



greenlab
think.act



Embracing a Sustainable World

Who we are

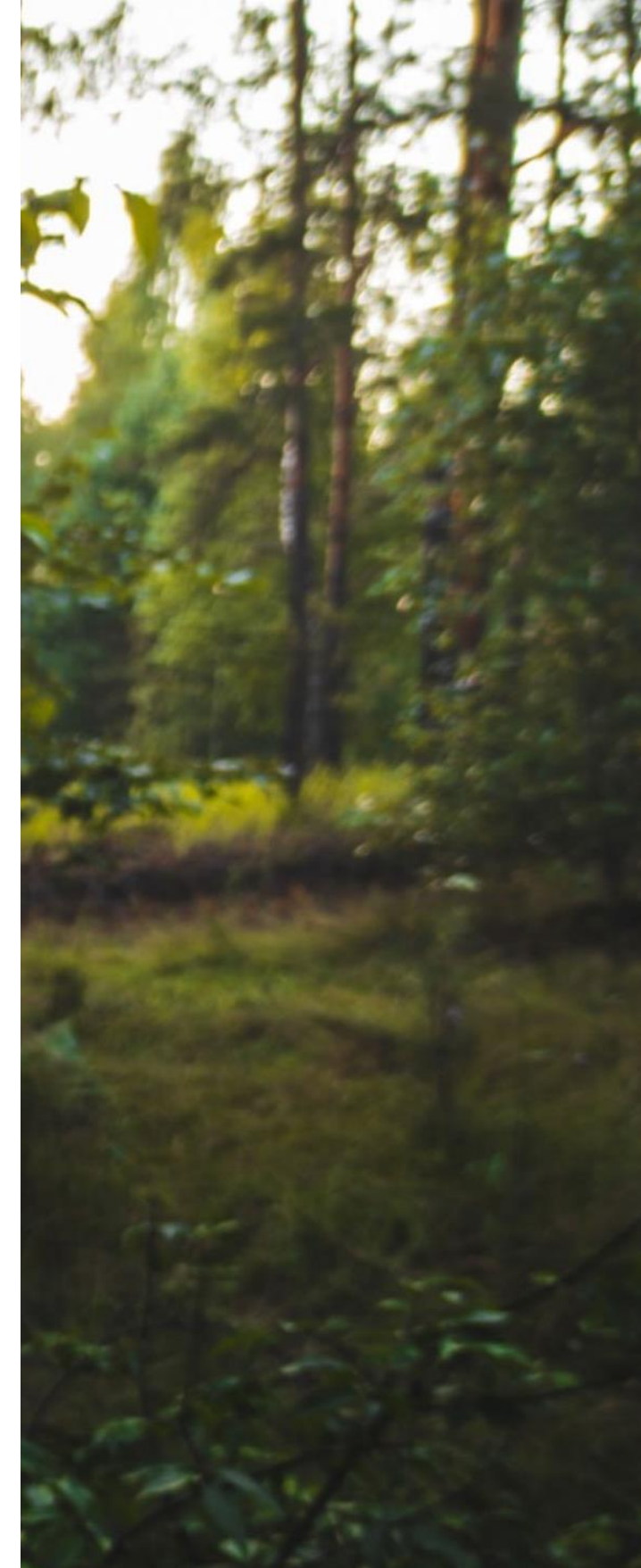
For the past 15 years, sustainability has been a central theme for Green Lab, reflected in an increasing overall offer of sustainable projects for buildings and corporations such as LEED, BREEAM, WELL, Carbon Footprint or ESG services.

We are made of consultants, engineers and passive design architects that aim to capitalize sustainability and create innovative solutions for building design, urban built environment, and eco-materials. Our mission is to continuously incorporate sustainability value into our clients' organizations, focusing in their products, activities, buildings and their people enabling them to become increasingly recognized as a sustainable trademark.





Why should the built environment go Green?



It's cost effective in a building life cycle.

Investments are in average less than 2% and energy operation costs are reduced in 15 to 40%.

WGBC, 2013

Green buildings and infrastructures have higher commercial value.

Up to 38% attractiveness in sale cost.

MCGRAW-HILL CONSTRUCTION, 2013

It's cost effective in a building life cycle.

This means improvements in work productivity, sales, learning or health recovery rates.

WGBC, 2013

Because climate change is happening and we need to take action.

A sustainable building can represent up to 66% less CO2 emissions.

BRE, 2016





SUSTAINABILITY in buildings

SUSTAINABILITY in urban environment

SUSTAINABILITY in materials

SUSTAINABILITY in corporation

Our Services



Sustainability in Buildings

BREEAM, LEED, WELL and Other Accreditations

Development of consultancy and assessment services of projects according to BREEAM, LEED, WELL, Passive House, SBTool or other internationally recognised sustainable construction certification systems. Our work is developed continuously during project and construction stages, offering our clients the most applicable and cost efficiency solutions to each project.

Net Zero Energy Buildings

Implementation of ZEB & NZEB (Zero Energy Buildings & Near Zero Energy Buildings) concepts. The Energy Performance of Buildings Directive requires all new buildings in EU countries to be NZEB by the end of 2020. This means very efficient energy performance buildings and the use of renewables to remaining energy needs.

Bioclimatic Design

Optimization of passive architecture based on bioclimatic principles towards sustainable, comfortable and energy efficient buildings. Passive design solutions are defined according to local conditions such as temperatures, sun shading, dominant winds, etc. and according to each building uses.

Dynamic Simulations

Development of Building Performance Simulations (BPS) to assess energy performance, daylighting, air renovation and thermal comfort, as well to identify improvement solutions both to improve energy efficiency and to optimize indoor conditions.





Atenor Office Development

Lisbon • Portugal

46.557 sqm **Area**

2018 **Year**

Building Permit **Stage**

Atenor **Client**

BREEAM Excellent (targeted) and WELL Gold (Pre-certify) **Rating**



www.greenlab.com.pt



The Atenor Office Development is notable for its innovative design, materials and cutting-edge construction techniques. Enhance active living, through dedicated facilities for active occupants, such as bicycle storage and physical activity equipment, to discourage sedentary behaviour.

Integration of nature and natural elements and nearby nature such as green spaces and active façades, to influence cognitive and emotional well-being.

Smart mobility strategy, with controlled car parking spaces, proximity to public transport electric car chargers and bicycle storage spaces.

Reduced footprint and materials recovery, with construction waste minimization, due to the reuse of minimum 50% of existing buildings and infrastructures. Comfortable workspaces through the optimization of daylight and use of materials that improve indoor air quality.

Atenor Office Development

Lisbon • Portugal

46.557 sqm **Area**

2018 **Year**

Building Permit **Stage**

Atenor **Client**

BREEAM Excellent (targeted) and WELL Gold (targeted) **Rating**



www.greenlab.com.pt

Sustainability in Urban Environment

Urban Scale Climate Modelling

Development of CFD (Computational Fluid Dynamics) Simulations for the assessment of local microclimate conditions such as temperatures, wind speed and patterns or sun shading. This modelling provides data for city planning and to identify local areas of discomfort or risk.

Smart City Strategies

Creation of Smart City development strategies that integrate sustainability, technology and data processing concepts into urban and regional governance for the improvement of urban infrastructures. Smart Cities provide adapted and adaptable environments that better respond to sustainable development challenges.

Adaptation to Climate Change

Natural risk assessment associated with climate change events and development of strategies for the response to this challenges since building design recommendations, resilience planning, infrastructures and urban measures for the mitigation of climate change.

Sustainable Energy Plans

Sustainable Energy Plans (SEP) settle a framework to improve energy consumption at regional level and to reduce CO emissions. Previous to the SEP development, a detailed inventory on energy consumption needs to be developed identifying priority sectors of action and measures to be implemented.

Environmental Diagnosis

Development of sustainability diagnosis and strategies for municipalities as well as Environmental impact assessments (EIA) or other Environmental management projects (waste management plans, landfill sites design, etc.)





Green Quarter

Astana • Kazakhstan

900.000 sum Area

2013 Year

International Competition Stage

Samruk Client

BAZIS Partnership



www.greenlab.com.pt



Green Quarters

Astana • Kazakhstan

Based on a modern system of resources management, developed according to LEED and BREEAM sustainable building certification schemes, this masterplan allows an efficient control of energy and water consumption and emergency services. The proposal considered a masterplan of 3.895 dwellings, two hotels of 180 rooms, several schools, police stations and other public services vital to the correct operation of a brand-new city.

The services and infrastructures were designed to have a smart central system that controls all functional aspects and where technical facilities are centralized on an underground network. All in all, this proposal gives corpus to the Third Industrial Revolution's idea in which we believe green and smart cities are not about the future, but the present.

900.000 sum **Area**

2013 Year

International Competition **Stage**

Samruk **Client**

BAZIS **Partnership**



www.greenlab.com.pt

Sustainability in Materials

Eco-Design and Industrial Ecology Strategies

Reduction of products' environmental impacts throughout its entire life cycle by improving the product development and defining eco-design solutions.

Material Transparency Declare and Health Products Declarations

Development of material transparency seals, that are inserted in the filling of WELL and LEED credits. This services is focused on ensuring that materials are healthy and neutral from chemicals that are harmful to human health.

Environmental Product Declaration

Development of Environmental Product Declaration (EPD), according to the international standards ISO 14025: 2006 and EN 15804: 2012, with the use of LCA studies.

Life Cycle Assessments

Life Cycle Assessments (LCA) of materials, construction solutions, products or processes (lines or production techniques), for the environmental analysis, characterization and improvement measures identification.





Quickbuild Modular House

Setúbal • Portugal

Variable Area

2015 Year

Built Stage

Amorim Cork Composites, Itecons, Dreamdomus, Ecochoice **Client**



www.greenlab.com.pt



Quickbuild (QiB) is an innovative project consisting of a modular prefabricated building system with high sustainability rates and low cost throughout its life cycle. It's the result of a three years R&D project developed in a consortium of several Portuguese companies and institutions. Some of the main characteristics of the QiB solution are its simple, appealing and adaptable Design; comfort due to the good thermal and acoustic behaviour; reduced costs, impact on site and time to construction; its thermal and energy efficiency and; the selection of materials with low ecological footprint.

QiB materials were carefully selected, considering its impact on the overall building performance and also according to Life Cycle Analysis that was carried to all materials.

Quickbuild Modular House

Setúbal • Portugal

Variable Area

2015 Year

Built Stage

Amorim Cork Composites, Itecons, Dreamdomus, Ecochoice **Client**



www.greenlab.com.pt

Sustainability in Corporation

Carbon neutrality

Carbon footprint assessment and certification, according to ISO 14064-1:2018 Standard or GHG Protocol (scope 1 to 3). Carbon Neutrality plan development, implementation and monitoring.

Social Responsibility and Stakeholder Engagement

Social responsibility and employees satisfaction assessment for the company workers, including JUST international label. Stakeholders management and engagement toward social and environmental commitment.

ESG Indicators

Development of ESG (Environmental, Social and Governance) Indicators at the organization level and Non-Financial Reporting according to NFRD, GRI, SASB or other frameworks, and Sustainability Risk assessment.

Sustainability action plan

Responding to ESG Indicators or other corporate challenges through the setting of specific sustainability targets, metrics and plans.





THINK ENERGY
ECOCHOICE 

Ecochoice

Lisbon • Portugal

2007 Year of Stablishment
Energy Provider & Services **Sector of Activity**
Ecochoice **Client**
ESG Resport (Under Develpoment) **Service**



ESG (Environmental, Social, and Governance) indicators assessment is being developed to ensure that the best actions and solutions for corporate sustainability, guaranteeing the efficiency and character of the company are addressed and reported.

By providing an ESG report Ecochoice can provide a competitive advantage such as performance improvements and directly influence operations / business / known / risks and opportunities.

Ecochoice

Lisbon • Portugal

2007 Year of Stablishment

Energy Provider & Services **Sector of Activity**

Ecochoice **Client**

ESG Resport (Under Develpoment) **Service**



www.greenlab.com.pt

Some of our clients



AMORIM

revigres®



KAZATOMPROM
NATIONAL ATOMIC COMPANY

Hovione 

 **weber**
SAINT-GOBAIN

 **EMSA**



 **tagusgás**
gás natural



PESTANA
VACATION CLUB



PROLOGIS



VANGUARD
PROPERTIES

saraiva+associados
ARCHITECTURE + URBAN PLANNING


greenlab

www.greenlab.com.pt

 +351 213 879 414

 greenlab@greenlab.com.pt

LISBON . PORTUGAL

 R. da Cintura do Porto de Lisboa

Prédio B . 5ªA e B

1950-323