsible for translating our overarching goals into guidance and initiatives to be implemented at a corporate level or business-unit level. A significant milestone in recent years was the development of strategic roadmap for both our parent company and individual toll road operators.

As a way of embedding sustainability into our management practices, our strategy includes medium and long-term targets relating to social and environmental impacts on the supply chain, as well as risks and opportunities related to non-financial matters. Examples of this are our goals to remain a constituent of the Sustainability Index (ISE) and reduce scope 1 greenhouse gas (GHG) emissions - two targets established for senior leadership which directly affect their performance assessment results.

A CHALLENGING BUSINESS ENVIRONMENT

The political instability and economic slowdown combined to reduce both freight and passenger traffic on roadways, adversely affecting our business environment.

A number of indicators affecting the industry were unfavorable in 2016. Gross Domestic Product (GDP), for example, continued on its downward trend, shrinking by 3.6 percent compared with the previous year. This is the first time Brazil has seen two consecutive years of contraction in the entire official historical series published by the Brazilian Institute for Geography and Statistics, which began in 1948. This year's contraction followed a decline of 3.8 percent in 2015 – the highest in 25 years – and growth of only 0.1 percent in 2014.

Cumulative 12-month inflation was slightly less than initially expected. Climbing 6.3 percent, the Broad Consumer Price Index (IPCA) stood close to the inflation target ceiling (6.5 percent) but far from the target center of 4.5 percent for 2016.

The trade balance is also relevant to our business as an indicator of foreign trade activity, which directly affects freight traffic levels. The projection for 2016 remained a surplus, with exports exceeding

imports by US\$ 48 billion. A similar trend is projected for 2017. In 2014 the trade balance was still in deficit (US\$ 3.93 billion), before reversing to a surplus of approximately US\$ 29.8 billion in 2015.

Another significant indicator is the rate of production of agricultural commodities, which account for more than half of Brazil's exports. Grain production stood at 186.4 million metric tons in crop year 2015/2016 according to Companhia Nacional de Abastecimento (CONAB), an agency linked to the Ministry of Agriculture, declining by 10.3 percent (21.4 million metric tons) compared with the previous crop year. The decline was caused by adverse climate conditions such as extended droughts and high temperatures, causing failure of crops such as corn, which declined 20.9 percent.

These indicators denote an economic slowdown and the negative effects on passenger (holiday, tourism and business travel) and freight flows through roadways, ports and logistics terminals, with adverse effects on both EcoRodovias and our peers.

According to the Brazilian Association of Toll Road Concessions (ABCR), a trade association representing our core business, the index measuring vehicle traffic on toll roads declined by 3.6 percent in 2016. The highest decrease was in heavy vehicles (-6.0 percent); with light vehicle traffic declining by 2.8 percent.



-3.6%

decline in vehicle traffic on toll roads

Affected by an adverse macro economic environment, the industry has been challenged to find ways to improve efficiency and reduce costs to mitigate pressures on cash flows

A FOCUS ON OUR CORE BUSINESS

The economic downturn has been addressed internally at EcoRodovias Group since the end of 2014. This has included measures such as reducing fixed expenses, improving business unit productivity, increasing liquidity (by controlling leverage and increasing resource allocation efficiency) and prioritizing the company's core business - toll roads.

We pursue a long-term strategy and believe infrastructure to be a key segment for Brazil's ability to resume growth and build compe-

titiveness. We also believe in the importance of toll road operators as stewards of key touristic and foreign trade corridors, and that there are potential opportunities to be explored in the long term.

In 2017, for example, the Federal Government will organize infrastructure concession auctions linked to the "Investment Partner Program", including Federal road concessions in the Midwest, Southeast and South.

The Company has recently been joined by a new shareholder, Gavio Group, a toll road player with extensive experience in the Italian market. Gavio Group now co-owns the Company with CR Almeida through Primav Infraestrutura. The investment has demonstrated confidence in our ability to deliver results and has enhanced the financial strength of our parent company by reducing indebtedness to comfortable levels that are consistent with the business outlook.

Our strategy also included disinvestment from the logistics business through the sale of Elog Sul to Multilog S.A. Elog Sudeste, in turn, will be partly divested in 2017.

STRATEGIC FOCUS



Short term (2017)

- Cost discipline and investment optimization (Capex)
- Disinvestment from Elog
- Negotiation of further contract addenda
- Bidding in toll road auctions to the extent of our financial capacity

Medium term (2017-2019)

- De-leveraging
- Maximizing value within the Ecoporto business
- Exploring potential for contract addenda
- Bidding in toll road auctions to the extent of our financial capacity
- Opportunities in the secondary market

Long-term (2017-2021)

- Profitable growth with a new round of toll road privatizations
- Exploring contractual addenda
- Secondary market opportunities

STRATEGY AND INVESTMENTS

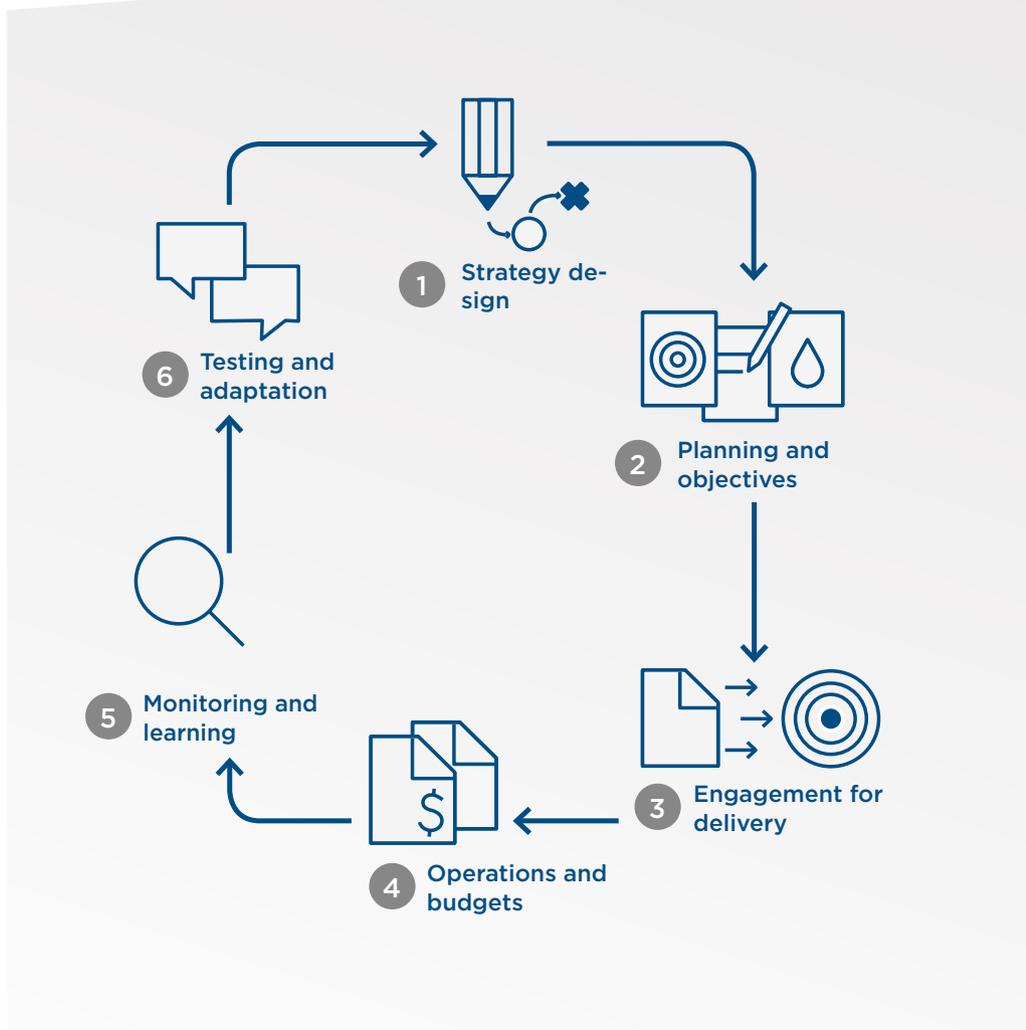
Designing our roadmap to business success is an exercise involving six steps that are integrated into our strategic management cycle - from business plan design to monitoring, review and adaptation. The six steps are:

1 Strategy design - This step involves developing our future vision based on an assessment of the domestic and global environment (including political, economic, social, regulatory, environmental and legal aspects) and gaining a better understanding of the capitals used by our company, our management systems, our culture, our governance, our sustainability practices and the risks associated with the business. The deliverable from this step is a SWOT (strengths, weaknesses, opportunities and threats) matrix to support the development of a value proposition.

2 Planning and goals - The plan is translated into specific, measurable goals which are assigned to and owned by our teams, functions and divisions. Execution planning is performed for each dimension.

3 Engagement for delivery - Group business units are then engaged around the strategy through action plans that are linked to employees' compensation and initiatives towards our corporate objectives, using management tools such as Balanced Scorecard.

4 Operations and budgets - Each operation then assesses the resources needed to implement the strategy, including expenses and investments, within a budget plan.



5 Monitoring and learning - Governance forums (committees, Executive Board and Board of Directors) assess strategy delivery and identify opportunities for improvement.

6 Testing and adaptation - The last stage of the program lifecycle involves practical discussions in which the strategy is reviewed in terms of new developments, relations with customers, partners, regulators and suppliers, and outcomes achieved. The program then cycles back to strategy design.

HOW WE ALLOCATE RESOURCES

Resource allocation to construction, projects, new business and supporting activities directly reflects our strategy review cycles. An example in 2016 was the creation of a Procurement function to better assess opportunities to improve efficiency in procuring services, equipment, materials and technology, attaching strategic importance to how we manage the supply chain.

In the toll road business, investments are part of our day-to-day operations under agreements between our toll road operators and grantor authorities. EcoRodovias operates in a highly leveraged industry, in which financial strength is a requirement for sustainable business.

A case in point is our most recent acquisition – Coponte – in Rio de Janeiro. Under the concession agreement with the Federal Government, EcoRodovias is required to conduct a range of roadworks

including an elevated highway connection from the Rio-Niterói Bridge to the Linha Vermelha Expressway and an underpass beneath Avenida Feliciano Sodré in the East-West section.

It is also part of Group policy to undertake voluntary investment to improve the safety, landscaping, housekeeping, traffic flows, comfort and traffic worthiness of our toll roads. CAPEX (capital expenditure) investments were R\$ 624.0 million in 2016.

ECORODOVIAS CAPEX (2016)

Company	Intangible assets/PPE	Maintenance costs/ provision for construction	Total
Ecovias dos Imigrantes	90.5	43.7	134.2
Ecopistas	135.9	5.2	141.1
Ecovia Caminho do Mar	15.2	6.4	21.6
Ecocataratas	39.4	38.9	78.2
Ecosul (100%)	65.2	6.0	71.2
ECO101 (100%)	94.8	-	94.8
Ecoponte	42.9	25.1	68.0
Ecoporto Santos	5.0	-	5.0
Other¹	10.1	-	10.1
TOTAL²	498.8	125.2	624.0

¹ Services and parent company.

² Includes 100% interest in Ecosul and ECO101.



Ecosul

SIGNIFICANT INVESTMENTS

- **Ecocataratas (PR):** In October 2016, EcoRodovias announced a twinning project along 15.2 kilometers of the BR-277 highway in two different sections: a 9 kilometer section within the urban perimeter of Cascavel, including the main and frontage roads; and another 6.2 kilometer section within the urban perimeter of Guarapuava. The twinning works will double the traffic capacity in these sections.
- **Ecovias (SP):** Third lanes were completed on the Padre Manoel da Nóbrega highway, on the southern coast of São Paulo, in addition to maintenance and road surfacing works.
- **Ecopistas (SP):** Work began during the year on a 10.9 kilometer extension of the Carvalho Pinto Highway (Ayrton Senna-Carvalho Pinto Corridor) connecting to the Oswaldo Cruz Highway.
- **Ecoponte (RJ):** A number of projects were completed during the year, including modifications to toll plazas and bus stops, which were previously creating bottlenecks to traffic. Work also again on the construction of an underpass beneath Praça Renascença in the center of Niterói.
- **ECO101 (ES/BA):** Work continued on a range of improvements along the highway, which traverses the state of Espírito Santo from the border with Rio de Janeiro to the state of Bahia. Projects initiated during 2016 include construction of a new 8 kilometer, two-lane section of highway skirting the town of Iconha; and construction of two bridges along the Viana section of the BR-101 highway to remove two traffic-lighted intersections. These are also scheduled to be completed in 2017.

R\$ 2,647,922.85

invested in infrastructure projects and services for pedestrians, road users and members of roadside communities. These projects include the development of detail engineering for the future Atilio Fontana Bridge (Ecovia), in an investment of R\$ 285,000; and installation of 16 cameras as part of an automatic detection system (Ecovias) to improve user safety and security, in an investment of R\$ 1,555,811.38 G4-EC7

COMPETITIVE ADVANTAGES

Learn about the differentiators that are key to our results, financial strength and sustainability in relations with stakeholders



STRATEGIC LOCATION

Our business model has developed a robust transportation network spanning key corridors for tourism and foreign trade in the South and Southeast of Brazil. Among these regions are Brazil's tripoint with Argentina and Paraguay, the Port of Santos, the Port of Paranaguá and other port facilities, such as those connecting to the BR-101 highway. Our toll roads also provide road links to major cities (such as São Paulo, Rio de Janeiro, Curitiba and Vitória) and are used by travelers to holiday destinations such as the coast of São Paulo and Espírito Santo, Vale do Paraíba (SP and RJ) and the Lagos or "Sun Coast" region (RJ).



FINANCIAL STRENGTH AND VALUE-CREATING CAPACITY

Since the 90s, EcoRodovias has delivered strong cash generation capacity and shareholder returns. Net revenue was R\$ 2.9 billion in 2016 compared with R\$ 2.7 billion in 2015.



FOCUS ON ROAD CONCESSIONS

Lessons learned in recent years have led EcoRodovias to focus its efforts, investments and search for opportunities on the toll road industry, which has enormous potential for growth to meet Brazil's demand for better infrastructure.

Our value proposition is designed to offer integrated transportation and mobility solutions to users and customers, and we select and carefully assess new business opportunities (such as federal and state toll road auctions) throughout Brazil and explore ways to improve profitability through the disposal of logistics businesses.



ALIGNMENT WITH AND SUPPORT FROM EXPERIENCED SHAREHOLDERS

CR Almeida and our new shareholders, Gavio Group, provide EcoRodovias with the capital structure needed to meet investment requirements and the expertise of their parent companies in selecting, developing and generating business opportunities that yield superior shareholder returns on capital employed.



Ecovia



ENGAGEMENT WITH GOVERNMENT AND SOCIETY

Approximately 20 years of experience in the toll road industry have enabled the company to build unique capabilities for engagement and collaboration with grantor authorities, governments and institutions to develop thought leadership and mutually beneficial relationships, and create solutions for infrastructure development and growth throughout Brazil.



COMMITMENT TO SUSTAINABILITY

Ensuring resource efficiency, promoting civic engagement and education in roadside communities, protecting our biodiversity and implementing world-class management are ways we ensure Group-wide alignment with internationally recognized best practice, which includes ensuring that all members of senior management are highly engaged and working towards performance targets.

At year-end 2016, five of our seven toll road concessions were certified to ISO 9001, ISO 14001 and OHSAS 18001, confirming that capabilities are in place to ensure high levels of quality, environment and health & safety management. This has been recognized by our remaining a constituent of the São Paulo Stock Exchange (BM&FBovespa) Business Sustainability Index.

RISKS AND OPPORTUNITIES

At EcoRodovias, risk management is required as a way of reducing exposure to external factors, strengthening our corporate reputation, prioritizing assets and segments that are key to our business success and creating value by building and maintaining competitive advantage and continually improving our internal controls.

The Board of Directors and executives are directly involved in risk management. The risks and opportunities facing the business over the following years have been identified as part of our strategic planning process. These range from reducing operating costs and overheads to narrowing our focus on the toll road segment to reduce exposure to financial losses as a result of investment in other assets (*read more in Strategy and investment, page 33*). [G4-46](#)

As compliance awareness in society and the market increases as a result of the corruption investigations involving the government and infrastructure companies, some of our key initiatives in recent years have included efforts to enhance compliance mechanisms. These efforts have included anti-corruption training, disseminating our Code of Conduct to our employees and

business partners and continually updating our risk matrix.

MANAGEMENT MODEL

Our risk model and internal controls are designed to identify, assess, address, monitor and communicate any risk or threat affecting our business sustainability, including strategic, financial, operational and compliance aspects.

EcoRodovias Group's business model has been developed based on local and international standards, including ISO standards and the guidelines published by the Brazilian Governance Institute. Important developments have included the creation of a dedicated corporate governance function and approval of our Master Plan and Risk Management and Internal Controls Policy. The Master Plan establishes 18 principles that not only our corporate risk function, but also our employees and business units more broadly are required to abide by.

Risk management at EcoRodovias operates across the three lines of defense recommended by the Institute of Internal Auditors. All business unit functions are expected to assist in managing risks effectively, taking account of the context and challenges surrounding each operation.

The first line of defense is controlling and managing risks, and is the responsibility of business unit managers. Our leadership is also responsible for assessing scenarios,

As a result of lessons learned in recent years, we have worked to further develop our internal controls and risk mitigation tools

considering externalities and issuing opinions on the company's risk appetite in assuming and addressing certain factors in its decisions.

The second line of defense involves our corporate risk, controls and compliance functions – which provide technical support and recommendations, as well as operating the model. The third line of defense is independent assurance and is the responsibility of internal and external audits on our management practices.

Through this process – which is ubiquitous across the company and subsidiaries – we monitor factors that could be crucial to our results and business continuity. Four major categories of risk (see chart) are currently evaluated, as well as sub-categories as applicable to the business.

Identification

Two approaches are used to ensure risks are measured both at the Group strategic planning level and in routine operations:

Top-down – EcoRodovias identifies significant corporate and business-unit risks that could potentially affect our achievement of strategic corporate objectives. These connect to assessments of the external (threats and opportunities) and internal (strengths and weaknesses) environment and inform an inventory of top risks, which is periodically reviewed as part of the strategic planning process.

Bottom-up – This approach measures risks – from supply-chain to management, business and supporting processes – that could potentially affect Group results; a review of the risk inventory is an integral part of the activities carried out by the risk management, internal controls, compliance and audit functions.

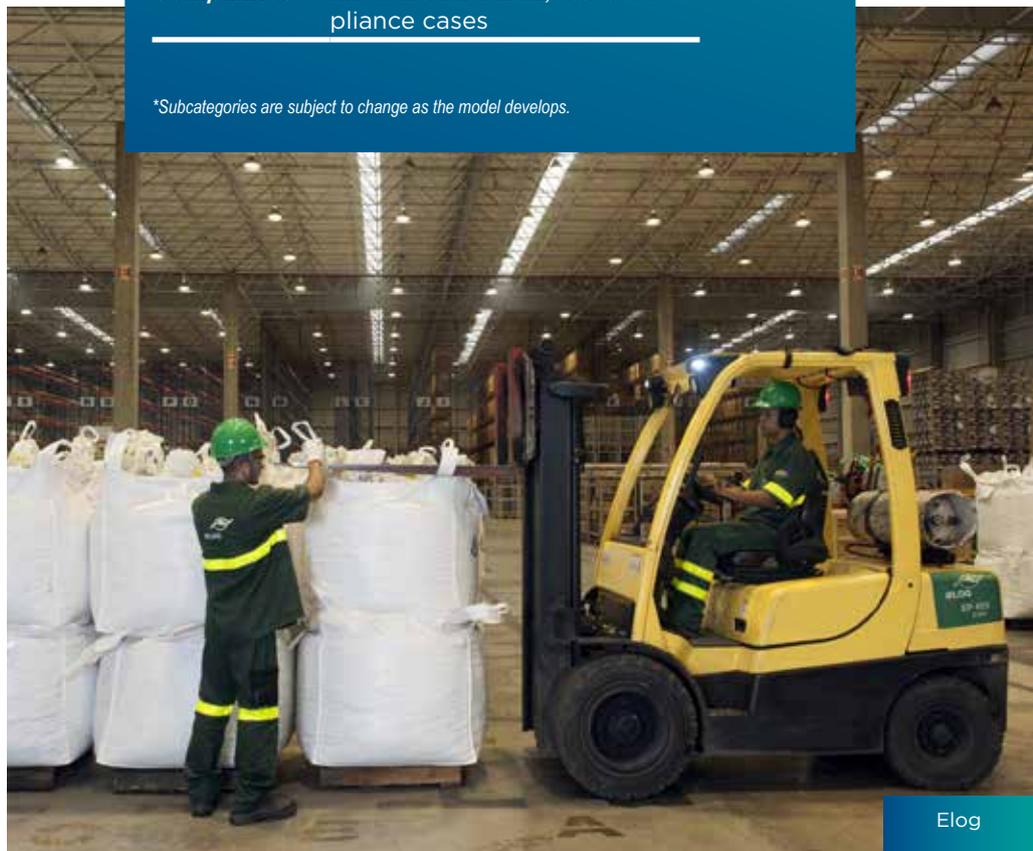
DEFENSE

Our risk management strategy works across three lines of defense against material risks

RISK CATEGORIES SUBCATEGORIES*

Strategic	Political, mergers and acquisitions, grantor authority/contractual, antitrust
Operational	Capex, natural disasters, processes, road safety, security, traffic, weather conditions, health and safety, environment, engineering, information technology, automation technology and infrastructure
Financial	Financial covenants, financing, liquidity, foreign-exchange
Compliance	Business ethics, regulation, internal standards, noncompliance cases

**Subcategories are subject to change as the model develops.*



Elog

Mitigating impacts from climate risks has been among our priorities in recent years

Assessment G4-46

The magnitude and materiality of each risk is determined by measuring the impact on the business and determining the likelihood of occurrence. Depending on criticality and available information, the analysis may be qualitative, quantitative, or both.

These analyses are monitored, implemented and validated by governance bodies at different levels in the organization, from parent-company and business-unit advisory committees to the Board of Directors.

In 2016, work continued on identifying best practices in risk management and measuring the risks that are most material to the company, in an exercise that involved supporting functions and executives.

Issues identified in external and internal audits were compiled to inform risk mitigation and internal controls. With risk management becoming increasingly critical, the Controllership function has been assigned risk management targets it is required to work towards.

Climate risk: our approach G4-EC2

EcoRodovias Group monitors climate changes and their effects on our operations. This is another example of how we have incorporated risk management as an avenue for generating new opportunities in both tangible and intangible respects.

The multifaceted effects of climate events on our toll road and logistics

businesses include loss of assets caused by extreme rainfall events (bridges, slopes, yards, terminals, vehicles, equipment etc.) and crop failure, which affect truck and commercial traffic flows through our roadways and logistics centers.

Climate variance can also affect – both positively and negatively – the flow of vehicles to coastal holiday destinations.

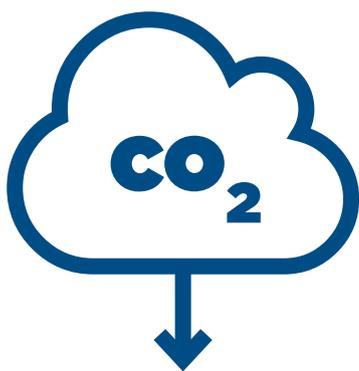
We also monitor potential developments in the regulatory framework governing transportation emissions limits and the potential impacts from taxation.

EcoRodovias Group undertakes initiatives that go beyond monitoring climate change and its effects on our results of operations. We recognize that energy and greenhouse gas (GHG) emissions management is an opportunity for us to strengthen our reputation as a company committed to sustainability and reducing the cost of energy (electricity and fuels) through projects to improve efficiency and energy sources.

In order to maximize the potential of these opportunities, we undertake investments that span our business unit operations and our relations with the value chain (*read more in* Natural capital, p. 54). Other tools we use to manage climate risk include our Highway Monitoring System, our Slope Management, Monitoring and Maintenance Program, weather monitoring and insurance.

SUSTAINABILITY MANAGEMENT

G4-15, G4-41, G4-45



“A List”

An “A band” list published by the Carbon Disclosure Program (CDP), in which EcoRodovias has been uniquely included

The Company is one of two Brazilian companies to make the list, which is published by CDP for the benefit of institutional investors

At EcoRodovias, a range of sustainability topics – such as user and employee safety, implementation of our Integrated Management System, natural resource efficiency, community development, good governance practices and ethics – have been incorporated into our management approach. Examples of this include the emissions and injury reduction targets that have been placed on our senior leadership agendas; business unit certification to international standards; and the development of Sustainability Guidelines and their application to corporate decisions.

These guidelines, which inform our strategy, combine with internal and external stakeholder engagement initiatives to help build our corporate sustainability and reputation. Our practices are also aligned with ISO 26000 to ensure a balance is reached between economic, social and environmental sustainability.

This has earned us recognition from a number of industry players and has strengthened our commitment to sustainability. In 2016 we were again a constituent of the São Paulo Stock Exchange (BM&FBovespa) Business Sustainability Index, which comprises Brazilian listed companies that are committed to evolving their sustainability practices.

Also significant was EcoRodovias’ integration into the “A List” of the Carbon Disclosure Program (CDP),

an organization that connects thousands of companies with approximately 850 institutional investors from around the globe to drive the transition to a low carbon economy.

As the only Brazilian company in the infrastructure segment to make the list, along with one other company in the chemicals/petrochemicals industry, EcoRodovias has become part of a select group of only 193 organizations recognized globally for their climate strategies. EcoRodovias has submitted emissions inventories to the CDP since 2012.

Other important Group commitments include:

- **Global Compact** – We subscribed to the UN Global Compact commitments in 2014 and have since regularly communicated our performance on these commitments, which include human rights, social development, ethics and decent working conditions.

- **Na Mão Certa** – An initiative run by Childhood Brasil to combat roadside exploitation of children and adolescents. EcoRodovias received an accolade from the program in 2016.
 - **Corporate Initiatives run by the Center for Sustainability Studies (GVceS)** – In its efforts to foster the co-development of strategies, tools and public- and private-sector policies on sustainability, the GVceS partnership has produced a range of significant studies/outcomes:
 - *Empresas pelo Clima* (EPC) has been part of the platform since 2009, and is committed to engaging in initiatives to reduce emissions and mitigate climate risks in operations and across the value chain;
 - *Inovação e Sustentabilidade na Cadeia de Valor (ISCV)* fosters innovation at small and medium-sized businesses operating within the value chains of large enterprises;
 - *Ciclo de Vida Aplicado (CiViA)* supports industry in the strategic management of externalities related to their products and services;
 - *Tendências em Serviços Ecossistêmicos* (Tese) develops projects based on the Business Guide to Ecosystem Services.
- **Sustainable Development Goals (SDGs)** – Building on the Millennium Development Goals, the Sustainable Development Goals were launched in 2015 and include 17 commitments and more than 160 targets to be met by organizations globally to help improve living standards. EcoRodovias is aligned with the SDGs through a set of commitments, programs and targets in areas such as diversity, inclusion, user and community relations, and compliance. In 2016, in addition to incorporating these goals into our sustainability strategy, we also connected the issues identified in our most recent materiality exercise to the SDGs (see GRI content summary *for a correlation between the material issues reported in this report and the UN Compact commitments*).
- **Global Reporting Initiative (GRI)** – GRI sustainability reporting standards have been used as a basis in preparing our annual and sustainability reports for the past decade, and are included on senior management agendas to ensure that economic, social and environmental impacts and indicators are adequately managed.

In partnership with the FGV Center for Sustainability Studies, EcoRodovias group works to develop new methods for aligning our management policies with social and environmental criteria

Read more

about our programs related to ecosystem services and management of externalities in the chapter on *Natural Capital*.

SUSTAINABILITY GUIDELINES

- **Quality** - Based on ISO 9001, the needs of business units and employees are met to the highest standards of quality.
- **Process management** - Processes, indicators and integrated systems are monitored continually at all subsidiaries.
- **Environment** - Based on ISO 14001, management models are in place that are designed to enhance efficiency at business units.
- **Climate change** - Actions aimed at reducing greenhouse gas emissions are implemented with a focus on energy efficiency, the use of renewable sources and protection of biodiversity.
- **Social responsibility** - Prioritizing human rights, ethics, anti-corruption, diversity and supplier development as pillars of management in accordance with the guidance set out in ISO 26000.
- **Occupational safety** - Protecting the integrity and well-being of our employees and contractors in line with the requirements set forth in OHSAS 18001.
- **Ombudsman's Office** - Channels are in place by which stakeholders can report concerns, suggestions and complaints, ensuring the Group is alert to society's demands.
- **Conflict of interests** - Conflict-of-interest risks are controlled through governance and highly effective internal controls.



MATERIALITY PROCESS

G4-24, G4-25, G4-26, G4-27



In accordance with Global Reporting Initiative (GRI) guidelines and industry best practice, EcoRodovias has conducted periodic materiality exercises in recent years to gauge society's perception of our business. Materiality processes identify, prioritize and incorporate into management the social, environmental and economic aspects of a company's impacts.

In 2016, our Sustainability function worked with business unit teams to conduct surveys among our key stakeholders, including employees, communities, suppliers, government, NGOs and users. In total, 178 participants attended panels in the cities of Cascavel (PR), Curitiba (PR), Pelotas (RS) and São Bernardo do Campo (SP), covering most of our operations. The survey also included 11 members of senior management.

The intersection of internal and external stakeholder feedback informed a new set of material issues affecting EcoRodovias, our business units and our broader corporate environment. Seven high-level issues to be monitored by the organization were identified and co-related with the relevant general and specific GRI disclosures in this report (see *table*).

All high-level issues are linked to impacts affecting internal stakeholders (employees and leadership). For external stakeholders, the relevance of each issue will vary: service responsibility, for example, is an issue that is most relevant to customers or users. [G4-20](#), [G4-21](#)

Materiality processes are conducted every two years, the most recent process being the fourth to date. As a significant improvement deriving from the most recent exercise, the views of our stakeholders about positive and negative impacts have been aligned with our priority management themes, ranging from economic challenges to social, environmental and governance aspects.

Going forward, the sustainability committees at our business units will review identified material issues and compare them with the Group's sustainability agenda, which includes tools such as GRI indicators, ISE indicators, Global Compact commitments, policies and practices. At the end of the process, each unit will recommend improvement actions which, following approval by the Corporate Committee, will be planned for implementation.

MATERIAL ISSUES

High-Level Issues G4-19	Related material issues G4-19	GRI Aspects	Disclosures*
Governance	<ul style="list-style-type: none"> • Corporate governance practices • Ethics and integrity 	Governance Ethics and integrity	G4-34, G4-38, G4-40, G4-41, G4-43, G4-44, G4-45, G4-46, G4-56, G4-57, G4-58
Economic performance	<ul style="list-style-type: none"> • Financial results 	Economic performance	G4-EC1
Environment	<ul style="list-style-type: none"> • Environmental management: water, energy, biodiversity, effluents and waste • Climate change: greenhouse gas emissions 	Economic performance Energy Water Biodiversity Emissions Effluents and waste	G4-EC2, G4-EN3, G4-EN6 G4-EN8, G4-EN10, G4-EN11, G4-EN12, G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19, G4-EN23, G4-EN24
Labor practices	<ul style="list-style-type: none"> • Labor practices and decent work 	Health & safety	G4-LA5, G4-LA6, G4-LA7, G4-LA8
Human rights	<ul style="list-style-type: none"> • Prevention of child and forced labor 	Child labor Forced or compulsory labor Assessment	G4-HR5, G4-HR6
Community	<ul style="list-style-type: none"> • Community relations • Anti-corruption • Strategic partnerships for sustainable development • Education for sustainability 	Organizational profile Indirect economic impacts Local communities Anti-corruption Training and education General	G4-16, G4-EC7, G4-SO1, G4-SO2, G4-SO3, G4-SO4, G4-SO5, G4-LA9, G4-EN31
Service responsibility	<ul style="list-style-type: none"> • Customer satisfaction, well-being and safety • Compliance with laws and regulations on service provision 	Customer health and safety Product and service labeling Compliance	G4-PR1, G4-PR2, G4-PR5, G4-PR9

*In addition to the disclosures on material issues, Group leadership has elected to report any other specific disclosures that are important in describing our sustainability performance: G4-EC3, G4-EC4, G4-EC5, G4-EC7, G4-EN1, G4-EN2, G4-EN27, G4-EN30, G4-EN33 e G4-SO6.

2016 RESULTS

BUSINESS

ENVIRONMENT

SOCIAL IMPACT

A photograph of a highway at night. The scene is dimly lit, with the primary light source being the streetlights and the headlights and taillights of vehicles. In the foreground, the rear of a dark-colored car is visible, with its taillights glowing. Further ahead, another car is visible, and to the left, a larger vehicle, possibly a truck or bus, is partially seen. The background features a series of tall, thin, curved streetlights that create a rhythmic pattern against the dark sky. The overall atmosphere is quiet and focused on the flow of traffic.

Our social, environmental and economic performance in delivery has reflected a challenging year in which we focused on pillars such as operating excellence, safety and cost control

Sustainable Development Goals (SDGs) reported in this chapter:



Ecocataratas

Through a focus on delivering results in an adverse year for our industry, marked by political instability and an economic slowdown in Brazil, EcoRodovias Group delivered important achievements in 2016 in areas such as cost efficiency, financial strength and operating excellence (accident reduction, health and safety and service levels).

In line with projections for the toll road industry - our core business - traffic levels were affected by Brazil's challenging business environment, with Gross Domestic Product (GDP) shrinking by more than 3 percent.

Consolidated volumes of paying equivalent vehicles declined by 2.1

percent in 2016 compared with 2015. Excluding traffic levels for Ecoponte, which began operations in June 2015, and discounting the impact from the suspension of tolls for retracted axles, the decline in traffic was 6.2 percent. The primary reasons for the decrease in traffic levels are presented below.

- **Commercial vehicles** - a 6.9 percent decline in 2016 caused by the economic slowdown. Excluding traffic levels for Ecoponte and discounting the impact from the suspension of tolls for retracted axles, the decline in traffic was 7.6 percent. Traffic levels on Ecopistas, ECO101 and Ecovias toll roads were adversely affected by the economic recession and

Road assistance calls

A range of indicators relating to the level, quality and efficiency of our services to users are monitored through our management system. Our total road assistance calls in the year included 178,741 towing calls (an increase of 14 percent compared with 2015) and 30,655 pre-hospital care calls (0.6 percent decrease). Average arrival time increased in comparison with the previous year (see table).

decreased industrial production levels, while Ecovia Caminho do Mar, Ecocataratas and Ecosul were positively affected by grain exports through the ports of Paranaguá and Rio Grande.

- **Passenger vehicles** – a 3.2 percent reduction in 2016 compared with the previous year. Excluding the commencement of tolling on Ecoponte, the decrease in traffic was 4.7 percent. Ecovias dos Imigrantes, Ecosul and Ecovia Caminho do Mar were affected both by unfavorable weather conditions – which curtailed the flow of tourists to coastal holiday destinations in São Paulo, Paraná and Rio Grande do Sul – and by the economic slowdown. Traffic on Ecopistas toll roads was affected by lower economic activity and consumer income levels. Traffic on Ecocataratas was positively affected by the weakening of the US dollar against the real, which boosted shopping tourism from Uruguay and Paraguay.

Consolidated average tolls per paying equivalent vehicle increased by 9.5 percent in 2016, primarily as a result of a toll road tariff increase.

NUMBER OF SERVICE CALLS – 2016

Ecovias	Towing	Ambulance
Total calls	42,310	8,288
Average time to arrival	00:11:06	00:06:21
Ecosul	Towing	Ambulance
Total calls	12,958	1,924
Average time to arrival	00:17:40	00:10:05
ECO101	Towing	Ambulance
Total calls	49,078	11,478
Average time to arrival	00:27:33	00:08:18
Ecopistas	Towing	Ambulance
Total calls	20,429	2,673
Average time to arrival	00:15:28	00:05:40
Ecocataratas	Towing	Ambulance
Total calls	13,892	3,119
Average time to arrival	00:27:44	00:10:42
Ecovia	Towing	Ambulance
Total calls	13,516	2,291
Average time to arrival (100%)	00:14:20	00:10:55
Ecoponte	Towing	Ambulance
Total calls	26,558	882
Average time to arrival (100%)	00:02:43	00:03:36

Accidents

As part of the UN Decade of Action for Road Safety 2011-2020, EcoRodovias has established targets for reducing accidents and deaths on all our toll roads. Most business units outperformed the established targets (see table).

Port operation

Container handling was impacted by the discontinued operation of a regular line in 2016, while our warehousing operations declined due to lower volumes of cargo imports and cargo retained at the terminal, with both operations strongly affected by the economic slowdown and by fierce competition.

Logistics

As a result of our strategy of focusing on our core business and to ensure our reporting is transparent, as from 2016 Elog's assets, liabilities and results have been classified as "Assets and liabilities of discontinued/held-for-sale operations".

Accordingly, Elog's results of operations are no longer included in the consolidated financial statements of EcoRodovias, except where otherwise indicated in the disclosures contained in the sustainability report and financial statements. The purpose in this is to demonstrate the effects of the disinvestment from the logistics business since the disposal process began in 2016 with the sale of Elog Sul (read more in EcoRodovias Group, page 14).



Road safety campaign

	Business Unit	2016 Target	2016 Actual	Percent
Accident figures	Ecovias	4,490	4,200	-6%
	Ecovia	1,096	1,166	6%
	Ecosul	660	582	-12%
	Ecocataratas	1,669	1,814	9%
	Ecopistas	1,612	1,476	-8%
	ECO101	3,749	3,991	6%
	Ecoponte	829	724	-13%
Total fatalities	Ecovias	71	82	15%
	Ecovia	31	35	13%
	Ecosul	41	26	-37%
	Ecocataratas	78	86	10%
	Ecopistas	32	38	18%
	ECO101	162	115	-29%
	Ecoponte	4	1	-77%

BUSINESS



Financial and built capital

Our financial results reflect efforts to increase the performance and strength of our assets and businesses through improvements in consolidated cash costs, investment efficiency, EBITDA margin and corporate indebtedness, as measured by the ratio of net debt to consolidated EBITDA.

Revenue

Consolidated gross revenue was R\$ 3,086.9 million in 2016, up by 3.3 percent over 2015. Excluding construction revenue, gross revenue was R\$ 2,635.5 million, an increase of 3.5 percent compared with the previous year driven by higher toll road revenue (+7.1 percent). This was as a result of contractual toll adjustments and the consolidation of Ecoporte from June 2015. Ecoporto recorded a decrease in revenue, however, due to the discontinued operation of a regular line and a decline in warehousing operations, affected by competition with other terminals and the economic slowdown.

Operating and administrative expenses

Operating and administrative expenses were R\$ 1,756.2 million in 2016, down 1.8 percent from 2015. Cash cost, excluding depreciation and amortization, provision for maintenance and construction costs, decreased by 5.3 percent in 2016 compared with 2015, despite 6.3 percent inflation during the period, reflecting the result of a cost reduction program with a focus on discipline in operational management, which delivered important cost savings across most business units.

Financial revenue (expense)

Financial revenue (expense) was an expense of R\$ 554.4 million in 2016, a decrease of 16.4 percent from 2015. The most significant changes are listed below:

(i) debenture interest increased by R\$ 34.9 million due to an increase in debenture debt from R\$ 3.9 billion in 2015 to R\$ 4.1 billion in 2016; (ii) interest on loans and financing increased by R\$ 12.3 million driven by an increase in the SELIC interest rate during the period; (iii) monetary variance on debentures declined by R\$ 73.5 million due to a decrease in the IPCA index during the period; and (iv) foreign exchange and monetary variance on loans and financing decreased by R\$ 84.5 million reflecting the weakening of the US dollar in 2016 (-16.5 percent), which positively affected import finance for Ecoporto compared with the strengthening of the US dollar by 47.0 percent in 2015, and ECO101's repayment of US dollar-denominated debt in 2016.

EcoRodovias successfully improved indebtedness levels and comparable-basis performance in 2016

IPC-01

EcoRodovias Group targeted an EBITDA margin of 45.0 percent in 2016, to be achieved through productivity improvements from optimization of operational and administrative resources, in accordance with the new accounting rules under IPC-01. This was exceeded at 63.9 percent.

Net income

Comparable net income, excluding nonrecurring and non-cash items relating to assets held for sale (Elog), impairment and a write-off of deferred taxes in Ecoporto, was R\$ 269.7 million in 2016, an increase of 116.1 percent. Net income including the above effects was a book loss of R\$ 964.6 million.

EBITDA

EBITDA was R\$ 1,114.5 million in 2016. Comparable *pro forma* EBITDA, excluding construction revenue and expense, provision for maintenance and non-cash impairment in Ecoporto, was R\$ 1,520.2 million, an increase of 9.4 percent, with an EBITDA margin of 63.9 percent.

Cash

Cash, cash equivalents and securities were R\$ 658.6 million in 2016, down 17.1 percent from R\$ 794.0 million in 2015, not including the consolidation of Elog.

Debt

Gross financial debt (gross debt excluding R\$ 32.4 million in concession fees payable) was R\$ 4,930.3 million at December 31, 2016, of which 21 percent was short-term and 79 percent was long-term debt, level with the gross debt of R\$ 4,930.8 million as of December 31, 2015, not including the consolidation of Elog.



2.8x

leverage measured as the ratio of net debt to comparable *pro forma* EBITDA in 2016, a decrease of 0.2x compared with 2015 (3.0x)

R\$ 146.5 million

in dividend payments for financial years 2015 and 2016, approved by the Board of Directors in November 2016

NET REVENUE (IN R\$ MILLIONS)

	2016	2015	2014	Change 15-16
Toll road concessions	2,133.1	1,991.2	1782.2	+7.1%
Construction revenue	451.4	443.1	713.6	+1.9%
Ecoporto Santos	290.5	313.1	452.7	-18.7%
Services	83.5	200.4	178.6	-18.3%
Logistics	-	-	-	-
Eliminations	-257.8	- 212.1	-190.1	-18.1%
Net revenue	2,829.0	2,735.7	2,937.0	+3.4%

FINANCIAL INDICATORS (R\$ MILLION)

	2016	2015	Change
Pro Forma Net Revenue ¹	2,377.6	2,292.6	3.7%
Comparable Pro Forma EBITDA ²	1,520.2	1,389.3	9.4%
Comparable Pro Forma EBITDA Margin ²	63.9%	60.6%	3.3 p.p
Comparable net income ³	269.7	124.8	116.1%
Capex	624.0	675.3	-7.6%
Net debt	4,304.1	4,136.8	3.3%
Available cash	658.6	794.5	-17.1%
Net debt/Comparable pro forma EBITDA ² ltm ⁴	2.8x	3.0x	-0.2x

¹ Excludes construction revenue

² Excludes construction revenue and expense and provision for maintenance; in 2016, excludes nonrecurring and non-cash items: impairment in Ecoporto in 4Q15; and in 2015, excludes the net effect of the fair value appraisal of Elog assets.

³ Excludes nonrecurring items: the effects of the write-off of assets held for sale (Elog), impairment and deferred taxes in Ecoporto.

⁴ ltm = last 12 months.



Ecovias

EBITDA (IN R\$ MILLIONS)

	2016	2015	2014	Change (2016 vs 2015)
Net income	(949.1)	115.8	474.3	n.m.
(+) net income from discontinued operations (Elog)	689.3	15.8	-	n.m.
Net income from continued operations	(259.8)	131.6	474.3	n.m.
(+) depreciation and amortization	340.0	344.2	309.0	-1.2%
(+) financial income	554.4	663.2	392.5	-16.4%
(+) recurring income tax and social contribution	235.9	159.2	242.6	48.2%
(+) write-off of deferred income tax in Ecoporto (non-cash)	244	-	-	n.m.
(+/-) equity income	-	(0.9)	28.4	n.m.
EBITDA¹	1,114.5	1,297.4	1,446.8	-14.1%
(+) impairment in Ecoporto (non-cash)	301.0	-	-	n.m.
(+) provision for maintenance	104.7	91.9	105.3	14.0%
(-) effect of STP	-	-	(269.2)	n.m.
COMPARABLE PRO FORMA EBITDA	1,520.2	1,389.3	1,282.9	9.4%
COMPARABLE PRO FORMA EBITDA MARGIN	63.9%	60.6%	57.7%	3.3 p.p

¹ EBITDA calculated in accordance with CVM Instruction 527, dated October 4, 2012.



Eco101

NATURAL CAPITAL

UNGC-7, 8, 9



Manufactured capital

EcoRodovias Group's day-to-day operations create a range of impacts on the environment – from the use of energy, water and construction materials to the production of waste and emissions. In addition, our toll roads – the Company's core business – pass through areas of Brazil with high diversity value, including protected areas, which require monitoring and stewardship actions that include preventing accidents involving spills and controlling fauna and flora within our rights of way.

The Sustainability Guidelines within our Integrated Management System (IMS) establish a range of indicators that are monitored to mitigate compliance risks and generate opportunities for investment while also improving efficiency and ultimately the Company's reputation among stakeholders.

Our focus areas include issues such as emissions, energy efficiency, waste recycling/disposal and biodiversity management. A new metrics system was established in 2014 in accordance with Global Reporting Initiative (GRI) guidelines, and can now be used by our business units to report on their performance on priority issues.

The certification of Group subsidiaries to international health, safety and environment standards is a primary requirement in management. Five of our seven toll road concessions and Ecoporto Santos are certified to ISO 9001, ISO 14001 and OHSAS 18001, and Coponte and ECO101 are currently in the process of certification, due to be completed in 2017.

ENVIRONMENTAL INVESTMENTS IN 2016 (IN R\$) G4-EN31

Waste treatment and disposal	R\$ 1,979,534.00
Emissions treatment (e.g. expenditure on filters)	R\$ 581,282.29
Environmental liability insurance	R\$ 474,169.08
Clean-up expenses, including spill remediation costs	R\$ 19,626.50
Internal environmental education and training	R\$ 85,498.05
External environmental education and training	R\$ 46,516.95
Independent management system certification	R\$ 181,284.03
Research and development	R\$ 871,886.15
Extra expenditure on adopting cleaner technologies (i.e. costs in addition to those incurred on conventional technologies)	R\$ 6,342,650.79
Additional expenditure on green procurement	R\$ 204,842.73
Other environmental management costs	R\$ 3,325,675.70

FROM RISK TO OPPORTUNITY G4-EN19, G4-EN27, G4-EN30, G4-SO2

Learn about some of the programs at our business units to mitigate negative impacts and strengthen our commitment to eco-efficiency

- Use of materials** – Our subsidiaries use recycled paper and fuel their vehicles with ethanol only. At our toll road concessions, asphalt millings are used for slope stabilization and foundations, yards and road surfacing. At Ecovias, steel guardrails have also been recycled.
- Water and effluents** – Water stewardship initiatives include periodic maintenance of artesian wells; the use of sanitary fixtures with flow control systems, and awareness campaigns on conscientious use and maintenance of water systems. Ecoporto operates a water treatment plant for recycling, and Ecosul operates a Water Museum. A significant project at Elog involved the use
- Emissions** – Since 2014, our vehicle fleets and leased vehicles have been monitored to improve fuel savings, optimize travel routes and control emissions. Currently 80% of our light vehicles have been migrated to ethanol. At Elog, a preventive stacker maintenance program is optimizing stacker performance and, ultimately, emissions levels. Other significant initiatives include smoke opacity testing on our operational vehicle fleets and preventive maintenance programs for toll road concession vehicles.
- Impact from transportation** – Encouraging lift giving and car pooling; engagement campaigns; route analysis; use of ethanol; fleet modernization; and opacity

of biodegradable products in container washdown operations in replacement of more environmentally aggressive products. At ECO101, water harvesting systems have been installed at toll plazas as a source of water supply for fire systems and tank trucks.

Six 15,000 liter tanks

collect rainwater at Ecocataratas facilities. Harvested rainwater is used for road surface, yard and toll booth washdown operations as well as for roadside assistance and weighing operations

50% reduction in receipt paper rolls

achieved at Ecopistas toll plazas in 2016

User convenience and eco-efficiency in road surfacing works

At Ecosul, innovative solutions have also been deployed in roadworks.

Warm-mix asphalt was used in 2016 for roadworks along a 10 km stretch of the BR-116 highway. This technology has helped to shorten roadworks periods by allowing asphalt concrete to be applied at lower than usual temperatures. There are also environmental benefits from reducing fossil fuel consumption in the asphalt production process.

testing and regular inspection of diesel vehicles are some of the measures taken by our toll road businesses and parent company. Ecoporto has also invested in modernization and upgrades that have had positive effects on energy efficiency.

- **Energy** – EcoRodovias is replacing toll plaza, tunnel and bridge lighting systems with LED lighting in a project running since 2011 as part of our Energy Efficiency Program (*read more about our projects on page 58*). In another initiative, solar panels are being installed along our toll roads as a power source for roadside emergency telephones.
- **Noise** – Roadside vegetation strips exceeding legal requirements, the use of rubberized asphalt and other technologies and processes have been used to minimize roadside noise pollution and noise emissions from our logistics and port facilities. Noise pollution is also monitored at our roadworks sites.
- **Waste** – Business units such as Ecovias and Ecopistas use environmentally friendly asphalt material and all business units have waste segregation systems in place at managed locations. At Elog, an automatic composting system is reducing the amount of organic waste going to landfill.



Innovative pavement recycling: foamed asphalt

In 2016, Ecopistas used an innovative asphalt recycling method involving the use of foamed asphalt. The initiative received an award in the Innovation category at the Concessionaire of the Year Awards organized by the São Paulo State Transportation Agency (ARTESP).

The new method – which is being used for the first time in Brazil on high-performance road surfaces after five years of research – consists of cold-in-place recycling the road base with foamed asphalt, a method that minimizes environmental impact and improves operating efficiency. In total, 15 kilometers of road surfaces have been repaired along the Ayrton Senna-Carvalho Pinto corridor using this method. Foamed asphalt is produced from a mixture of asphalt concrete (AC), millings, water and air.



Road surfacing laboratory

Set up in 2009 at an Ecovias facility in São Bernardo do Campo, our road surfacing laboratory has been accredited to ISO/IEC 17025 by the Brazilian Institute for Metrology, Quality and Technology (Inmetro).

The laboratory conducts testing and research to ensure that road surfacing materials used by Ecovias and other business units offer minimal environmental impact and superior road surface performance and safety. In 2016, testing for other toll road businesses accounted for 30 percent of total laboratory activities; the remaining 70 percent of testing activities were conducted by and on behalf of Ecovias.

The lab's accredited testing services include:

- softening point testing (ring and ball);
- asphalt flash point testing using Cleveland open cup testers - oil products;
- determination of high temperature viscosity using a rotational viscometer (high viscosity asphalt material);
- determination of the rheological properties of non-Newtonian materials using rotational viscometers (rubberized asphalt);
- Saybolt Furol viscosity testing;
- penetration testing;
- elastic recovery by ductilometer;
- determination of tensile strength by diametral compression.

Environmental incidents: prevention and response

Environmental incidents and chemical and/or hazardous product spills involving our roadways, ports and logistics centers are a key risk associated with our routine operations. To effectively prevent and respond to incidents, we provide quarterly training to employees at our business units.

Our Accident Prevention and Reduction Program (PRA) and Emergency Response Program (PAE) are two of the tools used in response to incidents with potentially negative impacts. Training and emergency response drills cover road incidents such as cargo and truck tipping, truck accidents involving victims and chemical products, serious collisions and mudslides.

In 2016, one incident occurred at Ecoporto (a spill at the container yard involving 0.23 m³ of diesel, which was properly contained); two incidents occurred on Ecovia toll roads (spills on the BR-277 highway involving 44 m³ and 33 m³ of respectively ethanol and vegetable oil, both of which were properly contained with bunding); three incidents occurred on Ecovias' SP-248 and SP-150 highways (one involving 100 kg of sulfur; one involving 43,155 kg of ethanol; and one involving 15,000 kg of nitrate fertilizers, all of which were contained by closing off the roadway, contacting the appropriate authorities and calling a specialized contractor to clean up the spill); one on ECO101 (a 30 m³ fuel spill, which was controlled using containment methods); six minor spills on Ecocataratas; and four spills on Ecopistas. In all cases, the environmental rules and processes established in our Emergency Response Program were applied. [G4-EN24](#)

Ecoponte

ENERGY

Efforts within our Energy Efficiency Program have helped to improve our energy performance with a focus on investments in technology, upgrades and energy efficiency.

Key initiatives in 2016 included the installation of LED lighting in four tunnels operated by Ecopistas to reduce electricity consumption by as much as 70 percent, in an investment of more than R\$ 2.1 million. Ecoponte replaced the entire lighting system on the Rio-Niterói Bridge with led lighting, investing a total of R\$ 3,611,671.

R\$ 9,736,590

invested in the Energy Efficiency Program in 2016

5,056,872.76 kWh

in electricity savings at our toll road businesses, Elog and Ecoporto, through improvements spanning processes, equipment, employee behavior and operations G4-EN6

1,998,991.20 liters

in fuel savings
G4-EN6

ENERGY CONSUMPTION WITHIN THE ORGANIZATION G4-EN3

	Toll road concessions* (GJ)	Elog (GJ)	Ecoporto Santos (GJ)
Non-renewable			
Natural gas	12,372.09	6,135.30	5,111.87
Diesel fuel (fleet)	60,853.94	22,596.66	20,913.72
Diesel fuel (generators)	5,482.53	1,750.82	22.89
Electricity (thermal power)	0.00	0.00	0.00
Gasoline	14,770.81	147.95	46.81
Renewable			
Ethanol (fleets - in liters)	25,725.90	479.61	212.24
Electricity (hydropower) - in kWh	27,276,885.45	9,994,748.00	4,878,958.00

*ECO101; Ecocataratas; Ecopistas; Ecoponte; Ecosul; Ecovia; Ecovias.

ENERGY EFFICIENCY PROJECTS

Business Unit	Project	Target	Annual savings (R\$)
EcoRodovias Concessões e Serviços	Replacement of all office building lighting systems with LED lighting. A total of 1,448 lamps were replaced	Reduce electricity consumption by: 35%	R\$ 39,948.00
Ecovias/ECS	Replacement of gas used in air-conditioning units with a gas providing higher efficiency. Gas replaced in 258 units	Reduce air-conditioning consumption by 28%	R\$ 59,681.25
Ecopistas	Lighting replacement in the approach sections of the Guararema, Caçapava and São José dos Campos toll plazas with LED technology	Reduce consumption at the Guararema toll plaza by 60% Reduce consumption at the Caçapava toll plaza by 76% Reduce consumption at the São José dos Campos toll plaza by 76%	R\$ 199,043.62
Ecopistas	Replacement of lighting systems in four tunnels with LED technology	Reduce consumption in tunnel 2 by 65% Reduce consumption in tunnel 3 by 70%	R\$ 941,280.00
Ecovia	Replacement of toll plaza approach lighting systems with LED technology	Reduce toll plaza consumption by 61%	R\$ 77,313.60
Ecovias	Replacement of sodium vapor luminaries with TD1, TD2 and TD3 LEDs along the south-bound roadway and adjacent areas of the SP-160 highway	Reduce south-bound roadway consumption by 58%	R\$ 1,017,599.40
Ecoponte	Replacement of the complete lighting system on the Rio-Niterói Bridge with LED technology. A total of 878 luminaries were replaced with LED units	Reduce consumption on the Rio-Niterói Bridge by 36%	R\$ 184,682.70
Ecovias	Replacement of Operations Control Center video wall and computers with more efficient technology	Reduce local operations center consumption by 47%	R\$ 26,805.60
Ecopistas	Replacement of Operations Control Center video wall and computers with more efficient technology	Reduce local operations center consumption by 70%	R\$ 23,631.64

KEY INDICATORS

WATER

Our subsidiaries have successfully delivered on water savings targets. Aggregate water consumption was significantly reduced in 2016 despite the incorporation of Ecoporte (see *table*).

WATER CONSUMPTION BY SOURCE* (IN M³)

G4-EN8

	2015	2016
Groundwater	137,638.20	90,935.51
Harvested rainwater	72.00	226.00
Municipal water supply	110,183.00	98,272.50
Recycled wastewater	78.36	43.90
Other	723.00	571.00
Total	248,694.56	190,048.91

*Scope 2015: ECO101; Ecocataratas; Ecopistas; Ecoporto; Ecosul; Ecovia; Ecovias; Elog. Ecoporte was included in 2016.

Percent of water recycled and reused in 2016*

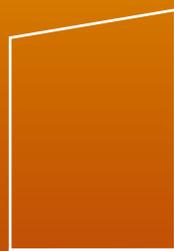
G4-EN10

Ecovias

17.70%

Ecoporto

0.40%



*Other units do not have water recycling systems in place.

WASTE

All business units properly dispose of waste materials and have established targets and objectives for controlling the generation and disposal of waste materials.

MATERIALS USED G4-EN23

		Quantity	Business Unit	Method of disposal
Class I	Miscellaneous hazardous waste (from roadway accidents)	145,294.00	kg	Local storage; landfilling; incineration; reuse
	Fluorescent lamps	7,585.00	un	Landfilling; recycling; reuse
	Pre-hospital care waste	2,126.33	m ³	Landfilling, incineration
Class II Class IIA	Millings	55,135.19	m ³	Local storage; recycling; reuse
	Recyclable materials	849,940.16	kg	Recycling
	Construction waste	28,113.06	m ³	Local storage; landfilling; recycling; reuse
	Solid waste (tires and rubber scrap)	219,956.50	kg	Landfilling; recycling
	Organic or other solid waste	5,514,168.06	kg	Landfilling

EMISSIONS

GRI G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19

Absolute emissions decreased significantly in 2016 as a direct result of reduced cargo handling volumes at Ecoporto. Our toll road businesses delivered mostly positive performance in reducing emissions, with the exception of Ecosul, which added gasoline to the fuel mix due to economic conditions.

Our toll road businesses, Elog, Ecoporto Santos and our service divisions – EcoRodovias Concessões e Serviços and EcoRodovias Infraestrutura e Logística – all worked towards a scope 1 GHG emissions reduction target of 1 percent compared with a 2015 baseline, with only Ecosul unable to meet the target.

Another significant sustainability goal in the year was remaining a constituent of the São Paulo Stock Exchange's Corporate Sustainability Index (ISE); this was successfully achieved by EcoRodovias Group as a whole. EcoRodovias Group's total scope 1 emissions were 2.097 metric tons of CO₂ per employee, down from 2.35 metric tons in 2015.

Scope 1 emissions were 3,966 equivalent metric tons (-29 percent), Scope 2 emissions were 2,283 equivalent metric tons (-40 percent), and scope 3 emissions were 43 equivalent metric tons (-3 percent) in 2016. In addition to the factors involving Ecoporto, the decrease in emissions reflects the results of process redesign and changes in employee behavior.

GHG EMISSIONS – TOTAL EMISSIONS BY BUSINESS

SCOPE 1 (t)*		SCOPE 2 (t)*	
Toll roads	5,446	Toll roads	2,245
Elog	2,325	Elog	812
Ecoporto	1,802	Ecoporto	400
Total	9,573	Total	3,457

Scope 3 (t)*	
Toll roads	1,383
Elog	35
Ecoporto	145
Total	1,563

*Includes the following gases: CO₂, CH₄, N₂O and HFCs.

Carbon footprint: Reducing emissions from towing service

G4-EN30

In 2015, EcoRodovias Group partnered with CiViA, a program run by Fundação Getulio Vargas in São Paulo, to develop a pilot project addressing our carbon footprint, an emerging challenge facing the infrastructure industry.

The project aims to identify and capture opportunities to reduce emissions from towing service, and could potentially be replicated at other business units.

The joint project determined that the Company's carbon footprint from towing services on the Imigrantes Highway using diesel fuel trucks was 44.85 tCO₂e.

This will inform action plans to reduce greenhouse gas emissions by improving the performance of our towing services.

More efficient tolling

In 2016, automatic toll collection systems on our toll roads helped to reduce emissions by 123.85 metric tons of CO₂. Electronic tolling allows users to pass our toll plazas at low speed without having to stop at toll booths.

CONSUMPTION OF MATERIALS

G4-EN1

Non-renewable		Total
Millings	Metric tons	104,889.09
Asphalt mix with AC 50/70	Metric tons	35,632.49
Asphalt mix with rubberized AC	Metric tons	108,752.83
Asphalt mix with polymerized AC	Metric tons	143,994.81
Millings, aggregate and cement	Metric tons	8,616.84
Plant-mixed millings with foamed asphalt	Metric tons	27,588.42
Water-based road marking paint	Liters	445,041.53
Renewable		Total
Paper (office materials)	Reams	15,724.00
Toll ticket paper	Rolls	163,284.00

MATERIALS USED THAT ARE RECYCLED INPUT MATERIALS - PERCENTAGE

G4-EN2

Non-renewable	Business Unit	Percent
Asphalt mix with AC 50/70	Ecoponte	100%
Asphalt mix with rubberized AC	Ecopistas	100%
Asphalt mix with polymerized AC	Ecoponte	100%
Millings, aggregate and cement	Ecocataratas; Ecopistas; Ecoponte; Ecosul; Ecovia	100%
Renewable	Business Unit	Percent
Paper (office materials)	Ecocataratas	89.09%
	Ecopistas; Ecoponte; Ecosul; Ecovia	100%
	Ecovias	97.25%
Toll ticket paper	Ecocataratas; Ecovia	100%

BIODIVERSITY

G4-EN11, G4-EN12

Our operations are present in areas that are a highly relevant part of Brazil's natural capital. Ecovia, Ecovias, Elog, ECO101, Ecocataratas, Ecopistas and Ecoponte are located near or within protected areas or high-value biodiversity areas, such as the Guaratuba Protected Area, the Rio Pequeno Protected Area and the Marumbi Special Tourist Interest Area (Ecovia); the Serra do Mar State Park and the Billings Reservoir Protected Area (Ecovias and Elog); the Sooretama and Flona Goytacazes Biological Reserve (ECO101); Iguacu National Park (Ecocataratas); the Tietê Ecological Park (Ecopistas); and the Guanabara Bay Protected Area (Ecoponte).

Potential impacts from our operations on biodiversity include siltation of water courses due to soil erosion, river and ground contamination and soil disturbance; hazardous spills; roadkill and clearing of native vegetation.

During the twinning work on the Ecocataratas highway, for example, an assessment was made of impact from earthwork, clearing, blasting and higher traffic flows. At Ecoponte, one identified impact is related to potential spills contaminating the water in Guanabara Bay as a result of road accidents, causing environmental pollution and loss of water quality. These impacts are mitigated using management tools and prevention and emergency response systems, as well as by ensuring infrastructure works are conducted in strict compliance with applicable regulations.

ECOSYSTEM SERVICES VALUATION: IN PRACTICE

Remediation of soil erosion at Ecopistas

Ecopistas conducted a slope remediation project using coconut fiber mats throughout 2016. The initiative aims to reduce soil erosion and was presented to the Center for Sustainability Studies at Fundação Getulio Vargas (GVces).

EcoRodovias conducted research on the use of coconut fiber mats as part of an ecosystem services valuation program initiated in 2015. The Company-developed method was reported in a compendium of case studies published by GVces.

Erosion monitoring throughout the year demonstrated that the use of coconut fiber mats successfully reduced soil buildup by 92.7 metric tons per year, while also containing over 50 percent of the materials produced by erosion processes.

The valuation of ecosystem services from erosion control using coconut fiber mats was performed using the Avoided Cost Method (ACM), which measures the cost of removing soil buildup from erosion at R\$ 50/t. This research has been an important step in gaining an understanding of how ecosystem services can be used to increase competitiveness, reduce costs and enhance the positive impacts of the business on the environment.

Positive impacts from the Anchieta-Imigrantes System

Ecovias dos Imigrantes has operated the Anchieta-Imigrantes system since 1998. The concession covers a 176.8 km section of highway connecting São Paulo to the Port of Santos, the Cubatão Petrochemical Complex, industrial clusters in Santo André, São Bernardo do Campo, São Caetano do Sul, and the Santos Region, with a throughput of more than 30 million vehicles per year.

The concession agreement included a requirement to construct the down-mountain section of the highway. This section was opened to traffic on December 17, 2002, with a redesigned alignment in relation to the original design developed in 1986, including longer tunnels and state-of-the-art bridge design. The new design helps to reduce impacts on native vegetation in the affected section of the Serra do Mar system.

Ecovias compared avoided emissions from vegetation clearing between the two design scenarios, and their contribution to ecosystem services in the form of global climate regulation. Deforestation mitigated through reforestation projects was also taken into account.

In this assessment for the 20-year concession period, a comparison was made between the 1600 hectares of area required to be cleared for the initial design (baseline) and the 40 hectares cleared with the new design. The result was 1,560 hectares of clearing avoided.

A balance of emissions was also computed for the 78 hectares of clearing (40 hectares in the down-mountain section and 38 hectares in other disturbed areas), and the 298 hectares of reforestation. Carbon quantification was performed taking account of the stocks contained in the ecosystem, and an economic valuation was performed using the replacement cost method on the basis of the Social Cost of Carbon (SCC).

A positive externality was determined and estimated to amount to 26,000 tCO₂e removed through reforestation projects. In addition, 363,000 tCO₂e of emissions were estimated to have been mitigated through avoided deforestation, using the SCC method. Based on this tool, an economic value of R\$ 68 million has been attributed to the environmental damage avoided.

Valuation of ecosystem services such as erosion control and avoided emissions from construction enable us to calculate the environmental benefits from our infrastructure projects

SOCIAL CAPITAL UNGC-1, 2, 4, 5, 6



Social and relationship capital; Intellectual capital

Our offering of mobility and infrastructure services in important regions throughout the country directly and indirectly affect the lives of millions of Brazilians. In our most recent materiality process (*read more in Sustainability management, page 41*), our stakeholders expressed their views on the materiality of a range of issues – from user health and safety through employee retention to development of roadside communities – to the future and sustainability of the business.

Recognizing that our operations are critical to the flow of raw materials, goods and commodities through important corridors for both domestic and foreign trade, as well as for tourism and interstate travel, EcoRodovias Group has worked to build trust in our relations with a range of stakeholders, including governments, suppliers, employees, thought leaders and civil society. This chapter provides a summary of the results from our practices and relationships.

INTERNAL STAKEHOLDERS

In addressing the challenges faced in recent years, we relied on our workforce to achieve significant progress in productivity and excellence. New toll road acquisitions – the most recent of which was Ecoporte, in 2015 – and the strategic decision to focus on the toll road business have created a need for initiatives aimed at building cultural integration and redesigning the organizational structure.

Our employee relations are managed by our people management function, which reports to senior management and our parent company and comprises multiple areas dedicated to specific aspects such as compensation, development and human resources management; business partners representing the HR team at business units are responsible for applying established guidelines in day-to-day operations. Operating excellence, cost reduction, leadership recognition and promoting diversity have been some of the primary aspects addressed in recent years.

Our total workforce in 2016 was 4,542 people, decreasing 25 percent compared with 2015. This was primarily due to the disposal of logistics assets: the sale of Elog Sul, for example, resulted in a reduction in the number of employees at EcoRodovias, who are now employed by Multilog S.A. [G4-10](#)

There were also 140 terminations at Ecoporto Santos due to a redesign of the operational structure following the winding up of Ecoporto Transporte Ltda. due to the economic slowdown and contracted demand for transportation services.





Ecopistas

Corporate education

EcoRodovias founded a Corporate Academy in 2014 as a platform for planning and delivering training through a number of programs, including our Leadership School, Operations School and Excellence School. In 2016, the platform delivered a total of 83,233 hours of training, in a total investment of R\$ 1,001,339.29. Training subjects range from behavioral, technical and operational subjects to leadership development and sustainability topics such as occupational safety and the environment.

Our employee recognition and retention initiatives continued during the year to help ensure a positive internal climate and quality of service. The Group's Organizational Climate Survey for example, identified critical issues and opportunities for improvement in the workplace. The most recent edition of the survey in 2014, with an 81 percent response rate, revealed the need to improve our approach to performance and career management, initiatives to ensure the well-being of each employee, talent retention and leadership development.

Some of the developments in recent years include a new Performance Assessment Program. The Program, which incorporates three competencies assessment processes - 90°, 180° and 360° - is an integral part of our *Gente & Gestão* platform, by which each employee's performance is measured, assessed and translated into metrics and development goals.

Since 2015, 360° performance assessment committees have combined feedback from leadership (from supervisors to senior management) with feedback from employees and their immediate reports to help build engagement and inform internal recruiting processes, supporting our employees in developing solid careers within the Group.

Approximately 2,990 employees participated in the performance assessment cycle in 2016. Our competencies framework has also been revised to include new competencies that are better aligned with our future and business requirements.

Another initiative during the year aimed at developing talent and future leadership was the EcoRodovias Trainee Program. Out of 6,000 registered candidates, 2,000 met the specified profile requirements. The six selected candidates attended induction training and will begin work at our business units and parent company in 2017. As part of our commitment to organizational diversity, we engaged a firm specialized in recruiting for diversity to help attract young and ethnically diverse talent to the program.

More than 83,000 hours of technical, behavioral, operational and sustainability training were provided in 2016

Hours of training by employee category		Number of employees trained per category	Number of hours of training	Number of hours of training/number of employees by category
G4-LA9 Senior Manager	Men	9	389.00	43.22
	Women	0	0.00	0.00
Line Management	Men	37	840.56	22.72
	Women	10	101.10	10.11
Advisor	Men	1	114.50	114.50
	Women	1	26.00	26.00
Coordinator	Men	80	2,844.90	35.56
	Women	33	1,178.50	35.71
Administrative	Men	357	10,113.04	28.33
	Women	275	5,049.60	18.36
Customer service	Men	2,014	44,058.84	21.88
	Women	1,402	29,880.24	21.31
Interns	Men	7	30.68	4.38
	Women	7	58.00	8.29
Third-party	Men	474	883.30	1.86
	Women	27	27.00	1.00
Apprentices	Men	57	97.96	1.72
	Women	42	72.51	1.73
Total	Men	3,036	59,372.78	19.56
	Women	1,797	36,392.95	20.25

Health and safety

A key component of our Integrated Management System, the theme of occupational health & safety has also been singled out by stakeholders in periodic surveys. Preventing injuries and fatalities is a priority, ensuring the integrity of both employees and contractors.

In line with legal requirements and best practice in our market, we have chapters of the Internal Accident Prevention Committee (CIPA) and Specialized Occupational Health and Safety Service (SESMT) in place at all business units. The Health and Safety Committees in place within our organizational structure represented 100 percent of our internal stakeholders in 2016. [G4-LA5](#)

All Group companies, except Ecoponte, ECO101 and Elog, are certi-

fied to OHSAS 18001, attesting to our alignment with and observance of international occupational safety management standards. Renewal of certification requires periodic audits and corporate and local action plans.

Internal Accident Prevention Committees are set up annually, in accordance with applicable legislation, and are responsible for managing and preventing occupational injuries and diseases, investigating incidents, providing first aid, and conducting contingency procedures. Our Specialized Occupational Health and Safety Service (SESMT) is made up of health professionals, technicians and engineers who are responsible for engaging with employees and providing training on health and safety.

Diversity Program

Implemented in 2015, the initiative was created to formalize the Company's commitment to increasing diversity across all levels of the organization – including diversity of gender, race/color and people with disabilities. Medium-term goals (three years) have been set to balance the ratio for management and board positions to between 0.9 and 1.1 across the different ethnic/color groups in the regions in which the Company operates and for both genders.

Our Code of Conduct requires respect for gender diversity and equal opportunity at all subsidiaries. Discrimination and prejudice based on economic or social status, political convictions, ethnicity or sexual orientation and gender are strictly prohibited both internally and in relations with users, suppliers and other stakeholders.

Program progress in 2016:

- A succession planning review was performed to determine how many women and people of color have been recommended to progress to management and executive positions. The review found that 20.6 percent of employees recommended for management positions and 21 percent of employees recommended for managerial positions were women;
- leadership development programs are in place to further train our entire leadership team regardless of gender and race, ensuring a broader pool of talent in the succession process, which will be updated in 2017;
- EcoRodovias engaged a firm specialized in recruiting for diversity to help attract young and ethnically diverse talent to the program.

All formal agreements with unions representing our employees contain occupational health and safety clauses addressing matters such as the requirement to have Internal Accident Prevention Committees in place, communicate occupational injuries, conduct inspections and provide training, and to have grievance mechanisms available. All employees are covered by collective bargaining. [G4-LA8](#), [G4-11](#)

In 2016 the Group regrettably recorded two fatalities. The first, as a result of a run-over incident, occurred on the Ecovia toll road. The employee involved was struck by a car in Curitiba (PR) while attempting to cross the frontage road alongside the BR-476 highway on the way to work, on September 11.

The other incident involved an employee who was hit by a truck on the BR-277 near Matelândia (PR), on December 27. Silvino was a tow truck driver who had been called to respond to a cargo spill incident and was on the roadway when he was hit by a truck that had lost control. The employee had set up a safe work zone before beginning work, but the errant truck ploughed through.

EcoRodovias deeply regrets the loss of both employees and has conducted a detailed investigation into the root causes and factors leading to the incidents in order to prevent recurrence and provide information to the appropriate authorities on the causes of accidents.

Monitoring risks

G4-LA7

We are committed to reviewing our processes to reduce employee exposure to specific diseases and risks. Our employees' activities are not considered particularly hazardous, except in the electrical and electronic maintenance department; there is no risk for specific diseases. At Elog there remains a higher incidence of RSI and stress involving customer service positions.

Key initiatives

Some of our key initiatives to prevent risks and encourage safe behavior in the organization include:

- Safety Meetings - held weekly or biweekly at our business units;
- Hazard maps;
- Internal Accident Prevention Week - with contractors also participating;
- *Saúde Ativa* - a disease prevention program for all employees. In 2016, 455 people attended;
- Employee Well-Being Program (*Programa para o Bem-Estar do Colaborador - PROBEM*) - implemented at Ecovias, the Program provides psychosocial care, social and legal assistance and financial advice to employees and dependents through a 24-hour toll-free call center that evaluates and refers the employee to a network with more than 4 thousand health care professionals. In 2016, the program provided assistance to 102 employees;
- workplace exercise - each business unit has a workplace exercise and ECS program as part of a SESC initiative (*Programa Move*);
- prenatal courses - in 2016, 107 pregnant women participated in the *Mamãe EcoRodovias* program;
- *Elog + Segura* - a program focused on controlling risks and increasing safety at our intermodal logistics business units;
- Health Care for Tree Nursery Personnel - in 2015 an agreement was signed with Hospital Assunção under which tree nursery workers will be provided with a complete routine health check-up designed for people with special needs;
- monthly meetings including some health topics (sex education and oral hygiene) and social assistance for tree nursery workers and their family members.

EMPLOYEE HEALTH AND SAFETY INDICATORS - 2016

G4-LA6

	Company employees	
	Men	Women
Number of fatalities	2	0
Number of injuries	67	35
Number of occupational diseases	0	0
Number of lost days	14,658	16,481
Number of absenteeism days	131,924	148,325
Total number of scheduled employee work hours	5,621,778	3,731,016
Rates	Company employees	
	Men	Women
Absentee rate	2.35%	3.98%
Days lost rate	0.26%	0.44%
Occupational disease rate	0.00%	0.00%
Total recordable case frequency	0.00%	0.00%

Note: business units manage contractor information.



Tree nursery in São Bernardo do Campo (SP)

RATIOS OF STANDARD ENTRY LEVEL WAGE BY GENDER G4-EC5

Business Unit	Local minimum wage (in R\$)	Entry-level wage (in R\$)	Difference between entry-level wage and local minimum wage (in R\$)	Percentage of employees receiving entry-level wage
Ecoporto	1,020.55	1,021.00 (men) 1,020.55 (women)		4.64%
Elog	1,033.37	1,033.00 (men) and 1,033.37 (women)		0.48%
Ecosul	956.38	956.00 (men) and R\$ 1,018.68 (women)	62.30 (women)	0.97%
Ecovia	956.38	956.00 (men) and 956.38 (women)		7.27%
Ecovias	1,113.55	1,114.00 (men) and 1,113.55 (women)		59.83%
ECO101	979.14	1,019.00 (men) and 979.14 (women)	39.54 (men)	3.29%
Ecocataratas	1,097.75	1,098.00 (men) and \$ 1,097.75 (women)		40.53%
Ecopistas	961.40	961.40 (men) and 961.40 (women)		69.88
Ecoponte	1,043.33	1,043.00 (men) and 1,043.33 (women)		49.19%

Note: the ratio of the highest to the lowest wage is 7,134%.

CUSTOMERS AND USERS

The success of our business model hinges directly on the quality and responsibility with which our business units operate. In our initiatives to deliver safe conditions and higher levels of service – with a focus on user satisfaction and recognition – our primary challenge is to understand the needs of our customers throughout Brazil – including both toll road and logistics customers – and respond efficiently, while also preventing risks and potential noncompliance from affecting value creation.

A User Satisfaction Survey involving most of our toll road concessions seeks to better understand our strengths, opportunities for improvement and the investment needed to improve the experience for users on our toll roads.

Depending on the business unit, the frequency of the survey is either annual (Ecovias, Ecopistas, Ecoporte, Ecovia and Ecocataratas, Ecoporto) or biannual (Ecosul and Elog).

The business units with the most positive survey outcomes in 2016 were Ecoporte, which for the first year received positive ratings from 92.78 percent of users; Ecopistas, with 93.1 percent of motorists satisfied; and Ecovias, with 89.1 percent satisfaction (see table). G4-PR5

A range of indicators relating to the user and customer experience are also monitored through our Integrated Management System. This includes data relating to signage, visibility, traffic control and fluidity, tolling efficiency, roadside service response time and quality and number of accidents. Both light and heavy vehicle users can indicate critical issues within these aspects through our Satisfaction Survey.

Based on complaints received, our toll road operators have implemented a range of initiatives:

- increasing the frequency of road sweeping operations;
- improving contractor training to ensure that our road surfaces are kept clean during roadworks;
- improving speed signage on electronic tolling lanes.

USER SATISFACTION G4-PR5

Business Unit	Sample (no. of people)	Positive	Fair	Negative
Ecoporto (%)	23	84.62	-	15.38
Ecovia (%)	600	74.00	19.67	6.33
Ecovias (%)	600	89.10	10.40	0.50
Elog Sudeste (%)	50	61.00	35.00	4.00
Ecocataratas (%)	761	77.58	16.49	5.93
Ecopistas (%)	753	93.10	5.70	1.20
Ecoporte (%)	263	92.78	6.46	0.76

USER CALLS - MOST FREQUENT SUBJECTS

Compliments			Complaints	
Business Unit	Volume	Type of compliment	Volume	Type of complaint
ECOVIAS	30	Road services/operation center/medical assistance	129	Toll evasion fines
Ecosul	65	SAU customer service	671	Objects on road
ECO101	181	Roadside mechanical assistance service	450	Roadworks
Ecocataratas	25	Complements for services	262	Objects on road
Ecopistas	237	SAU employee service	552	Tollgates closing on vehicles
Ecovia	20	SAU customer service	227	Objects on road
Ecoporte	151	Roadside mechanical assistance	96	Change of electronic tolling system

Safer roads G4-14, G4-PR1

Beyond contractual compliance, our investments in road safety and modernization are focused on delivering a high-quality user experience, preventing accidents (both in number and in severity) and mitigating risks to the integrity of our road users. Our initiatives also help protect the integrity of neighboring communities by preventing incidents such as run-over accidents in densely populated areas.

In line with the requirements of OH-SAS 18001, we work to meet concession contract requirements and undertake risk management actions to minimize both financial and non-financial losses (such as damage to our reputation and to government and public trust) that could affect our business sustainability. Some of our routine actions include:

- identifying and closing off unauthorized junctions;
 - preventive/corrective automatic tolling system and gate maintenance;
 - defensive driving training, road signage and accident response drills;
 - training on safety and roadside mechanical assistance and pre-hospital care for our technical teams;
 - traffic safety campaigns in partnership with municipal traffic and state and federal road police agencies;
 - providing reflective bike stickers to residents in roadside communities and contractor employees;
 - Accident Prevention and Reduction Programs;
 - awareness raising programs at our business units, such as “*Faro Ligado*” and “*Café na Passarela*”;
 - fire response training and traffic safety campaigns involving neighboring communities.
- In 2016, EcoRodovias invested more than R\$ 445 million in engagement and awareness programs and projects geared to light and heavy vehicle drivers, employees, contractors and members of roadside communities in order to enhance safety levels and well-being on and around our toll roads. Some of our key initiatives are described on the following page.
- improving road surfaces, building safer approaches and footbridges, and building safer infrastructure;
 - road surface technologies: asphalt with added polymers and tire rubber powder from used tires, improving comfort and road surface quality;
 - state-of-the-art safety solutions: barriers and impact attenuation devices;
 - roadway improvements: these include regular road surface cleaning to remove objects, road marking improvements and landscaping;
 - monitoring safety and traffic flow indicators: measuring accident, injury and fatality rates and mapping critical traffic congestion points;
 - routine and special road infrastructure maintenance;
 - preventive and corrective Smart Road System maintenance;

Satisfaction Surveys have demonstrated progress in the user and customer experience, as well as informing improvements based on the most frequent and important complaints

- Ecocataratas: markers were installed to prevent vehicles from jumping the queue at junctions. Speed reducers and signage and lighting improvements were also implemented on our toll roads.
- Ecopistas: fence inspections, emergency response drills, studies addressing critical roadway sections, impact attenuators and guard rail extensions.
- Ecofonte: replacement of the bridge lighting system and awareness campaigns were some of the most significant investments. Speed radars were also installed along the length of the bridge.
- Ecosul: in 2016, Ecosul implemented horizontal signage improvements at several sections of the highway and invested in awareness campaigns geared to truck drivers, roadside communities and passenger vehicle drivers. During the year, Ecosul secured approval from the National Land Transportation Agency (ANTT) for a new lighting project with a focus on road user safety as well as devices for roundabouts, junctions and bridges considered critical. In total, improvements were developed at 11 sections of BR-116 and BR-392, involving a total of 78 light poles and 148 LED lamps.

ROADSIDE COMMUNITIES

The direct influence that our toll road concessions and logistics operations have on neighboring communities has led us to develop relationships of mutual benefit, trust and transparency.

In addition to a social investment policy that prioritizes and supports programs focused on education, safety, health, safe traffic behavior and sustainability, we have worked to mitigate risks that are inherent to our business, such as environmental

damage (soil and water contamination), accidents involving vehicles carrying hazardous cargo, run-over accidents, noise and air pollution – while also helping to maximize the benefits of mobility and regional economic development deriving from our toll roads. [G4-SO2](#)

Some business units have specific monitoring initiatives in place that address specific local conditions, where monitoring noise levels from heavy equipment and the traffic of heavy vehicles is a priority. Elog creates no actual or potential negative impacts on communities as all sites are in industrial zones. [G4-SO2](#)

Activities by our business units' and corporate sustainability committees have strengthened our presence as an agent of good corporate citizenship and environmental practices where we operate. These committees are responsible for analyzing and deciding on whether to support sustainability projects, as well as dealing with local community requirements and studying improvements.

The communities influenced by our operations are addressed by social and environmental programs. In 2016, tax-deducted program investment was R\$ 9.1 million – above the preceding year's R\$ 7.9 million.

Topics such as education, environmental awareness, community development and noise management are addressed by projects aimed at communities

Business unit programs

G4-SO1, G4-EC1

Ecosul

Saúde na Estrada was implemented in 2001 with a view to providing health care services to users free of charge. Services include blood sugar, blood pressure and cholesterol testing, nutritionist advice, visual acuity and educational material on STDs/Aids.

Ecovias

Capacitar creates work and income opportunities for members of roadside communities bordering the Anchieta-Imigrantes highway system, by means of training and qualifications courses. In 2015 it received recognition from the United Nations Development Program (UNDP) as an inclusive and high-performance business model in sustainable de-

velopment. The program created a new motorcyclist training module for safer traffic. 100 people were reached by the program in 2016, including 42 community members and 58 motorcyclists.

Our Tree Nursery promotes the inclusion of intellectually deficient persons in the production of native species samplings in environmental offsetting programs. The Tree Nursery expansion was completed in 2016 to produce seedlings for another Group business unit. The team consists of 26 persons.

ECO101

Diagnóstico Rápido Participativo (DRP) is a tool that allows communities to analyze and share knowledge on the reality surrounding them. A total of 33 participants attended DRP meetings in the municipality of Viana organized by the concessionaire, with local authorities (Secretary of Sustainable



Development) and regional associations in attendance. The meeting in the municipality of Rio Novo do Sul was attended by 30 participants.

Ecocataratas

EcoCultural - Apae - this project was designed to develop partnerships to provide support to a Program for People with Special Needs.

Ecopistas

ECO PET collects PET containers at seven eco-stations along the highway. The material is sent to the Municipal Environmental School in the municipality of Itaquaquecetuba, where it supports environmental education for children from primary schools.

Corporate

G4-SO1, G4-EC1

Ecoviver - This program is coordinated from a corporate viewpoint and prioritizes public school education on topics such as water, energy and waste management. In 2016 the program covered 190 schools in 18 roadside towns. Initiatives were developed based on discussions with public school principals and teachers, covering areas adjacent to the Ecosul, Ecocataratas, Ecovia, Ecopistas and Ecovias toll roads.

The program consists of a set of activities both in and out of the classroom as part children's daily school routine, as well as workshops and guidance for teachers. Schools and neighborhoods are regularly toured by exhibitions with participants' projects, as well as professional theater performances supported by EcoRodovias.

De Bem com a Via - The *De Bem com a Via* project created in 2008 by EcoRodovias Group develops initiatives in line with the UN

Decade of Action for Road Safety 2011-2020, which provides access to traffic education with a focus on the most vulnerable audiences, i.e. children, teenagers and residents of socially vulnerable locations, involving schools and communities located adjacent to our toll roads.

The program proposition is to undertake initiatives based on art education through specific activities in communities, schools and traffic education circuits, with special content for children, teenagers and adults. In addition to interactive performances, the traffic education tracks feature electric mini-cars, bicycles, pedestrian crossings, traffic lights and traffic signs adapted for children who, under the supervision of trained adults, can experience traffic conditions in practice.

The project completed its eighth year of activities and in 2016 was expanded to ECO101.

Project activities covered the entire year and roughly 60 thousand persons have participated since 2008.

Sitting Volleyball - EcoRodovias sponsored a special initiative to provide staff members with the experience of attending the 2016 Rio de Janeiro Paralympic sitting volleyball matches. Three staff members from each business unit of EcoRodovias Group, which sponsored the national Paralympic volleyball teams, were selected and received tickets, travel, accommodation and meals to watch the men's and women's Paralympic volleyball finals. A total of 30 employees were selected.



Eco101

CREATING VALUE – INVESTMENT IN COMMUNITY PROGRAMS G4-EC1

Business Unit	Project	Institution	Amount	Nature of project
ECS	“Santa Claus Exists”	67 charities providing shelter to vulnerable minors	289,378.00	Social responsibility
ECO101	<i>Rede Escolar</i>	Escolaiá	144,000.00	Education project
Ecocataratas	<i>Ecocultural</i>	Apae – Association of Parents and Friends of People with Special Needs – Cascavel/PR	35,000.00	Cultural project
	<i>Impulsão</i>	Colégio Expressão – female teenage athletes from 13 to 16 years of age are provided with psychological support, orthopedic treatment and study incentives (scholarships)	30,000.00	Education project
	<i>Respeito à Vida – PNI</i>	<i>Escola Parque</i> – Iguaçu National Park	28,000.00	Education project
Ecopistas	<i>Voluntários do Bem</i>	Itaquaquetuba Municipal Shelter	1,935.40	Health care project
	<i>Voluntários do Bem</i>	Itaquaquetuba Environment School	750.00	Education project
	<i>Segura o Bicho</i>	Roadside communities	4,800.00	Education project
Ecoponte	Tree Nursery	<i>Samjarboni</i>	231,304.48	Degraded area preservation and remediation
Ecoporto	National Anti-Drug Project – Environmental Protection and Traffic Education	Instituto Brasileiro de Educação e Cultura Municipalista	4,800.00	Education project
Ecosul	Pelotas/Fiergs Food Bank	Pelotas/Fiergs Food Bank	20,400.00	Health care project
	Ecosul Athletics Circuit	A program in partnership with institutions such as Sesi, the Brazilian Army and the Physical Education School at the Federal University of Pelotas	17,714.00	Sports project
	Winter Clothing Campaign	Several institutions within <i>Polo Rodoviário</i>	11,170.00	Health care project

INSTITUTIONAL AND INDUSTRY RELATIONS

Another important venue for discussion with society in Brazil is our interaction with public authorities, governments and our industry.

Relations with regulators and grantor authorities are essential for business continuity due to the nature of the concessions business, which is based on long-term agreements with clauses regarding investments, toll adjustments and renewals and extensions.

The Company has a policy of monitoring and mitigating risks in these relations, including aspects such as changes in the regulatory framework – as in the case of the Truck Drivers’ Act enacted in 2015, which changed the toll system based on the number of axles, for example – and compliance, ethics and integrity criteria.

Brazil has seen a large number of corruption investigations in recent years involving the public and private sectors, underlining the need for transparency in companies operating in industries such as infrastructure.

We are aware of the need to report on our mechanisms for countering corruption and fraud and to ensure that our relations with governments and institutions are based on transparency

All EcoRodovias business units undergo regular external audits pursuant to Brazilian legislation and corporate governance standards (*read more in Governance and ethics, page 22*). The Group also complies with Brazilian electoral legislation, which restricts financial contributions to individuals in election campaigns. In 2016 the Group did not make financial contributions to any parties. [G4-S06](#)

It is the Group's policy not to lobby or otherwise make any requests from the grantor authority except where this is lawful or in matters essential or applicable to the entire sector. We are also wholly opposed to unfair competition practices, corruption or fraud in public bidding procedures, as detailed in our Code of Corporate Conduct.

The Company seeks to maintain continual dialog with the government and regulating bodies, providing information on compliance with standards, contractual obligations and clauses and sharing challenges in connection with operating conditions - including concession terms and toll reviews, for example. Due to our corporate strategy, which seeks to capture synergies from contract addenda and contractual dealings in line with business opportunities, this topic is especially relevant for our business success (*read more in Future vision, page 30*).

Also important is our participation in public discussions, whether directly or through organizations such as the Brazilian Tollroad Concession Association (ABCR), to seek solutions for local challenges. Examples of this include our investments to improve traffic conditions and safety for users of public transport terminals near the Rio-Niterói bridge operated by Coponte as a result of our engagement with public authorities and other players involved. Direct engagement is preferably through

contact with public authorities in regions of direct influence for purposes such as planning corporate social projects. [G4-16](#)

SUPPLIERS

We have 21,563 active companies in our supply chain, of which 4,380 suppliers did business with us in 2016. Partners are divided into seven major classes: special services, miscellaneous services, materials and equipment, high environmental impact materials, essential and mandatory basic services, highway police assistance service agreements - federal and São Paulo state - and large-scale suppliers. [G4-12](#)

Projects and initiatives dedicated to these business partners have different financial, social and environmental purposes, including development of local economies, cost reduction, productivity gains, quality assurance for goods and services and compliance with labor, environmental and human rights requirements.

In 2016 we incorporated a Procurement Director function reporting directly to senior management in our organizational structure. The goal is to ensure a strategic approach across the procurement, supply or approval and supplier relations processes in order to develop mutually beneficial relationships and ensure that resources available to our business units' projects are used efficiently.

Supplier relations are based on the Code of Corporate Conduct, which contains specific requisites on the prohibition of slave, forced or child labor at all levels of the value chain, under penalty of immediate contract termination. These items are contained in an addendum titled 'General Conditions of Service', which is included in every business agreement.

Monitoring and assessment

In recent years, our risk, social and environmental capabilities have been enhanced as a result of investments by our Sustainability teams at our parent company and the procurement functions at our business units. Certain supplier classes, such as outsourced engineering services and partners and service providers located a distance from large towns where there is a shortage of skilled labor and/or which outsource intensively, are assessed with regard to the risk of child or degrading labor, for example.

G4-HR5, G4-HR6

No cases were confirmed or brought to our knowledge in 2016 or previous years, yet it is Company policy to be permanently alert to such risks. We have had a vendor database system in place since 2012 through which we assess performance, especially for service providers. The technical function responsible reviews supplier documentation and certificates for validity, and conducts labor, tax, environmental and human rights screening. Any suppliers who fail the screening process are precluded from doing business with the Company.

The Company assesses suppliers considered to be most environmentally sensitive – especially suppliers providing pre-hospital roadside care, hazardous waste handling services and mechanical assistance (towing) – which are at risk of contaminating the ground and water resources if their operations are not properly managed.

Initiatives implemented by our Sustainability function mapped 272 suppliers for environmental sensitivity, of which 188 were considered to pose a greater risk for significant negative environmental impacts, and 85 were assessed, including pre-hospital care, mechanical assistance, road surfacing, signage,



Ecocataratas

OAE (Special Structures) maintenance, building maintenance and fleet maintenance suppliers. In 2016 no serious events were reported and no business relationships were terminated due to environmental or human rights breaches or issues.

G4-EN33

A photograph of several young green seedlings in black nursery bags, arranged in rows. The seedlings are small with a few leaves, and the soil in the bags is dark and moist. The background is slightly blurred, showing more seedlings in the distance.

ABOUT THIS REPORT

**GRI CONTENT
SUMMARY**

**ASSURANCE
REPORT**

**CORPORATE
INFORMATION AND
ACKNOWLEDGMENTS**

A photograph showing numerous small green seedlings growing in black plastic nursery bags. The bags are arranged in rows, and the soil is dark and moist. The seedlings have several leaves and are in various stages of growth. A purple semi-transparent box is overlaid on the top left of the image, containing white text.

In this edition of our report, we describe the challenges we faced in 2016 and report on future projects using internationally recognized reporting methods

EcoRodovias Group is pleased to present our *Sustainability Report 2016* to our users, investors, shareholders, employees, communities and business partners. This annual report describes our primary achievements, indicators and projects in the year, as well as the strategic goals and commitments for each of our businesses. [G4-29](#), [G4-30](#)

As in previous years, this report has been prepared in accordance with the Core option under the Global Reporting Initiative G4 guidelines. We have also sought to improve our approach to describing our investments and strategy and integrating financial aspects with non-financial aspects of the business, based on the integrated reporting guidelines of the International Integrated Reporting Council (IIRC). We also observe the requirements established by the Brazilian Association of Listed Companies (ABRASCA) for reporting on performance. [G4-32](#)

The content and data in this report has been selected based on two criteria: the first is the Group's matrix of material sustainability issues as revised in 2016 following a materiality process involving both internal and external stakeholders (*read more in Sustainability management, page 41*). We also took account of the Group's current business strategy, which reflects the issues and operating indicators that are most relevant to shareholders, investors, grantor authorities and other industry partners. [G4-18](#)

The GRI disclosures and data in this report are for the period from January 1 to December 31, 2016, and cover our toll road businesses (Ecovia, Ecoponte, Ecopistas, Ecovias dos Imigrantes, Ecocataratas, Ecosul and ECO101) and, in some cases, our logistics (Elog)

and port (Ecoporto Santos) businesses. There have been a number of scope variances as a result of structural changes in 2016, such as the disinvestment from the logistics business and the approach taken to presenting the relevant financial and non-financial disclosures; all exceptions are described throughout the text or in footnotes to the relevant graphs, charts and tables. [G4-17](#), [G4-22](#), [G4-23](#), [G4-28](#)

All economic and financial information has been compiled based on Brazilian regulations, the reporting standards issued by the Brazilian Accounting Practice Committee (CPC), and International Financial Reporting Standards (IFRS). The sustainability disclosures in this report have been subject to independent, limited assurance as described in the relevant section of this document. [G4-33](#)

EcoRodovias publishes *Sustainability Reports* as a key tool for enhancing transparency and accountability to the market, government and society. Any questions or feedback on the content and disclosures in this report can be submitted to the Sustainability Affairs and Investor Relations teams (contact details are provided at the end of the report). [G4-31](#)





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INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

Directors, managers and other stakeholders of Ecorodovias Infraestrutura e Logística S.A. São Paulo - SP

Introduction

We have been engaged by Ecorodovias Infraestrutura e Logística S.A. ("Ecorodovias" or "Company") for the purpose of applying limited assurance procedures on the sustainability information disclosed in its Sustainability Report 2016 ("Report"), for the year ended December 31, 2016.

Responsibilities of Ecorodovias management

Company management is responsible for the preparation and fair presentation of the sustainability information disclosed in the Report in accordance with the Global Reporting Initiative Sustainability Reporting Guidelines (*GRI-G4*), and for the internal controls necessary to ensure this information is free from material misstatement, whether due to fraud or error.

Independent auditor's responsibility

Our responsibility is to express a conclusion about the information disclosed in the Report based on the limited assurance engagement conducted in accordance with

Technical Notice (CT) 07/2012 approved by the Federal Accounting Council and prepared in accordance with NBC TO 3000 (Assurance Engagements Other Than Audits and Reviews), issued by the Federal Accounting Council (CFC), which is the equivalent to international standard ISAE 3000 issued by the International Federation of Accountants, applicable to non-historical information. These standards require compliance with ethical requirements, including independence and that the engagement be conducted so as to provide a limited assurance that the information disclosed in the Report taken as a whole is free from material misstatement.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) primarily consists of making inquiries to Company management and other employees involved in preparing the information in the Report and applying analytical procedures to obtain evidence that permits us to make a limited assurance conclusion about the sustainability information taken as a whole. A limited assurance engagement also requires additional procedures when the independent auditor learns of issues which lead them to believe that the information in the Report taken as a whole could present material misstatement.

The selected procedures were based on our understanding of aspects relative to the compilation, materiality and presentation of the information in the Report, as well as other engagement circumstances and our considerations about areas and processes related to the sustainability information disclosed in the Report in which material misstatement could exist. Our procedures consisted of:

- (a) planning the engagement, considering the materiality of each aspect to Ecorodovias' activities, the relevance of the disclosures, the volume of quantitative and qualitative information, and internal controls that served as a basis for preparing the Report. This analysis was used to determine the disclosures to be tested in detail;
- (b) understanding and reviewing the information disclosed on the management approach to material aspects;
- (c) reviewing the processes used to develop the Report and its structure and content, based on the Principles on Content and Quality of the Global Reporting Initiative Sustainability Reporting Guidelines (GRI-G4);

(d) evaluating non-financial disclosures on a sample basis:

- understanding the calculation method and procedures used to compile disclosures through interviews with the managers in charge of preparing the information;
- applying analytical procedures to the quantitative information and inquiries about the qualitative information and how it relates to the sustainability disclosures contained in the Report;
- analyzing the evidence supporting the disclosures;
- visits to Ecorodovias' offices to perform these procedures as well as those in (b) and (c);

(e) analyzing the reasonableness of explanations for omitted performance disclosures related to aspects and issues identified as being material in the Company's materiality process;

(f) comparing financial figures against the financial statements and/or accounting records.

We believe that the information, evidence and findings of our engagement are sufficient and appropriate to provide a basis for our limited conclusion.

Scope and limitations

The procedures applied in a limited assurance engagement are substantially less in extent than those applied in a reasonable assurance engagement. Consequently, we are

not able to obtain reasonable assurance that we would become aware of all significant matters that would be identified in a reasonable assurance engagement, the objective of which is to issue an opinion. Had we conducted a reasonable assurance engagement, we might have identified other issues and possible misstatements in the Report.

Non-financial data is subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate or estimate this data. Qualitative interpretations of the data's materiality and accuracy are subject to individual assumptions and judgments. Furthermore, we did not perform any procedures on any data provided for prior periods to allow an adequate assessment of sustainability policies, practices and performance, or on any future projections.

Conclusion

Based on the procedures described herein, no matter has come to our attention that causes us to believe that the information in the Report was not compiled, in all material respects, in accordance with the Global Reporting Initiative Sustainability Reporting Guidelines (GRI-G4) and the records and files used as a basis for preparing the report.

São Paulo, April 13, 2017

KPMG Assessores Ltda.
CRC 2SP034262/O-4 F-SP

Eduardo V. Cipullo
Accountant CRC 1SP135597/O-6

KPMG Financial Risk & Actuarial Services Ltda.

Ricardo Algis Zibas

GRI CONTENT SUMMARY

- ASSURANCE PROVIDED
- ASSURANCE NOT PROVIDED

STANDARD DISCLOSURES

Standard disclosures	Page/where addressed	External assurance	Sustainable Development Goals*
Strategy and analysis			
G4-1 Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	4, 5	■	
Organizational profile			
G4-3 Name of organization	14	■	
G4-4 Primary brands, products, and services	16, 17	■	
G4-5 Location of organization's headquarters	São Paulo.	■	
G4-6 Number of countries where the organization operates, and names of countries either with major operations or that are specifically relevant to the sustainability issues covered in the report	16, 17	■	
G4-7 Nature of ownership and legal form	22	■	
G4-8 Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	16, 17	■	
G4-9 Scale of organization	16, 17	■	
G4-10 Total number of employees UNGC	64	■	8
G4-11 Percentage of total employees covered by collective bargaining agreements UNGC	67	■	8
G4-12 Description of organization's supply chain	76	■	
G4-13 Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	14	■	
G4-14 Whether and how the precautionary approach or principle is addressed by the organization	71	■	

Standard disclosures	Page/where addressed	External assurance	Sustainable Development Goals*
G4-15 List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	41	■	
G4-16 List memberships of associations (such as industry associations) and national or international advocacy organizations	82	■	
Identified material aspects and boundaries			
G4-17 List all entities included in the organization's consolidated financial statements or equivalent documents	86	■	
G4-18 Explanation of the process for defining the report content and aspect boundaries	86	■	
G4-19 List of all material aspects identified in the process for defining report content	45	■	
G4-20 For each material aspect, report the aspect boundary within the organization	44	■	
G4-21 For each material aspect, report the aspect boundary outside the organization	44	■	
G4-22 Effect of any restatements of information provided in previous reports, and the reasons for such restatements	80	■	
G4-23 Significant changes from previous reporting periods in the scope and aspect boundaries	80	■	
Stakeholder engagement			
G4-24 List of stakeholder groups engaged by the organization	44	■	
G4-25 Basis for identification and selection of stakeholders with whom to engage	44	■	
G4-26 The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	44	■	
G4-27 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns	44	■	
Report profile			
G4-28 Reporting period (such as fiscal or calendar year) for information provided	80	■	
G4-29 Date of most recent previous report (if any)	80	■	

STANDARD DISCLOSURES

Standard disclosures	Page/where addressed	External assurance	Sustainable Development Goals*
G4-30 Reporting cycle (such as annual, biennial)	80	■	
G4-31 Contact point for questions regarding the report or its contents	80	■	
G4-32 'In accordance' option the organization has chosen	80	■	
G4-33 Policy and current practice with regard to seeking external assurance for the report	80	■	
Governance			
G4-34 Governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts	22	■	
G4-40 Nomination and selection processes for the highest governance body and its committees	25	■	
G4-41 Processes to ensure conflicts of interest are avoided and managed	41	■	
G4-42 The highest governance body's and senior executives' roles in defining policies and goals related to managing impacts	30	■	
G4-43 Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	25	■	
G4-44 Processes for evaluation of the highest governance body's performance	25	■	
G4-45 Responsibilities for implementing economic, environmental and social policies	24, 41	■	
G4-46 The highest governance body's role in reviewing the effectiveness of the organization's risk management processes	38, 40	■	
G4-48 The highest committee or position that formally approves the sustainability report and ensures that all material aspects are covered	24		
G4-49 Process for communicating critical concerns to the highest governance body	24		
G4-50 Nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	24		
Ethics and integrity			
G4-56 The organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	14, 24, 27	■	16

SPECIFIC STANDARD DISCLOSURES

Material aspects	DMA and disclosures	Page/ where addressed	External as- surance	Sustainable Development Goals*	
Economic					
ECONOMIC PERFORMANCE UNGC	G4-DMA Management approach	51, 52, 53	■		
	G4- EC1 Direct economic value generated and distributed	73, 75	■	2, 5, 7, 8, 9	
	G4-EC2 Financial implications and other risks and opportunities due to climate change	40	■	9, 13	
	G4-EC3 Coverage of the organization's defined benefit plan obligations	The Company's private pension plan offers both PGBL (free benefit annuity) and VGBL (annuity with survivor coverage) plans and investment funds F8 (100 percent fixed income), V15 (up to 15 percent in variable income and the remainder in fixed income) and V30 (up to 30 percent in variable income and the remainder in fixed income). Company contributions are made into PGBL F8 and participant contributions according to the individually selected plan design, with separate criteria for two employees groups (salaries of up to R\$ 3,661.50 and salaries above this amount). Total Group contributions in 2016 were R\$ 4,122,952.00		■	
	G4-EC4 Financial assistance received from government	None	■		
MARKET PRESENCE	G4-DMA Management approach	64, 65	■		
	G4-EC5 Ratio of standard entry level wage by gender compared to local minimum wage at significant locations of operation	69	■		
INDIRECT ECONOMIC IMPACTS	G4-DMA Management approach	73	■		
	G4-EC7 Development and impact of infrastructure investments and services supported	35	■	2, 5, 7, 9, 11	
Environment UNGC					
MATERIALS	G4-DMA Management approach	60, 62			
	G4-EN1 Materials used by weight or volume	62		12	
	G4-EN2 Percentage of materials used that are recycled input materials	62		12	
ENERGY	G4-DMA Management approach	58	■		
	G4-EN3 Energy consumption within the organization	58	■	7, 8, 12, 13	
	G4-EN6 Reduction of energy consumption	58	■	7, 8, 12, 13	

SPECIFIC STANDARD DISCLOSURES

Material aspects	DMA and disclosures	Page/ where addressed	External as- surance	Sustainable Development Goals*
WATER	G4-DMA Management approach	60	■	
	G4-EN8 Total water withdrawal by source	60	■	6
	G4-EN10 Percentage and total volume of water recycled and reused	60	■	6, 8, 12
BIODIVERSITY	G4-DMA Management approach	62, 63		
	G4-EN11 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	62	■	6, 14, 15
	G4-EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	62	■	6, 14, 15
EMISSIONS	G4-DMA Management approach	61	■	
	G4-EN15 Direct greenhouse gas (GHG) emissions (Scope 1)	61	■	3, 12, 13, 14, 15
	G4-EN16 Energy indirect greenhouse gas (GHG) emissions (Scope 2)	61	■	3, 12, 13, 14, 15
	G4-EN17 Other indirect greenhouse gas (GHG) emissions (Scope 3)	61	■	3, 12, 13, 14, 15
	G4-EN18 Greenhouse gas (GHG) emissions intensity	61	■	13, 14, 15
	G4-EN19 Reduction of greenhouse gas (GHG) emissions	55, 61	■	13, 14, 15
EFFLUENTS AND WASTE	G4-DMA Management approach	57, 60		
	G4-EN23 Total weight of waste by type and disposal method	60	■	3, 6, 12, 14
	G4-EN24 Total number and volume of significant spills	57	■	3, 6, 12, 14, 15
PRODUCTS AND SERVICES	G4-DMA Management approach	55		
	G4-EN27 Extent of mitigation of environmental impacts of products and services	55	■	6, 8, 12, 13, 14, 15
TRANSPORTATION	G4-DMA Management approach	61	■	
	G4-EN30 Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	61	■	11, 12, 13
OVERALL	G4-DMA Management approach	54, 55	■	
	G4-EN31 Total environmental protection expenditures and investments by type	55	■	7, 9, 12, 13, 14, 15, 17

Material aspects	DMA and disclosures	Page/ where addressed	External assurance	Sustainable Development Goals*
SUPPLIER ENVIRONMENTAL ASSESSMENT	G4-DMA Management approach	77	■	
	G4-EN33 Significant actual and potential negative environmental impacts in the supply chain and actions taken	77	■	16
Social - labor practices and decent work UNGC				
OCCUPATIONAL HEALTH AND SAFETY	G4-DMA Management approach	66, 67, 68		
	G4-LA5 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	66	■	3, 8
	G4-LA6 Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and gender	68	■	3, 8
	G4-LA7 Workers with high incidence or high risk of diseases related to their occupation	68	■	3, 8
TRAINING AND EDUCATION	G4-LA8 Health and safety topics covered in formal agreements with trade unions	67	■	3, 8
	G4-DMA Management approach	65, 66	■	
	G4-LA9 Average hours of training per year per employee by gender, and by employee category	66	■	4, 5, 8
Social - human rights UNGC				
CHILD LABOR	G4-DMA Management approach	77	■	
	G4-HR5 Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	77	■	5, 8, 16
FORCED OR COMPULSORY LABOR	G4-DMA Management approach	77	■	
	G4-HR6 Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	77	■	5, 8, 16

SPECIFIC STANDARD DISCLOSURES

Material aspects	DMA and disclosures	Page/ where addressed	External assurance	Sustainable Development Goals*
Category: social – society				
LOCAL COMMUNITIES UNGC	G4-DMA Management approach	55, 72, 73, 74, 75	■	
	G4-SO1 Percentage of operations with implemented local community engagement, impact assessment, and development programs	73, 74	■	1, 2
	G4-SO2 Operations with significant actual or potential negative impacts on local communities	55, 72	■	1, 2
ANTI-CORRUPTION UNGC	G4-DMA Management approach	27	■	
	G4-SO3 Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	27	■	16
	G4-SO4 Communication and training on anti-corruption policies and procedures	27	■	16
	G4-SO5 Confirmed incidents of corruption and actions taken	27	■	16
PUBLIC POLICY	G4-DMA Management approach	76	■	
	G4-SO6 Total value of political contributions by country and recipient/beneficiary	76	■	16
Category: social – society				
CUSTOMER HEALTH AND SAFETY	G4-DMA Management approach	71	■	
	G4-PR1 Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	71	■	3
	G4-PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	None	■	3
PRODUCT AND SERVICE LABELING	G4-DMA Management approach	70	■	
	G4-PR5 Results of surveys measuring customer satisfaction	70	■	
COMPLIANCE	G4-DMA Management approach	91	■	
	G4-PR9 Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	The total monetary value of significant fines was R\$ 753,587.62 relating to incidents on Ecovia (R\$ 290,524.50) and Ecopistas (R\$ 463,063.12)	■	

**Sustainable Development Goals*

1. *No Poverty*
2. *Zero Hunger*
3. *Good Health and Well-being*
4. *Quality Education*
5. *Gender Equality*
6. *Clean Water and Sanitation*
7. *Affordable and Clean Energy*
8. *Decent Work and Economic Growth*
9. *Industry, Innovation and Infrastructure*
10. *Reduced Inequalities*
11. *Sustainable Cities and Communities*
12. *Responsible Consumption and Production*
13. *Climate Action*
14. *Life Below Water*
15. *Life on Land*
16. *Peace, Justice and Strong Institutions*
17. *Partnerships for the Goals*

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