



How will Elia
return our
beach to its
former glory
once the
cable works
have been
completed?

**LEON INKEBERGHE -
MANAGER OF ICARUS SURFCLUB,
ZEEBRUGGE**

The beach and shoreline form the backdrop to our surf club so they have to look pristine. Our members also use the beach a lot to practice their surfing and leave their kites on the sand. We're very grateful that Elia has consulted us about the works and is completing them as quickly as possible. However, having a safe and clean beach again afterwards is just as important.

**- KEEN KITESURFER FOR THE
PAST SIX YEARS
- NEW MANAGER OF ICARUS
SURFCLUB IN ZEEBRUGGE**



**MATHIEU DONCHE -
NEMO LINK BE PROJECT
MANAGER AT ELIA**

“Ensuring that the beach looks its best after the works is a priority for us. This means carrying out the work to a high standard to prevent subsidence, and not leaving any waste behind. We will therefore dig the work area to make it level and sift the sand. We determine and discuss our working method in advance with stakeholders, in this case the surf club.”

21,824 m —————
STEVIN PROJECT LINES INTEGRATED
IN THE LANDSCAPE

85 ha —————
THE SURFACE AREA OF SUSTAINABLE
CORRIDORS CREATED EACH YEAR SINCE 2015



We cooperate to strengthen our TSO position

Elia's activities have an impact on the country's socio-economic development. As a key player in the energy system, Elia is committed to improving dialogue and coordination with the various market parties. It also aims to be a sustainable and responsible company that works hard to help reduce the ecological footprint of its operations and develop projects for the community.



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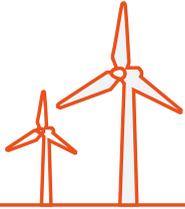
ILSE TANT, CHIEF PUBLIC ACCEPTANCE OFFICER AT ELIA

Elia wishes to take account of society's needs and concerns at every stage of its infrastructure projects. We approach our stakeholders with empathy and integrity. To this

end, Elia has developed a policy defining its ambitions and actions on sustainable development. The policy focuses on four main areas: economy, environment, society and employment.

“WE STRENGTHEN DIALOGUE WITH ALL STAKEHOLDERS AND OUR INTERNATIONAL COLLEAGUES TO PUT FORWARD SOLUTIONS THAT ARE IN THE INTEREST OF SOCIETY.”

Our ambitions



Economy

Elia upgrades its grid to enable greater renewable integration and thus supports Belgium's energy mix and the EU's ambitions on renewables.



Employment

Elia aspires to be a sustainable employer concerned for the safety of all. To achieve this, it relies on a motivational and robust corporate culture that allows it to meet all the challenges of the energy sector in an agile way.



Environment

Elia incorporates more environmental targets into its activities in order to make the best possible contribution to the energy transition and promotes biodiversity around its facilities.



Society

Elia seeks to upgrade its grid in a spirit of dialogue and cooperation with local residents. Its electricity system must be reliable and affordable, and must be maintained and developed in the interest of the community.



OBJECTIVES

We realise the grid of the future through proactive dialogue with a variety of stakeholders, based on mutual respect and empathy to come to the best societal and environmental solutions.

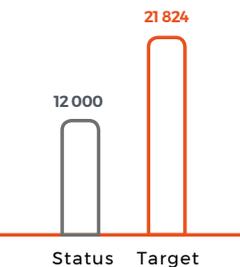
- Having a positive impact on society by realising further grid development enabling proper integration of renewable energy in the EU grid of the future
- Expanding dialogue with stakeholders and keeping them informed throughout the entire duration of projects
- Performing the necessary studies and analyses and acting as an advisor to the different governments with regard to the realisation of the energy transition in the interest of society



What we achieved in 2017

Building a relationship on trust and dialogue

BIODIVERSITY - STEVIN LANDSCAPING INTEGRATION



Elia is keen to lessen the impact of its facilities on the landscape and plants large numbers of trees and shrubs on the land it owns. For more information about Elia's sustainability measures, see the annex.

MEETINGS WITH LOCAL RESIDENTS AFFECTED BY INFRASTRUCTURE PROJECTS

Informing and listening to residents impacted by its infrastructure projects is a priority for Elia. As such, the transmission system operator organises regular information sessions in partnership with affected municipalities. These sessions inform local residents about the impacts, objectives and challenges of upcoming works, as well as answering any questions they may have. Newsletters, websites and brochures are also used to ensure optimal communication throughout the works.

INVITING LOCAL RESIDENTS TO LEARN ABOUT WHAT WE DO

In May, Elia held an open day for the public at its brand new Stevin high-voltage substation in Zeebrugge. The visit was part of the Open Site Days, an initiative by the Belgian Construction Confederation which sees a number of projects opened to the general public. It was the first time Elia had taken part in the event. With over 2,000 people attending, the day proved such a success that Elia plans to initiate another project in 2018. For more information about Stevin, see page 43.

COOPERATION WITH CUSTOMERS AND PARTNERS

Elia is committed to maintaining good relations with its customers and its partners, the distribution system operators (DSOs). To this end, it adopts a number of approaches.

Naturally, it has key account managers who deal with these parties directly on a day-to-day basis. In addition, events and meetings are organised to keep them informed of Elia's activities, the various products it offers and how it sees the future of the grid in Belgium.

SCHOOLS' DAY AT THE STEVIN SUBSTATION

On Friday 5 May, Elia organised a Schools' Day at its Stevin site in Zeebrugge. The initiative helped to raise awareness among future generations about changes in the energy system.

The unique experience of visiting a new, high-voltage substation proved a hit with students and teachers alike.





**PHILIPPE CORNELIS,
PUBLIC ACCEPTANCE OFFICER
AT ELIA**

“OUR AIM IS TO INVOLVE CITIZENS AND LOCAL AUTHORITIES AS EARLY AS POSSIBLE IN ORDER TO ACCOMMODATE THEIR NEEDS AND PRIORITIES. IT’S ALSO IMPORTANT TO MAINTAIN THE CLOSEST POSSIBLE CONTACT THROUGHOUT THE PROCESS SO THAT WE CAN REACT AS QUICKLY AS POSSIBLE.”



DIALOGUE AT THE HEART OF THE STEVIN PROJECT

Elia informed and involved hundreds of stakeholders at each stage of the Stevin project, from the eight municipal administrations through to local residents. In other words, it implemented the Stevin project in a way that took its surroundings into account. So how do local mayors feel about the project now?

Renaat Landuyt (Mayor of Bruges)

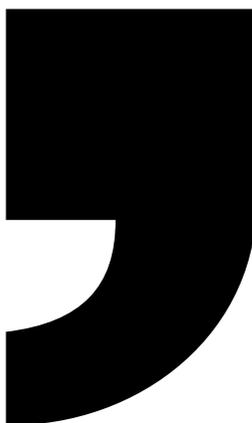
“The additional measures that Elia proposed were key to reaching a compromise. The Stevin substation blends in as well as it can and is surrounded by vegetation. The city council is happy with this solution as it allows us to protect our residents, while also enhancing their living environment.”

Joachim Coens (Mayor of Damme)

“Damme places a high value on the quality of its surroundings. We’re pleased that we were able to work with Elia to find a solution for those residents who were still being impacted visually. They were able to request free planting of vegetation to reduce the visual impact. The town council felt this was a very constructive way forward.”

Marleen Van Den Bussche (Mayor of Maldegem)

“Elia was always willing to reach a mutual agreement on a suitable route. We hope that it will continue to engage with us on a permanent basis as this is the best guarantee for the well-being of Maldegem’s residents.”



ELIA'S USERS' GROUPS

The Users' Groups are specific discussion groups comprising representatives of grid users, partner DSOs and other market players. They enable Elia to disseminate information to market players and to consult them on specific issues relating to the operation of the electricity market. The Users' Groups can convey views and problems to the relevant minister, administrative authority or regulator, or undertake other initiatives. Three working groups are active: System Operation, Belgian Grid and European Market Design. Ad hoc groups may also be set up to address more specific topics.

Elia carries out a satisfaction survey every other year to gather feedback on its services from its customers and partners. This survey is a very important tool for Elia to find out about expectations and areas for improvement. The next one is due in late 2018.



SATISFACTION SURVEY

COOPERATION WITH REGULATORS

CREG

In late 2017, CREG approved a revision of all the levies that Elia receives in connection with its public service obligations. The revised levies have been applied from 1 January 2018. The levy for Walloon green certificates was maintained at its existing level by freezing a certain volume of certificates in late summer 2017.

In the field of ancillary services, CREG granted approval for the method that Elia has developed to gauge the volumes of ancillary services that it will require to manage the electricity system safely and reliably.



RAPHAËL BOURGEOIS,
KEY ACCOUNT MANAGER AT ELIA

“ELIA ALSO ORGANISES A NUMBER OF ANNUAL EVENTS TO INFORM GRID USERS, OUR PARTNERS AND STAKEHOLDERS MORE GENERALLY ABOUT OUR STRATEGY, ACTIVITIES AND PRODUCTS. THESE INCLUDE THE STAKEHOLDERS' DAY, ARP DAY FOR ACCESS RESPONSIBLE PARTIES, AND CUSTOMERS' DAY FOR CUSTOMERS DIRECTLY CONNECTED TO ELIA'S GRID AND OUR PARTNER DSOs.”

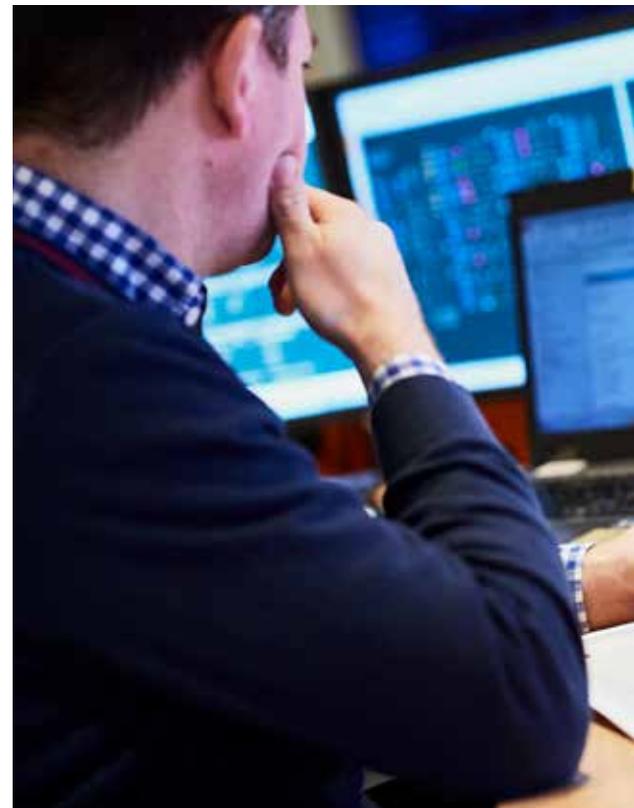
In late June, CREG set the various targets that Elia will be encouraged to achieve in 2018 within the framework created by the Tariff Methodology and left to CREG's discretion. Among other things, the targets aim to promote a better match between supply and demand.

CREG adopted a decision on the tariff balances for 2016 following Elia's tariff report.

CREG also adopted a series of decisions relating to the integration of the European energy markets, in particular the Common Grid Model, as well as regional requirements for harmonised allocation rules and long-term transmission rights for the CORE Region. It also addressed the single allocation platform and its cost-sharing methodology.

The rules on the operation of the balancing market were amended to open up the primary reserve market to new technologies and to open up non-reserved tertiary control power to non-CIPU technical units.

In late January, CREG approved the changes made to the Access Responsible Party contract, allowing the participation of free bids for tertiary energy control for non-CIPU technical units (BidLadder project) among other things.



VREG

In 2017, the Flemish Electricity and Gas Regulatory Body, VREG, was required to approve the changes made to the Access Responsible Party contract. VREG also approved the Investment Plan that Elia prepared in order to develop the networks it operates at voltage levels of 70 kV and below, which is in line with the regulatory obligations incumbent on it as a local transmission system operator in Flanders.

CWAPÉ

The Walloon Energy Commission, CWaPE, approved the Adaptation Plan prepared by Elia for the development of the local transmission network in the Walloon Region. In addition, CWaPE and Elia exchanged information within the framework of the operation of the Walloon green certificates market and, more specifically, in the areas in which Elia has obligations.

BRUGEL

The Brussels Energy Regulator, Brugel, issued a favourable opinion on Elia's Investment Plan for the regional transmission network that Elia operates in the Brussels Region.



GO15 ANNUAL MEETING IN BRUSSELS

The Elia Group organised GO15's 2017 Annual Meeting, which took place in Brussels from 22 to 24 October. GO15 is an initiative launched by the world's 19 largest system operators, which account for 70% of global electricity demand and provide electricity to 3.4 billion users on six continents. The Annual Meeting was an opportunity for the CEOs of participating TSOs to discuss the future of power grids and reaffirm their commitment to facilitating the energy transition.

INTERNATIONAL COOPERATION

Elia and 50Hertz are active members of various international organisations that work to promote the security, sustainability and reliability of the world's electricity grids.

ENTSO-E

The European Network of Transmission System Operators for Electricity (ENTSO-E) represents all European Union operators and other transmission system operators that are connected to the European electricity grid. ENTSO-E acts as a point of contact for bodies such as the European Commission and the Agency for the Cooperation of Energy Regulators (ACER) for matters concerning technical problems and market-related issues.

CORESO

The regional technical coordination centre 'Coordination of Electricity System Operators' (Coreso) brings together various European transmission system operators with a view to enhancing the operational security of grids in Central West

Europe. The development of intraday markets has triggered a rise in cross-border electricity flows. Coreso also strives to improve the region's integration of renewable energy generation by exchanging data and expertise.

EPEX SPOT SE

Elia has a minority stake (17%) in the holding HGRT¹, which is a shareholder (49%) in the European Power Exchange SE. EPEX SPOT manages a number of electricity trading platforms, mainly in the Central West Europe region (i.e. Germany, France, the United Kingdom, the Netherlands, Belgium, Austria, Switzerland and Luxembourg). These markets account for 50% of Europe's electricity consumption.

GO15

The Elia Group is a founding member of GO15, a voluntary initiative that brings together the world's 19 largest transmission system operators. The organisation represents 3.4 billion consumers on six continents and draws up joint action plans designed to improve the security and reliability of the global electricity grid.

1.. HGRT stands for Holding de Gestionnaires de Réseau de Transport, a holding company comprising Amprion, APG, Elia, RTE, Swissgrid and TenneT.

Helping community projects

SUPPORTING PROJECTS OUR EMPLOYEES ARE INVOLVED IN

Any Elia employee involved in a community or charity-run project can request a contribution from Elia. The contribution is worth €250 and can be applied for once a year. Elia donated a total of €4,000 to 16 of these projects in 2017. Elia supported initiatives to provide meals for young refugees, construct new buildings for the Scouts and run arts workshops in a children's hospital, amongst others.

HELPING YOUNG REFUGEES GET INTO WORK

In 2017, Elia took part in a training scheme for young refugees, 'Rising Youth', in partnership with the Flemish employment agency VDAB and IRIS Anticorrosion, a company specialising in the condition and maintenance of industrial production sites.

"24 young refugees received training under the Rising Youth scheme, and 23 of them went on to get jobs. This is something we're extremely proud of. In December 2017, the project won the Best Sustainable Partnership Award at an event organised by The Shift, the Belgian network association on sustainability. We intend to build on this momentum by organising another training session in spring 2018." Valérie Legat, Environmental Expert at Elia

CHARITY PROJECTS SUPPORTED



- Number of employees who proposed a charity project
- Total budget invested to support charity projects

TEACHING YOUNG PEOPLE ABOUT THE CHALLENGES OF THE ENERGY TRANSITION

In October 2017, the system operators Elia, Eandis and Infrax launched ElectriCITY, a free educational pack for children aged 10 to 14. The pack aims to make young people aware of the importance of electricity and the rational use of energy. In 2018, Elia will finalise the German and French versions with the distribution system operators in Brussels and Wallonia.



IGOR LEFEBVRE,
ENVIRONMENT MANAGER AT ELIA

Partnering with experts

Elia is aware of the importance of taking advice from experts to boost the sustainable development of its activities. It therefore forges partnerships with organisations that can guide it in its sustainable and socially responsible choices.

COLLABORATING WITH BE PLANET TO MAKE OUR ACTIONS MORE SUSTAINABLE

In February 2017, Elia became a partner of Be Planet, a 'public utility foundation' (fondation d'utilité publique/stichting van openbaar nut). Be Planet supports innovative citizens' initiatives that have a beneficial environmental impact and that could play a role in the energy transition.

“BE PLANET'S MISSION DOVETAILS PERFECTLY WITH OUR SOCIAL ROLE AS A GRID OPERATOR. BE PLANET HAS THE POTENTIAL TO HELP US BRIDGE THE GAP WITH LOCAL NETWORKS AND TO WORK BOTTOM-UP ON ENHANCING BIODIVERSITY AND ENERGY EFFICIENCY.”



FLEMISH ENERGY MINISTER PLAYS ELECTRICITY

The Flemish version of ElectriCITY was unveiled on 17 October 2017 during study days for teachers at Technopolis in Mechelen. Flemish Energy Minister Bart Tommelein came to support the initiative and was soon trying it out for himself - with great enthusiasm!



Following a call for projects organised for Elia by Be Planet, six projects were selected:

- Bûûmplanters (focusing on biodiversity in Brussels),
- ‘Maximilian Park’s Farm’ (training the public to reuse waste and consider bio-energy solutions),
- ‘Days Without Meat’ (raising participants’ awareness of their impact on the climate),
- ‘Terre@air’, (educating the public about sustainable energy),
- SeaWatch-B (addressing biodiversity in a maritime environment)
- ‘Samenwerking voor Agrarisch Landschap’/ the ‘Cooperation for Agricultural Landscape Association’ (dealing with reusing wood waste).

These organisations were selected in connection with Elia infrastructure projects to create and support environmental and social initiatives in the regions where Elia operates.

Reducing the impact of our activities

In addition to partnerships with organisations, Elia also works to minimise the impact of its activities on the environment, both in its activities in the field and in its administrative buildings.

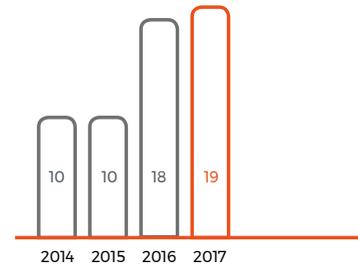
GREENPULSE: FOR STRUCTURED ENVIRONMENTAL MANAGEMENT

In 2016, Elia set up an environmental governance programme called Greenpulse to make a lasting contribution to the energy transition. Greenpulse defines Elia’s environmental mission and responsibility, its environmental priorities, and the applicable policies and procedures. A three-year action plan was drafted in order to implement these changes. In time, the Greenpulse programme will enable Elia to establish an integrated environmental management system within the company.

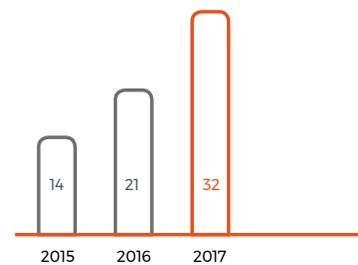
SOIL STUDIES AND REMEDIATION

Elia has developed a new soil management policy. Its aim is to draw up an inventory of the soil condition of land belonging to Elia in the Walloon and Brussels regions. This will enable environmental risks and the associated costs to be managed more effectively and a schedule of priorities to be drawn up in accordance with existing and future legislation. This policy will be amended in the Walloon Region in 2018, in response to likely changes in legislation.

SOIL STUDIES CARRIED OUT



NOISE STUDIES CARRIED OUT



NOISE MANAGEMENT

Elia’s facilities should not generate noise pollution. They are governed by acoustic standards, varying from region to region, which must be respected. Noise pollution can be caused, for example, by transformers in high-voltage substations, high-voltage lines and pylons. Underground lines do not make any noise.

In addition, noise studies are always carried out upstream of Elia’s infrastructure projects to ensure that the standards are not exceeded.



**VALÉRIE JADOT,
ENVIRONMENTAL EXPERT
AT ELIA**

“ELIA’S ENVIRONMENTAL POLICY ON NOISE AIMS NOT ONLY TO COMPLY WITH CURRENT LEGISLATION BUT ALSO TO MINIMISE NOISE POLLUTION, WHICH CAN SOMETIMES BE REPORTED BY PEOPLE LIVING NEAR OUR FACILITIES.”

SF₆

SF₆ gas has been used for over 30 years as an electrical insulator in high-voltage devices, including gas-insulated switchgear (GIS). GIS is often used in densely populated areas because it is much more compact when compared to traditional switchgear which uses air as an insulator.

Elia has developed an investment and maintenance policy to reduce the risk of SF₆ leakage. Manufacturers must guarantee a very stringent maximum percentage of SF₆ loss throughout the lifetime of the facilities. The maintenance policy aims to keep operations involving compartments filled with SF₆ to a minimum. The volume of SF₆ gas installed on the Elia grid (36 kV to 380 kV inclusive) is 98 tonnes.

Consumption of SF₆ gas (as a replacement and as a top-up in the event of a leak) is closely monitored using a system that tracks each cylinder of SF₆. The SF₆ leak rate for all Elia facilities was 0.59% in 2017.

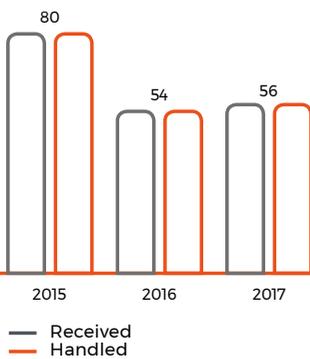


ELECTRIC AND MAGNETIC FIELDS

The electric and magnetic fields given off by high-voltage infrastructure have a very low frequency (50 Hz). Elia is very much aware of local residents' concerns over the potential health risks posed by electromagnetic fields, and as such keeps them informed as much as possible.

Around 78 measurements were performed in the field in 2017 at the request of local residents, and approximately 30 requests for information were handled.

FOLLOW-UP OF REQUESTS FOR INFORMATION CONCERNING ELECTROMAGNETIC FIELDS¹



Upon request, Elia offers free measurements of electromagnetic fields at properties close to its facilities. For more information, see the annex.



BBEMG PRESENTS FINDINGS ON ELECTROMAGNETIC RADIATION

The Belgian BioElectroMagnetics Group (BBEMG) held a seminar on 22 September 2017 to present the findings of its ongoing research into electromagnetic radiation. Such seminars are held every four years. Once again, the same conclusion was reached: there is no proof that magnetic fields have an effect on health but the research cannot entirely rule it out.

"We continue to cooperate fully with research into the possible impact of magnetic fields. We know that many people living near high-voltage lines wonder whether this has implications for their health. We have to take this into account and it is therefore in everyone's interest that further scientific research is carried out." Vincent Du Four, Environmental Expert at Elia

1. Please note that these measurements are performed on third-party requests received at the contact centre



STRIPPING AND PAINTING OF PYLONS

As part of its facility maintenance activities, Elia regularly (every 15 years on average) strips and paints its pylons to protect them from corrosion. It subcontracts this work to companies specialised in painting.

Elia's grid still features a number of black steel pylons coated with lead paint; after all, lead paint treatment was very common in the past. To prevent lead dust or lead chips from spreading when the paint is stripped off the pylons, the pylons are wrapped up in tarpaulins before work begins. Once the pylons have been stripped, the tarpaulins are removed and the pylons are painted in the open air.

The paints used nowadays meet the highest environmental standards. When work is complete, Elia and its subcontractors jointly inspect the ground around the pylons to make sure that their activities have not polluted the surrounding area.

CARBON ASSESSMENT

Elia has been conducting a carbon assessment since 2010 to identify direct and indirect emissions from its activities and is taking steps to reduce greenhouse gas emissions from its activities.

Elia has set a target of reducing emissions related to mobility and building consumption by 20% compared to 2010. It aims to:

- **reduce the carbon impact of mobility** by, among other things, encouraging decentralised work (teleworking or satellite offices), promoting public transport over cars, giving training in ecodriving and incorporating clean vehicles with low CO₂ emissions into its fleet;
- **reduce the energy consumption of its administrative sites** by conducting regular energy audits and integrating sustainability into day-to-day building management.

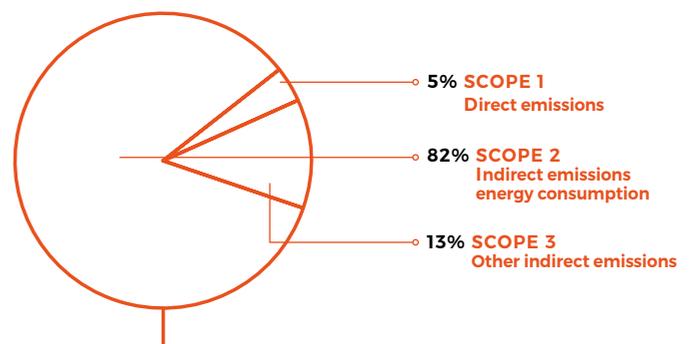
Developing a grid that allows the integration of renewable energies has a positive impact on the quality of the energy mix and will therefore be beneficial in terms of loss-related emissions.



**VALÉRIE LEGAT,
ENVIRONMENTAL EXPERT AT ELIA**

"IN ADDITION, ELIA IS ROLLING OUT A PROGRAMME TO MEASURE AND MONITOR CONSUMPTION AT HIGH-VOLTAGE SUBSTATIONS AND IS EXPLORING WAYS TO REDUCE CO₂ EMISSIONS FROM ANCILLARY-EQUIPMENT LOSSES AT SUBSTATIONS. ELIA IS THEREFORE DOING EVERYTHING IT CAN TO REDUCE SF₆ LEAKS."

CARBON ASSESSMENT



More details can be found on the annex.



ELIA AWARDED 'AWARENESS' STATUS BY CDP

Elia completed the Carbon Disclosure Project (CDP) questionnaire for the first time in 2017. CDP is an organisation that evaluates companies' environmental measures. Elia was awarded a C classification ('Awareness'). The assessment shows that Elia has started to implement changes in its strategy by reducing greenhouse gas emissions or identifying risks and opportunities.

LIFE BIODIVERSITY PROJECT DELIVERS ITS CONCLUSIONS

The LIFE Elia-RTE project, which was launched in September 2011 with funding from the European Commission and the Walloon Region, delivered its conclusions in late December 2017. Aimed at transforming the corridors under high-voltage lines into eco-corridors, the project exceeded its initial objectives by some margin. The corridors beneath high-voltage lines are now no longer considered as areas of no interest but rather as places in which local biodiversity can flourish. In view of these positive results, Elia decided to launch a five-year follow-up project, LIFE 2, but this time without any external funding.

In the past, trees were cut down and vegetation shredded. Now, Elia plants small trees, creates ponds or brings in sheep to graze the vegetation naturally. This method presents no risk to the grid or wildlife and encourages local fauna and flora, which are gradually reclaiming the land.

LIFE PROJECT EXTENDED TO FLANDERS

As it was co-funded by the Walloon Region, the LIFE project was initially only implemented in Wallonia. However, Elia has decided to extend the concept to Flanders by financing biodiversity measures itself. It has also allowed a shepherd to use some of the land under the 380 kV Zutendaal-Maaseik line. The area is now grazed by around 250 sheep, which help to manage the vegetation.

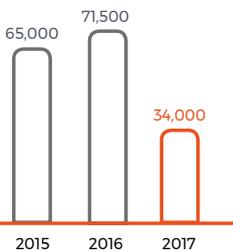
LANDSCAPING THE SPACE BENEATH PYLONS

Keen to adopt a sustainable method for managing its pylons while strengthening the ecological network, Elia asked non-profit organisation Faune & Biotopes to implement biodiversity enhancement measures along the high-voltage line between Gramme and Achêne. Some 32 native shrub species and seven wild-flower meadows were planted along the 70-pylon section in 2016.

The choice of landscaping at each pylon base is a compromise between biodiversity, landscape and the associated cost. Some pylons cannot be enhanced in this way, such as those situated along a boundary or hedge and those in grazed meadows. In any case, their location means that no additional boost to biodiversity is needed.



NUMBER OF SHRUBS PLANTED AS PART OF LIFE



JOHAN MORTIER, LIFE PROJECT MANAGER AT ELIA

“AS WELL AS ENHANCING AND RESPECTING LOCAL BIODIVERSITY, THE LIFE PROJECT ALSO SIGNIFICANTLY REDUCES COSTS AND DIRECTLY CONTRIBUTES TO BETTER ACCEPTANCE AND INTEGRATION OF OUR LINES IN THEIR ENVIRONMENT.”



PROTECTING BIRDS FLYING NEAR OUR LINES

Elia wants its high-voltage overhead lines to have as little negative impact on birdlife as possible, in line with its environmental policy aimed at preserving and enhancing biodiversity in Belgium. It has therefore developed a bird protection policy comprising a number of focal areas.

Installing bird markers

In 2015, a joint study by Elia, Natuurpunt, Natagora, Vogelbescherming Vlaanderen and the Flemish Institute for Nature and Forest Research (INBO) found that 3.4% of Elia's network of overhead lines was hazardous to birds. This is because some high-voltage lines are almost invisible to flying birds.

Based on precise mapping of the areas most at risk, Elia drew up an action plan to reduce the risk of bird mortality by installing bird markers. These spring-like devices are fitted on the lines and considerably reduce the risk of collision.

Installing nest boxes on our facilities

Elia places nest boxes on some of its facilities to provide secure nesting places to help to preserve endangered species. The birds' natural nesting periods are taken into consideration when installing these boxes.

Reducing nuisance caused by large flocks of birds

Where possible, Elia reduces the noise pollution caused by birds that sometimes congregate in large numbers on our facilities. Such animal behaviours are not always easy to control and also cause problems for Elia, such as paint corrosion due to excrement.

Felling and pruning trees and bushes

When trees and bushes near its facilities need to be felled or pruned, Elia takes care to do so at the correct time of year to limit the disruption to bird habitats.



13.62 km
OF BIRD PROTECTION SINCE 2016





A SUSTAINABLE AND ECO-FRIENDLY WATER TREATMENT SOLUTION AT MONNOYER

As part of its commitment to sustainable buildings, Elia has developed an autonomous, sustainable and environmentally friendly solution for wastewater treatment at its Monnoyer site. For the site's drainage system, which was virtually non-existent, it created a 1,700 m² pool complete with vegetation, which serves as a storm basin, a haven for biodiversity and a lagoon. A reed bed ensures natural purification of wastewater. There is also a rainwater recovery tank, which reduces the amount of mains water used.



**PIERRE VAN BAMBEKE,
IT INFRASTRUCTURE & OPERATIONAL
SERVICES MANAGER AT ELIA**

"ELIA ALSO GIVES A SECOND LIFE TO ITS USED IT EQUIPMENT BY PARTNERING WITH SCHOOLS AND OTHER INTERESTED ORGANISATIONS."



SUSTAINABLE-BUILDING POLICY

With regard to its buildings, Elia follows a policy of sustainable development and respect for the environment. New Elia buildings (Créalys and Monnoyer) comply with sustainable-building principles as certified under the Building Research Establishment Environmental Assessment Method (BREEAM). This certification is based on nine analysis criteria (management, health and well-being, energy, transport, materials, waste, water, land use, ecology and pollution) and is the benchmark standard when it comes to sustainable construction.

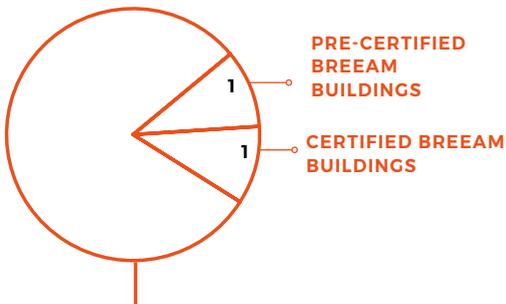
A policy of sorting and reducing waste is also in place at each of Elia's administrative sites. The company seeks to reduce the amount of paper it uses and has opted for fair trade and/or organic food in all of its canteens.

BEEHIVES ON ELIA SITES

In keeping with its sustainable building-management policy, Elia has two beehives at its Monnoyer site. Once a year, the honey harvested from the hives is sold to staff and the proceeds are donated to a good cause. Elia will set up three beehives at its Créalys site near Gembloux in 2018, and in 2019 it will be the turn of the Merksem site to welcome bees.

As well as doing its bit to help bees, Elia is also involved in analysing air quality in Brussels. In late 2016, the company BeeOdiversity, which helped Elia set up its beehives, teamed up with Elia and a number of other Brussels-based companies to take an inventory of biodiversity and pollution in the Belgian capital. The results of the analysis are available on BeeOdiversity's website.

OFFICES OWNED BY ELIA⁽¹⁾ (10 BUILDINGS)



(1) Elia also hires an office building.



WASTE MANAGEMENT

Elia has adopted a sustainable waste sorting policy that relies on the responsible behaviour of its employees. At its administrative sites, it has set up a sorting system facilitated by centralised islands, in which the staff restaurants participate. These sites also operate a comprehensive waste reduction policy, including measures to reduce excessive packaging, cut down on paper towels in the toilets and eliminate plastic cups in coffee machines. Plastic cups alone used to generate 3.3 tonnes of waste each year.

At its technical sites, Elia created two new waste facilities in 2017, ensuring optimal storage of all types of waste, including hazardous materials. A further four such facilities are planned. By taking these measures, Elia aims to guarantee high-quality sorting of each type of waste and to ensure that where possible, waste is recycled or reused.

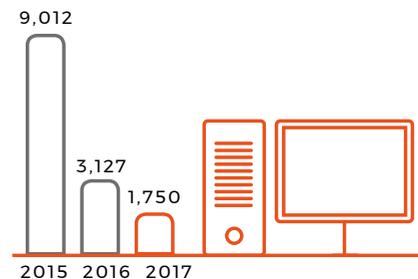


PROMOTING SUSTAINABLE FOOD

As of September 2017, Elia's new catering contract stipulates the introduction of the Good Food label, which helps businesses in the Brussels-Capital Region to serve sustainable food in their restaurants. The underlying reason for the label is that Elia wants to offer its employees sustainable food that adheres to its environmental, ethical and health commitments. Elia therefore favours organic, local and seasonal produce, products with minimal packaging and/or products that are part of a fair trade scheme.



IT EQUIPMENT GIVEN A SECOND LIFE (Kg)





WHAT HAPPENED AT 50HERTZ?

50Hertz accepts its social responsibility and feels an obligation to support the common good. This includes active commitment to environmental and climate protection in our sphere of activity. 50Hertz protects flora, fauna and biodiversity, uses natural resources conservatively and keeps the energy consumption and emissions of our activities as low as possible.

Dialogue with stakeholders

GRI 102-43

Transparent and proactive dialogue with our stakeholders concerning grid development and the enhancement of existing grid capacity is very important to 50Hertz.

Dialogue with stakeholders begins at a very early planning stage. This includes consultation on the network development plan, as well as on grid reinforcement and expansion projects. Info-markets, district conferences, planning forums, expert workshops, theme-specific brochures or freephone numbers are essential components of civic participation.

In 2017, Dialog Mobil received the "Good Practice of the Year Award" from the Renewables Grid Initiative (RGI). With the "Dialog Mobil", 50Hertz informs local residents of cable construction projects in the affected regions and gives them the opportunity to get involved.

Environmentally conscious player

The development of the high-voltage grid is necessary for transporting steadily increasing amounts of renewable energies over long distances. 50Hertz works every day to keep the impact of its activities on people and nature to a minimum, from the reinforcement of its grid to its administrative activities. This is demonstrated by the following two examples.

Grid losses

In 2017, grid losses amounted to 2.4 TWh. The average grid losses of the extra-high voltage level were 231.7 MW and those of the substation were 43.5 MW. 50Hertz is rolling out new techniques which are better suited than conventional technology.

SF₆

Since 2005, 50Hertz has been following the "Voluntary Commitment of SF₆ Manufacturers and Users". Its aim is to reduce the loss rate measured in the total stock from 0.8 percent in 2004 to 0.6 percent in 2020.

50Hertz achieved the reduction of the loss rate far below 0,6% already in 2017. The exact loss rate in 2017 was at 0,06%.



Protection of birds

High-voltage lines affect bird life but 50Hertz is making great efforts to minimise this impact.

In 2017, a new species-specific method was developed for the systematic determination of the effects on the species population in order to identify more targeted precautionary and compensatory measures. The installation of 30 km of bird protection markers in the existing network is planned for 2018.

50Hertz actively supported the establishment of a hotline developed by NABU, a German environmental association, so bird accidents with high-voltage lines can be reported and analysed.

50Hertz also carried out a comparative study on the effectiveness of spiral and flap markers and also installed cameras on two voltage fields of the electricity grid in a bird sanctuary. All measures and projects are designed to prevent future collisions at such locations with even greater precision.

In 2017 the 50Hertz conference “Bird protection on extra-high voltage overhead lines - methods, scope and feasibility” took place. More than 80 representatives of public authorities, environmental associations, infrastructure planners and experts exchanged views on how bird protection can succeed without endangering energy turnaround projects.



30 km

30 KM OF BIRD PROTECTION MARKERS PLANNED IN 2018

