



# SUSTAINABILITY 2017-2018



PETROCOQUE



## Message from Management GRI 102-14



*From right to left, Mario Jorge da Silva, CEO and Luis Guilherme Stella Lima, Commercial Director*

What does it mean to be sustainable if not managing resources in a way that meets the expectations of an organization's shareholders, not just today, but for tomorrow as well? At Petrocoque, we believe our contribution to society goes well beyond just manufacturing and selling our products. The work we do to ensure Petrocoque's continuity is not focused solely on profitability or excellence, but also on ethics, developing human capital and responsibility.

We revitalized our 7 Values in 2018, condensing them into 4 main principles: SAFETY, RESPECT, TEAM and EXCELLENCE. These are nonnegotiable principles and are part of our everyday decision-making process. This underlines our commitment to protecting the environment, respecting human rights and fighting corruption, in line with the United Nations Global Compact. We can also highlight our progress in corporate governance over the past several years, which includes consolidating the Ethics, Compliance and Anticorruption Program.

Financially, in the past two years we have posted the company's best financial results ever as market conditions have improved, significantly benefiting our business. We have a wide-ranging and transparent relationship with our stakeholders who are always kept abreast of our actions and results. Our Management Reports and Financial Statements

for the past five years are available on our website.

In 2018, aware of trends on the market and pressure from society, we reviewed and approved our 2028 Strategic Plan (SP 2028) and Business Plan (BP 2019-2023). We have adopted a strategy that pays close attention to risk and return and we are committed to improving process efficiency and increasing productivity as we move ahead.

In line with our Values, Mission and Vision, we will continue to focus our efforts on making Petrocoque one of the best companies to work for in the region and being a reliable partner from customers and generating value for shareholders.

Finally, we would like to thank our team for their energy and commitment, which is what has helped Petrocoque continue to deliver standout results with their competitive, yet ethical approach to business, as well as our shareholders, the market and society for their trust in us.



## Report Presentation [GRI 102-1](#), [102-46](#), [102-47](#), [102-50](#), [102,52](#), [102-54](#)

The 2017-2018 Sustainability Report presents the positive and negative, direct and indirect impacts caused by Petrocoque S.A. Indústria e Comércio between January 1 and December 31, 2017 and January 1 and December 31, 2018.

The report presents the main indicators monitored by the company, particularly its social and environmental initiatives, and explains how they integrate with our financial objectives to provide a transparent overview of how Petrocoque generates value over time.

This report is developed internally and will be produced biannually from this edition; the report is intended to become a sustainability management tool for periodic monitoring.

The financial and operational figures are presented on a consolidated basis and in line with Brazilian accounting practices; all figures can be consulted on the company website. The social and environmental indicators were surveyed internally, based on Brazilian labor and environmental regulations.

The report was produced in accordance with the GRI Standards guidelines from the Global Reporting Initiative (GRI) for the Sustainability Report: essential option, which came into effect on July 1, 2018. It is also based on the principles set out in the United Nations Global Compact, which is an initiative to encourage organizations to adopt best human rights, labor relations, environment and anticorruption practices.

Before you start reading the 2017/2018 Sustainability Report, find out more about the browsing features



Summary



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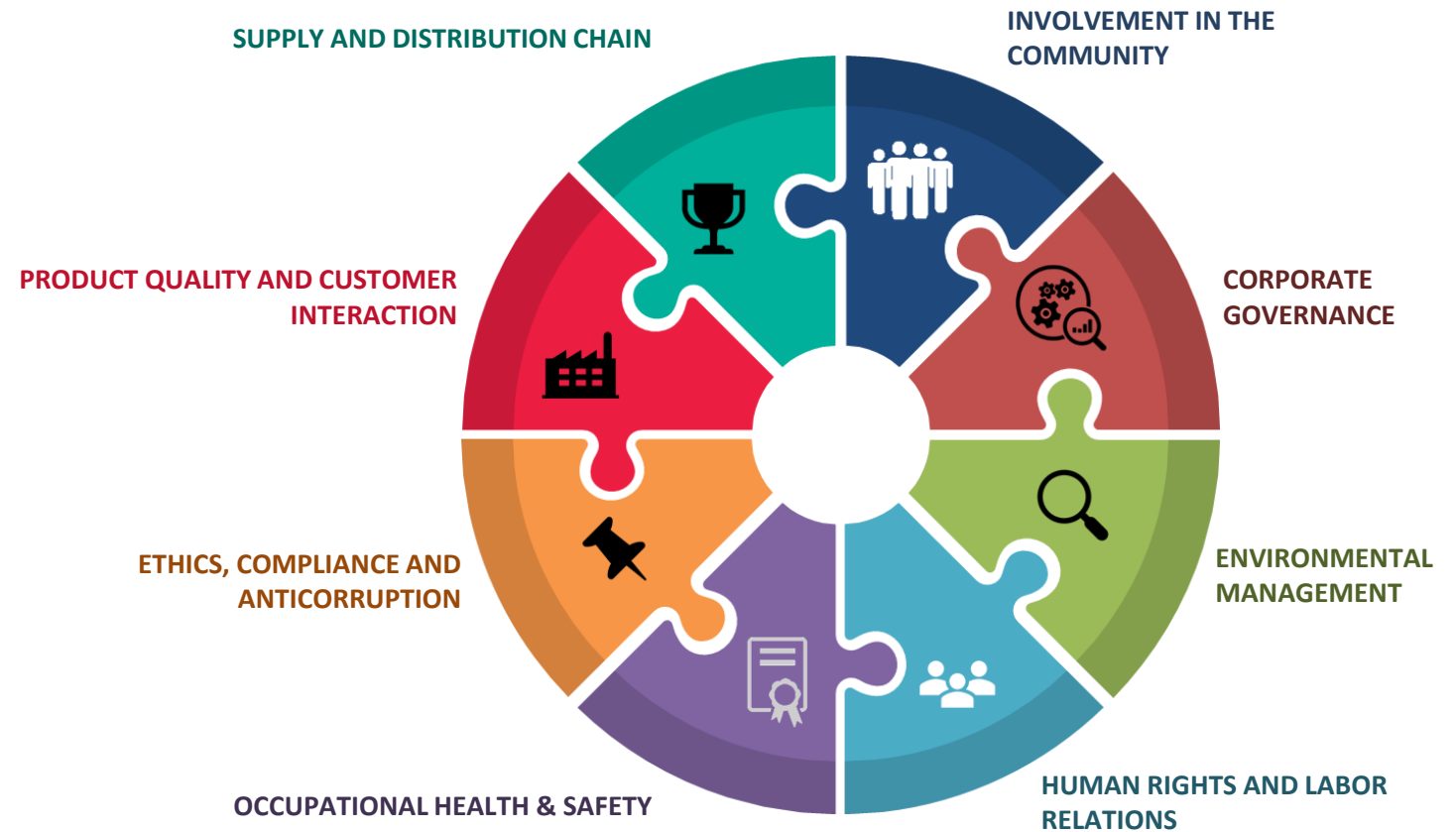


## Material Issues [GRI 102-42, 102-43, 102-44](#)

Everything in the 2017/2018 Sustainability report covers material aspects involving themes and concerns addressed while engaging with our main stakeholders throughout 2017 and 2018.

The process of mapping and identifying the most important issues was based on the level of influence of each Petrocoque business stakeholder.

The material issues are directly linked to our management model. For reference, we have used internal documents such as the 2028 Strategic Plan, which defines three strategic principles on which our existence as a business is based: we are an asset that constantly generates value for our shareholders, a reliable partner for our customers and suppliers and one of the best companies in the region to work for. These principles also play a significant role in our Policies and Regulations.





# Summary

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# Profile

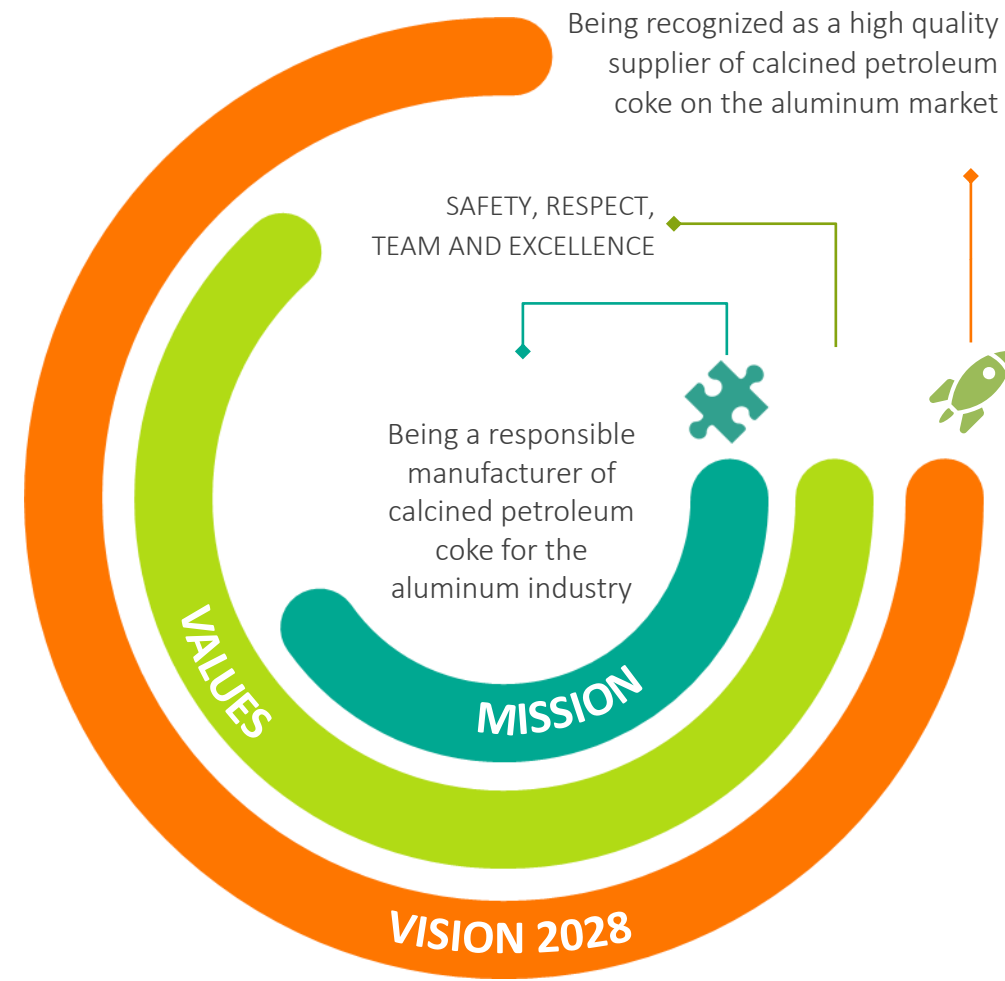
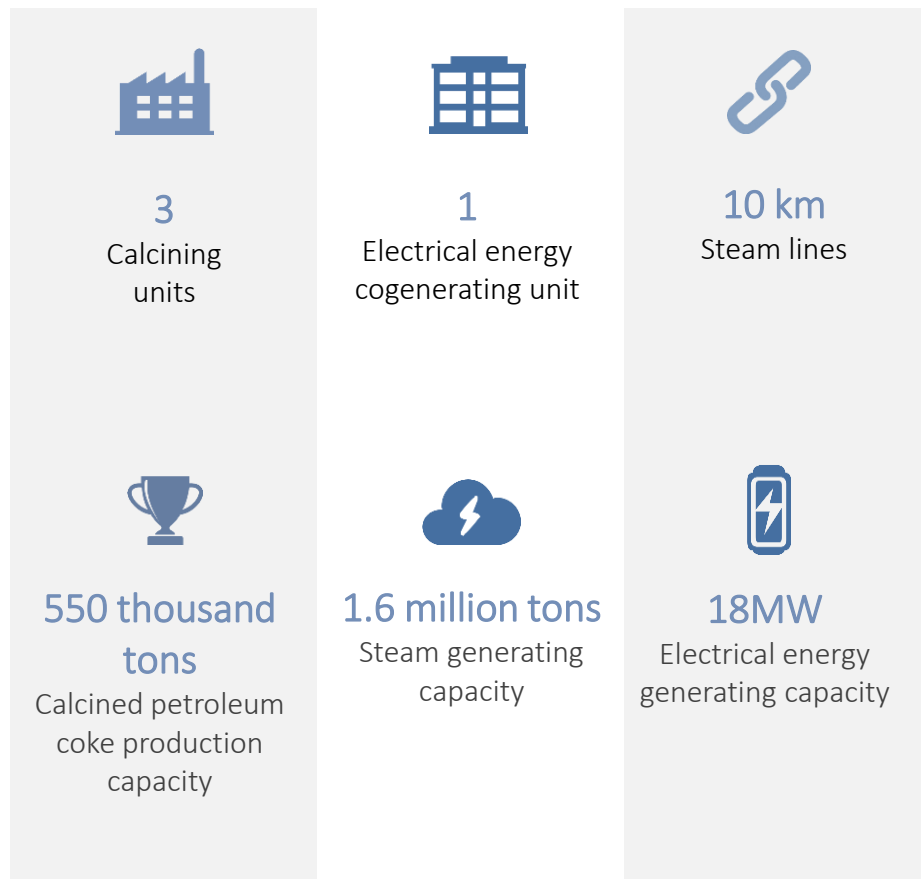


PETROCOQUE



## Who we are [GRI 102-2, 102-5, 102-7](#)

We are a privately held, joint stock corporation whose mission is to do business responsibly in the calcined petroleum coke (CPC) business for the aluminum industry. Our calcination process also generates thermal and electrical energy.

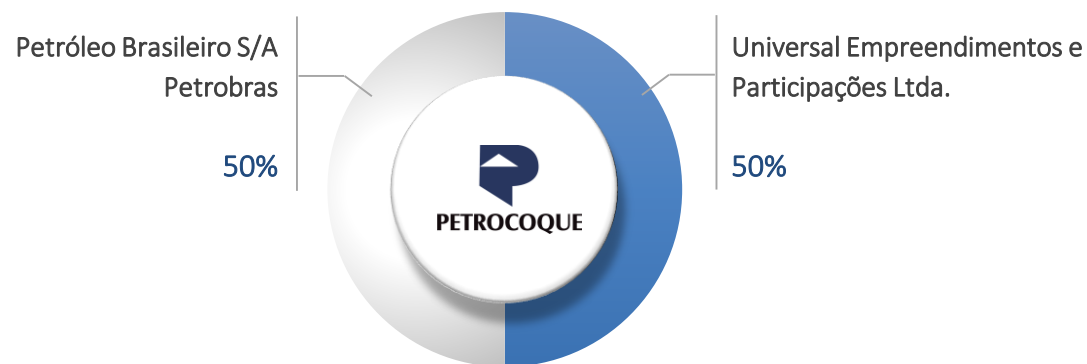


## Our Shareholders and Location GRI 102-1, 102-3, 102-4, 102-5, 102-7

Petróleo Brasileiro S/A – Petrobras and Universal Empreendimentos e Participações Ltda have equal shareholdings in Petrocoque S.A. Indústria e Comércio.

Because of local logistics benefits, we are based in the city of Cubatão alongside our main raw material supplier, the Presidente Bernardes Refinery - RPBC, 10 km from the Usiminas Port Terminal, from where we have shipped our exports since May 2018, and close to the Anchieta - Imigrantes highway system, which links into the Mário Covas Ringroad.

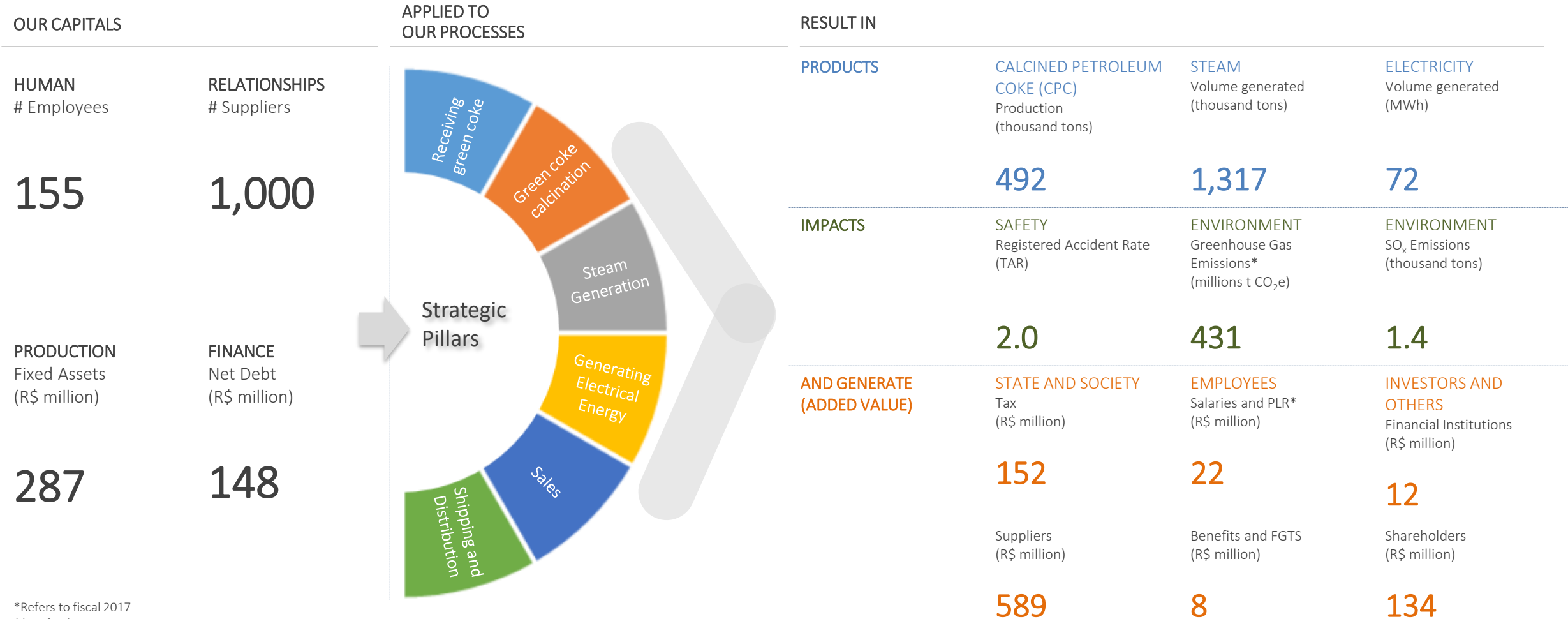
### Shareholder structure





## How we generate value GRI 102-2, 102-7

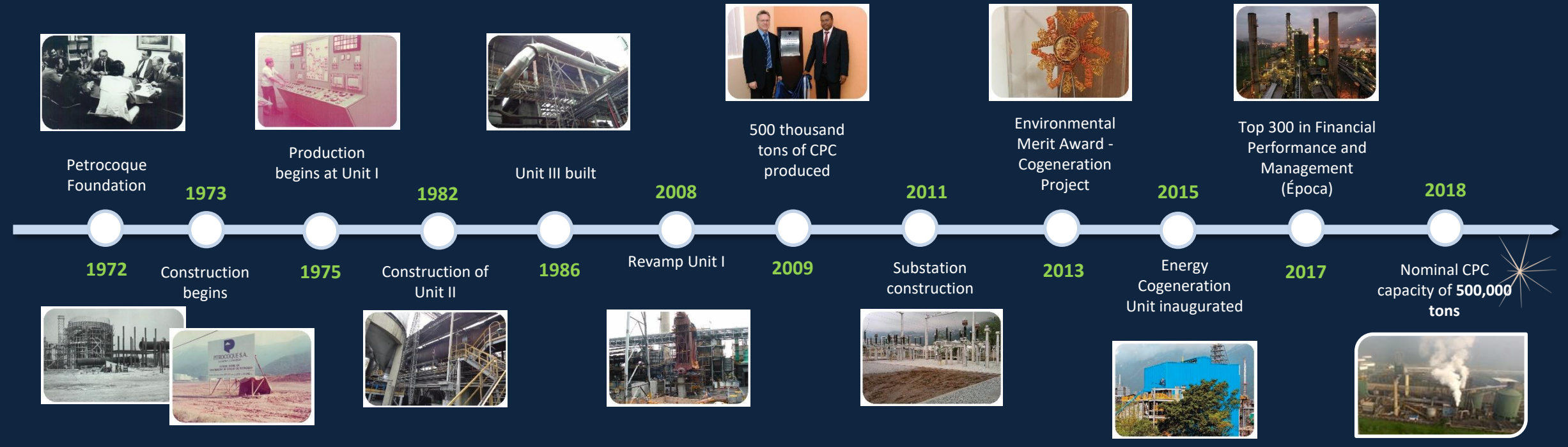
Below we will show how our business model used resources and processes to generate stakeholder value in 2018.



\*Refers to fiscal 2017  
\*\*Profit-sharing

## Our 47 years of history GRI 102-2, 102-7, 102-8

### Petrocoque over the last 47 years.



We ended 2018 with Ebitda of R\$ 244.2 million and Net Profit of R\$ 134.8 million - the best ever figures in the company's history. In 2017, Ebitda was R\$ 124 million and Net Profit was R\$ 59 million. These results were mainly the outcome of the favorable pricing conditions in 2018, as well as steps taken throughout the year such as

resuming CPC exports through the Usiminas (Cubatão-SP) Sea Terminal, increasing the company's nominal capacity, which rose from 532,000 to 550,000 tons as a result of technology improvements and *lean 6sigma* studies, and deployment of the More Petrocoque Program, intended to optimize costs

and processes. We invested over R\$ 19 million in operational efficiency alone in 2018, however the company has also invested in improving its quality, safety and environmental standards; where it invested R\$ 13 million in 2017, guaranteeing an operation factor in excess of 90% in both years.

In 2018, our businesses employed 245 people, with 156 direct staff and 89 contractors and they are the company's most valuable asset.

## Our Main Products | Calcined Petroleum Coke GRI 102-2, 102-6, 103-1, 103-2, 103-3

Calcined petroleum coke (CPC) is an extremely pure carbon used by the aluminum, metalworking and steel industries. Petrocoque’s CPC has unique characteristics with excellent physical and chemical properties, high VBD and low metal contaminant indices. One of its main characteristics is the fact it contains just 0.72% sulfur concentration, one of the lowest levels in the world.

Some of this quality is because of the raw material, the green petroleum coke (GPC), a highly consistent product supplied by Petrobras, a company shareholder and its main supplier. As a result, Petrocoque’s CPC is considered “anode grade” by the market because it can be used to manufacture anodes – which are required to produce primary aluminum.

Petrocoque produced 492,000 tons of CPC in 2018 and 486,000 tons in 2017. 75% of the material produced is exported to countries including the US, Canada, South Africa, the United Arab and Turkey.

CPC output	2016	2017	2018
Calcined petroleum coke - CPC (thousand tons)	472	486	492

**0.72%**  
SULFUR  
CONCENTRATION

**LOW INDICES OF METAL  
CONTAMINANTS**

**EXCELLENT PHYSICAL AND  
CHEMICAL PROPERTIES**

**HIGH VBD**



*Employees near the Unit II Furnace*

## Our Main Products | Steam and Electricity GRI 102-2, 102-6, 103-1, 103-2, 103-3

Every year, Petrocoque produces around 1.3 million tons of steam which is generated by recovering thermal energy from the GPC calcination process, supporting best sustainability practices in our production processes.

Some of the steam we produce is sold and supplied to local industries which use it as a source of “clean” energy, helping them avoid burning fuel in their boilers. This procedure helps protect nonrenewable natural resources and reduce regional emissions. Surplus steam that is not consumed is transported to the

electricity co-generating unit which is capable of producing approximately 18 MW, or enough to supply 26,000 homes.

Some of the resulting electricity is used by Petrocoque, which is energy self-sufficient. The surplus is sold via the National Interconnected System.

Petrocoque produced 1.317 million tons of steam and 72 MWh of electricity in 2018. In 2017, it produced 1.368 million tons of steam and 85 MWh of electricity.

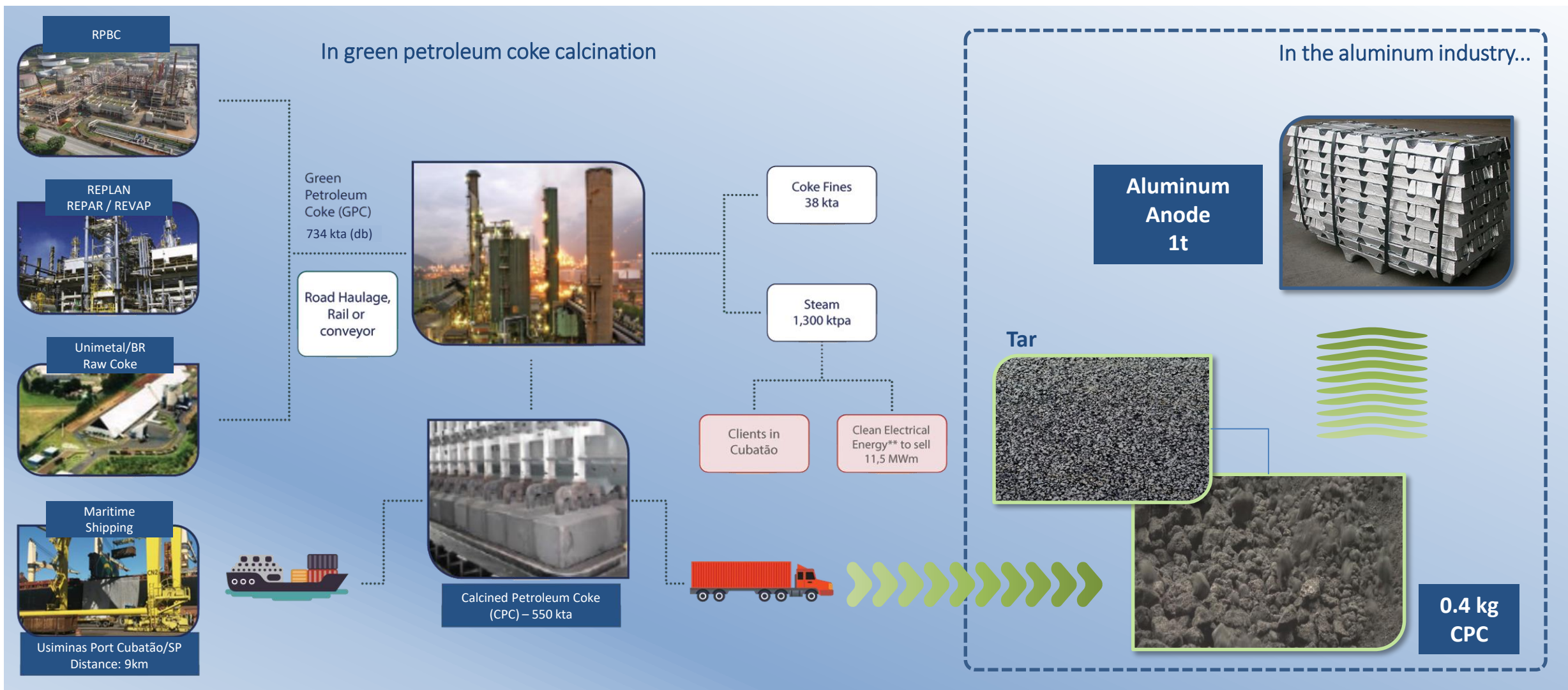
Steam and electricity production	2016	2017	2018
Steam generated (thousand tons)	1,283	1,368	1,317
Electricity generated (MWh)	38	85	72

### Cogenerating unit

The Cogenerating Project is ecologically correct and complies with the United Nations and Cubatão Agenda 21 sustainability recommendations and received the Environmental Merit Award in 2013 from Cubatão City Hall.



# Our Value Chain GRI 102-2, 102-6, 102-7, 102-9, 103-1, 103-2, 103-3



## Our Strategy GRI 102-15, 103-1, 103-2, 103-3

Petrocoque periodically reviews its Strategic Plan (SP) and Business Plan (BP) because they are a critical aspect of the company's business.

Petrocoque's Strategic Plan, which covers its mission, vision and initiatives for the next 10 years, and its five-year Business Plan, were completely revised and approved by the Board of Directors in 2018.

This process involved consultation with the main stakeholders (including shareholders, customers, the GPC supplier, regulators and

staff) and carrying out strategic/operational and risk analyses in partnership with the Board of Directors, Management and company managers.

Unlike the previous SP, the company adopted three "Strategic Pillars" which are intended to support any initiative the company decides to implement; these strategic pillars are linked directly to our main stakeholders, shareholders, customers, suppliers and workforce.

The strategy management process is based on the BSC (Balanced Scorecard) methodology in which strategic initiatives are broken down into objectives, indicators and targets for each fiscal year and described in a strategic or corporate map. This information is distributed to the entire workforce every year at a specific event.

Progress and indicator performance are monitored on a monthly basis at critical assessment meetings between company managers and Management.

Every year, Petrocoque breaks down its corporate map into corporate, sector and individual actions. Monthly monitoring of sector activities by each area's Director has been consolidated into a practice from 2018.

### Mission

Being a responsible manufacturer of calcined petroleum coke for the aluminum industry.

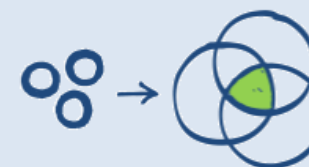
### Vision 2028

Being recognized as a high quality supplier of calcined petroleum coke on the aluminum market.

### Strategic Pillars



For our shareholders, Petrocoque is an asset that constantly generates value



We are always a reliable partner for our customers and suppliers



We are one of the best companies in the region to work for

## Our Strategy GRI 102-15, 103-1, 103-2, 103-3

When deciding its strategy, Petrocoque always takes into account the context within which it does business.

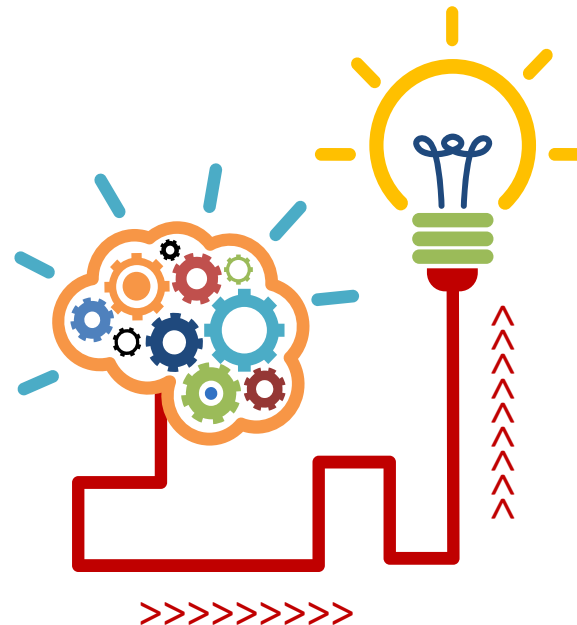
As a company that produces calcined petroleum coke (a commodity), its financial results are significantly affected by prices on the international market.

Although CPC is a petroleum derivative, its prices are influenced by the aluminum market, which consumes 90% of anode grade CPC worldwide. A calcining company's main competitive advantage is its access to green petroleum coke, GPC, the main raw material used to make CPC.

Based on its strategic and risk assessments, Petrocoque believes that demand for aluminum will grow between 3.0% and 4.0% per annum for the next 10 years, however GPC quality in Brazil and the rest of the world will decline because of pre-salt drilling. On the other hand, more GPC with low sulfur content is expected to be available in Brazil for calcination.

The company has already listed a number of initiatives as part of its Planning that will be implemented over the next several years to mitigate impacts or leverage opportunities.

These initiatives are intended to find alternatives and solutions that improve asset efficiency and reliability, increase CPC quality for customers and ensure improved business profitability, even in adverse market conditions.



Petrocoque was one of the 300 best companies in the Época Negócios 360º 2017 Annual.

The guide selects to 300 best companies in Brazil based on criteria that assess not only financial performance, but also corporate governance, strategy, innovation, social and environmental responsibility and human resources practices.

Petrocoque was one of the companies highlighted in the chemical and petrochemical industry, taking 5th place in the “Corporate Governance” and “Financial Performance” areas.





# Governance



PETROCOQUE





## Our Governance GRI 102-18, 103-1, 103-2, 103-3

Petrocoque is continuously implementing best practices in order to constantly improve its Corporate Governance. As part of this process, principals are converted into objective recommendations in order to optimize the company's value and ensure its continuity.

### Business Drivers

<b>Shareholder Agreement</b>	Describes the company's main strategic guidelines, as agreed by its Shareholders.
<b>Bylaws</b>	This document describes the nature of Petrocoque's business activities and regulates the way the company operates.
<b>Code of Ethics and Conduct</b>	Consolidates the company's values and principles to guide all decisions taken at the company and help resolve conflicts of interest.
<b>Business Policy</b>	This policy defines guidelines and parameters for Petrocoque's business, aligning everyday business activities with the company's commitments and balancing the needs of all its stakeholders.
<b>Compliance Policy</b>	This policy consolidates the principles and guidelines that direct the activities of company management and employees and is the basis for relationships between them and with any other stakeholders.
<b>Cash Management Policy</b>	This policy provides guidelines for use of funds.

The Risk Management and Related-Party Transactions Policies were approved in 2019.

### Petrocoque Governance Structure

- **Annual General Meeting:** This is a meeting of the shareholders where they discuss structural and management issues and is the organization's highest-ranking body.
- **Fiscal Council:** Acting independently from the Board of Directors and External Auditors, the Fiscal Council has 4 members and 4 alternates, indicated in equal number by its shareholders.
- **Board of Directors:** This is an autonomous and collegiate body whose responsibilities and prerogatives are determined by law and by the company Bylaws and is responsible for protecting Petrocoque's interests and equity. The board has 4 members and 4 alternates, indicated an equal number by its shareholders.
- **Compensation Committee:** This committee is made up of two board members who are responsible for deciding any and all Management compensation issues.
- **Management:** Elected by the Board of Directors, Management is made up of the CEO, Industrial Director, Commercial Director and Finance Director. Their function is to provide corporate management for the company's business in line with the mission, objectives, strategies and guidelines approved by the Board of Directors.
- **External Audit:** Petrocoque's Financial Statements are audited annually by a reputable auditor and the audit is published in local newspapers and the Federal Register that is made available on the company website.
- **Internal committees:** These are multidisciplinary committees made up of management and non-management employees who take steps to mitigate potential risks arising from conflicts of interest. The company has five committees: Compliance, Credit, Crisis, Cash and Volunteering.

## Our Business Policy GRI 102-16, 102-17, 102-1, 102-2, 103-3

The Business Policy describes our business guidelines and parameters. The policy is distributed to all of our employees in order to ensure our day-to-day activities reflect our commitments, balancing the needs of all our stakeholders and particularly supporting sustainable development practices.

The policy is broken down into five guidelines which set out the requirements for products and services, human capital, environment, health and safety, transparency and respect.



Aerial view of Petrocoque

### Petrocoque Business Policy

Petrocoque is committed to striking a balance between serving stakeholder requirements and implementing sustainable development practices.

01



We offer world-class products and services that meet our customers' expectations.

02



We focus on human capital, providing our team with continuous development opportunities in order to ensure ongoing improvement of our products, processes and services.

03



We take steps to prevent environmental pollution and support Occupational Health & Safety, not only by complying with relevant legislation but by addressing these issues in the standards adopted by the company as well.

04



We do business openly and ensure that management practices related to social, economic and environmental issues are reported transparently to the relevant stakeholders.

05



We value and respect human and cultural diversity.

## Ethics and Integrity as a Value [GRI 102-16, 102-17, 103-1, 103-2, 103-3, 205-2](#)

We really do care about people. As a result, we believe that acting with integrity, transparency, ethics and compliance means respecting everyone we interact with – a company Value. We therefore take steps to reinforce Ethics, Compliance and Anticorruption efforts in the way we do business.

### Petrocoque Code of Ethics and Conduct

The Code of Ethics and Conduct, a simplified and easy-to-understand version of which was approved by the Board of Directors in September 2018, is a set of common sense guidelines that should be used on a day-to-day basis, emphasizing self-reflection and people’s individual responsibility for the decisions they take. The issues addressed in the code include legal compliance, preventing conflicts of interest and supporting best practices in relationships between staff, suppliers, customers, regulators, the community and others.

Every new employee receives a copy of the Code of Ethics and Conduct on their first day with the company and everyone must commit to following the behavioral principles, rules and guidelines set out in that document. After reading the Code, each employee is required to sign a document declaring they have read and understood it and agree to comply with the Code’s principles.

The Code of Ethics and Conduct is also available to all partners and suppliers signing agreements with Petrocoque via the institutional website, with the goal of setting a minimum standard of conduct among all related parties.

### Petrocoque Values: non-negotiable and the essence of our business

Petrocoque takes a serious approach to acting in accordance with its Values. Petrocoque had seven values until mid 2018. After surveying its team, they were consolidated into four values: SAFETY, RESPECT, TEAM and EXCELLENCE, as part of an initiative to protect the essence of the company and reflect the way Petrocoque needs to do business in order to achieve its future goals. These Values, which are included in the Strategic Plan and Code of Ethics and Conduct, have been approved by the Board of Directors and represent the essence of the company; as such, they are nonnegotiable and must underpin all of the company’s relationships. The Values are frequently reinforced with the workforce through the Code of Ethics and Conduct and various other internal communication mechanisms such as newsletters, corporate TV programs and events.



We value life, people and the environment

**SAFETY**



We are ethical, honest and transparent toward all those with whom we interact.

**RESPECT**



We deliver better results with teamwork.

**TEAM**



We are committed to continuously improving and adopting best practices across our operations.

**EXCELLENCE**

## Ethics and Integrity as a Value GRI 102-16, 102-17, 103-1, 103-2, 103-3, 205-2

### CONFLICTS OF INTEREST

According to the Code of Ethics and Conduct, the company's interests must always take precedence over the personal interests of its managers and employees. This is why the Code goes on to describe the main situations where conflicts of interest might arise:



Family relationships



Employment of relatives



Bribery or preferred treatment



Parallel business activities



Gifts, presents and hospitality

When they joined the company, every employee is required to inform Petrocoque of any conflict of interest which will then be assessed by Management in conjunction with the Compliance Committee and/or the Human Resources area.

### Compliance and Anticorruption Policy

The Compliance and Anticorruption Policy was created as part of the Ethics and Compliance Program; it consolidates the principles and guidelines that should underpin the work of the Company's management and employees, as well as their relationships and any relationships between them and the Company's shareholders, suppliers and competitors, as well as governments, communities, other stakeholders and wider society. The Policy applies throughout Petrocoque and to any activities managed or carried out by Third-Party Intermediaries on Petrocoque's behalf.

The company provides its employees with annual compliance and anticorruption training; it also meets with representatives from its fixed third-party suppliers in order to communicate the standards they are expected to maintain in their relationships with the company. The Policy is available to employees on the intranet and to other stakeholders on the Petrocoque institutional website.

In addition to the training course, a theater performance about "Conflicts of Interest" was arranged as a fun and effective way of talking about the importance of the issue with Petrocoque employees.



*Theatrical presentation on Conflicts of Interest at Petrocoque*



**100%** of the workforce has received on-site training on the Code of Ethics, Values and Compliance Policy.

In knowledge assessments, **85%** of participants obtained a grade of 8 or higher.

## Ethics and Integrity as a Value GRI 102-16, 102-17, 103-1, 103-2, 103-3



### How to contact the Petrocoque Whistleblowing Channel

- Call **0800 388 8013** (Agents are available from Monday to Friday, between 9 AM and 5 PM; voicemail messages can be left 24 hours a day) from anywhere in Brazil or board using a fixed line, mobile or public telephone. The services available in Portuguese and English.
- Visit the website: [www.canaldedenuncias.com.br/petrocoque](http://www.canaldedenuncias.com.br/petrocoque)

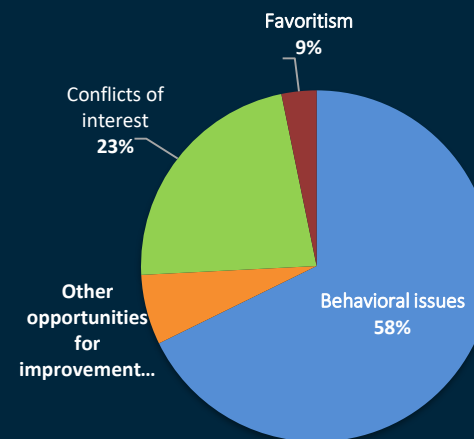
### Petrocoque Whistleblowing Channel

Launched in May 2017, this channel is used exclusively to report ethical issues involving the company or its staff. All reports are secure, confidential and can be filed anonymously. The channel is operated by a specialist outside firm to provide greater trust and transparency in our workplace relationships, providing an environment that offers a high standard of ethics and helps protect the company's reputation. Importantly, independent of what was reported, Petrocoque does not tolerate retaliation against any person reporting suspected violations of the Code of Ethics, whatever the outcome of the resulting investigation.

The channel is available 24 hours a day, seven days a week and has been extensively advertised to staff, third parties and other stakeholders in Brazil and abroad.

### Whistleblowing Figures - 2018

All reports are investigated in line with specific regulations and if evidence of wrongdoing is found, the relevant measures are taken. 31 reports were received in 2018, (21) linked with behavioral issues, (2) conflicts of interest, (1) favoritism and (7) associated with other opportunities for improvement.



Petrocoque rejects any and all types of corruption. It is each and every employees' responsibility to understand current Anticorruption legislation and enforce the rules and take the precautions described in the Company's policies and regulations, report any dubious conduct they are made aware of and use the Petrocoque Reporting Channel.

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If employees have any doubts how to react in a particular situation, they are encouraged to contact the Compliance committee by writing to [comitedeconformidade@petrocoque.com.br](mailto:comitedeconformidade@petrocoque.com.br)

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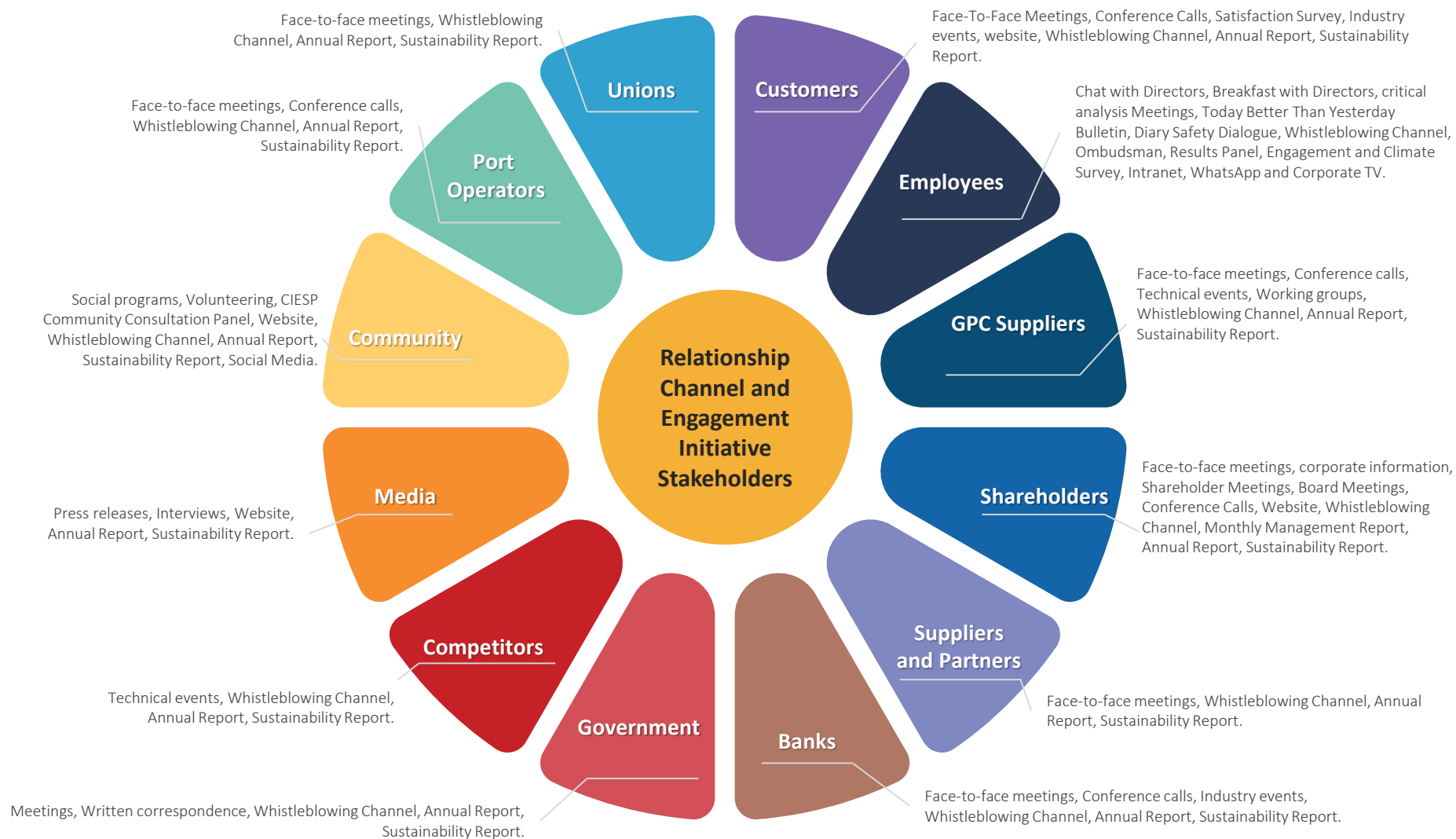
Petrocoque also has an Ombudsman, which is an additional in-house communication channel where employees can speak directly with Management to express their opinions, file complaints or suggest improvements.

## Our Stakeholders GRI 102-40, 102,42, 102-43, 102-44, 103-1, 103-2, 103-3

Stakeholders are defined based on the influence they exercise over the business, the impacts resulting from company operations and its business strategy. From time to time, priorities are surveyed in order to define and implement any action required to maintain healthy relationships, focusing mainly on sustainable development for all our audiences.

The diagram beside this text presents Petrocoque's Stakeholders and its main **Relationship channels/Engagement initiatives**.

Analyzing these factors, the company determined that shareholders, customers, GPC suppliers, port operators and employees of other companies most important stakeholders for engagement initiatives.



## Continuous Process and Product Improvement GRI 103-1, 103-2, 103-3

One of Petrocoque's Values is its constant efforts to improve its products and processes, which can be seen in a number of initiatives implemented throughout 2017 and 2018, particularly the More Petrocoque Program, Units Lean Six Sigma Project, Internal Controls for Assessment, Risk Management and Crisis Management Process Restructuring.

**More Petrocoque Program:** As the company's past success is no guarantee of future success, at the end of 2017 Management and all company management staff worked alongside an outside consultancy to identify opportunities to improve the company's levels of performance. The program was developed in line with best global practices in order to make Petrocoque more competitive and profitable, even when prices come under pressure (which is possible in the future). The More Petrocoque Program is intended to implement initiatives and increase process efficiency.

It was split into stages and the first stage, in 2018, evaluated every dimension of the company's business. From September 2018, the project also looked at ways of simplifying the companies organizational structure to create more synergy between areas and increase day-to-day speed and flexibility. "More HR" was also launched alongside this project to ensure that HR processes are based on merit and recognition; this looks at issues such as Career and Succession and Knowledge Management, reflecting one of the company's strategic pillars, which is to make Petrocoque one of the best companies to work for in the region.



*Petrocoque Managers and Management at the More Petrocoque Program workshop*

**Reassessing Internal Controls:** In the fourth quarter of 2018, an external consultancy reviewed Petrocoque's internal controls. This resulted in a large number of improvement actions that will be implemented in 2019 to help the company insure its internal control environment remains secure, reflecting the effectiveness of the risk management system.



## Continuous Process and Product Improvement GRI 103-1, 103-2, 103-3



Petrocoque Employees

**Lean Six Sigma project:** In October 2017, Petrocoque kicked off a project to assess production at Calcination Units I, II and III using the Lean Six Sigma methodology.

This project, which directly affects the plants operational reliability and efficiency, will be concluded in 2020 and will ensure annual CPC production levels in line with six sigma variance and reliability parameters.

The project is ordered to be completed at Unit III, which resulted in a 5% increase in the transformation ratio from GPC to CPC, representing a 4000 ton increase in annual CPC output. The study resulted in a number of actions, changes to operating procedures and on-site and panel operator training courses reinforcing the importance of maintaining these new practices.

**Continuous Improvement and Innovation Program:** Since 2016, Petrocoque has instituted a program that is intended to create a culture of innovation and continuous improvement within the company, encouraging employees to generate ideas and create opportunities so that they can improve and create new ways of doing their jobs and overcome day-to-day obstacles. The company has also given its employees opportunities to reveal their potential, increasing competition within Petrocoque and recognizing those who come up with good ideas and create value for the company. Employees who contributed the most ideas and those who presented the best ones received awards in 2017 and 2018.

Employees now have a direct channel for communicating with Management at a monthly “Chat with Management” event where they are given the opportunity to present their ideas and discuss the company’s future during an informal conversation with management.



Continuous Improvement and Innovation Program - 1st Place Award for 2017's Best Idea



## Risk Management GRI 102-11, 103-1, 103-2, 103-3

Petrocoque believes that risk management is not only a best corporate governance practice, it ensures the company's continuity by fulfilling its strategic and statutory objectives.

Risk management involving the companies interactions with customers, society and the environment, with decentralized until 2017.

Crisis management was consolidated and became more systematic in 2018 by applying COSO (ERM and GRC) and ISO31000 methodology. This process, which is widely supported by Management, managers and non-managers, identified risks, exposure and vulnerability; assessed controls used to mitigate or manage risk; prioritized risks; and defined remedial actions.

Corporate and sector risks will be monitored from 2019 and remedial actions will be supervised based on their critical level. Additionally, the Board of Directors approved a Risk Management Policy at the beginning of 2019.

As a result of this process, the company has contracted insurance from a reputable company to cover material damage to the factory, loss of profits, D&O, Civil Liability, Machinery and Vehicles.



### Crisis Management

In 2018, the **Crisis Management** process was reviewed and a new, simpler and up-to-date handbook was issued. The Crisis Management Committee, which is available 24 hours a day, was also created. The company reviewed its procedures in the event of different types of impact as well as the guidelines provided for the entire communication process with in-house and outside audiences. Notably, all staff have received crisis management training, which included an emergency simulation.

### May 2018 Truck Drivers Strike

Petrocoque's Crisis Management Committee took steps to mitigate impacts from the national truck drivers strike on its business, which meant the company was able to avoid suspending its operations.

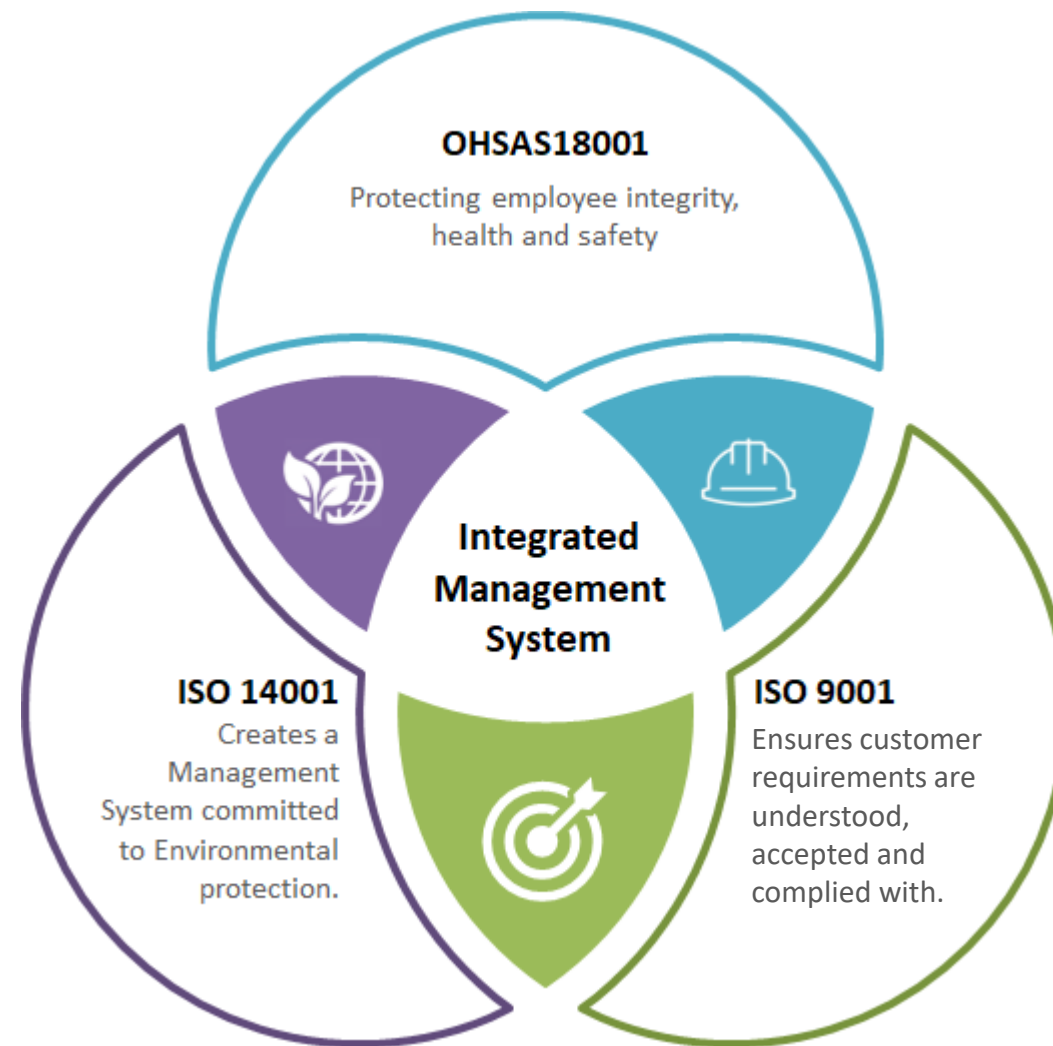
## Our Certificates for responsible business practices [GRI 103-1, 103-2, 103-3](#)

The company holds ISO and OHSAS certificates as part of its Integrated Management System, which guarantees the quality of Petrocoque products, services and processes and its efforts to protect the environment and employee health and safety.

The Integrated Management System is audited every year by an outside consultant carrying out a systematic and independent study in order to determine whether the activities and their results comply with the relevant standards and the guidelines and parameters set out in the Petrocoque Business Policy.

Petrocoque has not registered any nonconformities since 2015. As part of its engagement with and commitment to the management system, Management carries out a critical analysis of the SGI report every year.

All of the actions planned for each area, whether it is quality, health, the environmental safety, are based on extensive analysis of routine business risks and the identification of strengths, weaknesses, threats and opportunities inherent to Petrocoque's business. This allows the company to align risk prevention with business strategy, supporting intelligent management that is focused on meeting the company's targets.





## Our Commitments and Involvement GRI 102-12, 102-13

The focus on ethics and combating corruption are reflected not only in Petrocoque’s code and policies, but also in the commitments the company has signed:

Since 2016, Petrocoque has been a voluntary member of the UN Global Compact and is committed to applying fundamental values focusing on human rights, labor relations, the environment and anticorruption efforts in all its business practices in order to build a more inclusive and fairer global market, through committed corporate leadership.

The 10 principles of the Global Compact	Petrocoque Practices
<ol style="list-style-type: none"> <li>1. Businesses should support and respect the protection of internationally proclaimed human rights;</li> <li>2. Make sure that they are not complicit in human rights abuses;</li> <li>3. Companies must support freedom of association and acknowledge collective bargaining rights;</li> <li>4. The elimination of all forms of forced and compulsory labor;</li> <li>5. The effective abolition of child labor;</li> <li>6. The elimination of discrimination in respect of employment and occupation;</li> <li>7. Companies must take a preventive approach to environmental challenges;</li> <li>8. Undertake initiatives to promote greater environmental responsibility;</li> <li>9. Encourage the development and diffusion of environmentally friendly technologies; and</li> <li>10. Businesses should work against corruption in all its forms, including extortion and bribery.</li> </ol>	<p>Petrocoque’s commitment to the Global Compact is reflected in the following practices:</p> <ul style="list-style-type: none"> <li>• Petrocoque Values</li> <li>• Code of Ethics and Conduct</li> <li>• Business Policy</li> <li>• Compliance and Anticorruption Policy</li> <li>• ISO9000, ISO14000 and OHSAS 18000 Certificates</li> <li>• Contract and Supply Management</li> <li>• Customer and Supplier Relationships</li> <li>• Human Resources Management</li> <li>• Environment and Safety Management</li> <li>• Volunteering Program</li> <li>• Social Project Investment Guidelines</li> </ul>

***“We Support the Global Compact”***

***Nós Apoiamos o Pacto Global”***

The company is a member of the Brazilian Aluminum Association (ABAL), the Association of Chemical Product Companies (SINPROQUIM), the Sao Paulo State Center for Industry (CIESP) and the Sao Paulo State Federation of Industry (FIESP). It is also a member of various business related forums, boards and associations. These include the CIESP Community Consultation Panel, which discusses and supports best practices in a wide variety of areas of interest to the local community.





# Environment



PETROCOQUE



## Our Environmental Management GRI 103-1, 103-2, 103-3, 307-1



*The Perequê river is where Petrocoque collects water*

Since the company was founded, Petrocoque has prioritized environmental risk management.

The company has an efficient system to monitor and control potential sources of air, water and soil pollution at its calcination units, where it has implemented the best technology currently available to ensure waste emissions (following treatment and control) remain below legal limits and in line with the technical standards required by the Environmental Sanitation Technology Company (CETESB), which is part of the regional Environment Department.

Employees are strongly encouraged to take a preventive approach through a number of programs that provide guidelines on preventive procedures, particularly involving tasks that could cause significant environmental impacts.

Evidently, this significant level of environmental control requires a large investment and a team that operates in line with the highest ethical and technical standards.

The companies Environmental Policy, which is part of its Business Policy, is intended to ensure continuous improvement in preventing pollution, as well as its commitment to complying with the law, applicable environmental regulations and any other standards from environmental regulators.

According to Petrocoque's internal rules, employees and others acting on its behalf at any level must be aware:

→ of the importance of complying with the environmental policy and the Environmental Management System requirements;

→ of any significant environmental impacts and the actual potential impacts of their activities and the environmental benefits resulting from better personal performance;

→ of their functions and responsibilities to comply with the Environmental Management System; and

→ the potential consequences of failing to comply with specific operational procedures.

# Inputs and Water Resources GRI 103-1, 103-2, 103-3, 302-1, 302-3, 302-4, 303-1, 303-2, 303-3, 307-1

The calcination process uses energy and water as well as oxygen, fuel oil and mineral oil, which varies depending on the amount of product produced over a given period.

The Petrocoque production process and other areas at its industrial unit consume around 900,000 m<sup>3</sup> of water annually, 2% of which comes from the municipal water supply or other water companies and 98% from surface waters captured from the Perequê River. The Perequê River is not significantly affected by this process because we return approximately 30% of the water captured back into the environment. As required by law, Petrocoque does not reuse captured water, it simply treats it and disposes of it appropriately.



Through its QSMS area, Petrocoque organizes awareness campaigns to address responsible consumption of water, electricity, plastic, paper and other resources.

The increase in electricity consumption, which rose above 30 MWh in 2017, occurred when the Cogenerating Unit came online. The rise in oxygen consumption is justified because of the higher yields from Unit III, the result of improvement efforts based on the lean six Sigma study.

Water captured by source	Metric	2016	2017	2018
Perequê River	m <sup>3</sup>	806,846	995,662	895,692
Sabesp drinking water	m <sup>3</sup>	15,989	12,714	12,618
Water	Metric	2016	2017	2018
Captured water	m <sup>3</sup> /t CPC	1.7	2.1	1.8
Water consumed	m <sup>3</sup> /t CPC	1.7	2.0	1.8
Energy	Metric	2016	2017	2018
Energy consumption	Kwh	28,356,572	34,915,962	33,749,040
Energy consumption	kJ	102,083,659,200	125,697,463,200	121,496,544,040
Energy Consumption	Metric	2016	2017	2018
Generated internally	kWh/t CPC	38.1	66.3	56.4
Bought	kWh/t CPC	20.7	5.6	12.2
Total	kWh/t CPC	58.7	71.9	68.6
Inputs	Metric	2016	2017	2018
Fuel oil - shale	m <sup>3</sup>	1,163	1,013	1,249
Mineral oil	m <sup>3</sup>	1,546	1,542	1,545
Oxygen - 100% O <sub>2</sub>	m <sup>3</sup>	1,646,127	1,872,745	3,371,802

## Greenhouse Gases [GRI 103-1, 103-2, 103-3, 305-1, 305-2, 307-1](#)

In 2018, emissions sources was surveyed at the Cubatão Factory and included in the scope “1” (direct emissions) and “2” (indirect emissions from use of electricity) emissions inventory in accordance with the Environmental Regulator’s requirements, as shown in the table.

Petroleum coke for stationary combustion is the most representative source of emissions in Petrocoque's Scope 1, representing more than 99% of all emissions. Therefore, changes to emissions in the scope a result of variations in consumption of this source of emissions.

Scope 2 emissions refer to electrical energy consumption and are also directly related to the increased level of rainfall during the period. High levels of rainfall in 2016 meant the thermoelectric plants were deactivated, helping to reduce this emissions factor during the period. As there was less rainfall in 2017 and the thermoelectric plants are activated, the emissions factor increased.

Type	Metric	2015	2016	2017
Greenhouse Gases (GG) - Scope 1	tCO <sub>2</sub> e	399,073	410,598	427,616
Greenhouse Gases (GG) - Scope 2	tCO <sub>2</sub> e	2,763	2,326	3,283
Greenhouse Gases (GG) - Total	tCO <sub>2</sub> e	401,836	412,924	430,899



*The Perequê river close to the Petrocoque collection point*

## Atmospheric Emissions GRI 103-1, 103-2, 103-3, 305-7, 307-1

Sampling campaigns are carried out to chimneys every year and are accompanied by the environmental regulator to verify compliance with technical requirements provided in the Operating License, including the following standards for controlling residual atmospheric emissions, by unit:

- Particulate Material (PM): concentration 71.25 mg/Nm<sup>3</sup> (dry base), Emission rate 9.025 – 9.50 Kg/h;
- Sulfur Oxide (SO<sub>x</sub>): emission rate 123.5 - 133 Kg/h;
- The maximum emission rate for sulfur dioxide at all Units is 400 kg/h.

The following table contains the results from sampling the main sources that are monitored, showing environmental control compliance for the green petroleum coke calcination process:

Type	Average concentration (mg/Nm <sup>3</sup> )			Emissions Rate (kg/h)			Total Annual Emissions (t/year)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Particulate Material	30	33	29	7	8	8	56	64	60
Nox	28	166	147	7	41	41	56	330	327
SO <sub>x</sub>	680	773	690	166	183	180	1,309	1,492	1,439
SO <sub>2</sub>	667	757	678	163	179	177	1,283	1,459	1,413
SO <sub>3</sub>	17	20	15	4	5	4	33	39	32



**There were no penalties or fines in 2017 or 2018 for failure to comply with existing Operating License conditions.**





## Wastewater: Treatment and Disposal GRI 103-1, 103-2, 103-3, 306-1, 307-1

The Domestic Wastewater Treatment Station (DTE) is maintained by the activated mode process, with a modified aeration method in the anaerobic reactor with fluidized bed. The anaerobic reactor reduces the initial organic load and is supplemented by the aerobic reactor. Treated water is not reused in order to comply with Environmental Regulator guidelines.

Final treated wastewater is disposed off in the Perequê River and its affluent, in accordance with discharge standards under Article 18 of Decree 8468 and Articles 16 and 21 of Conama Resolution 430. The Quality Control Laboratory monitors treated water disposal on a monthly basis to avoid environmental risks and guarantee compliance of discharge results. Wastewater is not reused.

Industrial wastewater and rainwater from the industrial area are transported by gravity for treatment in the company’s fines separation box. Industrial wastewater from Cogeneration is discharged into the cogeneration basin.

The table below lists industrial wastewater (from the separator box and cogeneration basin) and domestic wastewater by quality and disposal method.

In 2017, waste water from the fines separation box increased because more water was used for production and environmental control.

Changes in wastewater flows from the cogeneration basin in 2018 are the result of changes to the energy production process throughout 2017.

Wastewater by location	Disposal	2016 Flow (m <sup>3</sup> /day)	2017 Flow (m <sup>3</sup> /day)	2018 Flow (m <sup>3</sup> /day)
ETE - Domestic Wastewater Treatment Station	Perequê River	27	25	24
Industrial Wastewater Treatment Station (Fines Separation Box)	Perequê River Affluent	290	389	370
Cogenerating Basin Wastewater	Perequê River Affluent	153	718	358



## Waste: Control and Disposal GRI 103-1, 103-2, 103-3, 306-2, 306-3, 307-1

Petrocoque produces, implements and maintains procedures to identify the aspect/waste generated during by its activities, products or services and can be controlled by the company.

Once identified, the company determines those that have or may have a significant impact on the environment to apply appropriate controls and dispose of them in an environmentally correct manner, in accordance with environmental regulations.

The table presents the results of environmentally correct disposal of waste generated during the company's activities, in accordance with regulatory requirements. The biggest variations are the result of process maintenance and scheduled unit downtime.

The company has not registered any waste leakage. Solid waste is used during the process or sold. Liquid waste is contained, neutralized and treated.

Waste	Disposal	Class	Metric	2016	2017	2018
Industrial towels contaminated with oil, grease, paint or solvent used to clean parts.	Reuse	I	Unit	2	-	3
Thermal insulation from replacement insulating material.	Co-processing	I	t	16	11	10
Hose filter from changing the industrial filter system material	Co-processing	I	t	1	2	2
Mixed solids (various materials contaminated with oil, grease, paint, solvent and Coke fines, generated by the maintenance workshop or resulting from general industrial site cleaning.	Co-processing	I	t	39	6	14
Oily Sludge from the containment and leak box.	Co-processing	I	t	-	0	-
Laboratory liquids left over from analyses carried out of the company laboratory.	Co-processing	I	t	1	-	-
Paper, cardboard, plastic.	Recycling	IIA	t	7	-	10
Electronic waste from maintenance services and use by employees.	Recycling	IA	t	0	-	-
Batteries	Recycling	I	t	0	-	1
Fluorescent, mixed, mercury, sodium and broken bulbs from changing burned-out and/or broken bulbs and equipment in office and industrial areas.	Recycling	I	t	0	0	0
Soil contaminated with coke fines, concrete stones and asphalt cement from civil construction work.	Landfill	IIA	t	216	416	1,192
Cement, bricks and refractory concrete mixed with soil and coke fines from furnace maintenance.	Landfill	IIA	t	112	55	80
Roof tiles containing asbestos, resulting from maintenance of warehouse roofing.	Landfill	IIA	t	5	-	-
Biological mud from the activated mud and sanitary sewage system.	Treatment	IIA	t	18	2	9
Wastewater from the grease trap in the restaurant area.	Treatment	IIA	t	12	3	6
Used lubricant for machinery and equipment.	Re-refining	I	t	2	3	2

## Noncompliant Product Control GRI 103-1, 103-2, 103-3, 307-1, 417-2

Controlling noncompliant products involves a documented procedure that describes the activities needed to ensure these products are controlled to prevent unintentional use or delivery. Noncompliant products are disposed of in accordance with specific procedures and records of nonconformities, action taken and, when necessary, customer concessions are kept.

If a product nonconformity is detected after the product has been delivered or while being used by the customer, documented steps are taken to advise the customer based on the actual and potential effects of the nonconformity.

If corrective action is taken after a noncompliant product is identified (including by means of a customer complaint), we determine the causes of the nonconformity and assess what action is required to ensure it is not repeated, determining and implementing any necessary corrective action, recording the results of any action taken, carrying out a critical analysis to assess the effectiveness of any such corrective action in order to prevent future occurrences.

Preventive action taken to eliminate potential causes of nonconformity and avoid them occurring is based on a documented procedure that sets out the requirements for identifying potential causes. After determining and insuring the necessary preventive action has been taken, the results are recorded and a critical analysis of the preventive action is carried out.

Any preventive or corrective action taken to eliminate the causes of existing or potential nonconformities is adapted to take into account the scale of the problem in proportion to its environmental impact.

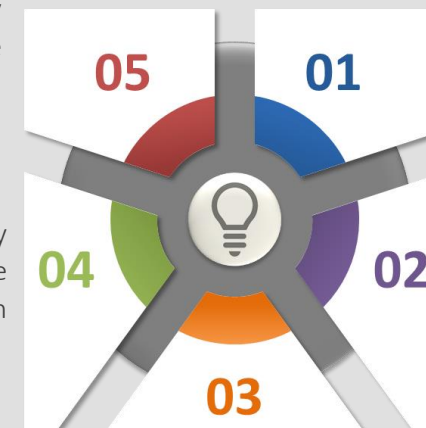
Between 2016 and 2018, there were no cases of noncompliance with fallen tree codes and/or regulations associated with Health & Safety Code impacts from products and services during their lifecycles.

### Treating Nonconformities

Petrocoque produces, implements and maintains documented procedures to address actual and potential nonconformities and implement corrective and preventive actions. This procedure is split into five phases:

- **Effectiveness analysis** for any corrective and preventive action taken.

- **Record the results** of any corrective and preventive action taken



- **Identify and correct nonconformities**, taking steps to mitigate any environmental impact

- **Investigate nonconformities** to determine the actual causes and take action to avoid any repetition

- **Assess the need for any steps required to prevent nonconformities and take appropriate action to avoid them occurring**



## Other Environmental Indicators GRI 302-1 305-7, 306-2

	Metric	2016	2017	2018
Nonhazardous waste generation	Kg/t CPC	0.1	0.0	0.1
Hazardous waste generation	Kg/t CPC	2.6	1.0	0.8
Total waste generated	kWh/t CPC	2.7	1.0	0.9
Hazardous waste generation (recycled, reused and/or reprocessed)	%	2.4	4.3	14.2
Hazardous waste generation (treated for final disposal – landfill, incineration)	%	0.0	0.0	0.0
Non-hazardous waste generation (recycled, reused and/or reprocessed)	%	0.7	0.0	1.7
Non-hazardous waste generation (treated for final disposal – landfill)	%	96.8	95.7	84.1
Electrical energy generated by the company (energy sold)	%	62%	60%	48%
Electrical energy generated by the company (energy consumed internally)	%	38%	40%	46%
Intensity of carbon dioxide equivalent emissions (CO <sup>2</sup> processes)	kg CO <sub>2</sub> e/t product	891.2	880.3	845.2
Intensity of carbon dioxide equivalent emissions (CO <sup>2</sup> combustion)	kg CO <sub>2</sub> e/t product	6.8	6.8	4.8
Intensity of carbon dioxide equivalent emissions (CO <sup>2</sup> total)	kg CO <sub>2</sub> e/t product	898.0	887.0	850.0





# Personnel

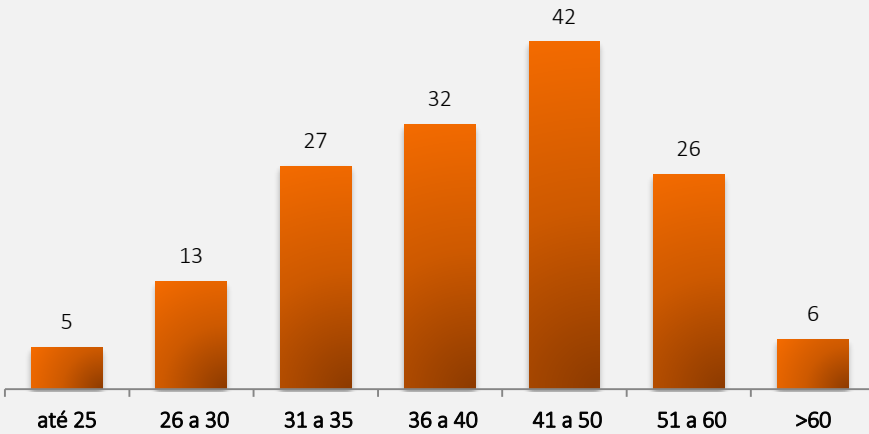


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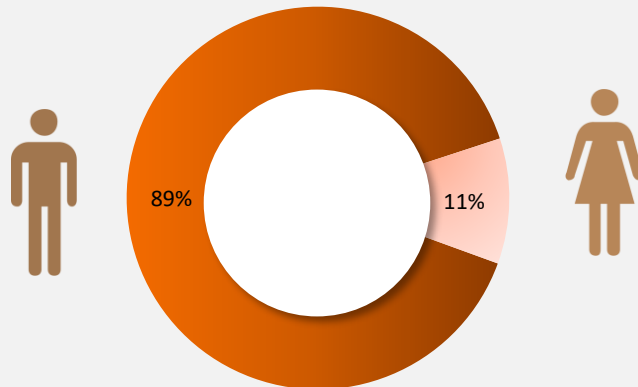
## Employee Profiles GRI 102-8, 103-1, 103-2, 103-3, 404-2

### Profiles of company employees in 2018

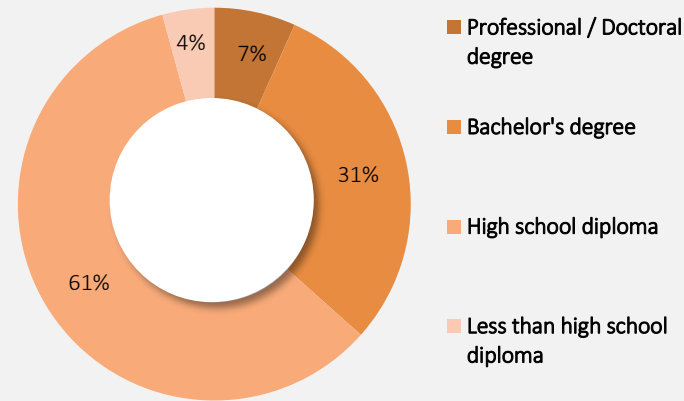
#### Breakdown by Age



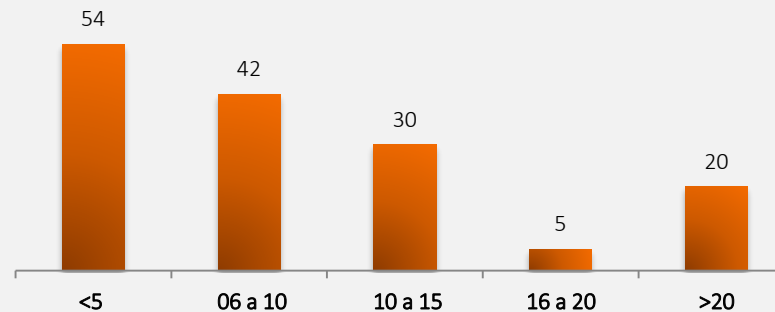
#### Breakdown by Gender



#### Breakdown by Education



#### Breakdown by Length of Employment at Petrocoque



People are Petrocoque's biggest asset. We are a team of 245 people, with 156 direct employees and 89 third-party contractors.

The company has programs that are intended to attract, develop, train and retain personnel, invest in talent and approve their technical and management skills in order to support the business and pursue competitive excellence.

The company invests in personal and professional development, encouraging people to continuously improve and giving employees the self-sufficiency they need to do high-quality work, safely.

Petrocoque is noted for its low turnover of around 1%, its compensation policy and the attractive benefits it offers.

Everyone who takes maternity/paternity leave returns to work.

## Safety and Accident Prevention - a Petrocoque value GRI 103-1, 103-2, 103-3

One of Petrocoque’s biggest values is safety. The company has rigorous internal operating standards and procedures to prevent accidents and control risks, as well as comply with Brazilian and international safety standards at all its facilities.

All plant calcinating units are equipped with appropriate infrastructure, in accordance with relevant standards and regulations, so that operational activities can be carried out safely.

Petrocoque distributes and periodically provides training on its Safety Manual as well as its internal emergency response and risk and hazard assessment procedures; it also carries out simulations involving its staff and other employees.

To ensure continuous hazard detection, risk assessment and identification of necessary controls, day-to-day maintenance activities are

only carried out when authorized by employees responsible for the production line and after a risk analysis of the site safety and conditions, which is part of a Work Permission (WP) process, which was completely revised in 2018.

All employees use requisite personal protective equipment (PPE) and receive guidance on how to use it.

Safety measures are also taken to improve accident communication and records and to encourage a corporate culture focused on preventing and eliminating risks. The company emphasizes the importance of everybody, including the people involved, continuously evaluating the risks involved in each activity. The proactive accident and incident prevention commitment and performance of each area and subcontractor is assessed on a monthly basis.

In order to avoid personal injury and strengthen the culture of safety, the “Take care of yourself, take care of others and let others take care of you” campaign was launched in line with the “Petrocoque’s 10 Golden Rules – Attitudes That Save Lives”, highlighting the importance of safety and taking care of one another.

Behavioral Observation practices have also been implemented. This involves one employee approaching another while at work to discuss safety aspects of the job they are doing, thereby making them aware of the importance of safety issues and using appropriate personal protective equipment (PPE).

**10 RULES OF GOLD PETROCOQUE**

**ATTITUDES THAT SAVE LIVES**

- WORK PERMISSION**  
Only work with a valid Work Permission authorized in the field and make sure you fully understand it
- SAFE POSITIONING**  
Do not enter isolated areas. Never stand under a suspended load or enter a vehicle while moving or stationary.
- POWER SOURCES**  
Check all power sources have been properly isolated.
- PERSONAL PROTECTIVE EQUIPMENT**  
Always use mandatory PPEs at work.
- WORKING AT HEIGHT**  
Only work at height using a safety belt attached to a secure location.
- CHANGES**  
Pay attention to the dangers and risks of changes. Only make a change after it has been analyzed and authorized.
- CONFINED SPACES**  
Only accessed a confined space when authorized, equipped and trained.
- TRAFFIC SAFETY**  
Use a safety belt, respect the speed limit, don't use your mobile phone and if you drink, don't drive.
- QUALIFICATION**  
Never perform tasks without the requisite training and authorization. Do not improvise tools or equipment.
- ALCOHOL AND DRUGS**  
Never work under the effect of drugs or alcohol.

## Safety and Accident Prevention - a Petrocoque value GRI 103-1, 103-2, 103-3, 403-1

All employees are represented by the Internal Accident Prevention Committee (Cipa) which is responsible for reporting workplace risks and helping to protect employees health and physical integrity. Cipa members receive training and verify safety at company facilities and action taken to improve safety. They also take part in accident investigations.

“Safety dialogues”, educational safety campaigns, are frequently held with the whole workforce. A Sipat (Internal Accident Prevention Week) is held annually. At each Breakfast with Management and each Corporate Critical Analysis meeting, the first issue is always an initiative to increase people’s awareness of the importance of behaving safely.

In case of emergency, we follow predetermined plans and procedures in order to try and avoid or mitigate the consequences, mainly with a view to protecting human life, as well as the safety of our employees and the local community, and preserving the environment.

*“Take care of yourself,  
take care of others  
and let them take care of you”*



### Campanha de CONSCIENTIZAÇÃO de Cuidado com as Mãos

Nesta quarta-feira, 28 de junho, as áreas de Manutenção e QSMS, com a participação da CIPA, promoveram a Campanha de Conscientização de Cuidado com as Mãos. Foi um DDS prático, onde os colaboradores tinham dois dedos da mão que mais utilizam imobilizados por uma fita. O objetivo principal da campanha é fazer os colaboradores pensarem antes de cometer um ato inseguro envolvendo as mãos, a fim de evitarem acidentes de trabalho. “A ideia era sair da teoria dos DDSs e aplicar um pouco de prática, possibilitando aumento de consciência dos colaboradores. Assim todos podem pensar antes de cometer um ato inseguro envolvendo as mãos”, pontuou Cleiton Rodrigues, Manutenção.





## Safety and Accident Prevention - a Petrocoque value GRI 103-1, 103-2, 103-3, 403-4

Petrocoque is implemented Environment, Health and Safety indicators in line with its commitment to continuously improve the efficiency of the Integrated Management System. Employee Safety, Process Safety, Transportation Safety, Social, Environmental and Health indicators are monitored.

1 accident resulting in leave was recorded in 2017. 2 accidents resulting in leave were recorded in 2018. The root cause of any accident is investigated in order to mitigate the risk of it recurring and the company also assesses the possibility of implementing preventive and corrective action.

From time to time, alerts are also distributed across the company to assess the likelihood of a similar event occurring at any of our facilities and decide whether to adopt relevant measures.

All of these efforts are focused on continuously reducing the number of accidents, which is reflected by the RAT target of 1.0 in 2019.

- RAT: the number of accidents recorded per million man-hours of risk exposure. This includes typical injuries that do not require time off work (excluding first aid cases), injuries that do require time off work, occupational diseases and fatal accidents.
- TFCA: the number of accidents with time off work resulting from typical accidents or occupational diseases, per million man-hours of risk exposure.

	2016	2017	2018
<b>EMPLOYEE SAFETY</b>			
Registered Accident Rate (RAT)	0.8	1.8	2.0
Frequency of injuries with time off work (own personnel) (TFCA)	3.08	3.12	3.23
Frequency of injuries with time off work (contracted personnel) (TFCA)	0.00	0.00	1.43
Frequency of injuries with time off work (total) (TFCA)	0.81	0.88	1.98
Accident severity (total) (days lost and debited against hours of risk exposure)	37.46	13.15	218.05
<b>PROCESS SAFETY</b>			
Process safety events (with fire or explosion)	0.00	0.00	0.00
Process safety events (causing injuries with time off work or death)	0.00	0.00	0.00
Process safety events (leaks exceeding 2300 kg)	0.00	0.00	0.00
<b>TRANSPORT SAFETY</b>			
Transport accident per 10,000 trips (serious)	0.00	0.00	0.00
Transport accident per 10,000 trips (no leak)	0.00	0.00	0.00
Transport accident per 10,000 trips (with small leaks)	0.47	0.86	0.00
Transport accident per 10,000 trips (total)	0.47	0.86	0.00
Quantity transported per trip (t/trip)	29.73	29.47	28.05
<b>SOCIAL</b>			
Number of complaints from the neighboring community	0.00	0.00	0.00

## Occupational Health and Safety GRI 103-1, 103-2, 103-3, 401-2, 403-4

In its relationship with employees, the company complies with applicable legislation and collective-bargaining agreements. Petrocoque also implements corporate human resources, safety, health, environmental and social responsibility practices including themes such as “work principles” and “workforce commitment”. The following health & safety clauses from the collective-bargaining agreement can be highlighted:



- Medical care for retirees for two years after they leave the company. **19th**
- Supplementary Accident and Disease Benefit for employees. **15th**
- Job protection for employees who suffer accidents causing injury. **36th**
- Action taken to prohibit the use, distribution, possession or sale of illicit drugs. **49th**
- Employee protection in the workplace. **50th**
- All material required to immediately provide care for anyone suffering an accident must be available in the workplace. **53rd**
- Employees are reimbursed the cost of prescriptions in the case of workplace accidents. **55th**

## Occupational Health and Safety GRI 102-8, 103-1, 103-2, 103-3, 401-1, 401-3

Underlining the company’s commitment to its staff and to further support their development, the value of human capital is one of the guiding principles of the Petrocoque Business Policy for the company’s sustainable development.

Petrocoque implements Occupational Health Medical Control, Occupational Risk Prevention and Health Promotion programs to ensure appropriate health, safety, ergonomic and hygiene conditions in the workplace.

The program includes annual medical exams. These exams include a medical assessment, and an evaluation of each employee’s clinical history and occupational background. All employees take part in this program.

Multidisciplinary health monitoring activities are also implemented for disabled staff and employees taking time off work as a result of accident or disease.

Based on the diagnoses from these programs, the company is able to control or eliminate occupational risks, implement healthier work and lifestyle processes, combat sedentary lifestyles and encourage people to have a healthier diet.

Campaigns highlighting the importance of periodic medical exams, anti-flu vaccination and other date-specific campaigns, such as “Yellow September” (suicide), “Pink October” (breast cancer), “Blue November”

(prostate cancer) and “Red December” (AIDS) are also organized.

Other companywide initiatives include communication and educational campaigns on health and healthy eating, with specific actions and broadcasts on corporate TV and educational bulletins.

Petrocoque also employs a nutritionist who is available to help employees assess their diets and offer nutritional guidance. The nutritionist also supervises the monthly menu provided by our meal supplier.



### Medicina do Trabalho



Mês de conscientização

**Outubro Rosa: a Petrocoque apoia a causa**

## Human Capital Management GRI 102-8, 103-1, 103-2, 103-3, 404-2

There are no gender related salary differences at Petrocoque. Different salaries are paid in accordance with the organizations jobs and salary structure, which defines differences based on the seniority of people in each position, their academic background, skills and experience.

All our employees are covered by a collective-bargaining agreement (CBA). The CBA is negotiated annually and includes clauses that basically address salary increases and other employee compensation items. When there are significant operational changes, employees are usually represented on permanent educational union committees. Occasionally, the company may ask for ad hoc meetings with unions to address such changes.

Within the company, salaries are not linked with the minimum salary, they are based on the baseline salary for chemical and petrochemical workers in each respective region. According to the union agreement, the baseline salary for 2018 is R\$ 1,864.21, which is also used as a reference point to increase any associated benefits pursuant to the Collective-Bargaining

Agreement.

Compensation for company administrators, including the Board of Directors and Management, is proposed by the Compensation Committee. Global compensation paid to administrators as a proved on an annual basis at the Annual General Meeting, in accordance with Article 152 of the Brazilian Corporations Act (law 6404, dated 12/15/1976).

Board member compensation is equivalent to 10% of the average fees paid to members of Management. Management compensation is based on market practice.



*Petrocoque Employees*

## Human Capital Management GRI 102-8, 103-1, 103-2, 103-3, 404-2, 404-3

**A new model for People Management** - As part of the More Petrocoque Project, and in line with the company's results, business strategy and core skills, Petrocoque has launched "More HR". This program includes a group of his initiatives intended to improve personnel management at the company and ensure that HR processes are based on merit and recognition. It is also intended to promote human and organizational development and increase employee satisfaction, commitment and productivity. The structure of the "More HR" program was finalized at the end of 2018 for application in 2019 and is based on the following three approaches.



**Organizational Structure** - changes were made to the company's organizational structure from 2018 as part of the More Petrocoque Project in order to better reflect the approved Business Plan. This change, which included transfer, hiring and dismissal plans, was intended to streamline the company's processes, increase synergy across areas and make day-to-day activities faster and more flexible.



# Human Capital Management GRI 102-8, 103-1, 103-2, 103-3, 404-2



## 01 - Performance, career and succession assessment

We have implemented a new performance assessment model for Petrocoque employees that is more rational, transparent and standardized and better aligned with the company's results, business strategy and core skills; it provides the company with information that will underpin development, recognition, training, promotion and, more particularly, succession initiatives.

The first round of assessments took place in 2018, evaluating indicators and deliverables, CVs, personality analyses and skills assessment (14) by stakeholders (270° Assessment). This was used to develop a set of recommendations for each employee to be implemented from 2019, from when this assessment will be used to calculate Profit Sharing.

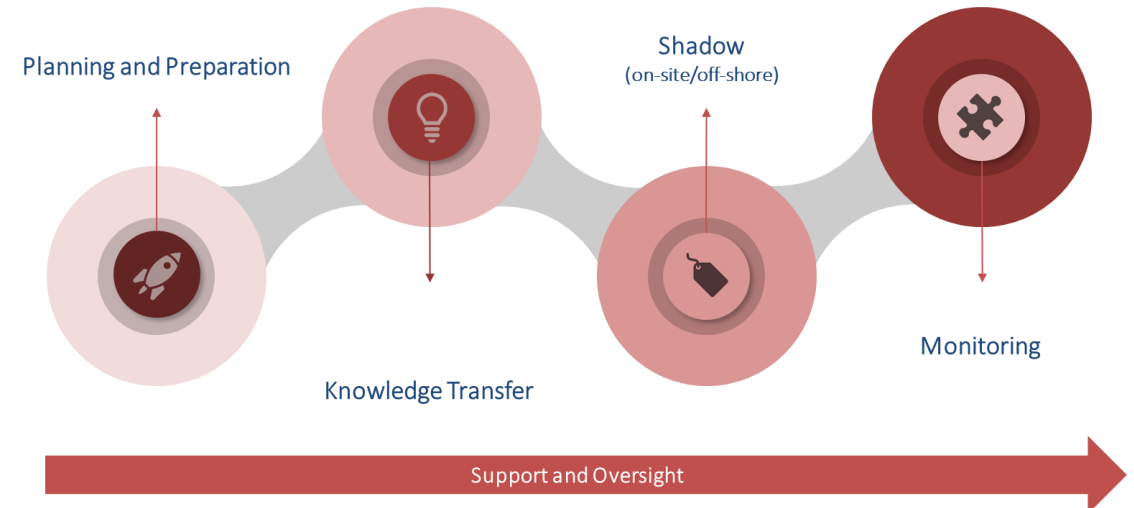
### Petrocoque 270° Assessment of Core Skills



## 02 - Knowledge management

As our team includes people who are at retirement age and the fact some critical functions are carried out by only one person, a Knowledge Management System has been set up and is being systematically implemented. The goal is to offer an integrated overview of all Petrocoque's intellectual assets (critical knowledge) and manage and share that knowledge.

The pilot project began in 2018 with 60 employees involved, including 30 mentors and their respective successors, who underwent training to create multipliers and implement knowledge retention initiatives.



## Human Capital Management GRI 102-8, 103-1, 103-2, 103-3, 404-2

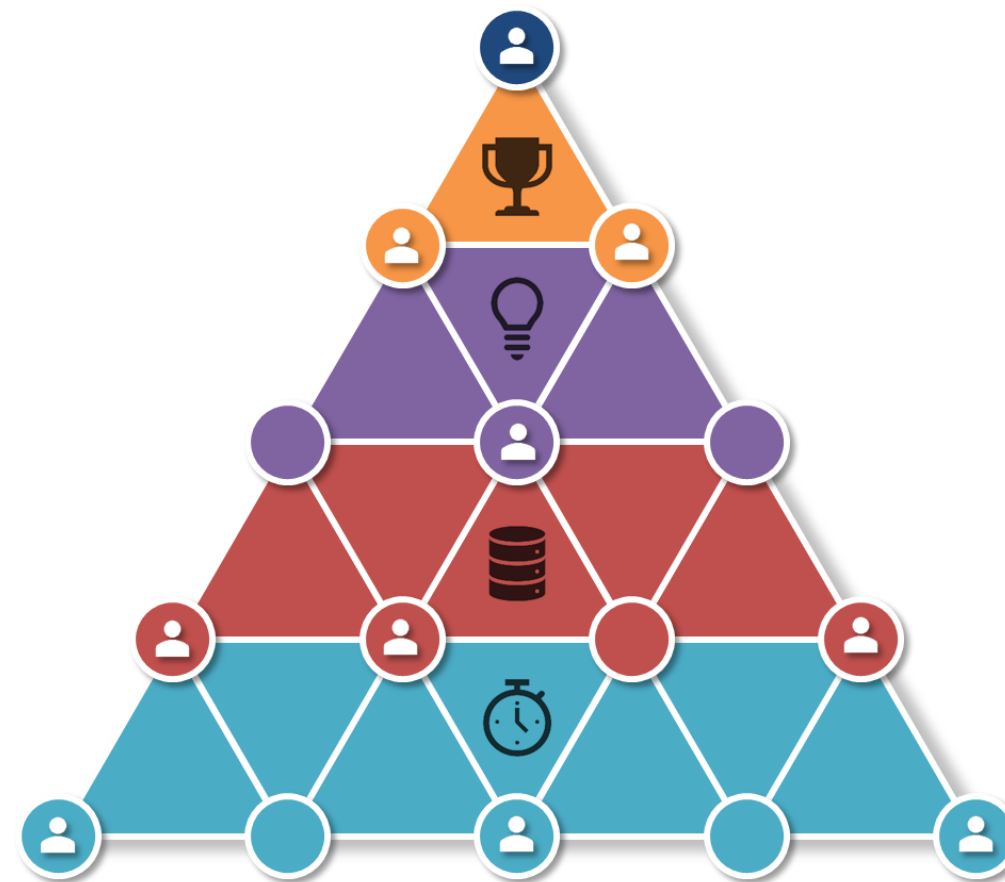
### 03 - Jobs and Salary Plan and Career Roadmapping

This initiative is based on three projects, taking into account the new organizational structure: a review of company job descriptions, the starting point to create career roadmapping at Petrocoque and define its jobs and salaries policy and structure.

**01** In order to improve the quality of staff allocation, **all company job descriptions have been reviewed** based on functional, market and legal criteria, taking into account not only the relevant technical requirements, but also training, experience, self-sufficiency, complexity and other factors, in addition to behavioral requirements.

**02** **Career roadmapping** has been implemented and includes clear and objective criteria for each level and position, helping to support professional development and retain talent.

**03** Petrocoque has defined a **jobs and salaries policy and structure** to reduce any feeling of unfairness among employees and the risk of labor claims.



## Human Capital Management GRI 102-8, 103-1, 103-2, 103-3, 404-2

**Internal Selection Process** - this process increases the outlook for career development and helps identify in-house employees and trainees ready to take on new challenges in order to help them pursue their careers at Petrocoque. Training, CV, personality analysis, skills assessment and psychological factors are taken into account for each position, based on each job's description.

**Training and Development** - the company invests in its human capital because that is its most valuable asset. Training involves internal, external, graduate and language courses to help educate the workforce.

	2016	2017	2018
Investment in training (R\$ thousand)	134	124	151
Training hours	4,807	5,955	3,182

This program was implemented in order to help people reflect and obtain information so that they could plan for their retirement in a way that would offer them a better quality-of-life, encouraging them to retain the knowledge our employees have acquired while working for the company. In 2018, the program focused on employees more than 55 years of age and/or who were in the line of succession. Around 20 people took part.



**Engagement and Organizational Climate** - Petrocoque has carried out an engagement and climate survey involving its employees for two consecutive years. The results were excellent: There was a very high level of engagement of over 90%, which is a reason for everybody to be proud. Based on the comments collected during the surveys, initiatives are implemented to try and improve these areas, especially as one of Petrocoque's strategic pillars is to become one of the best companies to work for in the region!



Petrocoque Employees



## Social Benefits for Employees GRI 102-8, 103-1, 103-2, 103-3, 401-2

Compensation for Petrocoque employees includes social benefits in order to help attract and retain talent; Petrocoque depends on its human capital to overcome its challenges and remain competitive. Petrocoque offers its employees better benefits than those generally offered on the market, including Profit Sharing, Private Pension and Health Insurance.

The Profit Sharing program is intended to recognize employee performance and dedication based on a set of corporate, departmental and individual targets agreed beforehand with the Board of Directors. Employees can earn up to four additional salaries in one year. The Health Plan Petrocoque offers its employees and their dependents (spouses and children up to the age of 24) is one of the most complete plans on the market. Employees contribute 20% towards medical consultations and some exams.

Petrocoque also offers the following benefits:

- ★ Dental plans
- ★ Private Pensions
- ★ Meal vouchers
- ★ Workplace meals
- ★ Chartered transportation or transport vouchers
- ★ Life insurance
- ★ Supplementary illness benefit
- ★ Pharmacy discounts
- ★ Funeral assistance
- ★ Christmas food box
- ★ Disabled child benefit
- ★ Childcare benefit

### Private Pensions

Petrocoque has a private pension plan in a closed fund which is managed by a private financial institution. Based on the model the company has adopted, both employees and the company make monthly contributions into a savings fund held in the employee's name. Contributions can represent up to 10% of the employee's salary and Petrocoque matches each employee's contribution.

Employees are entitled to this benefit in three basic circumstances: If they reach 60, if they suffer permanent disability or in the event of death (in the latter case, the benefit is passed on to their direct dependent). In the event of disability, access is granted when the employee is eligible for Social Security benefits.



## Supplier Management GRI 103-1, 103-2, 103-3, 102-9, 204,1

The company has service provider and supplier management procedures with criteria for selecting, developing and certifying its suppliers. The main objective is to ensure compliance with the relevant legislation and adoption of requisite best practices and quality standards, in addition to encouraging a joint approach to the environment, employee health and safety and social responsibility. Petrocoque has around 1000 certified suppliers.

Aware of its role in society and that the jobs it creates help people find work and produce income, the company tries to focus on hiring local labor and companies. In 2017 and 2018, the company preferred approximately 30% of local suppliers. Additionally, Petrocoque takes part in the Ciesp Regional Business around every year, helping to drive new business to regional companies.

The company only contracts with certified supplies who are fully compliant with its Code of Ethics and Conduct and Compliance Policy.

Service providers are also subject to legal and financial analyses when they are hired, while they are providing services and after the contract ends in order to mitigate possible risks and monitor contractor compliance with tax and labor obligations. The entire process is structured to offers suppliers the highest possible level of transparency and integrity. All suppliers are assessed by Petrocoque as an “internal customer” to ensure all contracts comply with the relevant quality standards.



**Supporting Anticorruption Efforts and Human Rights in the supply chain** – after reviewing its standard draft contracts in 2017, every supplier and/or service provider contracting with Petrocoque now declares not only that it is aware of the Petrocoque Code of Ethics and Conduct, but that it undertakes to comply with the code and enforce it on its third-party contractors, or face immediate contract termination. Contracts now address issues such as management practices, labor relations and human rights, including:

- Taking steps to promote social and environmental responsibility;
- Prohibiting child and forced labor (analogous to slavery or in degrading conditions);
  - Prohibiting unfair competition;
- Comply in full with all applicable laws and regulations when performing contracted activities, including, but not limited to, current anticorruption legislation – Law No. 12.846/14;
- Banning any corrupt, illicit or inappropriate business activity;

## Customer Management and Satisfaction Process GRI 103-1, 103-2, 103-3

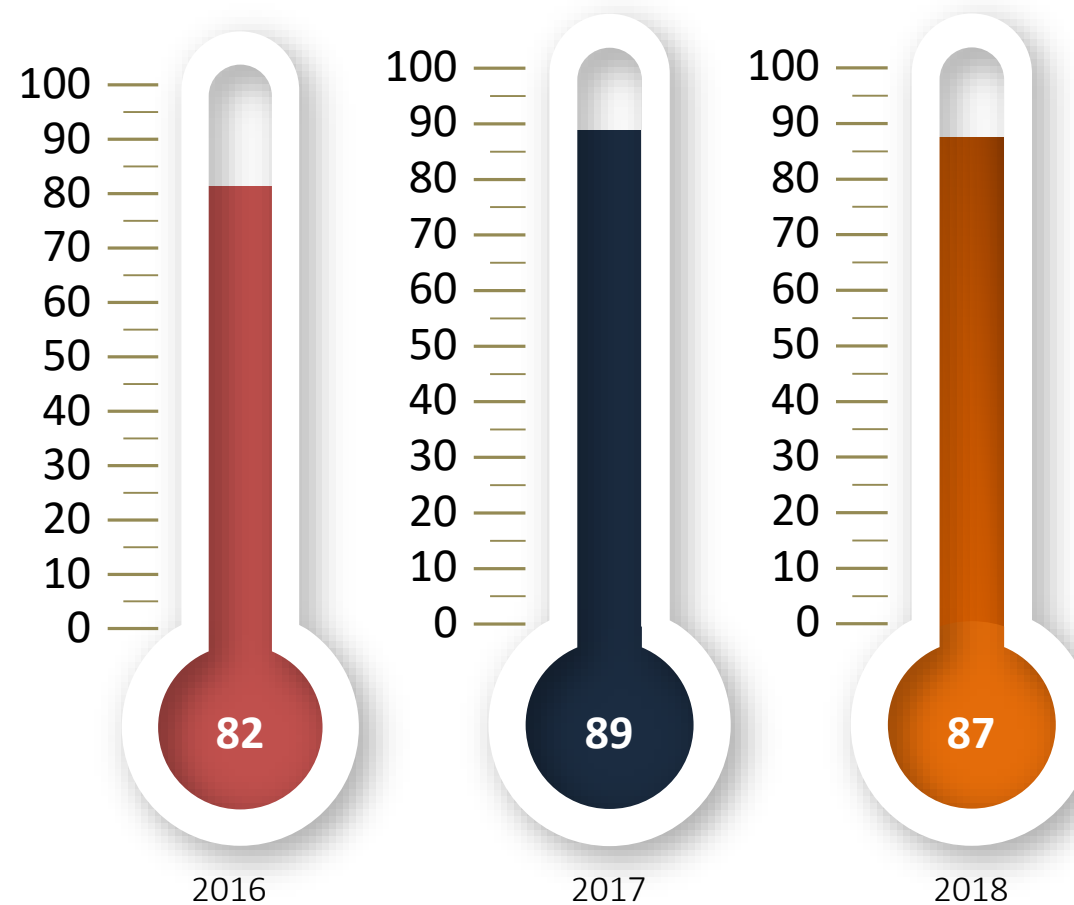
The company currently assesses the Petrocoque Customer Satisfaction Index using a system specified in its operational procedures, in order to measure their perception of Petrocoque, its products and processes and identify opportunities for improvement and to increase the level of customer satisfaction.

Customer satisfaction percentages are assessed using the following criteria: 90% to 100% - Excellent; 80% to 89% - Great; 65% to 79% - Good and less than 64% - Unacceptable.

Customer satisfaction monitoring results are also submitted to management during the Integrated Management System critical analysis, which is carried out on an annual basis.



### Cost of the Satisfaction Monitoring (In %)



## Social Responsibility GRI 103-1, 103-2, 103-3, 413-1

### Social projects based on tax incentive laws

Petrocoque is involved and invests in Social Projects in order to leverage certain tax benefits. Every year, the company sponsors projects focusing on education, citizenship, sports, the environment and culture in the city of Cubatão and the Santos region. These programs serve children, adolescents and the elderly. Approximately R\$ 450,000 was invested in social projects in 2017, supporting citizenship and sustainability, quality-of-life, sports, consumer awareness and employability. Specific events helped around 5000 children and adolescents.

In 2018, most projects the company invested in were of medium duration (between three and 12 months), however they reached out to a small number of people. These projects addressed issues such as citizenship, empowerment, art, culture, sustainability and sports. The company invested over R\$ 500,000, supporting approximately 1500 children/adolescents.



*Na Trilha das Águas Theater - lessons about living with nature, focusing particularly on the importance of*



*Handmade Project – papier-mâché doll workshop*



*Integrating Art and Life – three years sponsoring a volleyball school for over 70 children*

## Social Responsibility GRI 103-1, 103-2, 103-3, 413-1

Petrocoque’s relationship with the surrounding community is based on the work it does through the Cubatão Sao Paulo State Center for Industry (CIESP). A Community Committee has been created to survey local requirements and set up activities with local organizations.

Petrocoque also has an “Open Door” program where people can visit Petrocoque facilities. Created in 2016, this is an open and transparent communication channel with the community and educational institutions. An employee serves as a guide for people visiting Petrocoque and explains how we make Calcined Petroleum Coke (CPC), the safety measures we take and are concerns about the environment. Visits are free of charge and last around 2 1/2 hours.

**Petrocoque Volunteering** – Petrocoque Volunteering was based on an idea from a group of employees. This group of fallen tree employees supports social actions at underfunded local institutions. Petrocoque supports these employees by giving them time off and helping them with their for transportation.

In 2017, the volunteers selected a childcare center in an underprivileged neighborhood of Cubatão to help. Toys were donated for Children’s Day and sacks of presents were provided for Christmas, to the joy of over 200 children. In 2018, in addition to the Volunteer mascot drawing competition for employees children, there were other initiatives such as the “Warm Clothing Campaign”, “Grandparents Day”, “Happiness Day” and “Christmas Sacks” to support underprivileged people associated with charitable institutions in Cubatão.



*Open Doors Visit to the Operations Control Room*



*Children visiting during an Open Doors visit at Christmas – 176 gift packs were distributed, alongside plenty of love and attention*



*Cokito - Petrocoque Volunteer Mascot*



GRI Index



PETROCOQUE





## GRI Standards Table of Contents GRI 102-55

General Content		Reference (p.) / Direct Response
<b>General Disclosure</b>		
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102 – 1	Organization name	Pp. 3, 8 and 59
102 – 2	Activities, brands, products and/or services	Pp. 7, 9, 10, 11, 12 and 13
102 – 3	Head office location	Pp. 8 and 59
102 – 4	Operation locations	Pp. 8 and 59
102 – 5	Type and legal nature of ownership	Pp. 7 and 8
102 – 6	Markets served	Pp. 11, 12 and 13
102 – 7	Scale of the organization	Pp. 7, 8, 9, 10 and 13
102 – 8	Information about employees and other workers	Pp. 10, 42.43, 44, 45, 46 and 47
102 – 9	Supply Chain	Pp. 9, 13 and 48
102 – 10	Significant changes to the organization and its supply chain	None
102 – 11	Precautionary Principle or approach	Pp. 25
102 – 12	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	P. 27
102 – 13	A list of the main memberships of industry or other associations, and national or international advocacy organizations	P. 27





## GRI Standards Table of Contents GRI 102-55

General Content		Reference (p.) / Direct Response
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102 – 16	Values, principles, standards and norms of behavior	Pp. 18, 19, 20 and 21
102 – 17	Mechanisms for advice and concerns about ethics	Pp. 18, 19, 20 and 21
<b>Governance</b>		
102 – 18	Governance structure of the organization, including committees	P. 17
<b>Stakeholder Engagement</b>		
102 – 40	List of stakeholder groups	P. 22
102 – 41	Percentage of total employees covered by collective bargaining agreements	100%
102 – 42	The basis for identifying and selecting stakeholders with whom to engage	Pp. 4 and 22
102 – 43	The organization’s approach to stakeholder engagement, including frequency of engagement	Pp. 4 and 22
102 – 44	Key topics and concerns that have been raised through stakeholder engagement	Pp. 4 and 22







## GRI Standards Table of Contents GRI 102-55

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<b>Identified Material Aspects and Boundaries</b>		
102 – 45	Entities included in the consolidated financial statements	Petrocoque S.A. Indústria and Comércio e Coquepar – Companhia de Coque Calcinado de Petróleo
102 – 46	Defining report content and topic Boundaries	P. 3
102 – 47	List of material topics	P. 3
102 – 48	Restatements of information	None.
102 – 49	Significant changes from previous reporting periods in the list of material topics and topic Boundaries	None, as this is the first year the sustainability report is produced in line with GRI guidelines.
<b>Report Profile</b>		
102 – 50	Reporting Period	P. 3
102 – 51	Date of most recent report	2016, published in April 2017.
102 – 52	Reporting cycle.	P. 3
102 – 53	Contact point for questions regarding the report	P. 59
102 – 54	Claims of reporting in accordance with the GRI Standards	P. 3
102 – 55	GRI content index	P. 52
102 – 56	External assurance	The report was not submitted for external verification.





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103 – 3	Evaluation of the management approach	Sections 6, 16, 28 and 37
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<b>Effluent and Waste</b>		
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<b>Safety and Commitment to Life</b>		
403 – 1	Worker representation on formal health and safety committees	P. 39
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<b>Training and Education</b>		
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404 – 3	The percentage of employees receiving regular performance and career development analyses, separated by gender and category	P. 45
<b>Stakeholder Communication and Relationships</b>		
413 – 1	Operations with local community engagement, impact assessments, and development programs	Pp. 50 and 51
417 – 2	Incidents of non-compliance concerning product and service information and labeling	P. 35





## Corporate Information [GRI 102-1](#), [102-3](#), [102-4](#), [102-53](#)

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#### Credits

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We would like to thank the managers and other administrative and operational colleagues at Petrocoque for their assistance producing and analyzing this information.

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If you have any comments, questions or suggestions about the report, please email [contato@petrocoque.com.br](mailto:contato@petrocoque.com.br).





PETROCOQUE

