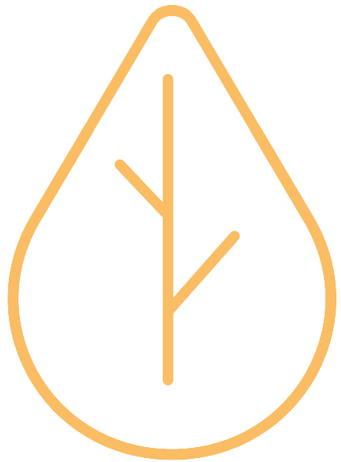
Respect for the enviroment and the social environment



Our high-voltage transmission lines span throughout Chile, from the northern desert to forests of the south and also pass through inhabited zones. Connecting with the environment and designing routes with these spaces in mind is highly important. We at Transelec believe that power transmission projects can be developed with minimal socio-environmental impacts.

Why is this important?

Construction and operation of our transmission lines require the transection of natural areas that it some cases have never been affected by man. Care for the environment is essential when it comes to designing transmission line routes. Potential impacts not only occur during construction, but also while operating transmission lines and substations, which have a long service life. Transelec activities can potentially generate negative impacts on surrounding areas, such as the loss of agricultural soil, alteration of the natural landscape and biodiversity, waste generation and the emission of hazardous substances, among others.

Climate change

Global awareness regarding climate change has expanded and measures have been taken to address the issue. Chile signed the Paris Accord in 2016. The objective is to reduce global emissions and prevent the Earth's temperature from rising by 2 degrees Celsius. This has promoted a climate change agenda designed to reduce greenhouse gas emissions and to increase power generation from renewable sources, among other commitments. In addition, and as part of SDG 13, Climate Action[18], Chile developed an action plan leading up to 2030 designed to implement urgent measures to fight climate change and its effects.

Regulatory context

Chile's main environmental regulation is Law 19,200 on General Environmental Bases, which is followed by a series of specific standards for the power transmission sector. In addition, any intervention affecting native vegetation and/or flora made by Transelec must be done in accordance with Law N° 20,283 on native forest recovery and forestry development, which specifies the need to formulate management plans in qualified cases. Another important regulation refers to archaeology and paleontology.

The Environmental Superintendence (MMA) and the Environmental Courts are responsible for inspection. Each new transmission project must be evaluated by the Environmental Evaluation Service (SEA) and the company must comply with the provisions of an Environmental Qualification Resolution, a document regulating actions for each project approved.

Transelec has power transmission facilities in territories that have been classified as protected areas, such as National Parks, National Reserves and priority sites for biodiversity conservation. The National Forestry Corporation (CONAF) is responsible for monitoring conservation and management plan compliance in these areas.

[18] Additional information is available at: http://www.chileagenda2030.gob.cl/seguimiento/ods-13

Editorial ARTICLE

David Noé, Vice-president of Corporate Affairs and Sustainability

Sustainability crossroads

A country cannot develop without reconciling economic growth with the welfare of its inhabitants and care of its surrounding area.

This same logic applies to companies. If a company wishes to leave a mark it must grow and be profitable, but if its stakeholders (whether these be workers, suppliers, customers or neighbors) are not benefited by the environment or if they damage the environment, the company will most likely disappear. In this context, companies must consider economic, social and environmental dimensions of sustainability as part of their strategic pillars

However, doing things right is no longer enough. We are currently facing high levels of citizen distrust, which also affects companies' own sustainability. Here are two examples:

1. According to the Eighth CADEM and SOFOFA Corporate Confidence Study, only 35% of the interviewees say they trust large private corporations. It is highly unlikely that customers will be willing to consume goods and services from companies they do not trust over the long term, which jeopardizes the economic sustainability of these companies.

2. Based on the CPC Productivity Observatory, average Environmental Impact Study approval time came to 18 months between 2007 and 2016. This term has increased substantially. This longer term is partly due to more stringent environmental standards, which is justified in terms of country development, but also to public services that distrust environmental impact evaluations, as well as mitigation and compensation measures offered by companies, which in recent years has unnecessarily extended the evaluation process and jeopardizes economic sustainability for projects.

Companies must presently continue to make headway in terms of their commitment with sustainability and also prove to society and to the State that we behave appropriately, while encouraging companies that do not behave appropriately to start doing so. Otherwise distrust will commensurably threaten the sustainability of all companies.

Transelec is serving Chile by transmitting energy and developing the new high-voltage power transmission systems the country needs: transmission lines, substations, complementary services, etc. Our job is to produce growth and prosperity, incorporating new technologies into the national power grid, improving service quality and transmission capacity, while ensuring that more and cheaper power reaches the country's households and industries.

How do we go about managing this?

ENVIRONMENTAL MANAGEMENT

The development of new power transmission systems is addressed with a multidisciplinary focus integrating environmental and social dimensions starting with the planning and study phase up to exploitation and eventual closure. This environmental and social management focus goes beyond legal compliance and enables the identification and evaluation of possible environmental impacts in time, followed by the analysis of route alternatives, standard compliance verification and the design of appropriate mitigation, compensation and/or repair measures when required. We have an ISO 14001 certified Integral Management System (IMS) that is used to evaluate environmental and social aspects and impacts generated during the engineering, construction and operating stages and to verify regulatory compliance and supervise actions for reaching goals and objectives. In addition, we monitor environmental conditions and requirements indicated in Environmental Qualification Resolutions for projects. We have an on-line monitoring system (an mRisk platform) that we use to manage these environmental conditions.

The Environmental Plan

The plan updated for the 2017-2018 period has the following six objectives: (i) minimize environmental incidents; (ii) comply with environmental legal requirements; (iii) increase the industrial waste recycling rate; (iv) maintain outstanding environmental leadership; (v) improve environmental communication with stakeholders, and; (vi) implement the "ConSuma Conciencia" environmental responsibility program. This plan includes actions, measures and a wide range of controls in order to prevent the occurrence of environmental incidents, among other issues, which are determined during operating procedures and then disseminated to workers and contractors. It also considers the design of emergency plans and the staging of simulations in order to evaluate monitoring response capacity for compliance with environmental regulations.

Climate change

We responsibly managed greenhouse gas (GG) emissions in line with the Sustainability Policy and as part of the Environmental Plan. We formulated an agenda to reduce emissions at a corporate level for this purpose. The Company's main sources of emissions are eventual sulfur hexafluoride (SF6) leaks, emissions from vehicles transporting materials and supplies and vehicles owned by employees, including air transport. The emphasis of our work in 2017 was the responsible management of SF6, an artificial gas widely used by the power industry due to its high insulation capacity.

Integral waste management

We have made headway in terms of minimizing waste generation and ensuring responsible waste management. The company has placed strong emphasis on controlling the responsible management of contractors during construction projects and while doing maintenance work for operating systems. We encourage the re-evaluation of discarded construction materials that can be used as raw materials for other lines of business, such as lumber, iron, escarpment material or excess material from excavation (see highlighted section on page 71).

In accordance with the Sustainability Policy, we have set waste management goals and objectives encompassing the main stages where waste is generated: project construction and operations. As part of our Environmental Plan, in 2017 we set an objective to increase recycling and industrial waste reutilization rates. Compliance with these goals is due to successful management by the areas responsible.

Objective	Management Area	Indicator	Goal for 2017	Results in 2017
Increase the industrial waste recycling and reutilization rate	Operations	Percentage of non-hazardous industrial waste recycling	> 50 %	89%
		Percentage of hazardous industrial waste recycling	> 50 %	50%
	Projects	Percentage of non-hazardous industrial waste recycling and reutilization	> 20% (three important projects)	59%
		Waste management campaign development	100%	100%

Organization and reporting

Environmental responsibility corresponds to the Vice-presidency of Corporate Affairs and Sustainability, which in turn reports to the General Manager. Transelec has professional teams comprising the Environmental Unit that meet its environmental goals and objectives. These teams are complemented and supported by technical work inspectors for projects and by zonal environment leads for operations. These inspectors and leads are experts with a background in environmental and social issues.

#YoCuido (ITakecare), #YoReciclo (IRecicle), #YoMeMuevo (IMove)

ConSuma Conciencia, a personal cultural change

Transelec believes that environmental care and commitment is an essential part of its work. In the spirit of its motto "Together for the environment!", the internal program known as "ConSuma Conciencia" (a play on words between 'with utmost awareness' and 'consume awareness') that aims to raise employee awareness with regard to energy consumption, material valuation and minimization of emissions produced by human activity.

The program is comprised of three central topics: #YoCuido (ITakeCare), #YoReciclo (IRecycle) and #YoMeMuevo (IMove). The idea is for employees from the Main Office and the Zone Divisions to adopt recommendations proposed by each initiative.

Outstanding proposals in 2017 included #IRecycle at the project development level: a material recycling campaign involving contractors and colaborators; at the zone level: the emblematic installation of compost bins for recycling organic matter from the Central South Zone Division. The #IMove campaign was activated at the company's Main Office in Santiago by means of an alliance with our neighbors VTR and SURA Asset Management Chile to jointly create the "Jump on the bandwagon" campaign for the Nueva Apoquindo Complex. The idea was to create a car pool for employees from all three companies. Consequently, and in line with Sustainable Development Goal 11, 13 and 17, the goals are to reduce atmospheric pollution, vehicle congestion and to strengthen community ties, quality of life and collaboration with our neighbors as a joint contribution to a more sustainable city and a more sustainable world. The initiative will be executed during the first quarter of 2018.

RESPECT FOR TERRITORIAL BIODIVERSITY, WILDLIFE, FLORA AND ITS NATURAL AND CULTURAL HERITAGE

Mitigation starting from the design phase

Action plans and initiatives for safeguarding natural, cultural and historical heritage focus on the formulation of environmental baselines for each of these components. These baselines are the first element used to provide early feedback for project engineering and to make adjustments required in order to safeguard natural and cultural heritage. For example, if the baseline is formulated during an initial stage of the project, infrastructure construction design and layouts can be formulated considering the location and status of natural resources. This ensures the least possible impact or enables the design and planning of mitigation, repair or compensation measures required in order to address possible impacts.

In the case of sites with high archaeological value, cultural or historical heritage, early identification enables mitigation actions to be started. These include changing the route or conducting archaeological rescue with the intervention of specialists in these areas in order to prevent the loss of heritage value.

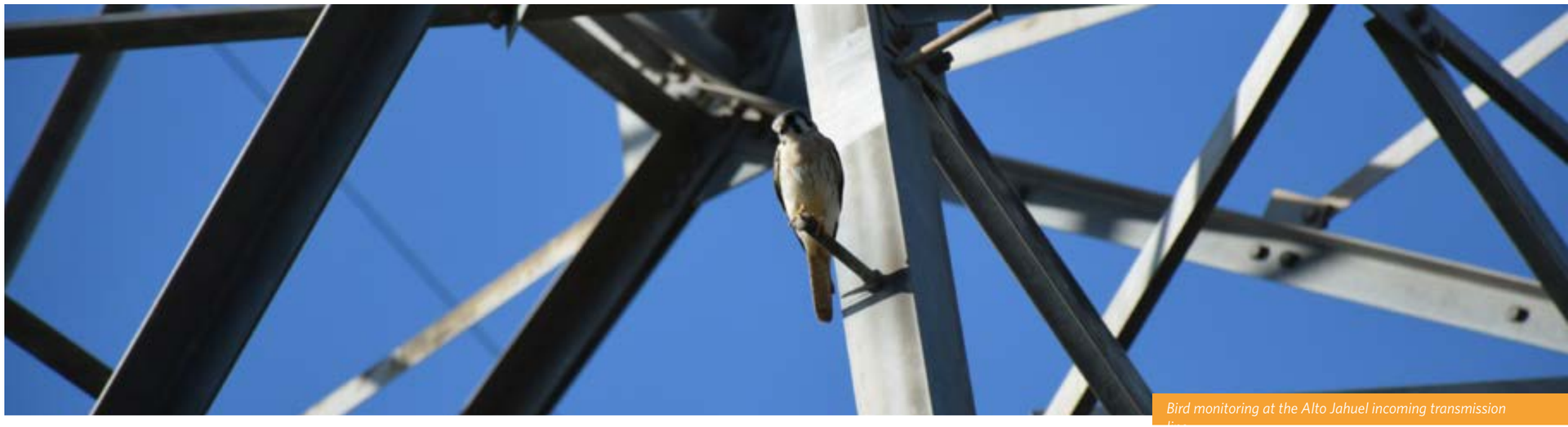
We work together with CONAF to safeguard protected areas or biodiversity-rich areas where we will be running transmission lines. We also comply with management plans committed to in the permits granted within the framework of the RCA. In addition, and in order to help safeguard biodiversity, Transelec has spearheaded a series of dissemination, investigation and protection initiatives. Some examples are the publication of "Lonquén, bioreserve" and "Biological value, ecosystem services and a plan indicating prioritary sites at the Lonquén and Chena hills" research projects in conjunction with local authorities.

2017 project challenges

One example of administration safeguarding natural, cultural and historical heritage is the "Frontera Sectioning Substation" project. Location of the transmission line associated to this substation was initially planned for an inland section of the "Oasis de Quillagua" prioritary site and went through an archaeological site corresponding to a lithic quarry known as "La Capilla". Aware of this situation, we decided to approach the authority and the community. We then decided to run the line away from the prioritary site and going around the archaeological site. We thus ensured that we would not interfere with the cultural component or the natural features in the area.

Another challenge in terms of safeguarding historical and cultural heritage was receiving the RCA for project STN 4319 Los Changos – Kimal, which is being managed by another company from the Transelec Group. We needed approval from the National Monuments Council to build a line spanning approximately 140 kilometers and going through Algorta, one of Chile's richest zones in terms of archaeological heritage. Transmission line design was adjusted to go around over 150 archaeological sites in the area surrounding the project. In addition, we committed to a series of measures designed to safeguard this heritage during construction. These measures included archaeological monitoring, temporary fences around archaeological sites, signage and worker training.

28
new hectares were reforested in 2017



Bird monitoring at the Alto Jahuel incoming transmission

Protecting birds

We continued to support initiatives related to the study and understanding of interaction between birds and power transmission lines in 2017. These include sponsoring the 12th Chilean Ornithological Congress (see highlighted section on page 73). In addition, in order to prevent incidents involving birds and transmission lines, the company continued to monitor birds along the 2x500 kV Alto Jahuel incoming transmission line. There were no findings in terms of collisions or electrocution. Devices have been installed along this same transmission line to prevent birds from colliding with the line, especially birds of prey in the Lonquén Hill sector. These devices were suited to the purpose and there is no evidence of incidents of this type.

Bird protection practices

We have been working with AvesChile (the Chilean Ornithologists Union) since 2016 to develop policies and protocols to control and mitigate impacts stemming from interaction between birds and transmission lines and structures. This initiative received an award in the environmental category from the Chilean Global Compact Network in 2017 for the "Respect for Birds" project.

AvesChile was commissioned by Transelec to study the frequency of these interactions, which species were involved, which biological, environmental and structural factors came into play with these problems and what type of outages were produced.

We attended the 12th Chilean Ornithological Congress in November 2017. AvesChile made a presentation entitled "Challenges in the investigation of avifauna and power transmission line interaction in Chile", a study conducted for our transmission lines in 2016. Presentations were made by different speakers from Chile and abroad at the Congress. The current situations in Chile and in Europe were discussed during these presentations. The congress was hosted by the Chilean Ornithologists Union (UNORCH) and was also sponsored by Transelec.

Monitoring and results

Each project executed by Transelec has its own environmental management plan. Formulation and submittal of monthly reports is required in order to evaluate compliance with these plans. Ongoing control and monitoring are provided at each site. In addition, the MRisk environmental management tool was improved. Based on these improvements, the company started to submit monthly environmental compliance reports to the Project Development, Operations and Engineering Committees.

In addition, the Projects Committee and the Operations Committee meet on a monthly basis to present different aspects to the company's General Manager and vice-presidents, which include environmental compliance for each project underway.

In June 2017, the company Bureau Veritas conducted an audit of the Integral Management System (ISO 14001, ISO 9001 and OSHAS 18001). Results were positive and no environment-related sanction processes or significant environment-related incidents were reported during the operation of power systems in 2017.

Carbon footprint measurement

We estimate our carbon footprint at a corporate level each year, considering scopes 1 and 2 in order to determine ongoing management measures to reduce the environmental impact of our operations. There was a slight increase in equivalent CO_2 emissions in 2017. This was caused by accidental SF_6 leaks, which will be totally compensated for by the contracting companies responsible. Power consumption dropped by 4.3% compared to last year. This means progress and a starting point for sustainable management of this resource.

0

environment-related incidents in 2017

Environmental monitoring

We measured noise, electromagnetic fields (EMF) and monitored interaction between birds and transmission lines in 2017 in the framework of compliance with RCA obligations. Transelec consequently complied with parameters established by national standards and reference standards (for EMF).

Environmental management figures

	2015	2016	2017
Incidents with environmental impact Number of significant spills	2	2	0
Environment-related fines Number	7	0	0
Electrical energy consumption Gigajoules	46,155	50,521	48,336
Greenhouse gas emissions Tonnes of equivalent CO_2. Total emissions from scopes 1 and 2.	9,009	7,944	8,797