



Press release - January 25th, 2024

The Low Carbon Building Initiative (LCBI) has launched the first pan-European methodology for whole life-cycle carbon measurement of buildings, with set limit values, aiming to cut the buildings' carbon footprint by half.

The LCBI certification scheme will highlight exemplary low carbon buildings.

The Low Carbon Building Initiative (LCBI) has launched its European whole life-cycle carbon methodology and certification scheme for low carbon buildings in eight countries - Belgium, France, Germany, Italy, Luxembourg, Netherlands, Spain, and the UK. It represents a major advancement in standardizing carbon measurement and promoting decarbonization in the European real estate sector.

LCBI: A Unified Approach to Measure Building Carbon Footprint

The real estate sector, responsible for nearly 39% of global CO₂ emissions¹, is crucial in the battle against global warming. To meet the 2050 carbon neutrality goal, European countries must reduce the carbon footprint of all buildings—new, retrofitted, and in-use.

Initial efforts focused on lowering energy use in existing buildings and transitioning to carbon-free energy. However, accurately measuring carbon emissions at every life-cycle stage—production, construction, operation, and demolition—is essential for a comprehensive climate impact assessment of buildings.

To date, a unified European method to understand and compare building carbon footprints has been lacking. Addressing this, the LCBI has developed a unique methodology to measure building carbon footprints across their entire lifecycle, with limit values, basis of a certification scheme for low-carbon buildings. This method aligns with major European standards and tools (Taxonomy, Level(s), CRREM, RICS).

Publicly available on LCBI website, this unified European methodology simplifies the quantification and comparison of building carbon footprints, fostering decarbonization across Europe.

Launched in 2022 by major players in the European real estate sector alongside the Association Bâtiment Bas Carbone (BBCA, established in 2015), LCBI first focuses on newbuilt: offices, residential, and hotels. Its broader objective is to encompass all real estate categories, targeting new, retrofit and in-use buildings.



Arnaud Regout, President of LCBI Advisory Committee, Chief Investment Officer BPI Real Estate: *"Commitment of LCBI stakeholders was key to build this innovative tool, now accessible to entire real-estate sector in Europe. As the first pan European low-carbon methodology, LCBI will facilitate performance benchmarking of carbon footprints for all.*

Such harmonization will provide a powerful signal to the market and help to unlock further private sector investment in low carbon buildings".

¹ 2019 Global Status report for buildings and construction, International Energy Agency

LCBI method and limit values: basis for a certification scheme highlighting low carbon buildings

Considering the entire life cycle, the LCBI certification scheme assesses building's performance on three indicators:

- **embodied** carbon (emissions of building elements) measured in kgCO₂e/m² over 50 years
- **operational** carbon (based on energy consumption and sources) measured in kgCO₂e/m²/year
- **biogenic** carbon stored (use of bio-based materials) in the building measured in kg CO₂e/m²

To define access to the **3 levels** of the label (Standard, Performance, Excellent), each of those indicators are rated on two criteria:

- **Completeness** of the Life Cycle Analysis
- Achievement of carbon emission **thresholds**

This innovative matrix rating fosters transparency and allows to compare buildings carbon footprints.

LCBI certification scheme is a means to position life-cycle carbon footprint at the core of real-estate players strategy. It offers them multiple benefits:

- For **project owners**, it functions as a low-carbon design tool, and a means to highlight exemplary low-carbon buildings.
- For **investors**, LCBI provides access to consistent and reliable data on the whole life-cycle carbon footprint of buildings, serving as reliable indicator for investment.

Bureau Veritas is set to be the first auditor for the LCBI certification scheme. Project owners interested in obtaining it should contact the certifier directly. The certification process includes two stages: a provisional certificate is issued during the design phase, and the final certification is awarded upon the completion of construction works.

A Product of Collective Expertise and Experimentation

Coordinated by the Technical Commission - led by Artelia and Elioth, by Egis - LCBI is the culmination of a two-year collaborative work that achieved consensus on a unified approach. BBKA expertise, benchmarking work, expert reviews with over fifty Life Cycle Assessment (LCA) practitioners from private and public sector - including teams from the European Commission - and a testing phase on 16 pilot projects across Europe, enabled a critical review of the LCBI method during a consultation phase.

Concurrently, substantial work was carried out on building datasets to establish the common thresholds of the LCBI Certification Scheme.

This great achievement would not have been possible without the support of LCBI sponsors: AXA IM Alts, BNP Paribas Real Estate, Bouygues Immobilier, BPI Real Estate, Covivio, GENERALI Real Estate, ICAMAP, Ivanhoé Cambridge, NSI, WO2, as well as partners from the pilot phase.

- To read full LCBI methodology, please visit www.lowcarbonbuilding.com
- To apply for LCBI Certification, please send request on [Bureau Veritas Webpage](mailto:lcbi@batimentbas carbone.org) or at lcbi@batimentbas carbone.org
- Press contact: Cécile Dap – cecile.dap@batimentbas carbone.org
- LCBI presentation sessions will start in February. To stay informed, please send info request [on this form.](#)

About Low Carbon Building Initiative (LCBI)

The Low Carbon Building Initiative (LCBI), launched in 2022, unites major European real-estate stakeholders to promote low carbon buildings and reduce the CO₂ emissions of European real estate by half (measured in a Life-Cycle Analysis). To date LCBI sponsors include AXA IM Alts, Bouygues Immobilier, BNP Paribas Real Estate, BPI Real Estate, Covivio, Generali Real Estate, Icamap, Ivanhoe Cambridge, NSI, WO2. The group is active across the UK, France, Spain, Italy, Belgium, Luxembourg, Netherlands, Germany. LCBI aims to create the first pan-European low carbon label measuring the carbon footprint of real estate based on a Life-Cycle Analysis. LCBI set up a scientific committee with experts and certifiers to work on the first version of the LCBI label. Artelia and Elioth are co-pilots of the scientific committee, which also includes the French Association BBKA, One Click LCA and Drees & Sommer. Bureau Veritas is the preferred certifier for the future label, expected by early 2024

For more information : www.lowcarbonbuilding.com

About Bureau Veritas

Bureau Veritas is a world leader in laboratory testing, inspection and certification services. Created in 1828, the Group has more than 82,000 employees located in nearly 1,600 offices and laboratories around the globe. Bureau Veritas helps its 400,000 clients improve their performance by offering services and innovative solutions in order to ensure that their assets, products, infrastructure and processes meet standards and regulations in terms of quality, health and safety, environmental protection and social responsibility. Bureau Veritas is listed on Euronext Paris and belongs to the CAC 40 ESG, CAC Next 20 and SBF 120 indices. Compartment A, ISIN code FR0006174348, stock symbol: BVI.

For more information, please visit: www.bureauveritas.com

About AXA IM Alts

AXA IM Alts is a global leader in alternative investments with over €184 billion of assets under management^[1] comprising c.€85 billion of primarily private real estate, over €88 billion of private debt and alternative credit, as well as c.€11 billion in Infrastructure and private equity. We take a 360° approach to real estate & infrastructure investing with over €115 billion of assets under management in direct opportunities, held indirectly through debt and listed equities and via long term private equity investments into operating platforms. ESG is fully integrated into our investment decision making processes with our responsible investment approach anchored by the three key pillars of decarbonisation, resilience and building tomorrow. AXA IM Alts employs 835 people located in 15 offices around the world and serves the needs of more than 600 clients from Europe, North America, Asia Pacific and Middle East. We are the number one property portfolio and asset manager in Europe^[2], and one of the largest worldwide.

1 Source: AXA IM Alts data (unaudited) as of 30 September 2023.

2 Source: IPE Top 150 Real Estate Investment Managers, November/December 2022. #1 real estate investment manager in Europe based on total European real estate assets under management. For more information : alts.axa-im.com et www.axa-im.com

About Artelia

Artelia is an international multidisciplinary consultancy, engineering and project management group specialising in mobility, water, energy, building and industry. With 8,600 employees and turnover of €833 million in 2022, Artelia is one of Europe's leading engineering groups, present in over 40 countries in Europe, Africa, the Middle East, Asia-Pacific and the Americas. Artelia is 100% owned by its managers and employees. <https://www.arteliagroup.com/fr>

About BBKA

BBKA, founded in 2015, is at the origin of the world's first building carbon performance label. This trailblazing initiative demonstrates the willingness of French stakeholders in the building industry to actively contribute to the fight against climate change by choosing to engage in low carbon construction. Today, the association brings together the key low carbon real estate players in France: more than one hundred members, including two thirds of the 20 largest French

property developers (Nexity, Altarea, Bouygues Immobilier, Kaufman & Broad, Icade, Eiffage Immobilier, BNP Paribas Real Estate, Linkcity, Adim, Crédit Agricole Immobilier, etc.), major architects such as Valode et Pistre, Wilmotte et associés, Jean-Paul Viguier, Jean-Marie Duthilleul, major investors such as Amundi Immobilier, Ivanhoé Cambridge, Covivio, Gecina and, among its honorary members, Jean Jouzel, Brice Lalonde, Yann Arthus Bertrand or Erik Orsenna.

For more information: www.batimentbascarbhone.org

About BNP Paribas Real Estate

BNP Paribas Real Estate, one of the leading international real estate providers, offers its clients a comprehensive range of services that span the entire real estate lifecycle: Property Development, Transaction, Consulting, Valuation, Property Management and Investment Management. With 5,300 employees, BNP Paribas Real Estate is a one stop shop company, supports owners, leaseholders, investors and communities thanks to its local expertise across 23 countries (through its facilities and its Alliance network) in Europe, the Middle-East and Asia. BNP Paribas Real Estate is a part of the BNP Paribas Group, a global leader in financial services.

As a committed stakeholder in sustainable cities, BNP Paribas Real Estate intends to spearhead the transition to more sustainable real estate: low-carbon, resilient, inclusive and conducive to wellbeing. To achieve this, the company has developed a CSR policy with four objectives: to ethically and responsibly enhance the economic performance and use of buildings; to integrate a low-carbon transition and reduce its environmental footprint; to ensure the development, commitment and well-being of its employees; to be a proactive stakeholder in the real estate sector and to build local initiatives and partnerships.

For more information: www.realestate.bnpparibas.com

About Bouygues Immobilier

Bouygues Immobilier is a leading French urban developer and contractor. For almost 70 years, we have been active across the entire property value chain, from development to operation and promotion. Our job is to design living spaces that take into account all users at all levels, to listen to our clients and local authorities and to work with them to create useful, human and sustainable spaces. We offer places to live, work and socialise.

Committed to limiting our negative impact and maximising our positive impact on the environment, our goal is to reduce our greenhouse gas emissions by 42% on scopes 1 and 2 and 28% on scope 3, by 2030. We aim to increase biodiversity on our projects by 25%, by 2025.

In 2023 we employed 1,673 men and women, our turnover was of €2.032 billion. Demanding in terms of quality and concerned about the well-being of our employees, we are the first developer to be ISO 9001 certified in France.

For more information: www.bouygues-immobilier-corporate.com

About BPI Real Estate

BPI Real Estate is the real estate division of the multidisciplinary group CFE, founded in 1880 and active in Belgium, Luxembourg and Poland in 4 business lines with strong growth potential because they have the potential to shape the world of tomorrow: real estate design and development, multi-technics, construction and renovation and sustainable investments. With a wealth of expertise acquired over the past 35 years, BPI Real Estate's ambition is to challenge the status quo and bring about positive change in real estate development in order to deploy innovative, inclusive and eco-responsible urban planning aimed at increasing the well-being of future generations. BPI Real Estate develops this know-how in the residential, office, retail, services and special products sectors. The company also brings its expertise in real estate design and development to Wood Shapers, a Belgian and Luxembourg company launched at the end of 2019 by BPI Real Estate and CFE Contracting (both part of the CFE group) that focuses primarily on the development, design and sustainable construction of wood and prefabricated materials.

For more information : www.bpi-realestate.com

About Covivio

Thanks to its partnering history, its real estate expertise and its European culture, Covivio is inventing today's user experience and designing tomorrow's city.

A preferred real estate player at the European level, Covivio is close to its end users, capturing their aspirations, combining work, travel, living, and co-inventing vibrant spaces.

A benchmark in the European real estate market with €26bn in assets, Covivio offers support to companies, hotel brands and territories in their pursuit for attractiveness, transformation and responsible performance.

Build sustainable relationships and well-being, is the Covivio's Purpose who expresses its role as a responsible real estate operator to all its stakeholders: customers, shareholders and financial partners, internal teams, local authorities but also to future generations and the planet. Furthermore, its living, dynamic approach opens up exciting project and career prospects for its teams.

S&P For more information: www.covivio.eu

About Elioth by Egis

Elioth is a unique collective in which all the facets of technical design interact. In bringing together more than 60 experts in structures, envelopes, energy performance and environmental design under one roof, Elioth has fostered a quite singular proposition: an innovative driving force working in favour of excellence in sustainable construction, from design to construction supervision, from project-specific approaches to portfolio-wide strategies.

Within the Egis Group (€1.5bn turnover, 18000 people in 100+ countries), the multi-disciplinary teams have committed to tackle the climate emergency by providing engineering solutions that accelerate societal transitions with a fair and performance-based approach.

Elioth by Egis is based in Paris, Lyon and Nice. www.elioth.com

About Generali Real Estate

Generali Real Estate is one of the world's leading real estate asset managers with around €38.7 billion of assets under management as of end of Q3 2023. It leverages the expertise of more than 370 professionals, with operating units located in the main European cities.

The company's integrated business model covers the full scope of asset management activities and the entire real estate value chain. A series of cross-border investment vehicles, managed by the specialized asset manager Generali Real Estate S.p.A. Società di gestione del risparmio, aims to create long-term value for investors with a core/core + profile by investing in assets characterized by good locations, high liquidity and strong underlying leasing dynamics. The portfolio under management comprises a unique mix of historical and modern properties, ranging from landmark buildings to new architectural masterpieces, which has enabled the company to develop best-in-class skills in the fields of sustainability, urban development, and technological innovation.

Generali Real Estate is part of the Generali Investments ecosystem of asset management firms.

For more information: www.generalirealestate.com

About ICAMAP

ICAMAP is an investment fund management company specialized in real estate, founded in 2013 and headed by its founding partners, Guillaume Poitrinal, Harm Meijer and Alexandre Aquien. ICAMAP manages €1.7 billion in equity for 30 leading internationally renowned institutional or family office investors. ICAMAP is the manager of three real estate investment funds with a focus on high-value-added operations: ICAWOOD (€750 million in equity), developing new-generation, low-carbon offices in the Greater Paris metropolitan area, ICAMAP Investors (€700 million in equity,

including €200 million in co-investments) taking ownership stakes in small- and mid-cap private or publicly traded European real estate companies, and ICAMAX (€220 million including parallel investments), investing in listed European real-estate companies. The ICAMAP and ICAMAP Advisory teams are based in Paris, London and Luxembourg.

For more information: www.icamap.com

About Ivanhoe Cambridge

Ivanhoe Cambridge develops and invests in high-quality real estate properties, projects and companies that are shaping the urban fabric in dynamic cities around the world. It does so responsibly, with a view to generate long-term performance. Ivanhoe Cambridge is committed to creating living spaces that foster the well-being of people and communities, while reducing its environmental footprint.

Ivanhoe Cambridge invests internationally alongside strategic partners and major real estate funds that are leaders in their markets. Through subsidiaries and partnerships, the Company holds interests in 1,500 buildings, primarily in the industrial and logistics, office, residential and retail sectors. Ivanhoe Cambridge held C\$77 billion

in real estate assets as of December 31, 2022 and is a real estate subsidiary of CDPQ (cdpq.com), a global investment group.

For more information: www.ivanhoecambridge.com

About NSI

NSI N.V. is a Dutch listed commercial property investor. NSI enables its customers to achieve maximum productivity and growth, providing best-in-class flexible space solutions and services in modern, healthy, sustainable buildings in prime locations. The portfolio consists of 47 properties with a value of circa €1.3 billion.

For more information: www.nsi.nl

About WO₂

Founded in 2014 by Guillaume Poitrinal and Philippe Zivkovic, the WO2 Group specializes in high environmental performance real estate development. To significantly reduce the carbon footprint of its projects, the group develops its own technologies, favoring the use of recycled or bio-sourced materials, especially solid wood cross laminated timber (CLT), for which it is the French specialist. Collaborating with top architects, the group continually innovates in the design of its products to set them apart from conventional supply. In 2023, the group sold its residential subsidiary, "Woodeum," to Altarea to refocus on commercial real estate under the brand "WO2." It is currently developing over 350,000 square meters of office space in the Paris region, representing total investments for over 2 billion euros. The group is still owned by its two founders, along with two other managing directors.

For more information: www.wo2.com

