

LUX CONNECT

LUX PROVIDE

CSR REPORT

2023/2024

www.luxconnect.lu - www.luxprovide.lu

EDITORIAL

LuxConnect – and later its subsidiary LuxProvide – have been committed to corporate social responsibility (CSR) across economic, social, and environmental dimensions since the inception of the company in 2006. As facilitators of Luxembourg's ICT sector, both entities adhere to principles that promote and support the national economy and the development of a Digital Nation. Our CSR policies reflect a dedication to fairness and transparency, particularly through our procurement practices, which support local suppliers and fair trade, and our commitment to human rights, fair labor practices, and safe working conditions. LuxConnect and LuxProvide's environmental strategies include using renewable energy sources and innovative cooling systems to minimize their carbon footprint, demonstrating awareness of the environmental impact of their operations.

In 2016, we formally integrated CSR into our corporate strategy, and a year later, we achieved our first certification. Over time, we expanded this commitment to include LuxProvide and trained additional team members to reinforce our CSR efforts. This journey reflects our deep commitment to CSR and our desire to continually improve our practices.

This year's CSR audit – the first we have carried out with our subsidiary LuxProvide – highlighted several strengths, such as our maturity in energy management and data protection. However, it also revealed areas where we had underestimated our performance, particularly in health and safety at work and environmental preservation.

One significant recommendation from the audit was the need to implement tools to better present our CSR strategy, leading us to publish our first extra-financial report this year.

Publishing it is a milestone in our CSR journey. By documenting our CSR initiatives and progress, we aim to enhance stakeholder trust and accountability, aligning with our long-term vision of responsible and sustainable business practices. It's a strategic tool to track our progress and set future goals. Moving forward, we are committed to produce an annual report, fostering a culture of continuous improvement and open dialogue with our stakeholders.

LuxConnect & LuxProvide CSR Team

TABLE OF CONTENTS

1. Company Overview	4
1.1. Products & Services	5
1.2. Our Subsidiaries	5
1.3. Key Figures	6
1.4. Labels & Certifications	7
<hr/>	
2. LuxConnect, a socially responsible company	8
2.1. Management Statement on CSR	8
2.2. History	10

2.3. Recent inclusion of LuxProvide in the CSR process	11
2.4. Integration of CSR team into the company's organization chart	12

3. CSR Strategy & engagements

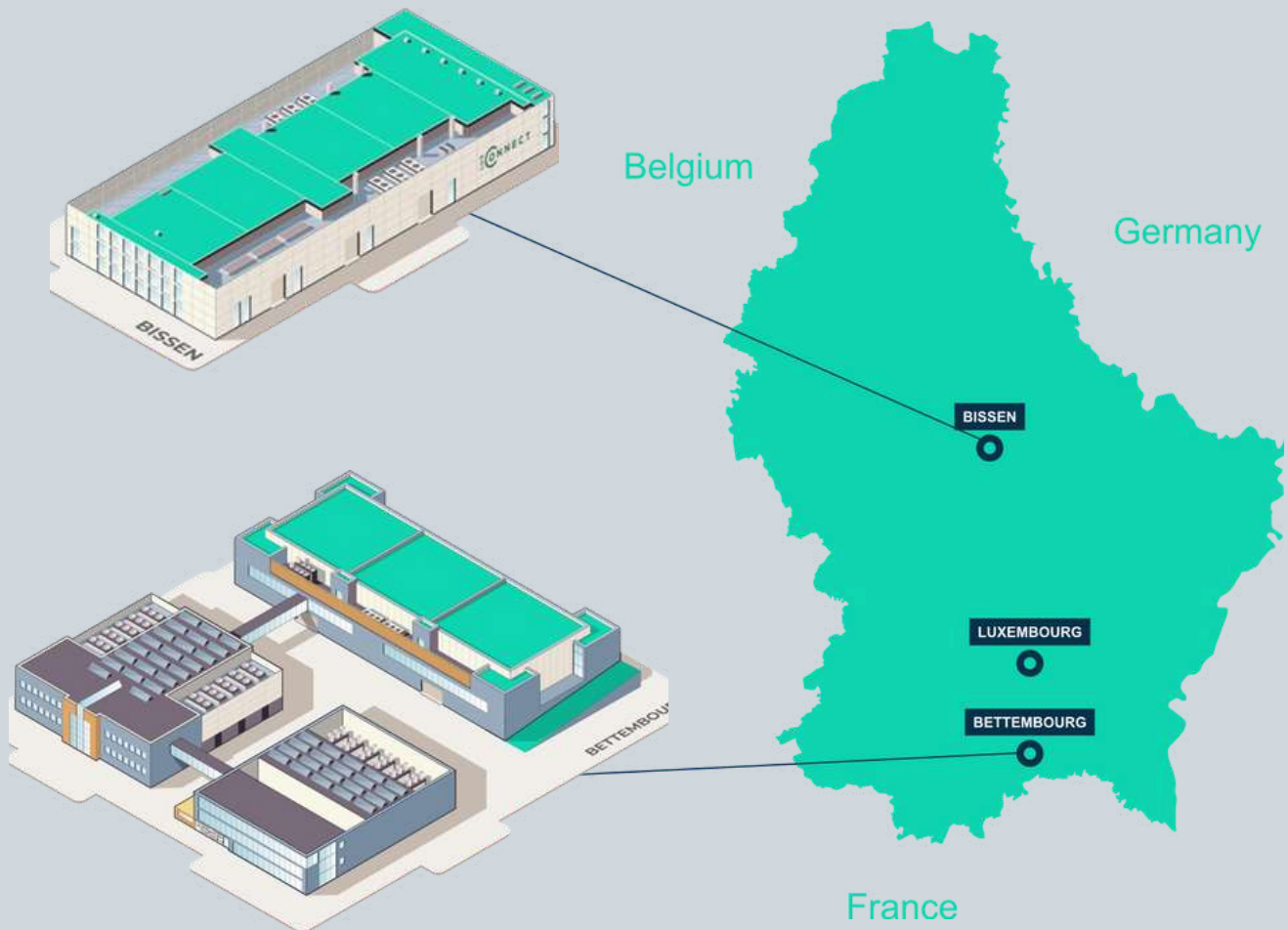
13

3.1. CSR Strategy	13
3.2. Governance	14
3.3. Social	17
3.4. Environmental	19
3.5. Further engagements	23

4. Conclusion

24

1. COMPANY OVERVIEW



LuxConnect was founded in 2006. It's a private limited company owned by the Luxembourg State and a multi-tenant and multi-Tier Data Center provider and Dark Fiber network operator based in Luxembourg.

Luxembourg's journey with HPC began in February 2019 when the EuroHPC JU selected LuxConnect to host a petascale system. By June 2021, the MeluXina supercomputer was inaugurated, delivering over 18 petaflops. Subsequent milestones included ISO 27001 certification in December 2022, and the launch of the Initiate and Cashback programs for startups in September 2023.

1.1. PRODUCTS & SERVICES

LuxConnect has two business lines: Data Center and Dark Fiber Provider in Luxembourg.

With four Tier IV Data Centers (three in Bettembourg, one in Bissen), LuxConnect is offering Data Center colocation services directly to end customers.

LuxConnect's optical fiber backbone encompasses over 1.800 km of fiber throughout Luxembourg. The backbone connects all commercial Data Centers in Luxembourg redundantly and gives telecom operators a choice of twelve country outbreaks to interconnect to and from Luxembourg.



1.2. OUR SUBSIDIARIES



LuxProvide

LuxProvide, founded in 2019 and 100% owned by LuxConnect, fuses data science expertise with supercomputing capabilities. Centered around MeluXina supercomputer, it stands ready to harness the power of data analytics.



Clarence

Clarence's disconnected sovereign cloud solution is the result of a joint venture between LuxConnect (60%) and Proximus (40%). Its mission is to offer unparalleled security and scalability to meet the specific needs of businesses for access to compliant data storage.

LuxConnect also acts as a facilitator and incubator in the ICT industry and has been instrumental in the creation of LU-CIX, the Luxembourg Commercial Internet Exchange.

1.3. KEY FIGURES

Financial Data



34,5 M€
turnover
LuxConnect



6
nationalities
LuxConnect



27
employees
LuxConnect



679.500€
turnover
LuxProvide



10
nationalities
LuxProvide



23
employees
LuxProvide

Data Centers KPI's



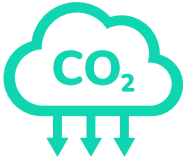
1,35
PUE¹



0,034
CUE²



0,206
WUE³



**emission of
2.215 tons
of CO₂**



**100%
green
electricity**

23 tons

**waste
recycled**

¹ Power Usage Effectiveness

² Carbon Usage Effectiveness

³ Water Usage Effectiveness

1.4. LABELS & CERTIFICATIONS

LuxConnect and LuxProvide have proudly earned a range of certifications, reflecting their commitment to excellence in various aspects of their operations. These include certifications that underscore the quality, performance and security of their infrastructure and processes, as well as their dedication to societal and environmental responsibility. Below, you'll find the logos representing each of these achievements, showcasing the high standards both companies uphold across all areas of their business.



2. LUXCONNECT, A SOCIALLY RESPONSIBLE COMPANY

2.1. MANAGEMENT STATEMENT ON CSR



LuxConnect and its subsidiary LuxProvide, act in compliance with the general principles of corporate social responsibility, whether at the economic, social, or environmental level.

Both entities act as facilitators. In line with their mission received by the State, they actively support the development of the ICT sector in Luxembourg and thus of the national economy and ultimately of the overall well-being of the population.

The two firms adopt a fair attitude towards their clients and suppliers. This approach is more specifically reflected in the application of the public procurements' regulation as well as in the application of the transparency and non-discrimination principles in their business relations.

The procurement policy of LuxConnect and LuxProvide seeks to support local suppliers and fair trade.

In both professional environments, we have implemented a comprehensive strategy that focuses on respecting human rights in all aspects of our operations. We are committed to promoting fair labor practices, eliminating discrimination and harassment, and providing safe working conditions for our employees.

Regarding human resources, the CSR policy of both companies aims at increasing the motivation and satisfaction of their employees through a fair wage policy, respect of employee rights, access to training and a healthy work environment.

Their social commitment is reflected by a low turnover and a low absenteeism rate because of illness.

As major energy consumers, LuxConnect and LuxProvide are fully aware that their actions have a considerable environmental impact. Efficient and sustainable use of natural resources combined with a reduction in the emission of greenhouse gases are therefore the two companies' priority goals.

In this sense LuxConnect and its subsidiary exclusively use electricity from renewable resources with the objective to minimize their carbon footprint. Furthermore, cooling a Data Center with a heat absorption system from wood waste incineration reduces CO₂ emissions to zero.

As socially responsible actors, LuxConnect and LuxProvide support the actions of local communities and participate in training, soft mobility, and renaturation initiatives.



Paul Konsbruck
CEO
LuxConnect



Arnaud Lambert
CEO
LuxProvide

2.2. HISTORY

In 2016, LuxConnect made a strategic decision to integrate Corporate Social Responsibility (CSR) into its core operations. This marked the beginning of a dedicated CSR-focused efforts and to the creation and development of a specialized CSR team.

From April to September 2016, Christine De Ridder – first member of the Team – completed the entire training cycle recommended by INDR and carried out the first two certification audits in 2017 and 2021. Christine is also a member of ProRSE, regularly participating in conferences organized by IMS.



Building on the foundation laid in 2016, LuxConnect began addressing CSR themes more systematically from 2017 onwards. The company's commitment to CSR was further strengthened with the arrival of Magali Panozzo, the HR Manager, in 2022. Magali, like Christine, completed the entire CSR training cycle and passed her certification exam in January 2023.

LuxConnect's CSR efforts have also involved close collaboration with LuxProvide, after the creation of this company in 2019. Ragga Eyjolfsdottir, a LuxProvide employee who completed the CSR training cycle and joined LuxConnect's CSR team, is responsible for coordinating CSR actions at LuxProvide.

In January 2024, the CSR team welcomed Martina Cappuccio, Communication Officer at LuxConnect, to promote internally and externally the company's CSR commitments.

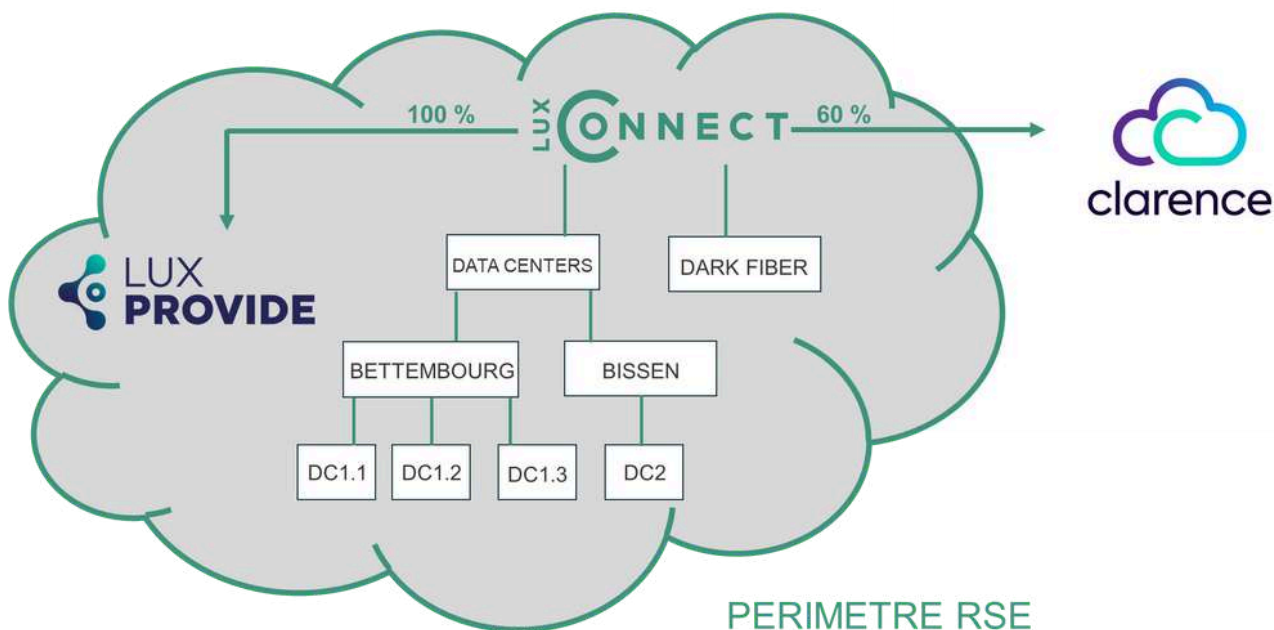
This year is particularly significant for LuxConnect, as it is the year of its first certification together with LuxProvide and it will also see the publication of the company's first CSR report, a milestone that underscores its ongoing dedication to sustainable and responsible business practices.

Certifications



2.3. RECENT INCLUSION OF LUXPROVIDE IN THE CSR PROCESS

LuxProvide was founded in 2019. As its activity really began in 2021 with the inauguration of its supercomputer MeluXina, LuxConnect's CSR approach changed during that year to include its daughter company. Since then, the two entities have been working together to develop their CSR strategy and took part in their first joint and successful CSR audit in 2023.



2.4. INTEGRATION OF CSR TEAM INTO THE COMPANY'S ORGANIZATION CHART

Each member of the team is responsible for his or her own topics and actions, under the supervision of the ESR Manager. Monthly meetings - as a minimum - are scheduled to follow up actions.

Our CSR team is composed as follows:

Christine De Ridder
Project & ESR Manager



Magali Panozzo
HR Manager in charge of HR topics



Ragga Eyjolfsdottir
LuxProvide ESR Manager



Martina Cappuccio
Communication Officer



3. CSR STRATEGY & ENGAGEMENTS

3.1. CSR STRATEGY

The CSR strategies of LuxConnect and LuxProvide are similar and share overarching goals. In terms of governance, LuxConnect supports the overall development of the ICT sector, while LuxProvide focuses more specifically on the HPC sector. Additionally, LuxConnect is a signatory of the Human Rights Pact and is committed to upholding its general principles in its relationships. On the social front, LuxConnect is dedicated to promoting initiatives that raise awareness among young people about careers in ICT, whereas LuxProvide focuses on careers in HPC.

In the following sections of this report, we will share examples of initiatives under each pillar of our CSR strategy.

Governance
Actively support the development of the ICT/HPC sector Establishing transparent and non-discriminatory business relations (additionally in compliance with the Human Rights Pact for LuxConnect) Give priority to local suppliers and fair trade
Social
Ensuring health and safety in the workplace Providing continuous training Creating a pleasant working environment Support initiatives to raise young people's awareness of the ICT/HPC professions
Environmental
Ensuring the efficient use of natural resources Analysis and offsetting of Carbon footprint

3.2. GOVERNANCE

Actively support the development of the ICT/HPC sector

The investment in the creation of Clarence, a joint venture 60% owned by LuxConnect and 40% by Proximus, was strategically made to bolster the development of the ICT sector by addressing a critical market need. Launched in 2023, Clarence emerged in response to the growing demand for genuine data sovereignty, a demand driven by the complex geopolitical landscape, the rising threats of cyberattacks and cyber terrorism, and the increasing needs related to artificial intelligence.



LuxProvide has launched two programs to support the HPC sector in Luxembourg: the Initiate Program and the Cashback 80% initiative. The Initiate Program provides a streamlined, risk-free entry into high-performance computing for startups, facilitating hands-on engagement with MeluXina. The Cashback 80% initiative offers substantial financial incentives, covering up to 80% of costs for continued access to MeluXina, ensuring SMEs can sustain and scale their innovative projects without financial constraints. These programs collectively foster the growth and success of startups and SMEs in the HPC landscape.



LuxProvide also co-organized the Supercomputing Day 2024 during Nexus2050 showcasing the latest advancements in high-performance computing. The event featured keynotes on global supercomputing trends, quantum computing applications, AI in finance, and the role of HPC in startups, space, and life sciences. Highlights included insights from industry leaders, discussions on diversity in tech, and the transformative potential of supercomputing across various sectors.

Establishing transparent and non-discriminatory business relations in compliance with the Human Rights Pact

By signing this Pact in 2022, Vincent Weynandt, CTO of LuxConnect, confirmed the commitment of the company to contribute to the application of the United Nations Guiding principles on Business and Human Rights in its day-to-day activities.

For the second year, LuxConnect completed the standardized annual report, to comply with its commitment to the Luxembourg National Pact Business & Human Rights.



Our company has chosen to focus on nine of the Charter's thirty fundamental rights, which correspond to those set out in the Universal Declaration of Human Rights in 1948.

**PACTE NATIONAL
ENTREPRISES ET
DROITS DE L'HOMME
LUXEMBOURG**



LuxConnect has undertaken to:

- **Raise awareness** among their staff and stakeholders about the protection of human rights
- **Train employees** on business and human rights
- Develop governance tools to **identify risks and prevent human rights violations**
- **Implement solutions** to deal with reported cases of human rights violations

For every right defined as a priority, we also identified risks to manage. At LuxConnect, we decided to prioritize ensuring health and safety at work, which entails not only identifying key priorities but also actively managing associated risks. We pay particular attention to risks concerning the mental health of our employees, potential deterioration of working conditions, and ensuring fair and equitable working conditions, including aspects such as working hours and breaks.

To this end, we have implemented flexible working schedules and a teleworking policy to promote a healthy work-life balance for all.

Give priority to local suppliers and fair trade

LuxConnect and LuxProvide are committed to supporting local communities and promoting sustainable practices by prioritizing the use of local, organic, and fair-trade products. For instance, LuxConnect ensures that gifts like chocolates for employees for Christmas and Easter are sourced from local artisans such as La Chocolaterie du Tricentenaire, and the crémant offered to clients and partners is always locally produced. Additionally, they collaborate with local partners like Cafetree for coffee services at events, reinforcing their dedication to fair trade and the local economy.



3.3. SOCIAL

Providing continuous training

LuxConnect and LuxProvide are committed to providing ongoing trainings for their employees. At LuxProvide, several employees have participated over the year in training sessions in Luxembourg and abroad on specific technical skills, and have been offered courses in Luxembourgish and French. Similarly, LuxConnect is offering Excel courses in 2024, tailored to the skill level and interest of each employee. Additionally, Luxembourgish courses are available to all employees, and other training programs can be arranged upon request, depending on the specific needs related to their roles.

Creating a pleasant working environment

LuxProvide and LuxConnect are dedicated to creating a positive and supportive work environment for their employees. In March 2024, LuxProvide relocated to the Atrium Business Park in Bertrange, a modern workspace designed to meet the needs of contemporary businesses. This BREEAM-certified building promotes a healthy work-life balance through its unique blend of services and amenities. LuxProvide employees also benefit from height-adjustable desks, ergonomic chairs, wide-view screens, as well as free coffee, water, and fruits. On the other hand, LuxConnect has been enhancing workplace engagement since February 2024 with a monthly internal newsletter that keeps employees informed about company life, upcoming events, and training opportunities. Additionally, LuxConnect organizes various activities, such as football game public viewings, foosball tournaments, and themed days, while also offering seasonal gifts like chocolates and special presents throughout the year.



Support initiatives to raise young people's awareness of the ICT/HPC professions

LuxProvide organizes and hosts several visits per year of MeluXina to HPC-Master students as well as to other schools and students in Luxembourg. LuxConnect also organizes visits of its Data Centers to schools. For example, in 2024, two final-year classes from the Lycée Privé Emile Metz, specialising in IT, had the opportunity to immerse themselves in the world of our Data Centers. The visit was part of their course on hardware security and carried out in partnership with Telkea Group, which generously opened the doors of its server room. A next visit is planned in September, with Ecole 42 and we keep on organizing new visits to raise young people's awareness of the ICT professions.



Ensuring health and safety in the workplace

At LuxProvide, the commitment to employee health and safety is evident through the recent certification of Ragga Eyjolfssdottir as a Designated Worker in July 2024. Additionally, new evacuation plans were implemented in March 2024.

LuxConnect also prioritizes safety, with its Designated Worker, Stéphane Briy, regularly informing employees about preventive measures, listening to their concerns, and making necessary workplace adjustments. LuxConnect emphasizes emergency preparedness by regularly conducting fire evacuation drills. In January 2024, employees from both companies completed first aid training, further ensuring a safe work environment.



3.4. ENVIRONMENTAL

Ensuring the efficient use of natural resources

Green Electricity

LuxConnect’s infrastructures are powered exclusively by 100% green energy sourced from hydroelectric power plants in Norway and certified by yearly green certificates. LuxProvide’s HPC MeluXina is hosted in LuxConnect’s Data Center in Bissen and benefits from it.



Increase of the server room’s temperature

For the customers under recent contracts, room temperature has been raised from 24 °C +/-2 K to 26°C +/-2 K according to the ASHRAE TC9.9 Class A1 recommended specifications.

EU Code of Conduct on Data Centers Efficiency Participant

The EU Code of Conduct on Data Center Energy Efficiency is a voluntary initiative managed by the European Commission’s in-house science service called Joint Research Center. The goal is to inform and stimulate DC operators to reduce energy consumption in a cost-effective manner without impacting the critical function of their infrastructure.



LuxConnect has renewed this year the “Participant” label for its four Data Centers and had to comply with the latest version of the European Code of Conduct tab, including KPIs such as Power Usage Effectiveness (PUE), Carbon Usage Effectiveness (CUE) and Water Usage Effectiveness (WUE).



For 2023, LuxConnect Data Centers have a contractual PUE of 1,3. and an average WUE of 0,206 l of water to generate 1 kWh of energy. This is a remarkable effort considering that Data Centers generally have a WUE of around 1,8 l/kWh and that, according to the Climate Neutral Data Centre Pact, Data Centers should aim for a WUE of 0,4 l/kWh by 2040.

Our good results in this area are because we have replaced traditional chillers equipped with hybrid towers producing cold water with “dry chillers” in DC1.3 and DC2. This system uses air instead of water, enabling us to reduce our water consumption considerably.

DC2 first green Data Center in the world

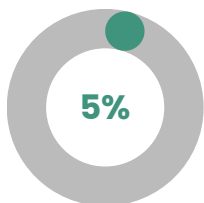
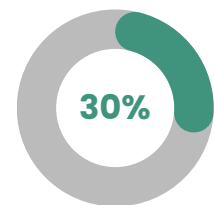
The Kiowatt cogeneration plant, located in Bissen, burns wood waste to produce electrical energy. The steam produced is used to turn the turbine, which produces electricity that is fed into the public grid.

The wasted heat generated by the steam turbine, normally released into the atmosphere, is used as follows:



65% of the heat produced in the cogeneration plant is used to cool LuxConnect's Data Center.

30% is used to dry the fresh wood for pellet production. Every year 35.000 tons of pellets are produced, which is equivalent to the consumption of 7.500 households i.e. 1.000.000 liters of fuel.



5% is turned into the heat network of the business zone Klengbousberg.

As a result, different forms of energy are produced by the cogeneration and each of them enters the LuxConnect production process, reducing Luxembourg's total CO₂ emissions by an estimated 27.000 tons per year.



Through its social, economic and ecological components, this project greatly benefits both people and the ecological environment and marks a major step in Luxembourg's energy transition.

Cold aisle containment

Cold aisle containment (closed cabinet) is actively recommended to all our customers as this allows us to be significantly more energy efficient. As a result, a lower PUE is applied to customers adopting this measure.



Free cooling

Free cooling is used exclusively when outside temperatures drop below 8°C. When temperatures rise above 8°C, our Data Centers revert to hybrid cooling towers. This technology does not require the additional supply of cooling water for temperatures ranging from 8°C to 27°C, resulting in a low ecological impact.



Photovoltaic panels

Photovoltaic panels are installed on the roofs of DC1.1 and DC1.2. Electrical energy produced through these panels is fed into the electrical power grid.

Waste management

LuxConnect and LuxProvide conform to the quality label "SuperDrecksKëscht fir Betriber" which is a recognised quality label granted to businesses that have adopted an environmentally friendly waste management plan. The label is granted by the Administration de l'Environnement, the Chambre des Métiers and the Chamber of Commerce.



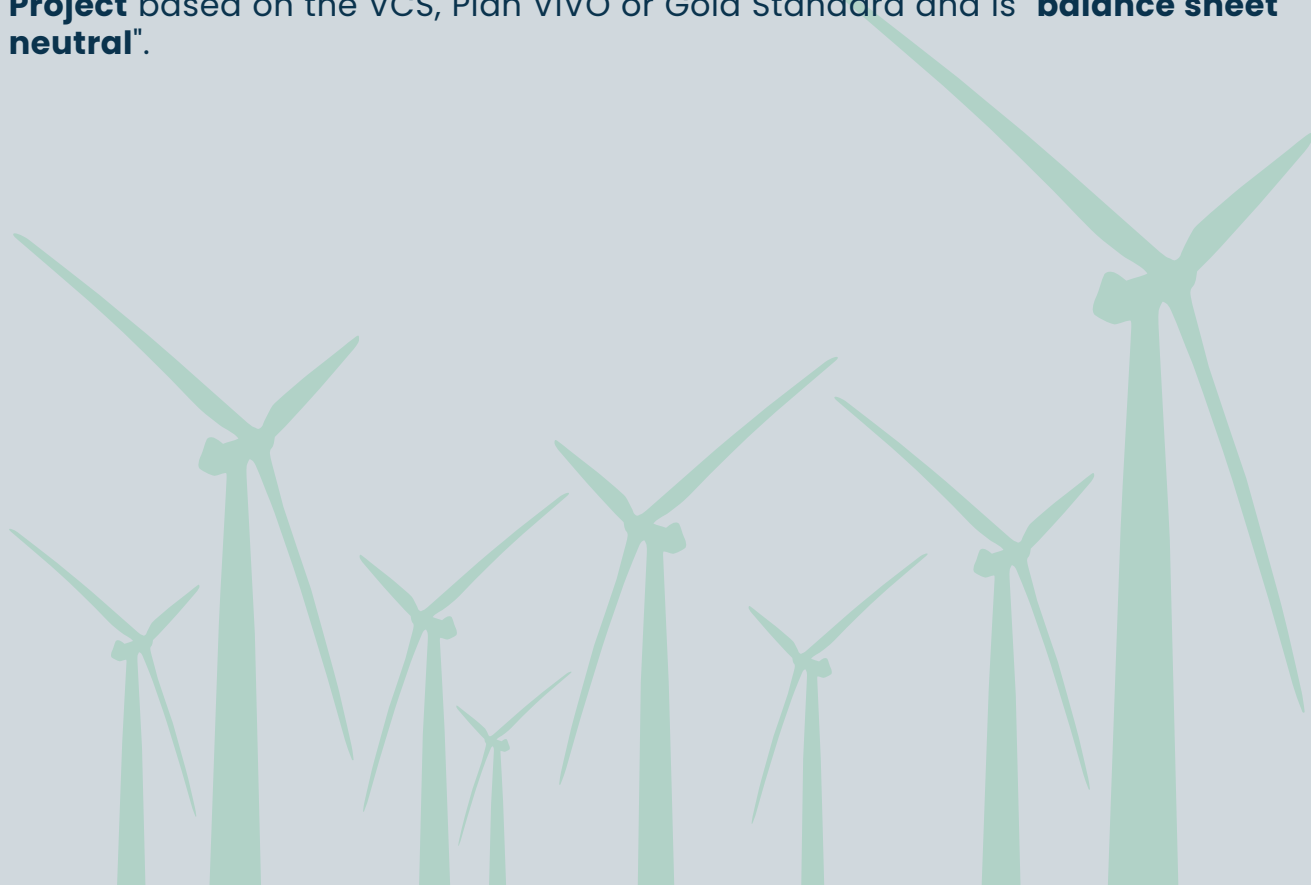
Digitalisation of supplier invoices

To further its continuous improvement and digitalization efforts, LuxConnect has in 2024 fully digitized its supplier invoice process. Above all, this method enables us to have a single procedure for processing incoming invoices. This saves considerable time, as well as having an ecological impact through reduced printing, both internally and for our customers. What's more, on a human level, it offers greater flexibility by enabling employees to access and process invoices remotely. Finally, the digitalization of this process offers a digital archiving solution for invoices validated on the new accounting system and facilitates the transmission of payments for control by management.

Analysis and offsetting of Carbon footprint

The **Bilan Carbone** (according to the ADEME/ ABC - Association Bilan Carbone methodology and the ISO 14069 standard) has been carried out by the energieageance in 2022. The analysis for 2023 is in progress.

As part of our **Decarbonization Strategy**, we have begun to reduce greenhouse gas emissions to the strict minimum. However, despite all the measures put in place, there will always remain a residual quantity of emissions. These emissions can be offset through greenhouse gas (GHG) emission certificates. LuxConnect has invest in **Sustainable Development Project** based on the VCS, Plan VIVO or Gold Standard and is "**balance sheet neutral**".



3.5. FURTHER ENGAGEMENTS

Both companies are members of IMS Luxembourg and LuxConnect is also member of ProRSE.

LuxConnect has been a signatory of the Lëtzebuerg Diversity Charter since March 2017 and LuxProvide will sign the Charter in May 2025.



Our Diversity Day in 2024 was a blast with engaging activities like a generation-themed quiz, followed by insightful discussions over snacks, and a fun blind test to wrap up the day!



4. CONCLUSION

Although our CSR adventure began officially in 2016 with our first audit, this year has been a special one as we worked together with our subsidiary LuxProvide to carry out our common CSR Audit in April 2024.

The feedback from our first joint CSR audit highlighted several key strengths and areas for improvement. We demonstrated a high level of maturity, particularly in energy management and data protection, and even underestimated our performance in health and safety as well as environmental preservation. We plan on better analyzing our performances for our next audit.

Our next certification is scheduled for October 2026. One of our main objectives by then is to implement and monitor CSR governance together with LuxProvide. We will also engage more actively with stakeholders on CSR impacts and issues, develop tools to present our CSR strategy – such as this annual Report – and enhance our action plan. Concretely, our actions will be to professionalize our materiality analysis by consulting stakeholders more extensively to better define our priorities, develop a more professional action plan with clearly identified KPI's to analyze more precisely the achievement of our objectives, and move beyond merely identifying stakeholders to recognizing our sphere of influence. This annual report is a testament to our commitment to ongoing enhancement and stakeholder engagement, laying a solid foundation for our future CSR initiatives.

Vincent Weynandt, CTO of LuxConnect and Management support for the CSR Team, says: "Publishing the first edition of our CSR report marks a significant step forward in our continuous improvement journey. It reinforces our transparency to stakeholders, clearly identifying our strengths and areas for improvement, and sharing our CSR projects and efforts. Our CSR strategy is firmly rooted in our corporate culture, and we don't want to limit ourselves to mere declarations".





202, Z.A.E. Wolser F | L-3290 Bettembourg



31, Rue du Puits Romain | L-8070 Bertrange