Table of Contents

1 BuildGreen Services - Introduction

BuildGreen is a consulting firm that specializes in providing sustainable development solutions for its clients. The company offers a comprehensive range of services that cover various aspects of sustainable development, including sustainable building design, audit and certification, decarbonization, and sustainability services.

BuildGreen's services are designed to help clients meet their sustainability goals and achieve long-term environmental and financial benefits.

The services provided by BuildGreen can be categorized into four main categories: Corporate, Building, Carbon, and Certification, but these categories will be detailed bellow, as you go through this presentation.

Sustainable Building Design:

BuildGreen's sustainable building design services are tailored to meet the needs of clients who are looking to create sustainable and energy-efficient buildings. The company provides consulting services for new building designs and retrofitting of existing buildings. BuildGreen's team of experts use state-of-the-art tools and technologies to create sustainable designs that are both environmentally friendly and cost-effective.

Audit and Certification:

BuildGreen provides auditing and certification services to help clients ensure that their buildings are compliant with sustainability standards. The company offers certification services for various sustainability standards, including LEED, BREEAM, Well and EDGE. BuildGreen's auditing services include assessments of building energy use, water consumption, and waste management, among others.

Decarbonization:

BuildGreen offers decarbonization services to help clients reduce their carbon footprint and transition to a low-carbon economy. The company provides a range of solutions, including renewable energy, energy-efficient systems, and carbon offsetting. BuildGreen's decarbonization services are designed to help clients meet their sustainability goals while reducing costs and improving efficiency.

Sustainability Services:

BuildGreen offers a range of sustainability services that cover a wide range of topics, including nZEB, ESG, EU Taxonomy, Carbon Neutrality, and Carbon Footprint Calculation. The company's team of experts provides consulting services to help clients develop sustainability strategies, assess their environmental impact, and develop plans for reducing their carbon footprint.

In conclusion, BuildGreen provides a complete set of consulting services in sustainable development that are designed to help clients achieve their sustainability goals. The company's services cover a wide range of topics, from sustainable building design to decarbonization and sustainability services. BuildGreen's team of experts is committed to providing innovative solutions that are both environmentally friendly and cost-effective.

"Are you looking for professional sustainability services provider? Our sustainability services are designed to suit environmental and strategic needs and can be chosen as a full package or individual services."

BuildGreen is one of the leading **ESG** and **sustainability consultancy** firms in Central and Eastern Europe with a team of experts who provide specialist advice in **sustainable design**, **carbon neutrality**, **decarbonization**, **audit** and **certification**. We help clients to understand their material impacts and risks, establish **ESG goals** and build **ESG strategies** that drive change. We also help clients to calculate their **Scope 1, Scope 2** and **Scope 3** emissions, set goals and develop reduction strategies. Founded in 2010 by Razvan Nica, BuildGreen was the first Romanian company to offer a range of green building certification services and has built a reputation as a very reliable partner having achieved over 350 certifications for some of the most reputable developers and asset managers in Central and Eastern Europe.

Following a similar path to BuildGreen, Czech based, green-gain were founded by Andrew Caistor in 2009. As the first BREEAM assessor organization in Central and Eastern Europe green-gain played a major role in raising awareness of BREEAM and in steering clients and project teams in its delivery.

After several years of collaboration, the 2 companies eventually merged and now operate under the brand name BuildGreen with offices in Bucharest and Prague. Building on their success and reputation as a leader in their field, BuildGreen has assembled a team of in-house specialists to offer a wide range of ESG and sustainability services. Our extensive knowledge and expertise are backed by a passion to serve those who share our values. Our people are valuable professionals who draw on extensive technical knowledge and relish challenging environments. We seek superior levels of development in every project and champion changes based on sustainability as key growth factor. We are present in two offices, in Romania - Bucharest, and in the Czech Republic - Prague.

One of the key sustainability services offered by BuildGreen include **sustainable design**, which involves designing buildings and spaces that are energy-efficient, environmentally friendly, and comfortable for occupants. This includes sustainable materials, building orientation, lighting and shading, HVAC, water and waste management, and renewable energy systems.

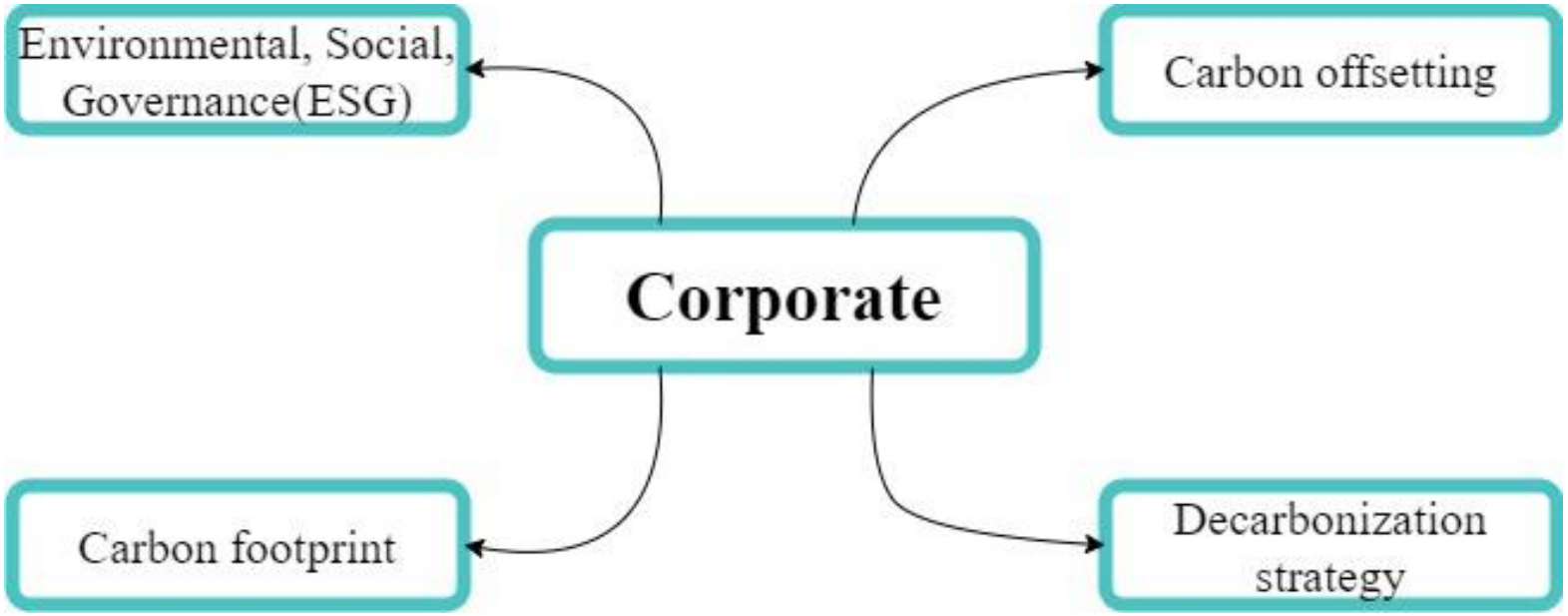
Another important service is **carbon neutrality**, which helps clients to measure and reduce their carbon footprint, offset their remaining emissions, and achieve net-zero emissions. BuildGreen offers carbon audits, carbon footprinting, and carbon offsetting solutions that are tailored to the specific needs of each client.

Decarbonization is also a critical service offered by BuildGreen, which involves developing strategies to reduce carbon emissions across the entire value chain. This includes identifying the key sources of emissions, setting targets, developing action plans, and implementing solutions that reduce emissions from energy, transportation, and supply chains.

Audit and **certification** are another core services, which involve assessing the sustainability performance of buildings, and companies against internationally recognized standards such as LEED, BREEAM, Well, and EDGE. BuildGreen provides third-party verification, certification, and labeling services that enable clients to demonstrate their commitment to sustainability and transparency.

2 Categories of services

2.1 Corporate Services



2.1.1 Environmental, Social and Governance (ESG)

ESG stands for Environmental, Social, and Governance. It is a set of criteria used to evaluate the sustainability and societal impact of a company or organization. Environmental criteria include a company's impact on the environment, such as its carbon footprint and waste management practices. Social criteria include a company's treatment of its employees, customers, and the communities it operates in. Governance criteria include a company's leadership and management structure, as well as its transparency and ethical practices. ESG investing involves selecting investments based on these criteria, with the goal of promoting sustainability and responsible corporate behavior.

2.1.2 Carbon Footprint

A carbon footprint is a measure of the total amount of greenhouse gases that are emitted into the atmosphere as a result of an individual's or organization's activities. These emissions are typically measured in terms of the amount of carbon dioxide equivalents (CO_2e) produced. The main sources of carbon emissions are the burning of fossil fuels for energy, transportation, industrial processes, and deforestation. A carbon footprint can be calculated for an individual, a

business, a product, or an entire country. The goal of measuring a carbon footprint is to understand the impact of an individual or organization on the environment and to identify areas where emissions can be reduced.

2.1.3 Decarbonization Strategy

Decarbonization is the process of reducing or eliminating greenhouse gas emissions in order to mitigate the effects of climate change. There are a variety of strategies that can be used to decarbonize the built environment, including: energy efficiency, renewable energy, net zero energy, low-carbon materials, sustainable transportation, carbon capture and storage, green roofs and walls. Overall, decarbonization strategies aim to decrease the built environment carbon footprint and reduce the impact of climate change.

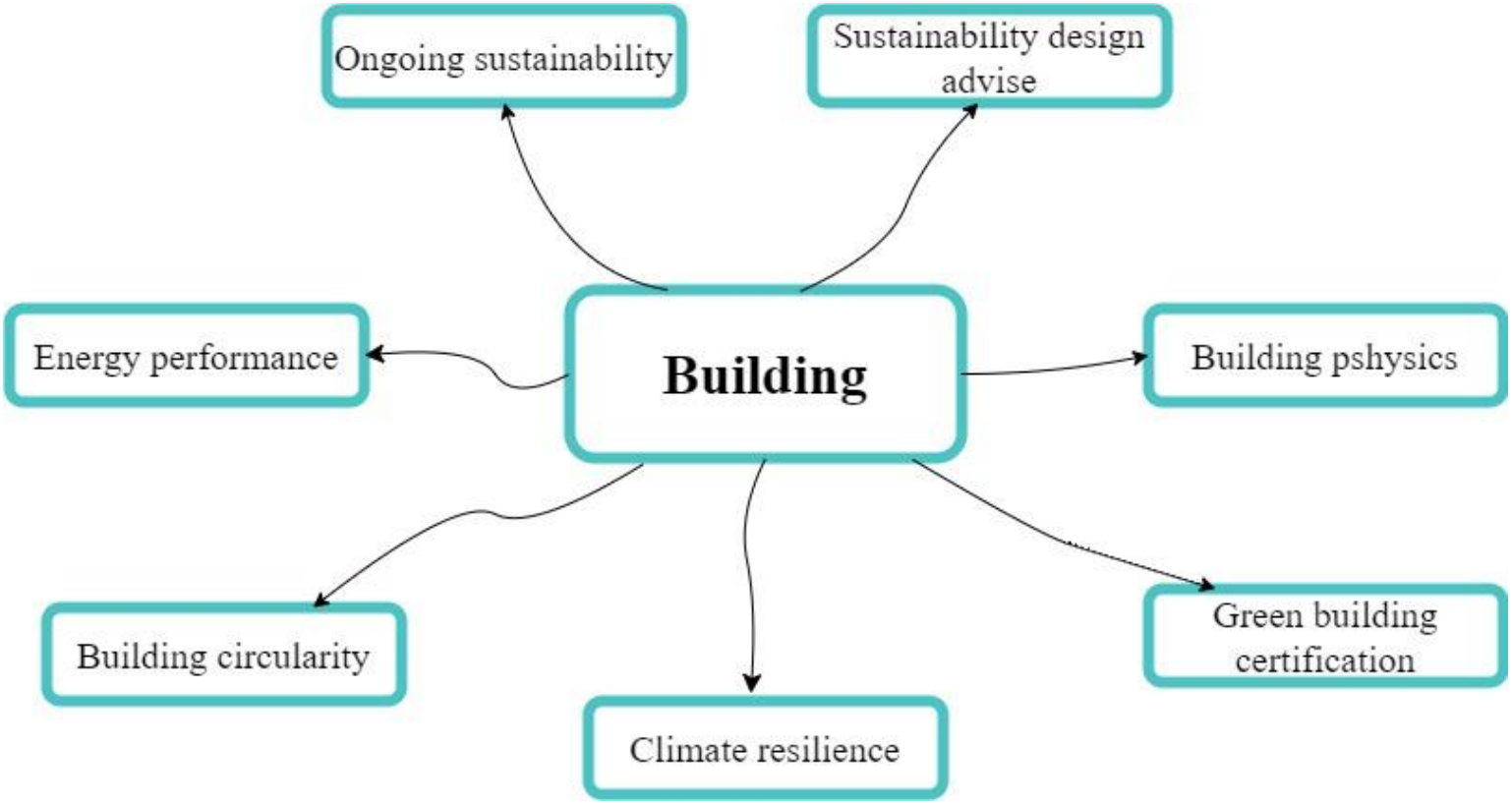
Decarbonization is an urgent and essential process that must be implemented to prevent the devastating effects of climate change. The term decarbonization refers to the reduction of carbon dioxide (CO_2) emissions in all sectors of the economy, including power generation, transportation, and industry. Is not only a must, but also a critical and urgent process that must be undertaken to protect our planet and its inhabitants. With the right policies, technologies, and collaborations in place, we can achieve a decarbonized future that is sustainable, resilient, and prosperous for all.

2.1.4 Carbon Offsetting

Carbon offsetting is a way for an individual, organization, or business to offset the emissions that they are responsible for by funding projects that reduce or remove carbon emissions elsewhere. The idea behind carbon offsetting is that the carbon emissions from one source can be balanced out by reducing emissions from another source. This can be done by investing in renewable energy projects, such as wind or solar power, or by funding projects that increase energy efficiency or capture carbon from the atmosphere.

The goal of carbon offsetting is to reduce the overall amount of greenhouse gases in the atmosphere. However, it is important to note that carbon offsetting is not a substitute for reducing emissions at their source and it should not be used as a way to avoid taking action to reduce emissions.

2.2 Building Services



2.2.1 Sustainability Design Advice

- **Sustainability assessment** is a process of evaluating the environmental, social and economic impacts of a project, product or organization. It's a way of measuring the sustainability and long-term viability of a project or organization, and it helps to identify areas where improvements can be made.
- A **sustainability strategy** is a plan of action that outlines the steps an organization will take to reduce its environmental impact, improve its social performance, and promote economic growth in a sustainable way.
- A **daylight study** is an analysis of the natural light in a building or outdoor space. It is used to evaluate the quality, quantity and distribution of natural light in a space and how it impacts the energy consumption, visual comfort and overall well-being of the occupants.

- **Passive-design analysis** is the study of the natural elements of a building or outdoor space, such as sunlight, wind, and temperature, in order to design a building that is naturally comfortable and energy efficient without the use of mechanical systems. It is a design approach that aims to reduce the need for active heating and cooling systems, and to make use of natural elements to provide a comfortable living environment.
- **Water consumption** refers to the amount of water that is used by an individual, organization, or community. It is typically measured in cubic meters and is used to assess the efficiency and sustainability of water use.
- **Air quality assessment** is the process of measuring and evaluating the levels of pollutants in the air. It is used to determine the quality of the air and to identify sources of pollution. Air quality assessment is important because poor air quality can have negative impacts on human health, the environment, and the economy.
- **A flood risk assessment** is a process of evaluating the potential for flooding in a specific area and the potential impacts of a flood event. The goal of a flood risk assessment is to identify areas at risk of flooding, determine the potential impacts of a flood, and develop strategies to reduce the risk and mitigate the impacts.
- **Ecology** services refer to the management and conservation of natural resources and ecosystems. This can include activities such as habitat restoration, invasive species management, conservation planning, and monitoring of biodiversity. The goal of ecology services is to maintain the health and functionality of ecosystems while also providing economic and social benefits to humans.
- **Building acoustics** is the study to improve sound quality in buildings by measuring and controlling sound transmission, reverberation and background noise. Professional acousticians use simulations, measurements, and tests to design and evaluate buildings for good acoustics.

2.2.2 Energy Performance

- **Energy modeling** is the process of using computer software to simulate the performance of a building or system in terms of energy consumption. The simulation is based on inputs such as the building's design, construction materials, and equipment. Energy models can be used for a variety of purposes such as predicting energy consumption, evaluating the energy efficiency of different design options, and identifying potential energy savings.
- **Renewable energy feasibility** is the process of evaluating the potential for a specific site or region to generate electricity from renewable energy sources such as solar, wind, hydro, geothermal and biomass. Feasibility studies typically include a range of technical, economic, and environmental assessments to determine the potential for a given renewable energy project to be viable.
- An **energy audit** is a systematic examination of the energy consumption of a building or system, with the goal of identifying opportunities for energy efficiency improvements. The audit typically includes a detailed analysis of energy use, as well as a review of the building's design, construction, and equipment. The purpose of an energy audit is to identify areas where energy is being wasted, and to recommend specific measures that can be taken to reduce energy consumption and costs.
- **Thermography** is a non-destructive testing method using infrared imaging to detect thermal issues in structures by taking temperature measurements and analyzing the data to identify temperature anomalies.
- **Energy Performance Certificates** (EPCs) are documents that provide information on the energy efficiency of a building. They are issued by accredited energy assessors and are typically required when a building is constructed, sold or rented. EPCs include an assessment of the building's energy consumption and carbon emissions and provide recommendations for energy-saving improvements.

- **Commissioning** is an essential step in the project delivery process. Green building design acknowledges the significance of commissioning in ensuring that buildings perform as intended. Commissioning poses the greatest risk in terms of achieving energy performance goals, but if done correctly, it also offers the highest potential return on investment in terms of good energy performance during the building's operation.

2.2.3 Building Circularity

- **Life Cycle Costing (LCC)** is a method of evaluating the total cost of a building or system over its entire life span. It takes into account not only the initial cost of construction or installation, but also the costs of operation, maintenance, and eventual replacement or decommissioning. The goal of LCC is to identify the most cost-effective option in the long term, rather than just the cheapest option initially.
- **Life Cycle Assessment (LCA)** is a method of evaluating the environmental impact of a product, process or service over its entire life cycle. It involves analyzing the environmental impacts of a product or service from the extraction of raw materials, through production, use, and disposal. The goal of LCA is to identify the environmental hotspots of a product or service and to identify opportunities for improvement.
- **Whole-life cycle carbon (WLCC)** is a method of evaluating the carbon footprint of a product, process or service over its entire life cycle. It includes all the greenhouse gas emissions (GHG) associated with the product or service from the extraction of raw materials, through production, use, and disposal or end-of-life treatment. The goal of WLCC is to identify the carbon emissions hotspots of a product or service and to identify opportunities for improvement.
- **Embodied carbon calculation** is a method of measuring the total amount of greenhouse gas (GHG) emissions associated with the production of a product, service or structure. It focuses on the carbon emissions that occur during the production phase, including the extraction, processing, and transportation of materials, as well as the manufacturing and assembly of the product or structure. The goal of embodied carbon calculation is to identify the carbon emissions hotspots and to identify opportunities for reduction.

2.2.4 Climate Resilience

- **Functional adaptability** refers to the ability of a building or space to be easily modified or reconfigured to meet changing needs over time. It is an important aspect of sustainable building design, as it allows buildings to adapt to changing uses, occupancies, and technologies, and to extend their useful life.
- **Designing for durability** refers to the process of designing buildings, products, and systems to withstand the effects of time, use, and environmental factors, in order to extend their useful life. This approach aims to ensure that the building or product will continue to function as intended, with minimal maintenance and repairs, over its entire life cycle.
- **Climate change adaptation strategies** refer to actions taken to reduce the negative impacts of climate change on human and natural systems. These strategies aim to increase the resilience of communities, infrastructure, and ecosystems to the effects of climate change, such as sea-level rise, increased frequency of severe weather events, and changes in temperature and precipitation.

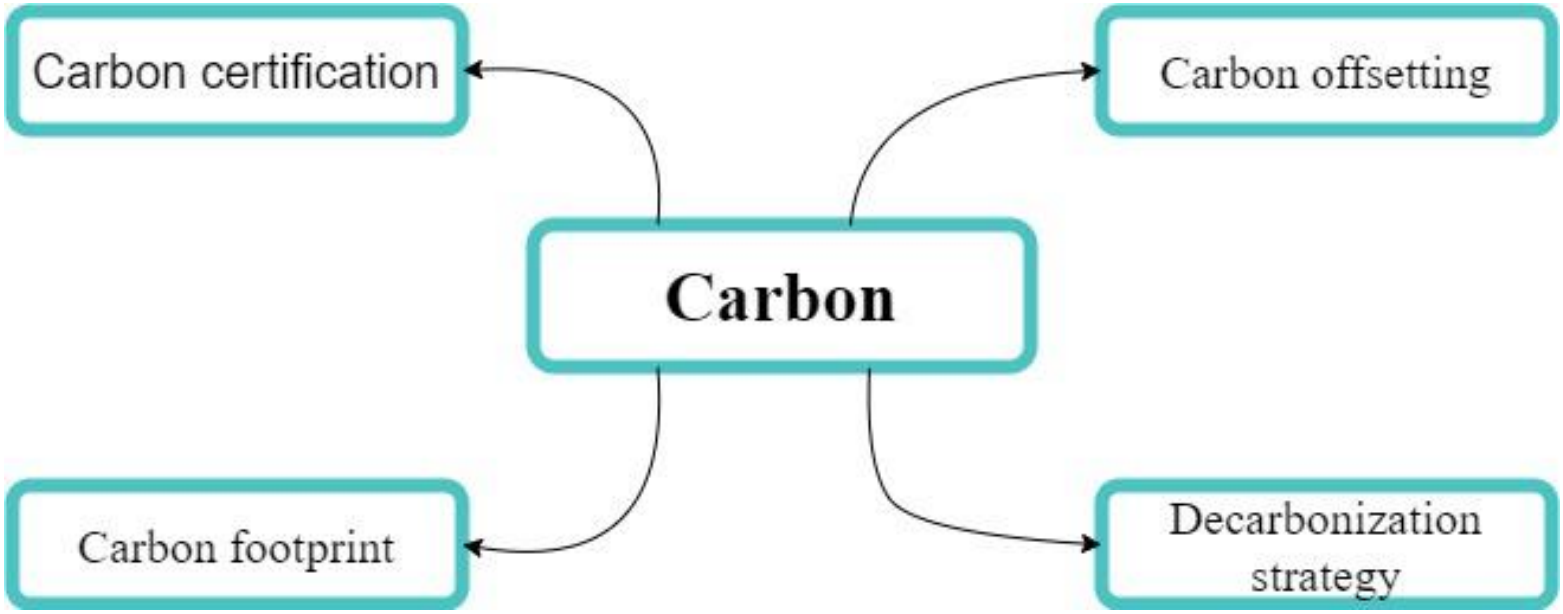
2.2.5 Building Physics

- A **blower door test** is a diagnostic tool used to measure the airtightness of a building. The test involves sealing all doors and windows in the building and then using a powerful fan to depressurize or pressurize the building. By measuring the amount of air that needs to be added or removed to maintain a certain pressure difference, the blower door test can determine how much air is leaking into or out of the building.
- A **daylight study** is an analysis of natural light in a building/space to optimize its use in reducing the need for artificial lighting, evaluating the impact of factors such as shading devices, window size, placement, and building orientation.
- **Passive-design analysis** evaluates a building's energy efficiency by assessing its potential for passive design strategies, including building orientation, insulation, ventilation, shading, thermal mass, and renewable energy systems.
- **Thermal comfort** refers to a perceived comfortable indoor environment, including temperature, humidity, air movement and radiation, aimed at avoiding discomfort or stress to building occupants.
- **Thermal** bridging is the loss or gain of heat in building envelopes due to more efficient heat conduction in certain areas, such as corners, edges, and penetrations like window frames and balconies.
- **Computational fluid dynamics (CFD)** is a branch of fluid mechanics that uses numerical methods and computer software to predict fluid flow behavior in various applications like aerospace, automotive, environmental and biomedical engineering.
- **Natural ventilation** is a process of using open windows, vents, or other openings to circulate fresh air and improve indoor air quality, reducing the need for mechanical systems. It can be passive or active and the effectiveness is affected by the building's design and architecture.

2.2.6 Ongoing Sustainability

- **Post Occupancy Evaluation (POE)** is the process of assessing the performance of a building after it has been occupied and used by its intended users. The evaluation typically includes a combination of objective data, such as energy consumption and indoor environmental quality, as well as subjective data, such as user satisfaction and comfort. POE can be used to identify areas where the building is performing well, as well as areas where improvements can be made.
- Building **recommissioning** is the process of identifying and correcting building systems that are not performing as intended. It typically includes a thorough assessment of the building's mechanical, electrical, and plumbing systems to identify issues such as equipment malfunctions, control system problems, and energy inefficiencies. Once issues are identified, corrective actions are taken to improve the building's performance, such as repairing or replacing equipment, optimizing control systems, and implementing energy conservation measures.

2.3 Carbon Services



2.3.1 Carbon Footprint

A **carbon footprint** is a measure of the total greenhouse gas emissions caused by an individual, organization, or product over a certain period of time. It is typically measured in units of carbon dioxide equivalents (CO_2e) and includes emissions from sources such as electricity consumption, transportation, and heating and cooling.

The carbon footprint of a building is primarily determined by its energy consumption, which is used for heating, cooling, lighting, and powering appliances and equipment. The energy used in the building's construction, maintenance, and demolition also contribute to the carbon footprint.

2.3.2 Decarbonization Strategy

Decarbonization is the process of reducing or eliminating greenhouse gas emissions in order to mitigate the effects of climate change. There are a variety of strategies that can be used to decarbonize the built environment, including: energy efficiency, renewable energy, net zero energy, low-carbon materials, sustainable transportation, carbon capture and storage, green roofs and walls. Overall, decarbonization strategies aim to decrease the built environment carbon footprint and reduce the impact of climate change.

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2.3.4 Carbon Certification

Carbon certification refers to the process of verifying that a building or organization has taken measures to minimize its carbon emissions and operate sustainably. This verification is usually carried out by a third-party organization that administers a certification program, which sets specific standards and requirements for achieving carbon neutrality.

The certification process involves measuring and quantifying the carbon emissions produced by the building or organization, identifying ways to reduce these emissions, and implementing solutions that result in a reduced carbon footprint.

The standards and requirements for carbon certification vary depending on the specific certification program being followed. However, common criteria often include energy efficiency measures, use of renewable energy sources, waste reduction and recycling practices, and sustainable transportation policies.

Once the building or organization meets the requirements of the certification program, it is awarded a certificate that verifies its carbon neutrality and sustainability. This certificate can be used to demonstrate the organization's commitment to sustainability and to attract environmentally conscious consumers or investors.

2.4 Certification Services

2.4.1 Green Building Certification

2.4.1.1 BREEAM

- **BREEAM International New Construction** is a multi-criteria approach that assesses the design, construction, intended use and futureproofing of developments, including the local, natural or manmade environment surrounding the building. All newly constructed projects can be certified, including public, private, residential, and commercial buildings, as well as building extensions.
- The **BREEAM In-Use** scheme enables building managers to assess the sustainability of their portfolios in two areas: asset performance, and the building management performance. All those involved in occupying, procuring, or managing existing buildings can evaluate and improve the building performance and the quality of the management procedures. All types of projects can be certified.
- **BREEAM Refurbishment & Fit-Out** - This standard allows real estate investors, developers and building owners to assess and mitigate unnecessary environmental damage caused while completing a refurbishment or fit out project. The following building improvements are analyzed: external envelope and structure, core services, local services, or interior design of a building. Specific criteria are also available for heritage buildings considering historic constraint. The fit-out part of the certification can be used by tenants to evaluate their interior design and is complementary to BREEAM New Construction – Core and Shell.

- **BREEAM Communities** is a simple and flexible route to improving, measuring, and certifying the sustainability of large-scale development plans. It provides a framework to support planners, local authorities, developers, and investors through the master planning process. The standard is applied during the early planning and design stages of a development and is suitable for medium to large scale developments, including new communities and regeneration projects.
- A **BREEAM AP** (Accredited Professional) assists project developers from the planning phase onwards in targeting the criteria that will enable them to achieve a high sustainability score under the BREEAM regulations. Up to 3 BREEAM credits are available if a BREEAM AP is engaged from the planning/feasibility stage of the certification process.

2.4.1.2 LEED

Developed by the US Green Building Council, **LEED ("Leadership in Energy and Environmental Design")** is a multi-criteria assessment system for identifying, implementing, and measuring sustainability in the construction, operation, and maintenance of buildings. This system is widely used in the United States and throughout the world. LEED works for all buildings, at all phases of development. Projects pursuing LEED certification earn points across several areas that address sustainability issues. Based on the number of points achieved, a project then receives one of four LEED rating levels: Certified, Silver, Gold, and Platinum.

2.4.1.3 Well

The **WELL Building Standard®** is an evidence-based system for measuring, certifying, and monitoring the performance of building features that impact health and well-being. Well is administered by the International WELL Building Institute™ (IWBI), a public benefit corporation whose mission is to improve human health and well-being through the built environment. Well is third-party certified by Green Business Certification Inc. (GBCI), which administers LEED certification and LEED professional credentialing.

2.4.1.4 EDGE

Developed by International Finance Corporation (IFC), **EDGE ("Excellence in Design for Greater Efficiencies")** is a green building certification system focused on making new residential and commercial buildings more resource efficient. EDGE calculates the utility savings and reduced carbon footprint of your green building against a base case. For non-residential buildings, you can see how much extra it costs to build green – and how short a time it takes to earn back the money through operational savings. EDGE can be used for buildings of all vintages, including new construction, existing buildings, and major retrofits. EDGE presents the business case for green building in rapidly urbanizing areas, making green building attainable and acting as an important intervention tool in combating climate change.

2.4.2 Environmental, Social and Governance (ESG)

ESG stands for Environmental, Social, and Governance. It is a set of criteria used to evaluate the sustainability and societal impact of a company or organization. Environmental criteria include a company's impact on the environment, such as its carbon footprint and waste management practices. Social criteria include a company's treatment of its employees, customers, and the communities it operates in. Governance criteria include a company's leadership and management structure, as well as its transparency and ethical practices. ESG investing involves selecting investments based on these criteria, with the goal of promoting sustainability and responsible corporate behavior.

- **ESG due diligence** is evaluating a company's performance in environmental, social, and governance aspects before investment, by researching, analyzing operations, policies, and practices and assessing risks and opportunities associated with the company's ESG performance.
- **ESG strategy development** involves integrating environmental, social and governance considerations into an organization's operations and decision-making to create long-term value and address societal issues.
- **ESG roadmap and KPI** - our ESG consultants' partner with you to build a strong roadmap that demonstrates your trajectory of improvement over time.
- **ESG policies** refer to guidelines and procedures to integrate environmental, social and governance considerations in operations and decision-making to meet ESG goals and objectives.
- **ESG analyses** evaluates a company's environmental, social, and governance performance through various methods and data collection, and is used for investment, stakeholder engagement, risk management, and creating ESG scores/ratings.
- An **ESG annual review** is an evaluation of a company's performance in terms of its impact on the environment, its social responsibility and ethical practices, and its governance structure and policies. It typically involves collecting data and information on key ESG metrics, analyzing it and presenting a report to stakeholders on the company's ESG performance and impact.

2.4.3 Carbon Certification

Carbon certification refers to the process of verifying that a building or organization has taken measures to minimize its carbon emissions and operate sustainably. This verification is usually carried out by a third-party organization that administers a certification program, which sets specific standards and requirements for achieving carbon neutrality.

The certification process involves measuring and quantifying the carbon emissions produced by the building or organization, identifying ways to reduce these emissions, and implementing solutions that result in a reduced carbon footprint.

The standards and requirements for carbon certification vary depending on the specific certification program being followed. However, common criteria often include energy efficiency measures, use of renewable energy sources, waste reduction and recycling practices, and sustainable transportation policies.

Once the building or organization meets the requirements of the certification program, it is awarded a certificate that verifies its carbon neutrality and sustainability. This certificate can be used to demonstrate the organization's commitment to sustainability and to attract environmentally conscious consumers or investors.