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# Let's develop collective leadership in the sector

\_Intro by Sandra Gottcheiner, Development & Innovation Director at BPI

As part of the Green Deal, the European Union has set ambitious goals for the period 2030-2050, notably in terms of reducing CO<sub>2</sub> emissions. With its expertise and early adoption of corporate social responsibility, BPI has been a fast mover in this area. A unique opportunity to shake things up and imagine the city of the future. The European green taxonomy, which comprises a large number of standards, has not been an obstacle: recent BPI projects were already largely compliant or could for the most part be adapted.

#### A committee for an entire sector

This taxonomy provides us with credibility, greater transparency, better positioning on certain projects, a vision of what is happening in Europe and leads to harmonious non-commercial rules. The need to rally together and the complexity of these requirements have expedited within UPSI-BVS (Union Professionelle du Secteur de l'immobilier) et BA4SC (Building Alliance for

Sustainable Construction) the creation of an ESG & Taxonomy Committee, which BPI chairs with enthusiasm. Mitigation is at the heart of the debate, while circularity and other aspects of sustainability (mobility, biodiversity, biosourced materials, reuse, social taxonomy and affordable housing, etc.) are discussed in order to understand how to speed up the sector's participation in improving cities. The UPSI-BVS also aims to play a leading role in supporting SMEs and smaller structures to ensure that they evolve as a whole. It is therefore together, with all the partners and players in the real estate sector, that we will take on these challenges.

"This taxonomy provides us with credibility, greater transparency, better positioning on certain projects, a vision of what is happening in Europe and leads to harmonious non-commercial rules."

#### **SANDRA GOTTCHEINER**

**DEVELOPMENT & INNOVATION DIRECTOR AT BPI** 



A three-year term for the

Approximately 50% developers and 50% investors, and banking partners.

One working session a month and a few seminars a year on the majority of the committee's work.

Between 80% and 85% of Europe's housing stock is in need of renovation.



\_Intro by Arnaud Regout, Chief Investment Officer at BPI

Over the course of a series of projects, our company has become a benchmark for the decarbonisation of the real estate industry. This is a vital issue, since 39% of the world's CO<sub>2</sub> emissions are generated by our sector. "We've had to learn quickly, because the wheels have been set in motion very fast, and the impact we can have as a property developer on reducing the world's carbon footprint is significant". The priority was to be able to measure CO<sub>2</sub> emissions at each stage in the life cycle of a building: construction, operation, end of life and this all in the same way. This is now possible thanks to a new pan-European label, the Low Carbon Building Initiative (LCBI).

#### Streamlining methods

Our wish to commit to common European policies has been fully fulfilled thanks to this label, for which we have also taken on the governance. The goals are simple: we are aiming for harmonisation that respects the emission thresholds of the Belgian and European markets. At the moment, methodologies between countries are still too different for us to be able to learn from each other and tackle decarbonisation objectives efficiently and jointly. This is what we aim to develop with the LCBI label, launched and made public in 2023 and which involves around 15 pilot projects in several countries. "I'm proud to be able to include one of our projects in Luxembourg, Roots, which will enable us to show you the key details of this LCBI initiative".

"In order to fight climate change and build a sustainable future for the industry, we must act on a European scale."



**ARNAUD REGOUT** 

CHIEF INVESTMENT OFFICER AT BPI AND PRESIDENT OF LCBI

# 2023: major achievements in sustainability\*



2

new sustainable headquarters: Wooden and Wood Hub



105

people dedicated to the cities of tomorrow



18,097

tonnes of materials reused



18,653

m² timber/hybrid buildings



22,587

m<sup>2</sup> renovations



93,017

m² fossil-free buildings\*\*



159,098

m<sup>2</sup> CO<sub>2</sub> friendly buildings\*\*\*



1

PILOT PROJECT for LCBI new pan-european label



From 33% (2022) to

59%

of our portfolio mostly aligned with the EU Taxonomy



> 10

partnerships with associations for temporary occupations or support in their activities



**BREEAM**® OUTSTANDING

38%

of office projects aiming to achieve WELL gold certification or higher. That includes the first project in Belgium with WELL platinum certification. 46%

of office projects aiming to achieve BREEAM Excellent certification of higher 2

upcoming residential projects stand out in Poland with BREEAM Very Good certification



<sup>\*</sup> Projects/phases included 100%, provided that the project status at the time of assessment is between six months before the submission of a permit application and six months after provisional handover of the building.

<sup>\*\*</sup> Fossil-free: no gas, no oil, no coal.

<sup>\*\*\*</sup> CO<sub>2</sub>-friendly. projects incorporating at least one co-generation system, a biomass/pellet heat network or geothermal energy, passive construction or at least 10% greater efficiency than the national NZEB value.

# Other highlights resulting from teamwork in 2023

- Relocation of our headquarters in Luxembourg and Belgium into two exemplary wooden buildings: Wood Hub and Wooden.
- Best Sustainable Building Award for Wooden (LuxReal × Paperjam+Delano Real Estate Awards 2023).
- Climate Future Project Award (Belgian construction Award) and Project of the Year (ProptechLab) for Wood Hub.
- Arnaud Regout, our Chief of Investments took the presidency of the EU Low Carbon Building Advisory Committee.
- Sandra Gottcheiner, our Development Director took the presidency of the new EU taxonomy and ESG committee at UPSI-BVS and BA4SC.

- Residential pre-certification of BREEAM at Very Good level for Chmielna Duo in Warsaw.
- CFE group, of which BPI is a part has been named a Top-Rated ESG Company by Sustainalytics, the leading global provider of ESG research and ratings.

This recognition highlights CFE's commitment to sustainable business practices and responsible management of environmental, social and governance issues.



Team BPI Real Estate Belgium



# Five key principles to develop new standards

Audaciously imagining the cities of the future has always been part of BPI's DNA.

From our first large residential redevelopment of an old military hospital (1997, Belgium) to the design of a cutting-edge, timber-framed, ultra eneray-efficient office building. the BPI team has always been at the forefront when it comes to delivering innovative solutions to urban challenges.

Smart architecture, inspiring indoor and outdoor spaces, buildings that effortlessly blend into their surroundings and support for vibrant communities are all features of our past real estate developments. So when the United Nations Sustainable Development Goals (SDG) were rolled out, we embraced them without missing a beat.

Today, we use the UN's SDG as a backdrop to all our initiatives and have translated them into five key principles that help us develop new and innovative standards for tomorrow.



# Well being

We recognise the importance of residents' well-being, green spaces and the services required for everyday life when designing a project. The way we proceed should encourage and support a sustainable lifestyle in its true sense.



# Circularity

When it comes to construction, we are all too aware that renovating and reusing materials should always be front of mind. Our aim is to give buildings and materials an extended lifespan.



# **Durability**

We aim to offer integrated sustainable processes for development and construction by promoting alternative energy sources and clean construction sites.



# **Mobility**

The options we offer are always designed with soft and active mobility in mind. We focus on non-motorised travel, favouring infrastructure promoting cycling and walking.



# **Innovation**

Always on the lookout for innovative concepts, we design solutions that promote dynamic use of office spaces. We also build partnerships with start-ups to provide us with innovative ideas. We dare to change the game towards more sustainable designs and construction methods. Innovation is at the heart of everything we do.







# An exemplary project in all respects





Wood Hub has been home to the CFE cutting-edge headquarters since late 2023. We take immense pride in being part of this vision of the future.

"When we acquired the site in 2018," Jean-Louis Amandt recalls, "we immediately saw its potential to house the new CFE headquarters. It was clear that it had to be a beacon of excellence. Unable to retain the existing structure, we embraced a more ambitious approach when designing the new building. We decided to go 'all in'."

#### PROJECT:

Wood Hub, Auderghem (Belgium)

#### PROJECT PHASE:

Delivered

#### **DEVELOPED AND MANAGED BY:**



JEAN-LOUIS AMANDT Project Development



**YVES LAMBERT** 



## STORY #1 An exemplary project in all respects

#### Wood Hub redefines benchmarks in environmental sustainability and innovation across five key areas:



### **Durability**

Wood Hub ranks among the most ambitious structures in the Benelux in terms of energy efficiency and carbon neutrality, meticulously aligning with European taxonomy. By using wood as a responsible, healthy, and sustainable alternative, we significantly reduced the structure's carbon footprint, in fact by 30% compared to traditional concrete constructions. Fossil-free energy sources such as open geothermal energy, heat pumps and over 300 solar panels ensure that the building performs 80% better than a Near Zero-Emission Building, the first to pull off such a performance. Thanks to all these features and more, Wood Hub is aiming to achieve the certifications BREEAM® Outstanding and WELL Platinum ratings for which the pre-certification has already been achieved.



### Circularity

Circular principles guided our approach, requiring the reuse of materials from the demolished structure through the realisation of a material portfolio by Retrival, as well as reuse of materials of external buildings. This included repurposing materials such as raised floor slabs, wood waste and elevated ceilings, resulting in substantial carbon savings. Additionally, wood scraps from other construction sites were given a new lease of life as finishes in the building's atrium.



## **Mobility**

Strategically located adjacent to the Demey metro station and several other transportation methods in and out of Brussels (15 min), Wood Hub champions sustainable mobility solutions. Offering secure bike parking, repair stations and amenities such as lockers and showers, it fosters a culture of eco-friendly commuting.



#### Well-being

Wood's inherent benefits positively impact air quality, comfort and the psychological well-being of occupants. The ground floor features dynamic spaces including coworking areas, yoga studios, cafeterias, nurseries, and expansive sunny terraces. Abundant natural light, integrated greenery and the pursuit of the WELL certification our commitment to resident wellness across multiple dimensions.



#### **Innovation**

Wood Hub features smart building technology managed by VMAnager for intelligent energy and operational management. IZIX, a parking management tool, optimises limited parking spaces with intelligent charging stations. The MINT system ensures the efficient distribution of self-generated electricity by photovoltaic panels for electric vehicles. Additionally, Trigrr provides the centralised control of various technical systems (HVAC, lighting, IoT, access control, lift, audio, video, etc.), enhancing user comfort and customisation within individual spaces. A "speed-dating" contest was organised together with Proptech hub, allowing the developers of WoodHub to meet several startups and select a winner to be included in the project.

In raising standards across the board, Wood Hub transcends our initial aspirations. United in a collective vision, we have crafted a state-of-the-art building that sets a new benchmark for the entire real estate industry. The market has also acknowledged the building by awarding it the Climate Future Project Award 2023 (Belgian Construction Awards) and the Project of the Year (Belgian Proptech Trophy).













A better world is not one in which

and provide greener escapes.

gleaming architectural marvels line our

well in cities that offer a consistently high

streets, but a world where people live

standard of living, support biodiversity

The impact of climate change is being felt like never before, with temperatures rising to extreme levels in densely populated cities covered in concrete. Heavy rainfall has caused flooding and destruction. During the Covid-19 pandemic, poor urban planning turned cities into giant traps with everyone locked inside small spaces with no escape outside their own four walls. Because of this, people are now seeking refuge in the greener suburbs or in rural areas. But increasing population density in the countryside brings other challenges for the environment.

At BPI, we believe cities have a major role to play in solving the greatest challenge of our times. Our commitment to cities demands that, in all our developments, we raise living standards, care for those living in and around urban centres and help cities sustain greener, more resilient, more diverse natural areas.

# Feeling good starts with living well



#### PROJECT:

Bernadovo, Gdynia (Poland)

#### **PROJECT PHASE:**

In construction

#### **DEVELOPED AND MANAGED BY:**



MARTA GLABOWSKA Investment Analyst



MARCIN DUL
Project Director

In the green heart of the Polish port city of Gdynia, BPI is building a unique apartment complex: Bernadovo. Close to the city centre, but even closer to nature. Staying in Bernadovo is equivalent to basking in an oasis of tranquillity. And with this, this project is fully focused on the well-being of residents.

Located on the edge of the Tri-City Landscape Park, Bernadavo is surrounded by nature. More than 70% of the site is green, 50% of which consists of natural forest. Stylish architecture, easily accessible footpaths and recreational areas complete the idyllic picture.

"In Poland we think of Bernadavo as 'upper standard'," according to Marta Glabowska, investment analyst at BPI Poland. "It is a total package where residents can unwind after an intense working day, for example. We deliberately opted for high ceilings, large windows and wide terraces. This creates a sense of space and you look out onto some greenery everywhere."

### **Relaxing together**

In addition, the leisure facilities are impressive. Children can live it up in the playgrounds, with its zipline and slides, whilst others hang out in the gym (exclusively for residents), the clubhouse or one of the cosy spaces on the grounds. "With Bernadovo, we aim to create a close-knit community among residents," comments Marcin Dul, project director at BPI Poland. "There are enough public places where residents can relax together. Human contact is important to feel good."

"Here you have all the

advantages of city life, only

terraces. This creates a sense of space and you look out onto some greenery everywhere."

with some peace and quiet that is typically lacking in a busy centre."

provided that is typically lacking in a busy centre."

# STORY #2 Feeling good starts with living well

### **Unique combination**

With so many options and a national nature park on your doorstep, you would almost be tempted not leave the place. But according to Marcin Bernadovo offers further assets: "Everything is within easy reach: public transport, schools, a shopping mall and, of course, the city centre. And you live just 5 km from the sea. In short, all advantages of city life, except here you get a little peace and quiet that is typically lacking in a busy centre. A unique combination you won't easily find elsewhere. It is no coincidence that the people of Gdyna are said to be the happiest people in Poland."

76% of the site is made

ıp of nature

apartments spread over 18

minute away from Tricity Landscape Park

minute ride to Sopot







### OUR OTHER KEY PROJECTS THAT PUT WELL-BEING AT THE HEART



# Czysta Wroclaw (Poland)

# Where urban elegance meets well-being

Its simple yet elegant architecture seamlessly blends modern aesthetics with practical features tailored to residents' needs. From an observation deck providing a serene retreat atop the building to a coworking space catering to remote workers, and innovative smart home solutions, every aspect contributes to fostering well-being and convenience.

# RockWood Val Saint-André (Luxembourg)

# Where sustainability meets enduring comfort

In the realm of well-being, the RockWood residence shines with its wooden construction, ensuring optimal comfort while prioritising environmental stewardship. Enhanced by high-performance double-flow ventilation, superior insulation, and triple-glazed aluminium frames, the residence provides exceptional thermal comfort levels. Complementing these features are solar panels, rounding out a comprehensive package geared towards sustainability and occupant well-being.

# Bavière Liège (Belgium)

# Development of a lively neighbourhood on the outskirts of Liège

Along the River Meuse, near the city centre, a historic area is being revitalised and transformed into a vibrant neighbourhood. With complementary functions available locally, the entire community will be able to live, study, shop, take care of themselves and be cared for in return. The be well place!

chillHouse design sp. z o.o



Rodolphe Mertens Architects



Assar & Verso Architecture



### OUR OTHER KEY PROJECTS THAT PUT COMMUNITY AT THE HEART



We incorporate the concept of community into our strategic well-being focus because we care about the well-being of the residents and communities surrounding our projects. We aim to engage in community activities and support organisations in need around us. Our actions undertaken over the past year across three countries include:

# BPI Luxembourg prioritises the health and integration of Persons with Reduced Mobility (PMR) for its teams

- BPI Luxembourg has signed the Cancer@Work Charter, a network of committed companies aimed at enabling a better balance between illness and work.
- It is one of the main sponsors of the new Well-being Space at the King Albert II Institute, Oncology and aematology at Saint Luc.
- Because we care: 7 employees of BPI Real Estate Luxembourg attended a 20-hour training course in order to better understand the needs of Persons with Reduced Mobility and translating them into our projects.



# Magritte on our façade

The facade of our project in the heart of Brussels, Brouck'r, was adorned with a rather surreal collage as part of the 'In Magritte's footsteps' journey by the artist Julien de Casabianca.

## **Earthquake in Morocco**

In partnership with the municipality of Anderlecht and the Red Cross, our Key West site has been transformed into a donation centre to assist the earthquake victims in Morocco.



### BPI Belgium moves its headquarters with a focus on circularity and mutual assistance

In 2023, CFE and BPI Belgium relocated its headquarters. In order to avoid waste and material losses, we maximised the reuse of office furniture. Any items that were not reusable were donated to associations and schools with the aim of minimising waste and benefiting youth in the neighbourhood.

# BPI Poland takes part in sport for various causes

- BPI Poland participated in the JLL Charity Tournament, aimed at funding the construction of the Ronald McDonald House at the Institute of Remembrance Children's Health Centre. The goal is to provide a welcoming and supportive environment for families within the hospital.
- As part of our annual participation in the Hot Harts Rally race, we supported individuals with disabilities by purchasing sports and rehabilitation equipment.



#### **TODAY'S CHALLENGES**

For a long time, cities grew by building on top of themselves, reusing what was already there. But over the last century, expansion involved replacing long-lasting existing buildings with structures that became obsolete within two decades, without caring about the waste generated or the CO, emitted.

Today, the real estate sector has the unique opportunity to contribute to cities' sustainable development, so we must embrace the old ways, re-learning how to use what already exists and designing buildings that will last, even though their function may change over the course of their lifetime.

BPI's commitment to cities requires a strategy to repurpose, refurbish, repair and reuse the materials already in buildings, as well as to future-proof our designs beyond the intended use of our development.

At BPI, we have the know-how to take on that challenge, based on our long track record in renovation projects. As part of the CFE Group, we have access to cutting-edge technology, smart-building tools and construction best practices that directly inform our designs.

# Honouring the past with circular construction approach



Office buildings dominate the street scene in the European district, with Arlon 53 catching the eye with its brutalist style. In the Arlon 53 project, BPI consciously opted to preserve the striking façade. The inside is changing, however, and will undergo a thorough renovation in accordance with circular building standards.

Initially, plans were different. The project has been running since 2018 and back then a renovation seemed like a futile task. The iconic building's structure at number 53 showed too many faults and was ready for the scrap yard.

"Tearing down and rebuilding was in line with the zeitgeist at the time," according to Griet Trekels, development director at BPI. "In the meantime we have made a big leap forward in terms of conservation, patrimony appreciation and CO<sub>2</sub> reduction. And yes, this comes with its challenges. But these do not outweigh the architectural quality of the building and the ecological impact we have with this new approach."

#### PROJECT:

Arlon 53, Brussels (Belgium)

#### **PROJECT PHASE:**

In renovation

#### **DEVELOPED AND MANAGED BY:**



**GRIET TREKELS Development Director** 





# STORY #3 Honouring the past with circular construction approach

#### Minimum waste

As a result of this change of tack, the original concrete skeleton is pretty much preserved. Griet: "Thanks to the technical team's new insights, we are preserving more of the initial structure than anticipated. This dramatically reduces our  ${\rm CO_2}$  impact. In addition, we had the building's materials inventoried. This allows us to know exactly what we can recover and dismantle. To do so we follow a step-by-step plan. If we cannot use something on site, we look to our other yards. Waste is only the last resort. In short, Arlon 53 incorporates every type of reuse."

### Sympathetic renovation

Not everything is preserved. The underground gas boilers are being replaced by carbon-free solutions such as heat pumps and solar panels. There will also be accessible bicycle parking and the various roof terraces will provide a welcome green area. Griet: "Major changes, but always with respect for the original building's special architecture. To me, preserving the individuality and identity of such an iconic venue is also a form of sustainability. Arlon 53 will be a landmark for users and local residents."

20,000 m<sup>2</sup> of office and commercial space

45% energy saving after conversion

100% carbon-free building





### OUR OTHER KEY PROJECTS THAT PUT CIRCULARITY AT THE HEART



# Wood hub Auderghem (Belgium)

# Circularity and reuse resulted in a 487,000 kg CO, emission reduction

Our commitment to circular principles drives us to prioritise reusing materials from demolished structures, such as raised floor slabs and wood waste as wall finishing, yielding substantial carbon savings. Extending this ethos, we repurpose scrap wood from other construction sites into finishes in our atrium area.

# Czysta

Wrocław (Poland)

# Reuse of 6 tonnes of façade stone slabs

In the residential project Czysta, 6 tonnes of stone slabs were recovered from the derelict existing structure and will be reused as a wall finishing material in the lobby of our latest development in Wrocław.

# Mimosa Strassen (Luxembourg)

# Office building conversion

By opting for a conversion from an office to a residential building, the project significantly reduces its reliance on embodied energy (during construction and throughout its lifecycle), employs resources judiciously and contributes to the decarbonisation of the construction industry.





chillHouse design sp. z o.o



**Boito Architectes** 





Reducing energy consumption is our lifelong challenge. Since 40% of all energy used globally is consumed in buildings, and most traditional building materials are derived from petrochemicals, we – as real estate developers – still have a lot to do!

Solutions must be found to reduce the energy we need to power our buildings. Alternative building materials must be developed and new construction methods are required if we are to lower our energy dependence and limit global warming.

BPI is committed to the challenge of durability. Our team of professionals, with their strong engineering and technical knowledge, have rolled up their sleeves and are excited to be part of all the initiatives developed within the CFE Group. Together, we can forge new paths and set new standards.

# Exceeding energy and environmental standards



PROJECT:

Arboreto, Tervuren (Belgium)

**PROJECT PHASE:** In construction

#### **DEVELOPED AND MANAGED BY:**



FRÉDÉRIC BERLEUR Project Developer



**ERIC VAN CROMBRUGGE** Sr Project Manager

The Arboreto project, launched in response to a public call for tenders from the municipality of Tervuren, embodies a bold vision of sustainability and urban integration. Located on *Chaussée de Bruxelles*, this former brutalist concrete school complex has been transformed into a true symbol of ecological and social resilience.

Frédéric, project developer, explains: "The project's basic concept was to create a new soft mobility route through the site, thus promoting connectivity and traffic for soft transport methods such as walking and cycling." Four buildings, erected on a common foundation and accommodating an underground car park, blend harmoniously into a green landscape designed by renowned

landscape architect Erik Dhont. Frédéric: "The latter recreates a permeable natural biotope, providing a refuge for birds and small wildlife, while using drought-resistant native plants to replace the concrete schoolyard."

"The creation of a green microcosm in the heart of a city centre is a true success story."



### STORY #4 Exploring the boundaries of timber construction

#### **Superior score**

Sustainability is at the very heart of each aspect of the project. Eric, project manager, tells us: "Arboreto is a pioneer in the implementation of environmentally-friendly technologies and practices. Initially, the project was not aligned with European taxonomy. The Management Committee therefore requested that the entire project be revised to bring it into line and agreed to allocate a substantial additional budget. These days, it is unthinkable for BPI to have projects that are not aligned with taxonomy."

That is why an exhaustive analysis of the parameters was carried out to beat the legal standards by 10%. This approach includes the installation of even better insulating glazing, additional solar panels and more efficient heat pumps to heat and cool the buildings, as well as the implementation of measures to cope with the risk of flooding and heat peaks, promote soft mobility and opt for sustainable materials.

All these initiatives will make it possible to achieve an EPB score that is 10% lower than the legal requirements, i.e., E27 instead of E30 (E35 at the start of the project in 2018).

### 15-Minute city

Accessibility and soft mobility are at the very heart of the project. Bicycle storage facilities on the ground floor will promote their use, whilst stairways are open on the apartment landings, making it easier to get around on foot. All of this contributing to the creation of a dynamic and convivial urban environment.

"Arboreto also promotes an inclusive urban vision by accommodating community spaces such as a crèche and offices, taking part in the '15-minute city', where everything is accessible in less than 15 minutes," explains Frédéric.

Despite the technical and economic challenges, Arboreto undertakes to exceed energy and environmental performance standards, thus showing an unwavering commitment to sustainability and innovation.









# A major breakthrough for the decarbonisation of the real estate industry

#### PROJECT:

ROOTS, Low Carbon Building Initiative (LCBI) pilot project

#### **DEVELOPED AND MANAGED BY:**



**ARNAUD REGOUT** Chairman of the LCBI Advisory Board



FRÉDÉRIC VINGTANS Design Director

The European real estate industry now relies on the LCBI label, a streamlined approach to measuring the carbon footprint in Life Cycle Analysis. By setting performance limits linked to data quality, this method promotes the most sustainable assets on the market. Launched in 2022, BPI Real Estate is actively involved in this label's roll-out.

LCBI is the result of a consultation and test phase covering 15 projects in eight European countries, including ROOTS, a mixed-use development by BPI in the south of Luxembourg. "The pilot project designers were able to share their experience, thereby enabling us to adapt the baseline to the reality and challenges on the ground", explains Arnaud Regout, chairman of the LCBI Advisory Board and Chief Investments Officer at BPI

# Three performance levels



In practical terms, LCBI assesses:

#### 1. Embodied carbon

(emissions from building components) measured in kgCO<sub>2</sub> e/m<sup>2</sup> over a 50-year period.

#### 2. Operational carbon

(based on consumption and energy sources) in kgCO<sub>2</sub> e/m²/year.

#### 3. Biogenic carbon

(use of bio-sourced materials) in the building measured in kgCO<sub>2</sub> e/m<sup>2</sup>.





### ROOTS project in Belval: the road ahead

ROOTS aims to achieve the excellence level, i.e., the LCBI label's highest rating.

The project teams have drawn on this experience to implement best practices that will serve as a reference for tomorrow's green projects.

### 1. Counting to act efficiently

Adopting "carbon accounting" for each project represents seizing the most effective tools at our disposal to reduce carbon emissions. "It's a little like going on an egg hunt, and starting by picking up the biggest, most easily visible eggs!" explains Frédéric Vingtans, design director at BPI Luxembourg.

**<800** kg CO<sub>2</sub>/m<sup>2</sup>

embodied carbon Roots\*

\*Based on LCBI standards, design stage value.

#### 2. Rationalising the surface area of the infrastructure

Reducing the surface area of basements is an efficient way of substantially cutting down the carbon footprint of buildings. For example, a building without a basement will release half as much embodied carbon as a building with 60% of its surface underground.

**Applied in Roots project:** Removal of a basement level as opposed to town planning and deployment of a system of shared parking spaces outside of office hours.









#### 3. Biosourced materials: carbon sinks

The priority given to the use of bio-sourced materials such as wood in construction transforms our buildings into actual carbon sinks, thus meeting the urgent need for carbon sequestration.

2,560 tons co<sub>2</sub>

(+/- 20% of the embodied carbon of the project)
embodied carbon storage\*

\*In accordance with the LCA life cycle study in the design phase.

#### 4. Pragmatic design

The quantities and types of materials constitute the main source of incorporated carbon. "It is the early involvement of the construction teams working with the developers that makes it possible to outline the most appropriate methodologies and construction methods early on. This will have a positive impact on managing budgets, both carbon and financial, without compromising on quality," according to Frédéric.

**Applied in Roots project:** The use of materials from responsible sources, with a preference for renewable energies and recycled materials. The integration of off-site production methods in the project is also aimed at limiting the flow of materials on site.









### 5. Energy-efficient building

Designed using sustainable materials, the buildings reduce their footprint while providing a high level of comfort to occupants: efficient insulation, state-of-the-art energy generation systems and the integration of renewable energy sources, such as solar panels on the roofs.

50 kWhc

photovoltaic system installation

43.9 kWh/(m<sup>2</sup>.yr)

energy performance rating of the Roots project\*

11 kgCO<sub>2</sub>/m².yr

operational carbon\*\*

#### 6. Flexibility and reuse

Once the embodied carbon has been used in the construction, the buildings are designed with maximum flexibility in mind, taking into account a range of different uses. Construction materials must be selected and designed with a view to facilitating their reuse, thereby extending their service life beyond the limits of the current system.

### **Applied in Roots project:**

Use of lightweight partitioning and flexible layouts

Use of large wood slabs allowing for future reuse







<sup>\*</sup>Based on the project's energy performance.

<sup>\*\*</sup>Based on the LCBI assessment tool.



# Cavallia Poznań (Poland)

### **Durability is paramount**

With 35% of the area dedicated to green spaces, our focus on sustainability is evident. We have integrated heat pumps for improved energy efficiency and installed electric car charging stations to promote eco-friendly transportation. Certified materials with positive environmental impacts are used throughout the development, ensuring a lasting legacy of responsible construction practices.

# Domaine des vignes Mertert (Luxembourg)

### Aligned with the EU Taxonomy

Incorporating all future EU requirements, the focus remains on sustainability. Integration of heat pumps and solar panels significantly reduces CO<sub>2</sub> emissions, ensuring a lower environmental impact throughout the project's lifecycle. These initiatives aim to create a sustainable living environment, contributing positively to communities and the planet.

# Move hub Brussels (Belgium)

### Green'up

With ambitious environmental targets, Move'Hub is dedicated to achieving BREEAM Outstanding and WELL Platinum certifications, while aligning with the objectives of the European Taxonomy. As a zero fossil fuel building, Move'Hub prioritises the reuse of materials, prefabrication and modularity to minimise its carbon footprint and waste generation.

SUD Architekt Polska

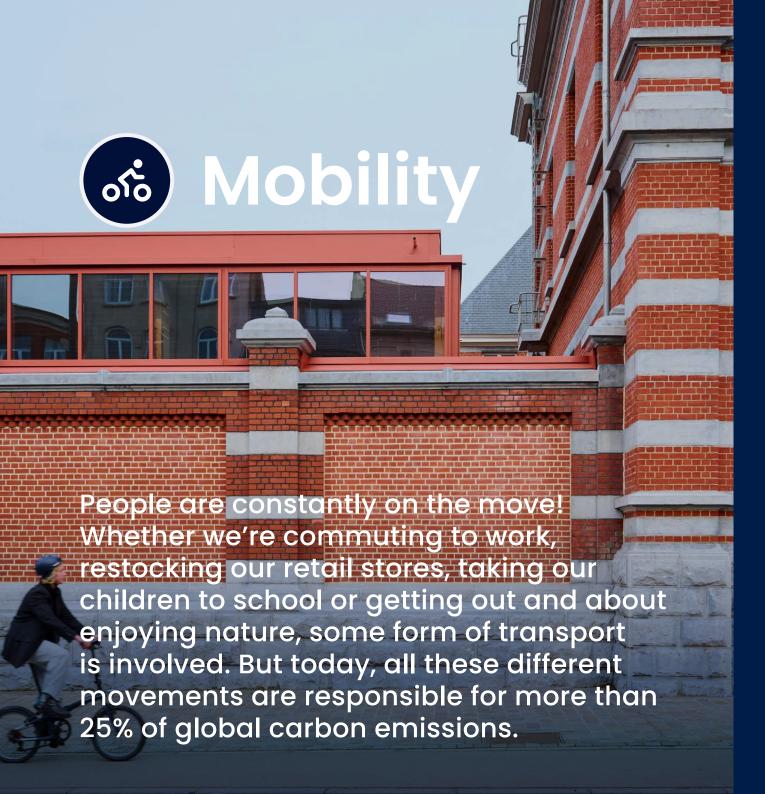


BFF Architectes



Jaspers - Eyers/B-Architecten





#### **TODAY'S CHALLENGES**

Moving in and around cities more sustainably is a major challenge, not just for the mobility industry itself (e.g. the automotive industry) but also for the construction industry and real estate business. Sustainable transportation solutions will simply not work if the buildings they need to serve cannot accommodate them. And there is no point having carbon-free transportation infrastructure if it does not take users where they want to go.

As real estate developers, we must ensure that our building infrastructure is suitable for developing sustainable mobility solutions. Our overriding goal is to reduce the need for a car, improve the accessibility of bikes and make walking an enjoyable alternative.

At BPI we strive to promote environmentally compatible transportation. We carefully select sites to ensure they have good connections to a quality public transport network. We create as many green areas as possible to contribute positively to the health and well-being of residents and visitors. We constantly seek solutions to meet the needs of the growing number of electric vehicle users.

# oto

# A vibrant square 24 hours a day

or a long time, the headquarters of the former occupant had been nothing but a temporary stopover for office workers. After the working day, life there came to a complete standstill.

With Brouck'R, BPI is transforming the block of buildings on Place de Brouckère into a multifunctional space where everyone will find something to their liking.

> "Brouck'R breathes new life into the square at any time of the day."

### Added value within the city

"Brouck'R appeals to a wide and diverse audience," according to Griet Trekels, development director at BPI. "In addition to office spaces, there will also be residential units, student rooms and shops. This will result in constant activity, even after a working day or on weekends. This project fulfils several functions. In this way Brouck'R creates value for the inner city. Also in terms of sustainability. We deliberately opted for geothermal energy and, thanks to the large courtyard garden, biodiversity increases considerably."

#### PROJECT:

Brouck'R, Brussels (Belgium)

#### PROJECT PHASE:

Start demolition works in 2022

#### **DEVELOPED AND MANAGED BY:**



GRIET TREKELS

Development Director



**BERTRAND SAUVAGE**Project Manager



# STORY #6 A vibrant square 24 hours a day

### **Mobility solutions**

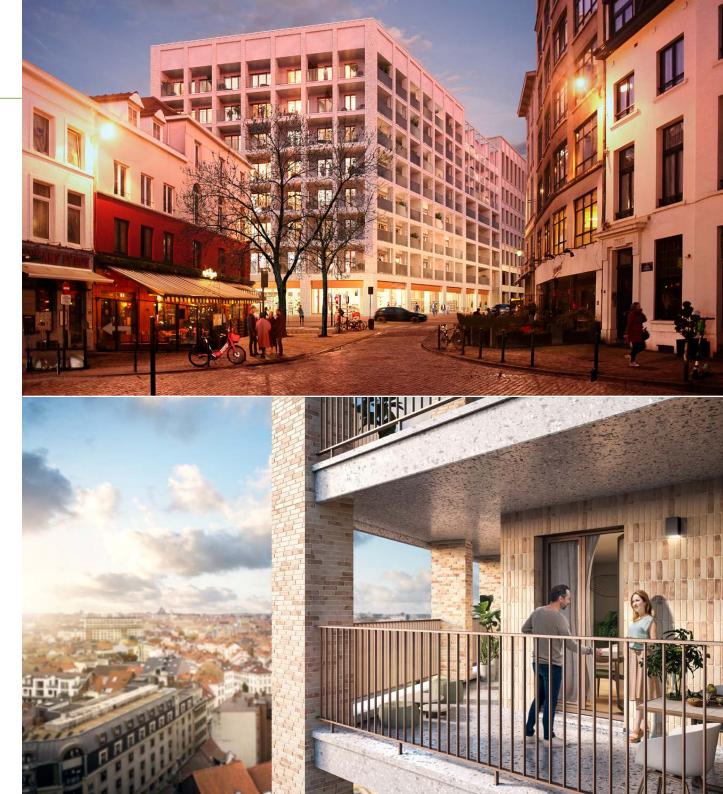
An added bonus: Brouck'R, fully fits into the 15-minute city concept. It is located in the new pedestrian zone in the centre of Brussels. Griet: "The project is truly centrally located, surrounded by a host of sustainable mobility solutions such as trains, buses, charging stations and shared vehicles. You prefer cycling? Spacious and comfortable bicycle storage facilities are available. And a huge public cycle hub can be found under the square. Several car parking spaces are reserved for local residents. In this way, parking pressure remains limited and we do not compromise on accessibility anywhere."

100% fossil-free office space

**1,800** m² indoor garden

minute walk to metro and train station







# Arboreto Tervuren (Belgium)

### In Arboreto, convenience beckons: A mobility-friendly haven

Arboreto offers unparalleled convenience, placing all essentials within easy reach. Situated close to the centre of Tervuren and just a short 15-minute drive or direct tram-ride ride from Brussels, the project ensures seamless access to urban amenities. Within walking or cycling distance, residents discover a plethora of shops, schools, pubs, restaurants and recreational facilities, thus promoting an active and sustainable lifestyle.

# Serenity Valley Auderghem (Belgium)

### Accessible tranquillity: Serenity Valley

Serenity Valley embodies an ideal location, i.e., easily accessible by several modes of public transportation (with the Demey metro station adjacent to the project) or by car, close to all amenities (shops, schools, hospitals, etc.) and enveloped in greenery, all within a residential neighbourhood.

# Panoramiqa Poznań (Poland)

#### In the heart of Poznań

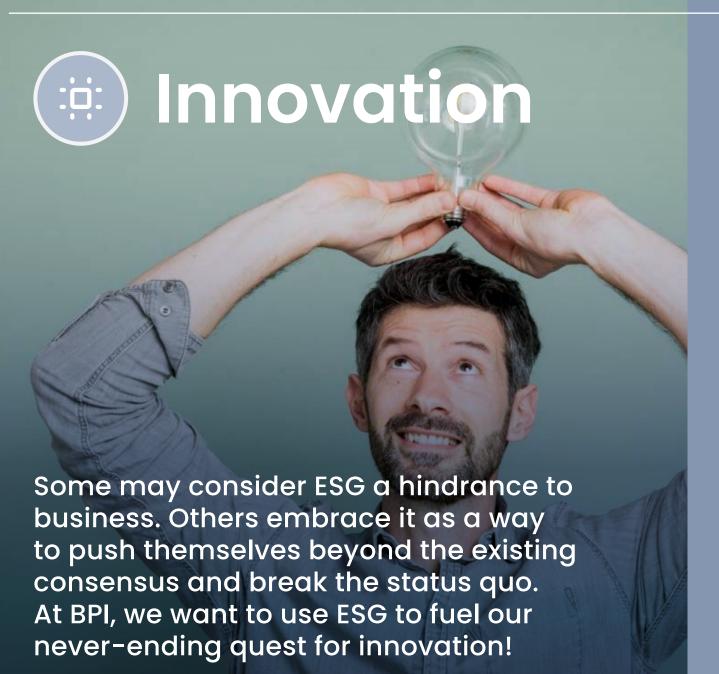
The area owes its uniqueness to the combination of the proximity of green spaces and easy access to the city centre. The location of this residential development near the Warta River provides an opportunity to enjoy the picturesque landscape on a daily basis, which is sure to appeal to hiking and cycling enthusiasts.

HUB & Styfhals Archi2000 Brit Plo









With climate change an everpresent reality, we are living in testing times. Each day raises new issues for the construction industry, and new solutions need to be found to address them.

As an organisation, we are constantly challenged from within and by the business environment around us whenever an employee or a new start-up develops a new idea, a new concept or a new solution to overcome the challenges facing cities. We must embrace the uncertainty innovation brings and experiment with new solutions and ideas to identify the best ones.

Finding the time and committing resources to untested initiatives often calls for boldness and requires us to step out of our comfort zone. However, there is no alternative to innovation. So let's wholeheartedly welcome it!

# Facilitating the transversal exchange of leftover materials

# **PROJECT:** Bazaar

#### **DEVELOPED AND MANAGED BY:**



**BJÖRN LEPEZ**Project Manager
Bazaar Ambassador



PIETER ELSEN

BPC Sustainability Manager

Bazaar Initiator

**Bazaar** 

How can we implement our sustainable ambitions on our project sites? By efficiently reusing supplies and raw materials from various other projects within the CFE Group or from our other current construction sites. This in-house 'bartering' is carried out through the innovative Bazaar platform created by the Group.

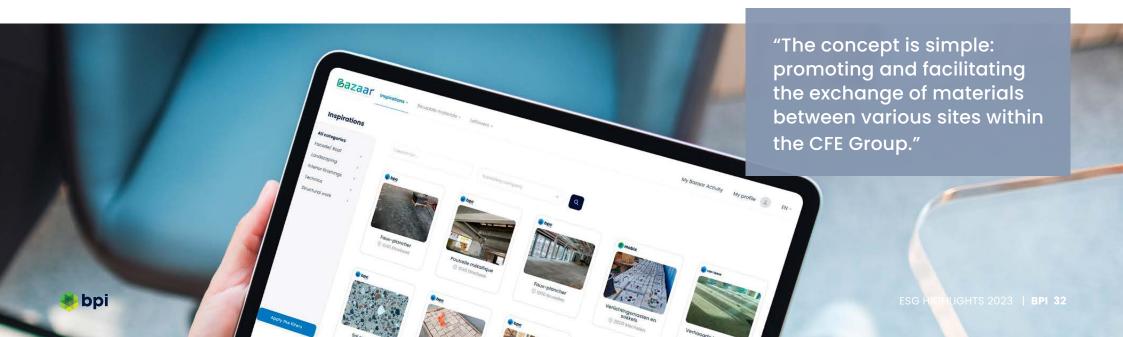
The concept is simple: promoting and facilitating the exchange of materials between various sites. During the demolition process, both at the beginning and at the end of a project, we are often confronted with an abundance of materials whose destination remains uncertain.

This approach encourages reuse, strengthens ties between our various subsidiaries and contributes to reducing our activities' environmental footprint. Our main objective is to maximise the reuse of materials in order to reduce our carbon footprint.

Björn Lepez explains: "It's very easy to bring to market. You go to a worksite, take a photo, add it to the platform by filling in the quantities, availability and storage location, and post it online. This is how, on our Wood Hub project, for example, we reused raised floor slabs, which prevented the production of 60 tonnes of CO<sub>2</sub>".

### Inspiration

Moreover, this platform provides an opportunity to develop a network within the recycling market. Currently Bazaar is exclusively deployed within the CFE Group. We undertake to gradually bring up to date depending on specific needs. By 2025, we plan to assess the possibility of extending the use of this platform beyond our area of activity. We aim to inspire everyone to get involved in the process of reusing materials, by informing and supporting them throughout the process.



### OUR OTHER KEY PROJECTS THAT PUT INNOVATION AT THE HEART

### One Click LCA

### **Building Life Cycle Assessment**

The use of the innovative tool *One Click LCA* for Life Cycle Assessments in projects underscores a commitment to sustainability and innovation. This advanced technology enables the accurate measurement and analysis of environmental impacts, facilitating informed decisions and optimisation of sustainability efforts. By incorporating such tools, a dedication to integrating sustainable practices into every project stage is demonstrated, ultimately fostering environmentally responsible and forward-thinking buildings and communities.

### **Pure**

# Auderghem (Belgium)

# Qualitative apartments equipped with high-tech domotics

Connected upscale apartments equipped with intelligent sensors. The smart system allows users to control electronic devices and open downstairs door remotely, operate lights on your smartphone and adjust window blinds based on the weather forecast.

# Chmielna Duo Warsaw (Poland)

#### Green concrete

Chmielna Duo showcases innovation through the use of green concrete. This advanced material is a type of concrete class C30/37 with a carbon footprint certificate, issued by the Institute of Building Materials and Technology, which is reduced by 25% compared to a classic concrete thanks to the optimization of the recipe and production process. By incorporating green concrete, Chmielna Duo sets a new standard for eco-friendly development, demonstrating our dedication to creating buildings that benefit both the environment and the community.











# CFE group and the SPARC strategy

# An ESG policy at the heart of CFE's strategy

BPI Real Estate is the real estate branch of the multidisciplinary CFE Group, which was founded in 1880 and operates in Belgium, Luxembourg and Poland. We focus on developments in urban centres with high growth potential, a positive environmental impact, real opportunities for soft mobility and an emphasis on social well-being. Energy-saving, circularity of materials, mobility, well-being, innovation and waste reduction are all global challenges to which we strive to provide sustainable solutions.

The CFE Group's SPARC strategy puts sustainability, innovation and operational excellence directly in the foreground. To ensure this strategy goes beyond words and has a real impact, it is essential that we structure and communicate the group's sustainable approach around a clear and transparent ESG policy. Since 2022 this ESG policy is confirmed through the group's SPARC strategy.





# Happener Engaged Reliable One





"We are moving ahead with confidence. CFE is well positioned in the net-zero transition and we have built strong partnerships with our clients, helping them with total solutions for complex challenges."

**RAYMUND TROST** 

"We have built a solid strategy for CFE over the years with an ambitious ESG roadmap, diversified revenue streams, and leadership positions in three core markets."

**LUC BERTRAND Board of Directors** 

# CFE group and the SPARC strategy

For the second year in a row, CFE was named **Top ESG Company** by independent auditor Sustainalytics. Needless to say, we are very proud of this. It is basically a recognition that we are doing exactly what needs to be done as a responsible company. Key criteria were corporate governance, human capital, health and safety, community relations, and carbon footprint in our operations.

**Safety** remained our top priority in 2023: we successfully further decreased our accident severity and frequency rates. We also conducted the industry-standard Nosacq safety culture survey which was then developed into a Group-wide campaign with local action plans.

Our **Taxonomy-aligned business** increased from 13.56% to 20.03%, which is a great achievement seeing its very tough criteria. Our focus on markets in the net-zero transition informs which projects we take on and will surely further increase our Taxonomy-aligned business over the coming years.

Our CO, and waste reduction plans are on track for our 2030 target. Waste was slightly higher than previous year because we did more renovations last year, which means we took more of the waste into our own reporting.

A key initiative was the development and rollout of the CFE Green Book which lists a comprehensive overview of all actions that a project can take to decrease its environmental impact. Our teams evaluate each project and identify the maximum measures they can take, including water recuperation, alternative energy sources, smart mobility, and many others.



Another key project was the launch of our internal Bazaar platform which serves as an exchange hub between Group projects for recycled or surplus materials, thereby reducing costs and waste.

**Bazaar** 



# CFE group and the SPARC strategy

2023 was marked by the delivery of multiple flagship projects in our sustainable buildings segment. From bio-based construction to circular renovation to smart building technology, these projects are providing us with a wealth of data and expertise. In 2024 we will be bundling these into our new **Sustainability Knowledge Centre** which will function as a hub for all our projects to generate efficiencies and top-notch know-how.

We have started preparing for the **EU CSRD framework** to be ready by the end of 2024 in compliance with EU climate regulation. This exercise follows our implementation of the EU Taxonomy standard and confirms our existing ESG strategy.

In terms of safety, we have just launched our new **Go for Zero** campaign which sees the whole Group focus on further decreasing our accident rates.

In 2023, we engaged the whole organization in the design of the **Heroes for Good Foundation** which will be launched in 2024. The foundation will be supporting non-profit organizations active in health, social justice and education, and that were submitted by CFE employees.

We have a **strong ESG framework** with solid foundations that delivers results, and we keep setting the bar higher for ourselves. CFE continues to walk the talk in sustainability, true to its purpose!

Want to read more about the non-financial statements and key indicators of the CFE Group? Read the CFE Group annual Report.



HEROES FOUNDATION

"For the second year in a row, CFE was named Top ESG Company by independent auditor Sustainalytics. Needless to say, we are very proud of this. It is basically a recognition that we are doing exactly what needs to be done as a responsible company."

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ISABELLE DE BRUYNE
Chief Sustainability Officer of CFE

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# Our commitments for the future

# Continue to surpass ourselves every day

Our company's commitment to society is about meeting the current needs of cities and their inhabitants, without compromising the ability of future generations to meet their own needs. We are fully aware that our work must not stop there and that the years ahead will be crucial in combating global warming and reducing our environmental impact.

That's why the whole BPI team is committed to achieving this goal, whether in the acquisition and development of new projects, in the refurbishment of existing buildings, or even in the day-to-day work of all our team members.

Being an integral part of a multidisciplinary group is both a strength and an opportunity that we must seize to maximise our impact.

European policies and regulations are becoming increasingly stricter with regard to our activities. We need to embrace these changes if we are to outperform ourselves and shape a better world for tomorrow, starting today.

Finally, we believe that every action counts, big or small. It is important for us to have faith in what we are doing and do it with passion, all together, day after day. "Being an integral part of a multidisciplinary group is both a strength and an opportunity that we must seize to maximize our impact."

Team BPI Real Estate Luxembourg

Team BPI Real Estate Poland





