

BEYOND GREEN



Facing challenges, to build a better world

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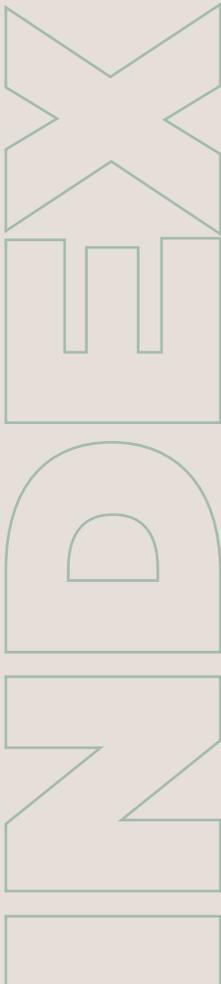
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Patrícia de Melo e Liz

CEO
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The world, as we know it, is at stake.

The planet that future generations will inherit may not be the one we know and, trying to change that reality, depends only on us. Whether in our home, through small gestures or at work, people still have the possibility to save this wonderful planet that gives us life.

“Now” is the answer and, therefore, it is with great pleasure and pride that Savills now presents to the market “Beyond Green”, exclusively dedicated to ESG and Sustainability.

We want this to be a useful tool for companies and the general public that seek effective information regarding the current and demanding challenges the planet Earth faces. In order to do so, we have several national and international collaborations

on various topics, from energy efficiency, smart cities, food waste to well-being, amongst others.

“Beyond Green” represents much more than the need to effectively be “green”. It represents the environment, people and communities, sustainability, and the future of our planet and lives.

Let’s hear it for the wonderful and professional Savills team who works every day to build a better world.



Nuno Fideles

ASSOCIATE ARCHITECT,
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Beyond green. Beyond ourselves.

What do we want for our future generations? A better planet?

The planet Earth will remain, and it will know how to renew itself, regenerate itself. What is at stake is not the planet but our civilization and the survival of species. This is what we know that will happen. However, this is something we have known for a long time.

Today, more than catapulting the doom or the cataclysm that is at our door, it is important to show solutions. Solutions that seek to respond to the challenges of building a better and more sustainable world.

With “Beyond Green”, Savills, rather than looking at pictures of what is wrong, intends to construct solutions. Solutions created by man, with a single goal: to create a more sustainable, a more social and a less disruptive

world as well as a greener and less dark planet.

It is up to us, stakeholders, an integral part of this process, to be the voice of this solutions that can change this path and help people. Public decision-makers and political decision-makers must also have a word to say regarding what needs to be done. The EU aims to be climate-neutral by 2050 – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU’s commitment to global climate action under the Paris Agreement.

The transition to a climate-neutral society is both an urgent challenge and an opportunity to build a better future for all. All parts of society and economic sectors will play an important role, and we want to be part of it.

**And so
the journey
begins...**

2015

Signature of the Paris Agreement – limitation of the average global temperature under 1,5° and establishment of the goal for carbonic neutrality through the significant reduction of global greenhouse gas emissions (GEE).

2017-19

The Roadmap for Carbon Neutrality 2050 which establishes the long-term strategy presented to the United Nations.

2019

Enactment of the European Ecological Pact by the European Commission which establishes the strategy for the fulfilment of the Paris Agreement: the reduction of emissions by 80% and 95% until 2050

2020

Establishment of the National Plan of Energy and Climate 2021 -2030

2021

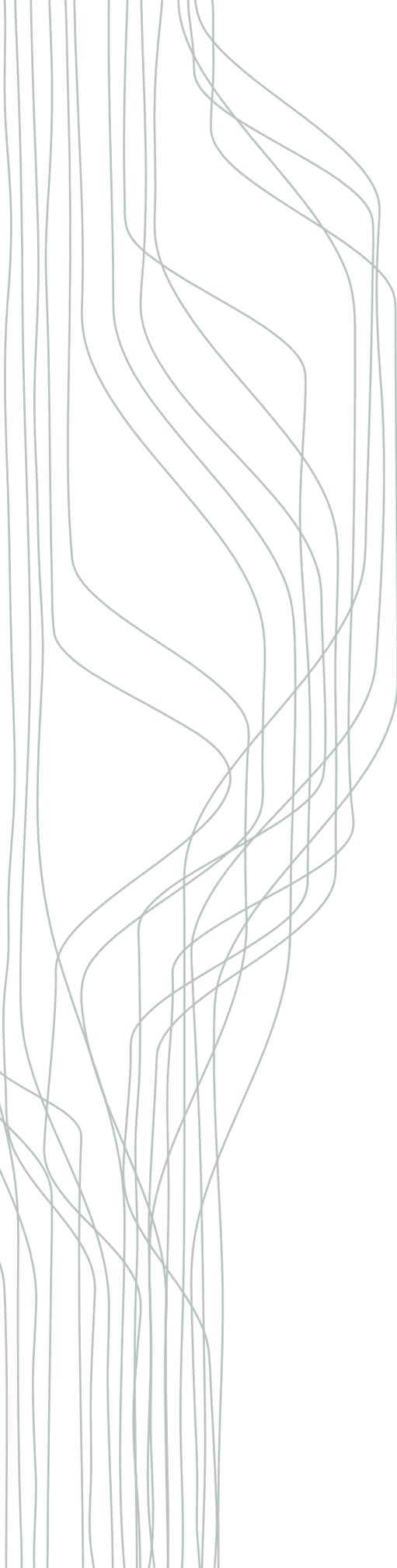
Climate European Law aiming at carbonic neutrality until 2050, where it is also included the programme “Fit for 55”, referring to the actualisation of climate and energy policies of the EU. Likewise, in Portugal, the Bases of Climate Law was approved.

**Saying your
business is green
is not enough...**

It's time to

**PROVE
IT!**





ESG STRATEGIES BECAME AN ABSOLUTE PRIORITY FOR ALL THE ORGANISATIONS AND LEADING COMPANIES IN THE GLOBAL REAL-ESTATE INDUSTRY

A new chapter must start. It is mandatory for the narrative to change, otherwise, the future of the planet and of coming generations can not be guaranteed.

The success of a company now goes way beyond its mere enterprises or financial gains; or even the ‘green’ acts that it might sporadically begin. The success of a company is now, more than ever, connected with its ability to identify, to manage, to mitigate risks and to its contribution to the creation of a positive impact and a differentiating footprint on an environmental, social, and economic level.

In the last few years, the monogram ESG began featuring in the top position of the agendas of companies, especially for those sectors which have a stronger environmental impact. The compromise with the establishing of ESG strategical goals goes way beyond financial objectives and gains, establishing a relation between three dimensions: Environment, Social and Governance.

ESG strategies became an absolute priority for all the organisations and leading companies in the global real-estate industry; and fundamental to ensure the sustainability of the operations of the companies, having an active role in the mitigation of impacts, in value chains, and in communities.

The swiftness of change compels companies to have a faster rhythm and capacity of adaptation. The companies that do so, considering the integration of ESG strategies, will stand out from the others, carving the path for the CSRD reports.



**Katarzyna
Chwalbinska-Kusek**

HEAD OF ESG & SUSTAINABILITY
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THE HOTTEST ESG UPDATE OF THE SEASON!

On the 30th of June the EU policymakers reached an agreement on the Corporate Sustainability Reporting Directive (CSRD). It is assumed that the directive will be adopted by the European Parliament in mid-November 2022

WHAT IS CSRD?

The CSRD introduces obligations for companies to publicly disclose information on their sustainability impacts, risks and opportunities in their management report based on mandatory sustainability reporting standards.

One of the main assumptions of the upcoming changes is data transparency, which is to limit the procedure of signing up to ESG goals, which are ultimately not implemented. The reported sustainability information will have to be independently audited.

The directive not only contains requirements for individuals, but introduces a framework and

guidelines for EFRAG and the EC on the development and content of European Sustainable Development Reporting Standards.

WHO?

It will require over 50,000 companies in the European Union, equaling 75% of all EU companies' turnover) to follow detailed sustainability reporting standards.

- All large companies in the EU (250+ employees, over 40 mln EUR turnover and/or over 20 mln EUR in assets)
- All listed companies in the EU except micro-enterprises (less than 10 employees and/or less than 20 mln EUR turnover)

- But also non-EU companies with substantial activities in the EU

WHEN?

The CSRD introduces a gradual approach to reporting starting with companies that are in the scope of the Non-Financial Reporting Directive (NFRD). These companies are expected to disclose sustainability information as from 1 January 2024. Other large listed and non-listed companies will be expected to report a year later.

The provisions of the new directive will become mandatory in three phases - first they will be applied by all entities that already use the NFRD, then the rest of large entities, and finally medium and small listed companies (they will still be able to take advantage of the temporary opt-out until 2028).

Application to fiscal years beginning with:

- 1 January 2024 - all large PIE (large listed entities, banks and insurers) with more than 500 employees (at the individual and / or consolidated level)
- 1 January 2025 - all other large companies
- 1 January 2026 - medium and small listed units (opt-out until 2028)

Therefore, the first mandatory information on sustainable development according to the requirements of the new directive will be published in 2025..

WHAT?

The large listed companies in the EU are already reporting on the following:

- Environmental protection

- Social responsibility and treatment of employees
- Respect for human rights
- Anti-corruption and bribery
- Diversity on company boards

WHAT WILL BE ADDED?

The CSRD will add the obligation for companies to report on the sustainability impacts, sustainability risks and sustainability opportunities.

The new standards, the additional requirements will include:

- Double materiality concept including sustainability risk (including climate change affecting the company) + companies' impact on the environment and society
- Process to select material topics for stakeholders
- More forward-looking information, including targets and progress
- Information disclosure relating to intangibles (social, human and intellectual capital)
- Reporting in line with Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy

WHO WILL BE ELIGIBLE FOR VERIFICATION?

- **statutory auditors (hence the numerous changes to Audit Directive and Audit Regulation) - the statutory auditor will voluntarily acquire the right to verify information on sustainable development**

and

- **other Certified Independent Assurance Providers (EU member countries option)**

Information on sustainable development will be verified at the "limited assurance" level. Ultimately, the verification is to be at the "reasonable assurance" level, as in the case of financial statements - it will take place when in the future the European Commission will issue a European standard of reasonable assurance of information on sustainable development and, after the analysis, will set a date for moving to this higher level of verification.

THE REPORTS WILL BE INDEPENDENTLY ASSURED

The CSRD mandates disclosures based on -to be developed by EFRAG- sustainability reporting standards, which is to develop a taxonomy by mid-November 2022.

The CSRD introduces an EU-wide requirement for limited assurance on sustainability information with moving to reasonable assurance as an end goal. The statutory auditor, another auditor or an independent assurance service provider can conduct an assurance engagement.

Regulations are increasing urgency in organizations to take ESG seriously and to create structure around it. We help our clients grapple with climate and diversity reporting. ■



**Katarzyna
Chwalbinska-Kusek**

HEAD OF ESG & SUSTAINABILITY
SAVILLS POLAND

WHAT DOES ESG AND S MEAN FOR REAL ESTATE

ESG stands for Environmental, Social and Governance aspects. These aspects are at the top of the agenda for many organisations as increasing legislation, enhanced stakeholder concern and requirements for transparency and disclosure continue to develop.

WHAT IS ESG?

ESG includes aspects that should be taken into consideration by businesses today to comply with regulatory and social requirements.

ESG stands for Environmental, Social, and Governance. Investors are increasingly applying these non-financial factors as part of their analysis process to identify material risks and growth opportunities. ESG metrics are not commonly part of mandatory for financial reporting, though companies are increasingly making disclosures in their annual report

or in a standalone sustainability report.

The ESG aspects are very broad in its scope and require a very holistic corporate approach. The acronym was first coined in 2005 in a landmark study entitled “Who Cares Wins”, and since then it has replaced what has been known as sustainability or corporate social responsibility.

WHAT DOES ESG MEAN FOR REAL ESTATE?

As buildings account for 40% of energy consumption, 20% of water consumption, 36% energy-related



greenhouse gas emissions in Europe and the built environment creates an estimated third of the world's overall waste. The built environment also has a significant impact on the human health and wellbeing. Thus, ESG representing environmental, social and governance aspects needs to be part of the business strategies and business models for real estate and construction market players today. The ESG aspects should also be reflected in strategies for individual buildings or portfolios of assets.

However, ESG is complex and it is much broader than green building certification such as BREEAM, LEED or WELL. To reach Net Zero a company needs a broader strategy and interventions than green building certification. Green building certification helps to reach some of the ESG elements on the building level and is a great activity within a broader ESG strategy.

At Savills, we start our work with selection of the material aspects and SDGs and then translate these into an ESG strategy and policy of whose green building certification should be an integral part.

A building with an ESG strategy will have limited negative impact on the environment and its users. As the E aspects relating to the use of resources, positive impact on the biodiversity, GHG emissions, climate change adaptation and mitigation to name the key ones; is very well understood and in many cases required by the increasing regulatory, the S may still sound a bit enigmatic for investors and property managers.

THE RISE OF S

What we observe today is the rise of social and governance issues, with a focus on diversity and inclusion (D&I), and human rights. The question is how to transfer these aspects to ESG charters for buildings. In real estate, we examine the impacts our built environment has on the health, wellbeing and social value outcomes affecting people, supply chains, residents, occupiers and wider communities.

The aspects that should be adopted widely by the industry include the building's diversity and inclusion policy, its impact on the users' long-term health by creating a healthy indoor environment and providing people with healthy choices regarding daily commuting, nutrition and lifestyle in general. The building should be opened to the local community and play an integrating role for it. ■

TIME TO TAKE **RESPONSABILITY**

To aim at the reduction of elements with no quality and to promote elements that rely on well-being, will no longer be an exception, but the norm.

The management of the theme sustainability and the actions fomented by the companies will increasingly be analysed and evaluated not only by its stakeholders, but also – and equally important as the stakeholders themselves – by the society and community in which they are inserted.

In the present moment, a profound change of awareness is occurring, younger generations are more and more involved actively so that they can make a difference in the world. Society is more attentive and aware of the impact which sectorial activities have, not only in the environment, but also in the economic and social spheres.

The footprint left by each organisation plays a key role for the attainment of a growing

sustainable economy, which will allow a swifter transition to a decarbonised world. With this in mind, the establishing of and compliance with ESG criteria are of the essence for the realisation of increasingly responsible investments from a sustainable point of view. Investments that can ensure the continuity of our planet.

To invest sustainably entails the construction of an analysis that goes beyond financial variants, being equally important in the process of decision making the analysis of environmental, social, and corporative governance factors. Thus, leading, through the models of sustainable businesses, to an exchange and sharing of values between all stakeholders.

The enactment and introduction of

socially responsible management policies is, with no doubt, one of the biggest challenges put to companies.

Currently, the Socially Responsible Investment represents a very significant part of the ESG strategies. Even if recent, this is a promising tendency that will grow in the next few years. To aim at the reduction of elements with no quality and to promote elements that rely on well-being, will no longer be an exception, but the norm, with the implementation of the criteria based on the Eu Taxonomy tool.



An ESG approach that integrates the Social Value dimension is a process that requires an on-going tracking of records, having as basis the selection of an ensemble of measurable meaningful indicators for the building and to the surrounding community, such as the rate of job creation, volunteering, mentoring programmes, sustainable transportation, health and well-being, amenities, and infrastructures. ■

TENANT'S WELLBEING

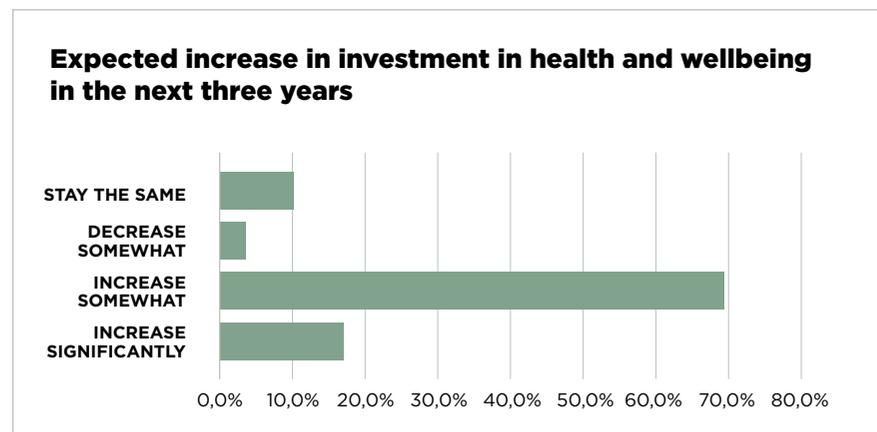
One of the legacies left by Covid-19 was a concern for and a prioritization of the worker's health and well-being.

The preservation of health, of well-being and everyone's security became the focus of human resources teams, as well as the emergence of new tendencies concerning our lifestyle and the way we occupy offices, the way we establish interpersonal relationships, how we perceive corporative values and how we manage our day by day between work and family, which all have changed forever. Many times, whilst on the pandemics, it was questioned whether all these changes would have come to stay, almost with a tone of disbelief. Quite close to the final stretch of 2022, it is consensual that there really is a before and an after whose milestone is the pandemic, being a turning point, with no return.

More than ever, spaces assume a fundamental role.

Organisations and institutions from all around the world are being challenged to rethink their strategies and programmes of HR, opting on investing on buildings and spaces, thinking holistically and having as main base the ESG (Environmental, Social and Governance) factors, aiming to the creation of a long-term positive impact on people, on the planet and on economy.

According to a survey done by Urban Land Institute "Picture of Health" to investors, promoters, managers, assessors, and consultants, dating from 2019, in the next 3 years, we would witness a significative and increasing investment in well-being strategies and in the management of buildings.



Source: Urban Land Institute, Picture of health, 2019

The integration of health and well-being strategies in buildings can maximize the potential of the users of the spaces. The certifications of buildings, such as the WELL certification, which aims to establish directives to ensure the health and well-being of the users of the buildings, ascertain some of the principal procedures for this answer. These type of certifications ensure two main goals: mental health and the sense of community (criteria mind and community). To ensure and to promote mental health, in a narrow relation with the objects that direct each project and with HR teams, has as aim to improve the “work life balance”. Simultaneously enhancing the compromise between the organisations and the users of each space. This criterion is mirrored first and foremost in the possibility of defining an Emergency Plan. The beginning of this architectural project, accompanying the whole useful

life of the building, promotes the constant information of its occupiers. Here too the owners of the buildings, the property management and facility management teams of HR, and the collaborators should be involved.

In addition to natural concerns related to the conditions of the air that we breathe, the recirculation of air should be increased, favouring natural ventilation or the quality of the materials.

We live in exceptional times, and it is of the essence to construct a structure that can provide an answer for any type of emergency. To engage all of the intervenors, to name the specialists, to increase the communication so that people are able to provide an agile answer, minimising some uncertainties and risks, is the secret for success. ■



Bárbara Clemente

ASSOCIATE ARCHITECT WELL AP
& WORKPLACE STRATEGIST,
SAVILLS PORTUGAL

FIGHTING FOR TALENT

WHERE SHOULD COMPANIES INVEST TO REACH HAPPINESS?

Differentiation and competitiveness are in the centre of the war for the appealing and conquering of the finest talents. Formerly conquered by wage levels and by the stability that an organisation could offer or not, talents have now surrendered to factors such as flexibility, innovation and well-being in the workspace and are now unbending in their choices.

Never before has so much debate and writing around the creation of experiences, well-being, flexibility, retention of talent, digital nomads and ESG taken place as currently. The flexibility and the prioritisation of matters such as well-being, mental health and security propelled by the pandemics, the biggest game change of the job market of our generation, have come to stay and it is of the essence for employers to understand so.

To pay attention to the tendencies of the workspace, specially to adaption, to connectivity and to innovation, is key to attract and to motivate the collaborators of a company, since it offers the capacity of choosing and promoting positive experiences that go beyond something merely professional.

But where should companies invest? How to promote happiness in the workspaces?

The conventional time in office is in the past. The adjudicated 11/m² to each job space composed by an operative chair, equipment and telephone have now given way, in most companies and considering its area of business, to hybrid models where the user can circulate and also work in any area of the office, or opting on working remotely.

This power of choice, made possible thanks to the adaptation of inserted technological tools in a world 100% digital, is of the essence for the health of the human capital of the companies.

The organisations which prioritise the health of their human capital in their physic spaces, policies and operational protocols are clearly investing in the future. The promotion of creativity and initiative from the collaborators' side and the opportunity of conciliating work with happiness are factors that allow for

companies to increase their levels of efficiency.

It is urgent, then, to improve the mental health and diversity in the workspace, and to transform these factors in a tool with potential to attract and to nurture talents, boosting the global outcomes of the business.

The positive experience associate to the workspace, to well-being and to ESG policies through the promotion of initiatives that value health and well-being in the work environment occupy a crucial role in the motivation of the collaborators, being a competitive advantage.

People spend 90% of their time inside buildings, that is why it is of the essence that their individual well-being in these spaces is not neglected. This is, with no doubts, a variant that ought to be in the centre of the talent management process in the workspace, since only thus can the experience in the office be associated with the notion of happiness.

In the framework of structure and introduction of ESG strategies, the acquisition of BREEAM, LEED or WELL certifications have become a measure tool of parameters with environmental impact, but also of impact in human capital, increasing the reputation, notoriety, and credibility of companies. **For instance, WELL certifications focus on the health and well-being of people inside buildings, having an active and crucial role in the increase of the quality-of-life patterns, which will reflect itself on the levels of productivity of the collaborators.**

The WELL certification presents thus as an opportunity of differentiation of the companies in a current context, where not only environmental matters are

on the top of the agenda. More and more the influence that buildings have on the health and well-being of its inhabitants is discussed, proving the role and direct association between architecture and happiness in the workspace.

In the final equation, there are various denominators that the post pandemics have brought to the table and that go way beyond thermal and acoustic comfort. Nutrition, fitness, biophilia, and active furnishing are now part of a vocabulary that is growingly universal. An equation where everything is thought in favour of the physic and mental health of the collaborators, promoting them to experience the new workspace, stimulating interpersonal relations. An equation thought to nurture positive and comfort-related emotions, to encourage creativity and to continue conquering the best human resources, day after day. ■



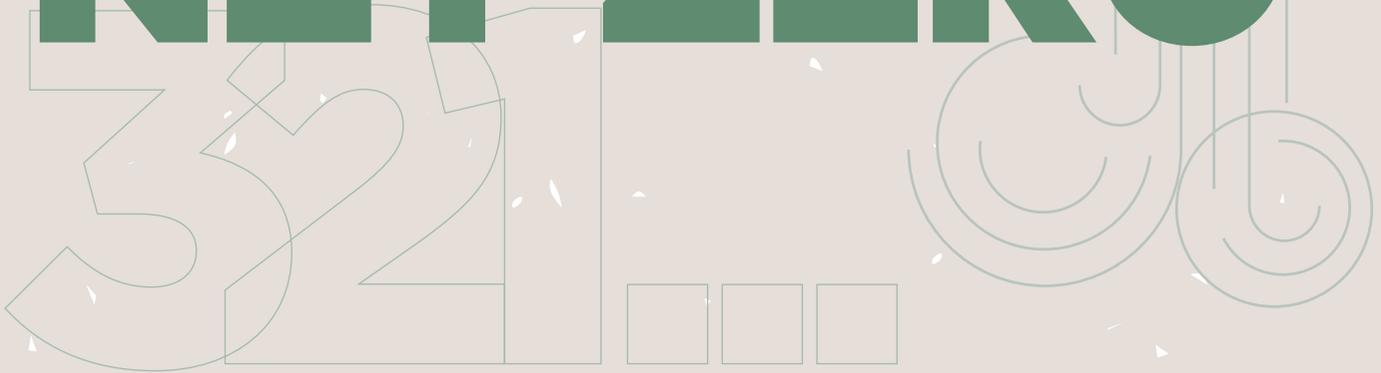


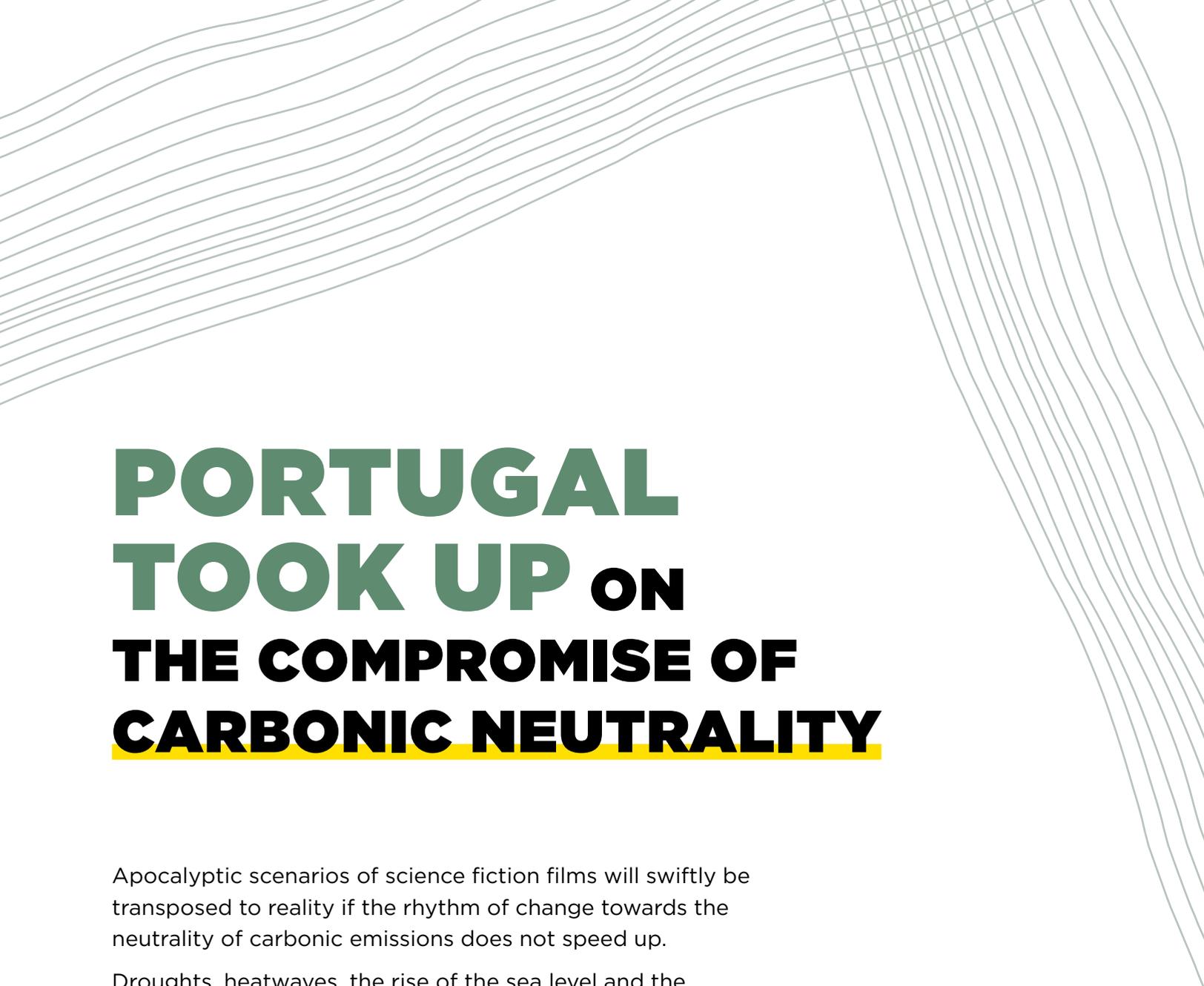
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Ignition: target

**PLANET
NET ZERO**





PORTUGAL TOOK UP ON THE COMPROMISE OF CARBONIC NEUTRALITY

Apocalyptic scenarios of science fiction films will swiftly be transposed to reality if the rhythm of change towards the neutrality of carbonic emissions does not speed up.

Droughts, heatwaves, the rise of the sea level and the loss of biodiversity are just some of the realities that affect the planet and that jeopardise the survival of future generations. The limitation of global warming to below 1.5° is imperative, it is an essential condition to attain the carbonic neutrality until 2050, objective defined and signed in the Paris Agreement in 2016, by 195 countries.

**MOST SEVERE RISKS ON A GLOBAL SCALE
OVER THE NEXT 10 YEARS**

1st	Climate Action Failure
2nd	Extreme weather
3rd	Biodiversity loss
4th	Social cohesion erosion
5th	Livelihood crises
6th	Infectious diseases
7th	Human environmental damage
8th	Natural resource crises
9th	Debt crises
10th	Geoeconomic confrontation

Within the framework of the European Union, the strategy outlined until the far away date of 2050, aiming to the successful fulfilment of the Paris Agreement and the Ecological Pact, will lead to a mandatory revaluation of the environmental impact in several sectors (energy, transports, industry, constructions amidst others), so that its noxious impact on the environment is reduced and so that such sectors can be active agents contributing to a cleaner economy.

PORTUGAL CO2 AND GHG EMISSIONS

	CO2 2020 vs. 1990	GHG 2018 vs. 1990	GHG 2018 vs. 2005
POWER INDUSTRY	-28%	27%	-24%
OTHER INDUSTRIAL COMBUSTION	-20%	-14%	-21%
BUILDINGS	-7%	-1%	-42%
TRANSPORT	44%	69%	-14%
OTHER SECTORS	-18%	9%	0%
ALL SECTORS	-7%	19%	-17%

Source: Joint Research Centre

During the conference of the United Nations on the topic of Climate Changes that took place in 2016, Portugal took up on the compromise of Carbonic Neutrality, undertaking programmes such as “The Roadmap for Carbon Neutrality 2050” and the “National Plan of Energy and Climate”.

BUT WHAT DOES NET ZERO MEANS AND WHY IS IT SO IMPORTANT?

The definition is very straightforward: to eliminate, until 2050, as many carbon emissions as those which we produce.

In the European Ecologic Pact presented in 2019 by the European Commission, the established goal is for carbonic neutrality to be attained until 2050, with the aim of reducing the emissions by 60% until 2030, by comparison to the levels of 1990.

However, to reach a NET ZERO planet is to go beyond the state of Carbonic Neutrality. According to the World Green Building Council only 1% of the buildings in the whole world are Net Zero.

CARBONIC NEUTRALITY

The zero carbon emissions are reached through the reduction of the carbon emissions and the compensation of remaining emissions with an equal amount of avoided or compensated emissions.

NET ZERO

Broader aim, applied to all the organisations and respective Supply Chain, that implies the cut of indirect carbon emissions of the supply chain and final users.

To reach the Net Zero state is a challenging journey that requires for all of us, as citizens, and from all sectors and economic agents, to be involved in an action focused on the measure and efforts that not only significantly reduce the gas emissions with greenhouse effects, but simultaneously produce progress and innovation. ■

WHERE DOES PORTUGAL STAND ON THE PATH TOWARDS DECARBONISATION?

Portugal presents a low-cost potential of decarbonisation, relatively to the remaining European countries.

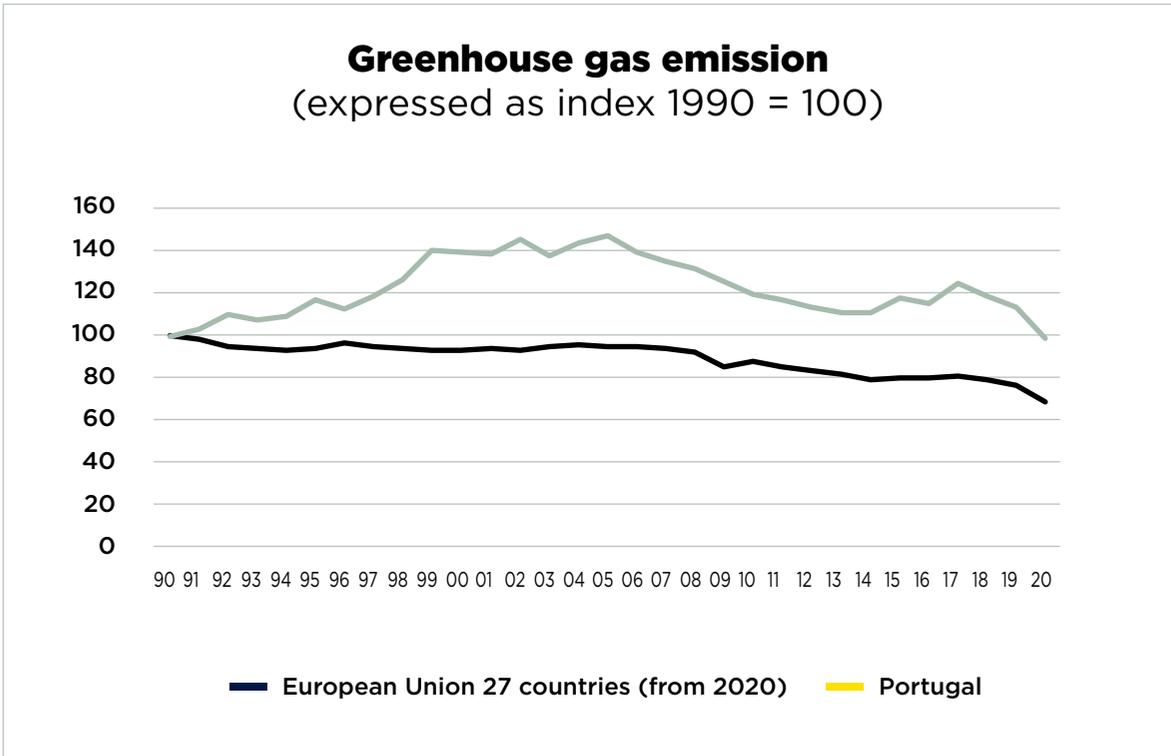
The study “Net-Zero Portugal – Ways of Portugal for decarbonisation”, made by McKinsey & Company, with the collaboration of BCSD Portugal, concludes that “Portugal presents a low-cost potential of decarbonisation, relatively to the remaining European countries which enhances a bigger contribute of the country for the most efficient path of decarbonisation in the European Union.”

It is nonetheless necessary for Portugal to increase its speed of decarbonisation by 20%.

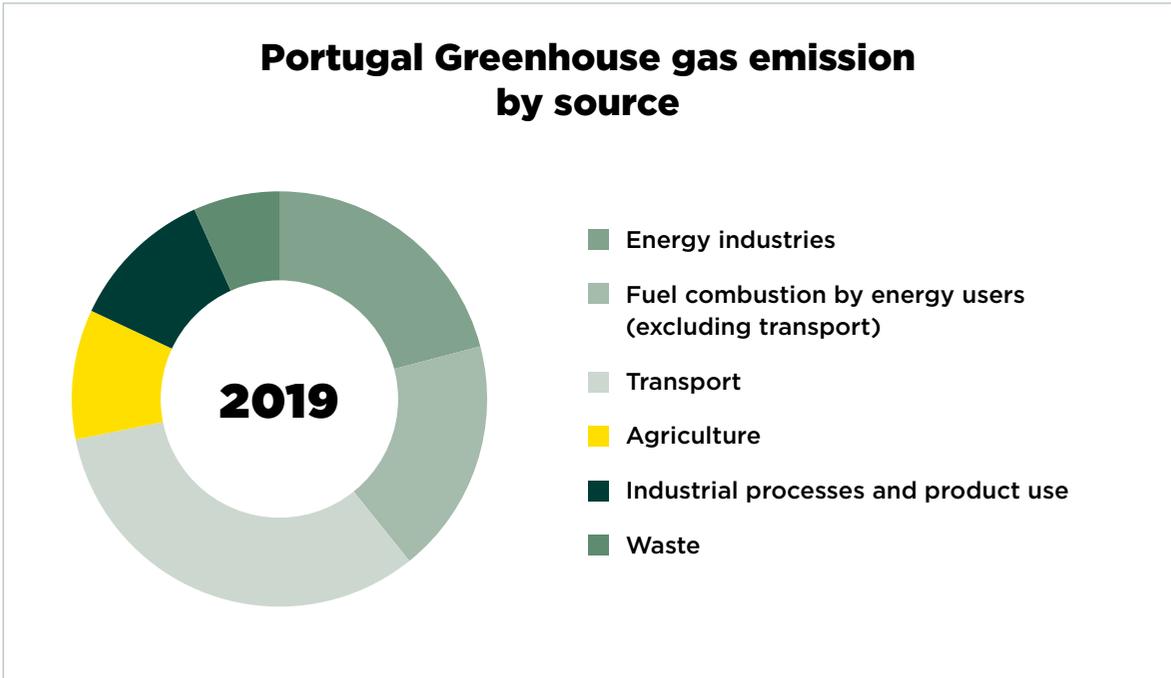
The country presents already lower emissions by capita by comparison to its European congeners, likewise the carbonic intensity of electricity is lower, due to the lower weight of the carbon utilised for such proceedings.

When considering buildings, Portugal is too the country that register the lowest weight of emissions due to a lower consumption of energy. Nevertheless, additions of wind and solar capacity from 5 to 6 times bigger are needed per year to electrify economy. The rhythm of annual addition

is not enough, for instance, to allow for a growing clean electrification of electric vehicles and batteries. ■



Source: Eurostat



Source: Eurostat

SMART CITIES

THE NEW URBAN PARADIGM

Currently, cities concentrate the majority of the population, of the economic activities and of the richness, being the places with biggest potential to the dynamization of the economic growth, of competitiveness and innovation. However, cities too present the biggest and most complex environmental problems.

In the last decades, the investment in cities was driven by the purpose of overcoming infrastructural deficits, demonstrating a clear preference for the investment in infrastructures. The objective was to improve basic infrastructure, as all as the accessibility and the logistic integration. Nonetheless, the extensive pattern of urban occupation led to diverse problems of efficiency and productivity, that now present as one of the main challenges for urban policies.

All things considered, Smart Cities can be defined as “the new urban paradigm” that leads to the development of situations that answer to the problems that cities currently face, as the high rate of occupation of urban centres, mobility, climate change, amidst others. ■

LISBON AS AN EXAMPLE TO FOLLOW

In Portugal, 65% of the population lives in cities, being cities responsible for 74% of carbon dioxide emissions. As such, the importance of cities for the agenda of national sustainability is increasingly prominent. Some cities tend to stand out because of the effort of transformation and adaptation of its services with more sustainable offers.

This is, for instance, what happens with Lisbon, elect as the Green Capital of Europe in 2020, distinction which had for basis the objectives of energetic efficiency and carbonic neutrality established in various services of the city.

The Portuguese capital is, with no doubt, an example in that which concerns the enactment of sustainability policies. Being the biggest city of the country, it also is the target of numerous smart cities projects, in particular those made in association with learning and research institutions, and companies.



Local needs: what is possible to improve and how can we do so?

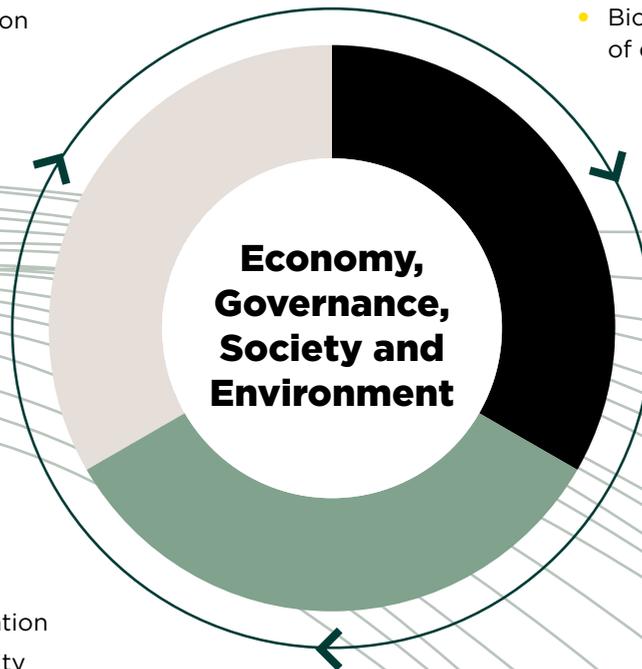
This question is put forward in the guide of “Urban Transformation in 7 steps” developed by the BCSD, in which Savills participated.

The main local challenges consider three main aspects: environment, economy, and society.

- Work
- 4.0 Industry and Innovation
- Entrepreneurship
- Civil Engagement

- Air quality
- Resilience and adaptation to climate change
- Efficient use of water and natural resources
- Waste appreciation
- Circular Economy
- Energetic Efficiency
- Biodiversity and services of ecosystems

- Education
- Security
- Health
- Quality of Life
- Services that bring the citizen closer to decisions



Entities and Stakeholders:

A key aspect in any strategy developed on a local level is the endowment of the entities with the needed abilities to interact and to communicate with the stakeholders. The creation of a shared value and the establishing of partnerships with common aims, are two essential factors for the promotion of a shared effort.

A bigger ability of mobilisation must be the motto for the creation of synergies with every ecosystem which developpes sustainable actions.

NATIONAL STRATEGIES

PROGRAMME	AIM	DESCRIPTON
National Plan of Energy and Climate (NPEC 2030)	Energetic policies for the decade of 2021-2030	It has as its basis five dimensions: decarbonisation, energetic efficiency, supply safety, internal market of energy and research, innovation and competitiveness
Roadmap for Carbon Neutrality 2050 (RCN 2050)	Path to attain carbon neutrality in 2050	It deals with the areas of energy, transport and mobility, waste, agriculture and forests, socioeconomics scenarios, circular economy, and social engagement.
Strategic Plan for Urban Solid Waste (SPUSW2020+)	To continue the national policy of waste	It deals with the areas of energy, transport and mobility, waste, agriculture and forests, socioeconomics scenarios, circular economy, and social engagement.

The Resilient city

How can Lisbon increase its urban resilience?

The idea of resilience can be defined as “the ability to overcome, of recovering from adversities”.

The international network of cities is increasingly opting for a path guided by resilience. Lisbon, for instance, has been participating in international projects:

- **Sharing Cities:** it promotes the international collaboration between industry and cities;
- **RESCCUE EU Project:** its aim is to help urban areas attaining a high degree of resistance to climate changes, improving their ability to anticipate, prepare, respond and recovery from threats, causing the least possible damage;
- **C40 Cities:** network of roughly 100 world leading cities that collaborate in the development of an urgent action to avoid the current climate crisis

Locally, Lisbon develops another initiatives that allow for the city to increase its level of resilience:

- **Investment in the transformation of a municipality in a solar city,** which allows + 20% of energetic efficiency, + 20% of alternative energies and -20% of CO2 emissions
- **Consolidation of green infrastructure** in spaces constructed densely and the increase of green corridors
- **Opting on a network of cycle paths**
- **The redesigning of the landscape** focused on the water cycle in order to minimise the consequences of urban floods.
- **Engaging of the society** in campaigns of citizenship and interactive networks.
- **The establishing of partnerships on different levels:** municipalities, metropolitan area, national, entities and organisms both public and private
- **Changing the public lighting** of the city for LED equipment.

ANOTHER EXAMPLES OF SUCCESS



MATOSINHOS

THE PORTUGUESE CARBON-ZERO LIVING-LAB

The municipality created the Carbon-Zero Living-Lab Project, a neighbourhood that breathes carbonic neutrality, awarded by the European Commission. With the aim of being an intelligent neighbourhood, the projects also include technological solutions, focused on factors such as mobility, energy, environment, buildings, and connectivity.

The decrease of the consumption of energy, with solutions that can be used for another geographies, striving for a more sustainable and comfortable mobility, is yet another plus of this initiative. The measuring and assessment of CO2 emissions in real life is also one of the guidelines of this project. Additionally, the traffic in Matosinhos is intelligently overseen by radars and sensors.

Likewise, this Carbon-Zero neighbourhood aims at an intervention in road security, in increasing the creation of new companies with low-carbon solutions and in better connectivity. How? Through intelligent lamps capable of measuring the emissions; the application of pavement that reduces the speed of the vehicles without the intervention of the drivers; and a programme that

shares bicycles connected to the public transport system whilst measuring in real time the avoided amount of CO2 emissions, amidst others.

PORTO LEIXÕES: ZERO EMISSIONS BY 2035

The Leixões' Harbour is fundamental for the economy of the industrial area in the north of the country and being in an urban context in the county of Matosinhos, it is necessary to find a model of decarbonisation of harbour activities, ensuring that these are compatible with the urban context.

How to answer to this question? The Leixões' Harbour has presented a plan in which it assumes the objective of becoming the first ever harbour with zero emissions until 2035. It clearly is an ambitious goal since it becomes mandatory to anticipate by 15 years carbonic neutrality. However, it emphasizes the urgency of an action in different areas through the cooperation with municipalities, so that the impact caused by mobility and harbour operations can be reduced. ■



BRAGA

A CITY IN THE FRONT LINE

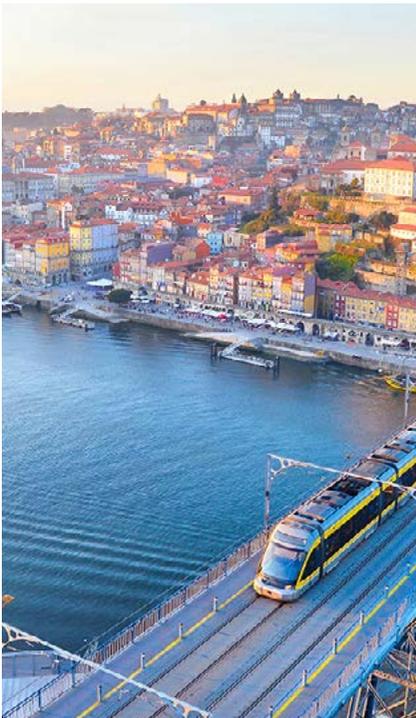
Braga has as goal being one of the first 100 European cities to attain decarbonisation.

The municipality plans an ongoing development of multiple initiatives that contribute for Braga to be a leading city when it comes to sustainability. The city is on the run to be one of the first 100 European pilot-towns that can reach the threshold of decarbonisation.

Braga is also on the list of best cities in the world in that which concerns the fight against climate change, and, according to the rate of the European Blue Flag Association (EBFA), the city

is well rated when it comes to the enactment of sustainability policies.

In 2019, the municipality was distinguished as one of the best 88 towns in the world in the fight against climate change, being given to the municipality the “A class” by the Carbon Disclosure Project. On a national level, Braga is on the front line in the concretisation of Goals for the Sustainable Development of the United Nations, presenting a rate of execution of approximately 70%. ■



PORTO

PORTUGAL’S ENERGETIC HUB

The city of Porto belongs to the group of the 10% of municipalities with the highest global rate on the North scale and on a national level in that which concerns the compliance with the goals of the United Nations of 2030.

In 2020, similarly to Braga, the municipality became part of the narrow list of cities considered “A Class” by the Carbon Disclosure Project. And, until 2030, the city has promised to reduce its emissions by 50%.

For instance, the project “Solar Porto” developed by Social Domus, in partnership with AdEPorto will allow for the installation of 1 MW of solar potency in 29 coverings of municipal buildings. This plan will produce a reduction of 27% in the using of electric energy coming from the net, saving approximately 150 thousand euros per year, in addition to an annual reduction of 505 tonnes of CO2. Since most of the chosen buildings are high schools, this project will rely strongly on a component of social awareness in local communities. ■



AVEIRO

A TECH NATIONAL CITY

With an investment of 9 million euros, Aveiro became a Tech City, that is, a more competitive and sustainable city economically which opted strongly on technology. To create the best jobs, to enable and to increase competitiveness of local companies, to make the city more sustainable, and to draw and to maintain talent, are some of the goals of the municipality.

In the innovative projects of the city, there is also a platform that allows for the monitoring of the air quality, the noise in and the temperature of the city. Information concerning the consumption of energy in the municipality and the managing of waste has been made available. In the future, it might be that the amount of energy used by Moliceiro boats - once combustion engines are converted into electric engines - will be made available, being a variant under analysis.

Still considering mobility and environmental sustainability policies, Aveiro will be the first Portuguese town to have an electric Ferryboat, which will reduce annual CO2 emissions by 300 tonnes.

AVEIRO'S HARBOUR

So that its decarbonised vision can come to life, Aveiro's Harbour will take on multiple actions, amidst them:

ROADMAP

the creation of a green harbour and the identification of the main challenges that, alongside the best efficient practicalities will allow for the energetic transition of Aveiro's Harbour.

HARBOUR SOURCES OF RENEWABLE ENERGY

to increase the energetic autonomy so that the harbour can be self-sufficient in renewable energies. Investments in wind and solar energy will take place, amidst other technologies such as hydrogen and the sea's energy and, until 2030, Aveiro's harbour will produce 7 GWh of renewable energy (air and sun) per year.

ADVANCED HARBOUR BIOFUELS

advanced biofuels produced locally from multiple types of waste, with reduced or even zero emissions, will be made available. To support the circular economy and to contribute to the decarbonisation, as well as the decarbonisation of sea and road transports of goods, from and to Aveiro's Harbour, are some of the objectives. ■



CASCAIS

THE FUTURE SEASIDE SMART CITY

With the aim of becoming a smart city in the next eight years, Cascais has been investing in solutions that are able to transform the urban space, such as platforms that manage the transport network, energetic management, and the reduction of lighting costs.

CASCAIS' SMART POLE BY NOVA SBE

The project 'Cascais Smart Pole by NOVA SBE' is the first living lab of the decarbonisation of Cascais. This is a space where the interaction and the engaging of the community will promote a walk towards carbonic neutrality, associated with the concept of entrepreneurship.

Financed by the programme "Environment, Climate Change and Low-carbon Economy", an innovative living-lab will be developed, in which synergies between a circular economy, biodiversity, sources of renewable energies, sustainable mobility and local culture will be verified.

The goal is to analyse and to act so that everyone who belong to the ecosystem of the city (residents, tourists, students, and visitors) acknowledge the impact of their daily actions. Only thus it will be possible to reduce the carbon footprint, be it that of the community, be it that of the individual. ■



OEIRAS

A CITY CONNECTED TO SUSTAINABILITY

The environmental policy against climate change still is a priority in the municipality of Oeiras. The city has been recognised, throughout the years, for its good sustainability related practices, especially those established in the pandemics, such as the Certifying of quality of management systems; in the area of health and well-being; sustainability in seaside areas; digitalisation and connectivity; and climate change, amidst others. ■

"Connected to Community we generate sustainability" is the most recent motto of the campaign developed by the Municipal Chamber of Oeiras, whose aim is to promote local sustainability and the widespread of good business practices. The municipal initiative springs from the project People and Planet: A Common Destiny, in partnership with INCD - Intermunicipal Network for Cooperation and Development

THE CITY OF THE FUTURE

It will be a city that can balance harmoniously 6 important criteria:



Environment

Cities depend upon Nature and the services of ecosystems, not only to sustain life, but also to improve the quality of life of its inhabitants. That is why it will be of the essence to recover ecosystems that preserve and even regenerate the natural systems in urban contexts, thus increasing the ecosystemic services that they give, creating ecologically resistant communities.



Mobility

Being the transportation sector responsible for a quarter of greenhouse gas emissions (GEE), the city of the future must adopt a new approach in which it combines urban planning through the development of mixed uses of the soil, efficient transports, better connectivity, and engagement from all interested parties, looking for proximity solutions, having the widest coverage possible.



Water Efficiency

The city of the future will have to enact an integrated approach for the management and planning of the use of the water, paving the way for a water network with zero waste.



Materials & Resources

Being cities the main place where materials and nutrients gather and are consumed, they are responsible for the highest consumption of natural resources. The solution will imperatively include opting on a zero-waste city, rooted in a strong recycling system; in the promotion of reutilisation; and in the raising of awareness of waste reduction.



Quality of Life

The city of the future must equally pay attention to the needs of everyone, no matter their gender, ethnicity, sociocultural and economic status, searching for liveability and sustainability, whilst promoting diversity and safety.

A city with sustainable buildings, where all of the above points are considered, enhanced with NET zero aims and ESG (Environmental, Social and Governance) criteria, supported by local sustainable policies.

INTERVIEW



Emídio Pinheiro

BOARD PRESIDENT & CEO
EGF

Sustainability includes multiple fields of action: environmental, social, and economic. Which path has EGF followed in all these dimensions?

Sustainability is part of EGF's DNA, it is an organic characteristic, we do not fulfil our mission if the development that we promote, and its consequences are not sustainable. Remember that our mission is to deal with and to value urban waste of roughly 60% of the Portuguese population – who consumes, uses, and manages resources every day, but who also wastes, disposes, and demands to be well treated, with security and quality, with the lowest possible cost.

It is in this framework that our task is clear – we have to execute the best environmental service according to the established goals and to manage collective resources with efficiency and effectiveness, which translates to

attaining a cost that is fair for all parts, considering that we pay an essential public service.

Throughout its 75 years of history, that we reach this year, EGF underwent many transformations, some of them quite deep. The most outstanding one for who we are today is when focus and activity were oriented exclusively towards the environmental sector and the management of waste.

In this framework, EGF and the concessionary companies in which it participates were moved by the sustainable development of the country and that of the regions where they operate, for instance, the closing of public waste dumps; the construction of infrastructure that values waste; the introduction of a general selective collection of packages; the production of energy from collected waste or the promotion of the citizens' awareness and communication.



Cities now move towards a decarbonised reality. In your opinion, is Portugal adopting the necessary measures to fulfil these goals in the expected time?

Portugal is certainly carving its path with ambitious plans in a phase in which many adverse conditions exist in multiple areas, such as the current situation of the production and distribution of energy and raw materials, the severe drought in most of the country and the high inflation.

Concerning EGF, it is significant to mention the elaboration of an inventory of the Greenhouse Gas Emissions (GEE) of the years of 2019 and 2020. This inventory had as main goal the elaboration of a plan of action that will allow to stablish new goals when it comes to the reduction of GEE in EGF's concessionaries, so that we can keep up with the country's goal of reaching carbonic neutrality by 2050.

Environmental awareness is a topic that now has particular importance for EGF. Which way is the best one to raise citizen's awareness for the matter of sustainability and the preservation of the environment?

The education and the raising of environmental awareness are key points in the whole process of management of resources and waste since the citizen is the beginning of everything. We, as citizens, cannot be understood as mere waste producers, who discard everything that we have bought, so that we can take on our role of resource managers – both of our and our community resources. If this role is understood and this responsibility exists, all of the process of the appreciation

of resources, and in fact of raw materials, gains value.

To fulfil this purpose, EGF and its concessionaries promote initiatives in schools, in the area of commerce; in the area of event planning; in markets; in companies and institutions. We have been doing so for many years and we believe that this is the systematic and consistent process that ensures a behaviour change. Last year, still an atypic year, influenced by the pandemics, the EGF group promoted direct actions in communities engaging roughly 1 million people. This year, with the withdrawing of restrictions and a growing social activity, we hope to increase further the engagement of the citizens.

The Recycling Line is EGF's most recent project. In your opinion, how do you see the possibility of integrating this service and the answers to all the questions and problems felt by the citizens who do not know what to do about their waste?

On the 27th of October 2021, EFG began a new contact and citizen support service – the Recycling Line – a FREE, NATIONAL, COSTUMER service, which was created to provide efficient answers to citizens, especially to answer to queries, information requests, suggestions, complaints, praises, and service requests.

With this service, all the ways of contact with the concessionaries where integrated, which allowed for more efficacy in the management of the service of selective collection and the citizens' contact. The membership and use of the Recycling Line has gone beyond our most positive expectations, making clear that



Portugal is certainly carving its path with ambitious plans.



the citizens are indeed engaged in the process of appreciating the waste they produce and that they want to contribute through their actions for a more sustainable society.

Curiously, there are many more questions that we are asked that come from areas of the country that do not belong to the EGF's areas of concession; and related to subjects and waste that we do not manage. However, and whenever possible, we provide an answer to all citizens that get in touch with us, even if that answer only indicates the way or contact, so that the citizen's problem can be solved with the right institution.

Answering in a straighter forward way to your question, we are already providing solutions to all citizens, but we still have lots of space to evolve and to ensure a better quality in the reply.



**To be
#BeyondGreen
is to be more
demanding
and
responsible.**

The social dimension must always be associated to the projects in the cities. According to you, is this idea currently considered when beginning new projects?

If the social dimension is not considered, any project will be incomplete, sooner or later difficulties will be found. In our situation and in our management of activity, the social dimension is at the core of the projects – if we value the waste produced daily by people, all of the projects must consider variants such as localisation, the quantity of produced waste and evolution prospects or engagement from the community. I can assure that when it comes to new projects of waste appreciation, the social dimension is immensely relevant, and if it is not given its right importance, the projects cannot be fulfilled.

For you, to be #BeyondGreen is...?

To be #BeyondGreen is to be more demanding and responsible. It is not worth it to disguise 'green practices' those practices which have already been proven not to be sustainable. What is worth doing is to make good choices and to make decisions that allow for the planet to improve by comparison to what our generation found. ■



José Gomes

BUSINESS DEVELOPMENT DIRECTOR
COFINA

THE BEST INHERITANCE: A BETTER PLANET...

We received our parents' planet, and we should try to protect it for our sons, grandsons, and future generations, ideally, **leaving it in a better state than what we found it in.**

Those who can, leave money to their sons, a house, a car, something that allows for a financially better life. However, how many of us think that the best possible inheritance is a better planet than the one we have inherited? Not to leave a warmer planet, with increasing fires, without water in its rivers, highly exploited when it comes to raw materials, polluted and without animal extinction.

Currently counting, we have:

- Wild life has shrunken by 60% in the last 40 years;
- More than half of the forests and coral reef have already disappeared;
- Two thirds of the rivers are dead or seriously polluted

- The global economy consumes 100 thousand millions tonnes of materials per year and the rate of the recycling of resources has been inverted. According to The Circularity Gap Report, of Circle Economy, published in January 2020, our world is now only 8.6% circular vs. 9.1% in 2018.

To revert this situation, goals have been mapped aiming for the reduction of CO2 Emissions in the European Union. One of the sectors that can give a significant contribute is that of real-estate. According to the European Commission, between 85 to 95% of European buildings will be the same in 2050. To ensure energetic efficiency of this existing buildings is of the essence to fulfil the goals of carbon neutrality.

Matter of fact, buildings represent 40% of energetic consumption and 36% of the carbon emissions in the European Union. In face of these values, there are no big questions. These actives ought to be transformed since the immense majority (85%) is not sustainable.

It is likely for a non-sustainable building to undergo a bigger devaluation in time than a building with a sustainable certification. One of the studied possibilities to ensure the changing of buildings into more efficient assets is the increase of a tax burden that penalizes the buildings with excessive carbon emissions. A building built or restored with sustainable measures allows for the reduction of between 25 to 50% in the consumption of energy; and the minimisation of water-use by 40%.

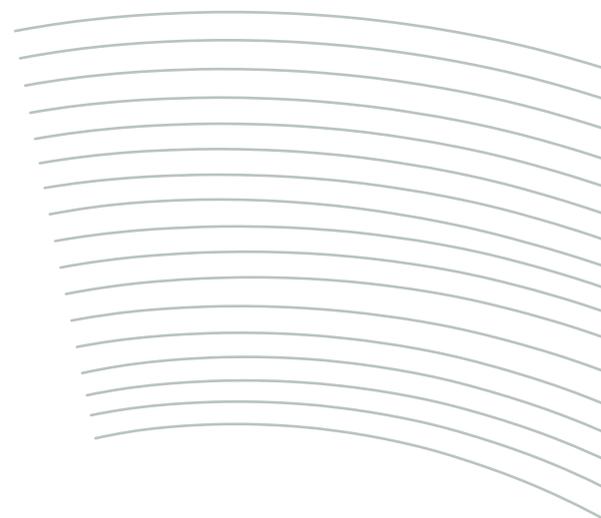
For Portugal and Europe to be more sustainable, it is of the essence to ensure that buildings are energetically efficient and more resilient.

Currently, there is a war in the centre of Europe; and Europe is burning due to the fire scourge. Often, we blame the fact that the land is not properly clean, when indeed the elephant in the room is global warming, the increase by 1.1 degrees since the beginning of the industrial revolution. It is impossible for fires to not keep on increasing from here on. It is inevitable for reliability and costs of financing of countries like Portugal to go on growing due to climate change. And does that happen because Portugal is a big polluter? No, precisely because it is too small to make a difference. And that is many times the story of the collateral damage that we do. The small and disadvantaged

suffer the most with the consequences of the war or with climate change.

If today we asked 100 companies whether or not they are sustainable, all of them would say that they are sustainable. And, in their heads, and at times, in their attempt to influence public opinion, it is clear that they are so. Nonetheless, after having problems with DWS, the investment branch of Deutsche Bank, and the Bank of New York Mellon, whose financial products are sold as ESG – an acronym that gathers all the topics of sustainability (Environmental, Social and Governance) – hardly can these companies be included in that category, in spite of the attempt made by the regulators to prove so.

But how many are the cases of packages that have taken on the green colour, products that say they are environment friendly, bottles that include, for instance, 30% of plastic? Who actually and with ability validates these communications? And what to say about sustainable fashion items whose rotation wants to be done the most possible? It is due to this wanting to be without actually being that some companies are now defending itself on trial, due to their misleading publicity. It is in this framework that the concept of greenwashing operates, fortunately it is not the reality of all companies. There is lots of commendable work and even acknowledging the necessity of greenwashing can be a significant step on the path that has to be made.



We could say it is complicated to control everything. Wanting for sustainability to include environment, the social and the governance of societies, we are aiming for too many changes simultaneously, getting lost in ambition. The Economist said so in its July 2022 edition. That we should focus exclusively on the environment. To find focus and then to solve the remaining questions.

None of this is a lie. Everything is very much true. We have extensive criteria when it comes to sustainability, which allows for the greenwashing of sustainable financial products and the control done over these. There still is not a real capacity to assess if what is being said is true or not, that is why 'sustainable' screams louder, meaning that companies with wider spread communication abilities are always right.

It is urgent for certified criteria to be created, so that what is said is absolute true, preferably in an easy and transparent way, hence avoiding for the public opinion and the consumer to be misled. An idea would be for all products to have written on them their impact on the planet, in a completely verified way, allowing for consumers to choose basing

their choices in this suppositions. The choice of products would then depend on Kotler's Ps and one more that is the impact on the planet – in English, Planet Impact, which would even be a bigger P. One of the biggest problems, if you ask me, over what each one of us can do to change the current course of action, is not having a simple and clear vision on the impact of our choices.

In July 2022, the European Union reached an agreement on the rules of the reports of companies, known as Corporate Sustainability Reporting Directive (CSRD). Reliable data assessed, and the supervision of the whole value chain, even for companies outside the European Union, in relation to sustainability, in all the sectors and holding the administration responsible, beginning by big companies, and put forward in 2024. It is a decision that will impact 49 thousand companies in the sense that the institutions ought to do their job, concerning a topic that affects all generations (the present one and all of those to come).

Considering further the initiative that the Jornal de Negócios created, the National Award for Sustainability aims to recognise, award, and inspire society through the identification of the best national projects when it comes to sustainability, having as basis the United Nations Goals for Sustainable Development. One of the main concerns was to create an evaluation criteria for the projects; another priority was to allow for a knowledgeable partner to create a set of objective criteria of assessment to validate the data presented by the companies. And so it did happen. All awarded

projects go through Deloitte's sieve, and only after validated in terms of impact and importance, are the projects assessed by the jury, composed roughly by 80 personalities highly well-known in each one of the categories.

We are very proud about having given dozens of awards and honourable mentions and of having avoided 'greenwashing' – there were excluded projects – and of having offered millions of euros in communication to the winners. Above all, we hope to have inspired many companies to follow the same path and to have encouraged and promoted the idea that the best inheritance that we can leave behind for our sons, grandsons and future generations is a better world than the one we inherited. It is by rewarding good examples and inspiring others to follow that same path that we can do so. ■

SHARING ECONOMY

**Just a buzzword or
a potential protector
of Biodiversity?**



Emma Sairanen

PROJECT COORDINATOR,
GLOBAL COLLABORATION,
SUSTAINABILITY SOLUTIONS,
SITRA

ADOPT CIRCULAR SOLUTIONS TO REACH GLOBAL GOALS FOR NATURE

The circular economy provides a tangible tool to halt and reverse global biodiversity loss.

Sitra's circular economy experts organised a discussion on the theme at the UN Convention on Biological Diversity negotiations in Geneva.

Human activity is driving biodiversity loss at unprecedented speed, creating a risk for human well-being and our economies. One million species are facing extinction, and none of the targets set for the last decade under the UN Convention on Biological Diversity (CBD) have been fully met. Action is urgently needed.

In March 2022 in Geneva, countries began to negotiate new global targets for halting biodiversity loss by 2030. Vital for success is

making sure that both direct and indirect drivers of biodiversity loss are tackled. A major indirect driver being our current linear economy, which follows the "take-make-waste" logic, producing waste and extracting finite natural resources beyond ecological limits.

According to the International Resource Panel, 90 per cent of land-use change related to biodiversity loss is caused by the way we extract and process materials, fuels and food. By

tackling this root cause and providing more value from what we already have, the circular economy the circular economy provides some of the most effective tools to halt biodiversity loss.

During the negotiations, The Finnish Innovation Fund Sitra, together with partners from the Finnish Ministry of the Environment, the Finnish Environmental Institute, the European Commission, the Mission of Ecuador, PBL Netherlands Environmental Assessment Institute and the Swiss fragrance and taste company Firmenich, held a discussion on how the circular economy could be used to strengthen new global targets for nature and used as a tool for implementation.

CIRCULAR ACTIONS IN THE EUROPEAN UNION

The European Union is already taking lead. The EU Circular Economy Action Plan released in 2020 aims to reduce the footprint of production and consumption and double circular material use within the EU.

“The action plan is very much akin to changing the engines of an airplane during the flight so it won’t be easy, but together it can be done,” according to **Pascal Delisle**, Head of Section at the Delegation of the EU to the United Nations.

Within the action plan, production and consumption are considered together. Through new initiatives the European Commission aims to improve durability, reusability, upgradability and the recycled content of products while also empowering consumers to make better choices through reliable data.

Exploring the link between the circular economy and biodiversity

Compared to the linkages between the circular economy and climate change mitigation, much less is known about the potential of circular solutions to tackle biodiversity loss. However, the circular economy community, including members of the European Circular Economy Platform, are rising to the challenge, exploring the linkages and suggesting actions to strengthen the circular economy as a tool for addressing biodiversity loss.

Ari-Pekka Auvinen, researcher at the Finnish Environmental Institute, presented results from a Finnish study exploring the potential of a circular economy to halt biodiversity loss and mitigate global heating. The study found that the best circular actions are ones that reduce the extraction of virgin raw materials and relieve land-use pressures. In particular, reuse on the consumer side and product lifetime extensions on the producer side are win-win solutions for biodiversity and climate change.

Tim Forslund, specialist at the Finnish Innovation Fund Sitra, presented a groundbreaking Sitra study, “Tackling root causes – Halting biodiversity loss through the circular economy”, quantifying this link on a global scale. According to the study, circular solutions in four key sectors can halt global biodiversity loss and help the world’s biodiversity recover to the same levels as in the year 2000 by 2035. The sectors are food and agriculture, construction, textiles and forests.

FOCUSING ON FOOD

Agriculture is a key driver of biodiversity loss. A recent remote sensing survey by the FAO (UN Food and Agriculture Organization) estimates that almost 90 per cent of global deforestation is caused by the expansion of agricultural lands. With big impacts come also large potential for solutions. According to Sitra’s study, circular actions in the food and agriculture sector could free up a land area as large as 1.5 times the size of Europe by 2050 for other uses, the most impactful solutions being alternative proteins and halving food waste.

“The plant-based revolution is driving big change in consumer choices,” said **Oana Ocico**, Vice President of Global Strategic Business Unit at Firmenich. By enabling consumers to make the right choices for them and the planet, Firmenich has estimated that their products could potentially save 285 billion litres of water and reduce emissions by 4.5 million tons of CO₂ by 2030.

Change within the food sector requires action from both businesses and consumers. Transitioning to more plant-based diets can be supported through education and awareness raising, but also businesses have a role to play. “Unless you make the plant-based proteins taste nice the shift won’t happen,” said Ocico.

Besides dietary shifts, also changing the way food is produced – by incorporating more regenerative practices – is important. Regenerative agriculture includes practices like no-till methods, crop rotation and polyculture, biochar and



organic principles which improve soil health, carbon sequestration, nutrient retention and diversity to build resilience.

Daniela García, Foreign Service Diplomat at the Mission of Ecuador to the WTO, shared an inspiring example of organic cacao cultivation in Ecuador. An association of Waorani Women from the Ecuadorian Amazon have tackled illegal poaching in their community by proving an alternative revenue stream: organic cacao cultivation. Applying circular economy principles both up and down stream in production, the community has been able to invest in education, fruit trees, healthcare and infrastructure.

THE CIRCULAR ECONOMY IN THE GLOBAL BIODIVERSITY FRAMEWORK

Marcel Kok, Environment and Development Programme Leader and Senior Researcher at PBL Netherlands Environmental Assessment Agency, called for the need to tackle the indirect drivers of biodiversity loss, including overconsumption.

This should include current material efficiency thinking, but also a stronger emphasis on respecting planetary boundaries and achieving absolute decoupling of the economy from emissions and natural resource use. Marcel also highlighted that to strengthen the global goals for nature, halving the footprint of consumption through lifestyle and dietary changes and halving food waste is critical.

Oana Ocico also pointed out the need for a sense of urgency and

a stimulus through consumer education and business incentives: “We want to see a level playing field for everyone. We cannot make change on our own.”

The negotiations on new global goals for halting biodiversity loss will continue in June in Nairobi and the new Global Biodiversity Framework will be finalised at the COP15 meeting later this year. Efforts to strengthen the framework will continue as well as efforts to harness the potential of the circular economy as a solution.

“The post-2020 Global Biodiversity Framework should ensure that countries take action to support the transition towards a nature-positive economy, sustainable consumption, and the adoption of circular economy business models. These actions should aim to half the global ecological footprint on the environment, and here obviously the circular economy has a crucial role to play,” said **Nina Mikander**, Senior Specialist at the Finnish Ministry of the Environment. ■

Special note:

The article was first published at Sitra.fi in June 2022. The Finnish Innovation Fund Sitra is an independent public fund collaborating nationally and internationally to build a fair, sustainable, and inspiring future that ensures people’s well-being within the limits of the earth’s carrying capacity.



António Martins

ZERO - ASSOCIATION
FOR THE SUSTAINABILITY
OF THE EARTH SYSTEM

BIODIVERSITY: CHALLENGES FOR A FORESEEN CRISIS

To fight against the loss of biodiversity is an ethic imperative that we all should take on.

Ever since the 60s of the past century that the extinction of the species, of their genetic patrimony, and of the ecosystems where they gather, has been consistently increasing. This abrupt decrease in variety and variability of life is leading the planet's biodiversity into a profound crisis, that will have irreversible impacts on humanity.

In Europe, the European Environment Bureau (EEB), to which the ZERO - Earth System Sustainable Association belongs, says that only 23% of animal and plants species and 16% of the habitats protected by the Habitat European Directive have a favourable conservation status. The remaining habitats still are one of the biggest challenges of

nature's conservation, in order to avoid the disappearing of the living systems they integrate.

Even if Portugal belongs to the European framework, to be recognised as a rich country in natural patrimony as it is considered by the National Strategy for the Conversation of Nature and Biodiversity 2030, in that concerning its habitat, the report of the European Agency for the Environment, "State of Nature in the EU" of 2020 shows that more than half of the habitats evaluated by the Agency strongly lean towards deterioration. Thus, we integrate the same pattern of global threat and, as such, Portugal should introduce and prioritise energetic measures that stop and fight against the loss



of species and ecosystems, loss which we will growingly witness.

There are multiple elements that individually or collectively promote the significant disappearing of the species. The urban expansion, the intensive agriculture and the unsustainable forest exploitation converge in the alteration of the habitats and in the destruction of the complex network of living organisms and ecosystems. Pollution changes the state and the quality of human beings' support systems. The introduction of the exotic species, that compete against local species, changes the habitats and their resilience. The rampant evolution of climate change does not allow for the adaptation of the new species to the new environmental conditions. The overexploitation of resources feeds a linear economy, based on impetuous consumption, which generates waste and residues that are not used by productive cycles, making mandatory the permanent access to natural resources. All of these conditions are acknowledged as big threats that act over the loss of biodiversity which we witness.

Biodiversity ensures the life conditions in the planet and is the basis of economic models that support our society. The World Economic Forum (WEF), in the 2020 report on Global Risks, qualifies the loss of diversity and the loss of eco-systemic services as one of the five major risks with the likelihood of generating significant negative impacts on

humanity in the next 10 years. WEF also assumes that more than half of the world's PIB currently depends upon nature and its services, highlighting the sectors of constructions, of agriculture, of food and drinking – all of these being highly exposed to the impacts caused by the loss of biodiversity.

Stopping the loss of biodiversity cannot merely be limited to conversion dynamics that shyly spring in classified natural areas. It is urgent to manage natural resources efficiently, engaging the population, its institutions and remaining organisations that are at the core of society. The economic agents can have a fundamental role in this path of increased sustainability, contributing to the elimination of the information gaps still prevailing on Portuguese nature; engaging in activities of restoration of natural ecosystems, being these activities the promoters of new value chains; optimising and minimising the use of resources through the introduction of circularity practices; supporting the widespread and the promotion of the protection of national patrimony, amidst many others that can adjust and accommodate to the needs of the territories where they act.

To fight against the loss of biodiversity is an ethic imperative that we all should take on. ■



Nuno Plácido

COUNTRY MANAGER
TOO GOOD TO GO
PORTUGAL

FOOD WASTE IN PORTUGAL AND THE CURRENT IMPACT ON SUSTAINABLE POLICIES

Portugal can still win the battle against food waste.

In September 2015, seven years ago, 193 countries signed the Agenda 2030 for Sustainable Development and thus publicly sealed their compromise to reduce by half global food waste per capita when it comes to retail and consumer and to reduce the food loss throughout the whole value chain.

Today, 8 years later, almost reaching the agreed date of 2030, it is the right time to ask the following: What has been the countries' progress and where does Portugal stand in this battle?

Numbers still are concerning: 2.5 thousand million tonnes of food are wasted annually in the whole world (WWF 2021). According to FAO, 89 millions of tonnes of food are wasted every year in the EU, representing 179kg per capita. That means that a third of globally produced food is wasted. Portugal wastes a million of tonnes of food per year (PERDA 2012).

Throughout the last 6 years, there were multiple countries that

enacted laws addressing food waste: France (2016), Italy (2016), Spain (the law becomes effective in January 2023). These countries thus take steps, and legislation, that include significant measures that entail compromises and obligations, both from the public and the private sector, acknowledging the importance of measuring food waste and establishing a hierarchy of residues to be followed by the agents of the food chain.

In 2021, Portugal enacted its food waste regulation, according to which companies have to take measures for the reduction of such waste, and from 2024, companies will not be able to discard food that can still be consumed. Hence, companies shall look for tools and solutions that allow for them to reduce food waste, through additional solutions for the consumer – as it happens with the Too Good To Go app amidst others – and to reduce the amount the surplus of food that is discarded through donations.

In Too Good To Go, we believe that together our impact is bigger. That is why we develop projects founded upon 5 cornerstones: our marketplace (the App); Education; Public Affairs; Companies and family's households.

In Portugal, with no recent data on the quantity of food waste on a national level, it will be more complicated to establish priorities and to assess the progress of the country. The last available data is from 2012. It will be needed more specific compromises on behalf of the public and private sectors so that – together – we can progress further on this matter.

A real change in this topic will require more national efforts so that Portugal can keep up with the European trend, stepping forward and becoming one of the pioneer countries in the EU in the fight against food waste. All things considered, it is crucial to measure so that we can make tangible solutions that allow us to achieve global goals.

INTERVIEW

Eunice Maia

FOUNDER
MARIA GRANEL



What is a sustainable diet and what does it consist of? Is it easy to adopt this idea on our daily lives?

According to FAO - United Nations Food and Agriculture Organisation - a healthy and sustainable diet has as basis a low-impact environmental activity, that also contributes to the food and nutritional safety of the population. That is, it must protect and respect biodiversity and the ecosystems, optimising natural and human resources. It must be culturally accepted, and made accessible to the whole population, safe nutritionally and economically adequate and fair.

In a world with a continuous demographic increase, lacking resources, and with climate changes that become more obvious by the day, everyone has a challenge, not only as consumers, but also as citizens, highlighting the importance of a sustainable diet.

PRACTICALLY, WHAT DOES A SUSTAINABLE DIET MEAN?

To adopt a more sustainable diet, there are various key-points that have to be considered, so that our ecological footprint diminishes, amidst these key-points are:

- The reduction of food products of animal origin, specifically meat.
- The increase in the consumption of local and seasonal products
- The reduction of one-use only packages
- The reduction of food waste
- Biological production, short distribution chains and a fair trade.

How could people, through small gestures, have a sustainable diet? Could you provide 3 tips?

It is well-known that the production of food products of animal origin is responsible for a



higher use of resources, such as water and soil, and also higher greenhouse gas emissions, when compared to food products of plant origin.

The main change to consider should thus be the reduction of the intake of food products with a bigger ecological, water and carbon footprint, opting for a sustainable diet consisting mostly of plant origin food products, characterized by the high consumption, in quantity and frequency, of fruit, vegetables, cereal (preferably integral), leguminous plants, oily fruits, and olive oil, occupying 3/4 of the plate.

To opt on local products allows for the reduction of transportation, refrigeration, and packaging needs, and, subsequently, the associated emissions, whilst supporting small producers.

Seasonality too, should be considered. The food of the season usually has superior nutritional and organic characteristics since there is no need for transportation nor for multiple methods of conservation that produce greenhouse gas emissions. The consumption of national products also promotes local economy.

What impact does this practice have in our country and in our planet?

The current global food system presents various problems, not being sustainable on the long run. It is responsible for the emissions by 20 to 35% of the total of greenhouse gas emissions, occupying roughly 40% of the available soil.

Unfortunately, there still are many other components in this

equation, such as the excessive use of fertilizers, that pollute the earth and subterranean waters. All converge, having a direct effect on biodiversity. If we consider that world Population will be superior to 9 billion people by 2050, food production will have to increase by 60%. Alternatively, 1.3 thousand of millions of tonnes of food are wasted annually, which represents a 1/3 of the whole population (FAO, 2011).

On a national level, according to a study published in 2020 (Source: Galli A, Moreno Pires S, Iha K, Alves AA, Lin D, Mancini MS, et al. Sustainable food transition in Portugal: Assessing the Footprint of dietary choices and gaps in national and local food policies. Sci Total Environ. 2020.), food is responsible for 29% of the Portuguese ecological footprint. Moreover, we are the Mediterranean country with the highest food footprint per capita. Portugal does indeed depend on importation from other countries for more than 60% of its food needs, we should also consider the greenhouse gas emissions associated to transport.

More than 3.5 millions of Portuguese have a meat consumptions superior to 100 g/ per day, being superior to the recommended amount of meat.

Food and agriculture are the areas that could have the biggest impact on the transition to a circular economy. How could we, through these aspects, avoid the loss of biodiversity?

I would like to emphasize the key-role of the expansion of the cultivation of leguminous plants in our country and the brilliant work developed by the



Food is responsible for 29% of the Portuguese ecological footprint



LeguCon project, an initiative that began in 2021, promoted by the Catholic Portuguese University, with the support of the Calouste Gulbenkian Foundation, and that is contributing for the growing and strengthening of the production of leguminous plants in an engaging and interactive manner.

Considering the measure of the Common Agricultural Policy - CAP for the next few years, established by the end of June 2021, that includes the promotion of eco-regimens and that promotes the adoption of environmentally responsible practices, leguminous plants are strategical cultures, due to their biological characteristics:

- They improve the quality of the soil
- Their cultivation requires less water, less fossil fuels, and less agrochemicals products.
- They are natural soil fertilizers, due to their ability to fix nitrogen
- They promote the fight against plagues
- They promote microbial diversity on the soil

In addition to environmental advantages, when it comes to health, it has been verified that the consumption of leguminous plants has numerous benefits, reducing several chronic diseases such as cancer and cardiovascular diseases.

The reutilization alongside the changing of some other eating habits, would make possible to feed the population using less agricultural soil and less additives, such as fertilizers. What can people do to develop this idea of reutilization?

Matter of fact, it comes down to rescue some practices that the discarding culture ended up by removing of our quotidian. This must start before shopping and meals, selecting rigorously what we already have in the pantry and in the fridge, structuring a meal plan considering these resources.

When it comes to confection and preparation, we should try to profit integrally, and whenever possible, from the food, using peels, branches, stems, seeds, and roots. For instance, the peeling of a carrot could be used for pesto, or simply chopped to be put in the salad, giving it a similar flavour to parsley; the peeling of vegetables could be used for aromatic soups; they could also be frozen and used later to make soup or rice.

The use of these homemade soups, in addition to increasing the taste of the meals, also increases the vitaminic value, since many vitamins stay in the boiled water of the vegetables; hence, whenever we boil vegetables on water this water can be used for soup. If there are any remains, they can be creatively included in new meals: salads, pies, quiches, tortillas, soups... ■



Leguminous plants are strategical cultures



**REAL
ESTATE**

**in the eye
of the hurricane**

THE REAL-ESTATE SECTOR IS RESPONSIBLE FOR 40% OF GLOBAL GREENHOUSE GAS EMISSIONS

Perhaps the most widespread information and the one that is the most engraved in our memory is that the real-estate sector is responsible for 40% of global greenhouse gas emissions, which puts the real-estate and the construction sector in the eye of the hurricane and in the top of the agendas when it comes to the planning and sustainability strategies of countries and cities.

Since 2021 that the market witnesses an intensification of the buildings' energy development requirements. All of the existing stock of buildings and the future pipeline ought to be constructed by NZEB buildings.

It is urgent for **rehabilitation projects towards energetic efficiency of the parking** of existing buildings so that in

2030

it will be possible to attain the established aims.

KEY FACTS

40% of the buildings
and
75% of the infrastructures
foreseen until 2050

will still be built according to and will have to comply with the Net Zero Carbon State throughout their whole life span.

In 2050,
80%
of the current
stock of buildings
will still exist.

BUT WHAT IS A **NZEB BUILDING?**

A NZEB building is fuelled by energy sources generated by the building itself, due to electric reuse. The total amount of energy used by the building in the time span of 1 year shall be identical to the amount of renewable energy created by the building itself.

NET
ZERO
ENERGY
BUILDING

BY 2030

35M buildings MIGHT BE RESTORED

BUILDINGS WILL HAVE

Net Zero Operational Carbon

BY 2050

BUILDINGS WILL HAVE

Net Zero Embodied Carbon

FIT FOR 55 EUROPEAN COMMISSION PROGRAMME

3%

of the absolute surface
of the ensemble of public
buildings **restored per year**

49%

of the use of renewable
energies in the buildings
until 2030

+1.1 p.p.

of the annual increase
until 2030 **in the use of
renewable energies** in the
heating and in the cooling
down

The extensive renewal of existing buildings is key for the reduction of carbon emissions.

The urgent intervention includes the enactment of solutions that lead towards the reduction of the consumption of the buildings' energetic needs and that promote the limitation of carbon emissions implied in each phase of the real-estate project.

2020

THE WARMEST EVER RECORDED YEAR IN EUROPE

+50%

OF THE WORLD POPULATION LIVES IN CITIES

UNTIL 2050

70%

OF THE WORLD POPULATION WILL LIVE IN CITIES

The construction sector (the use and the operational management of buildings) presents as one of the main challenges to reach the Net Zero Carbon aim, objective that will be impossible to fulfil if the footprint of this sector is not drastically reduced.

The carbon emissions produced by a building can be found in all its life cycle, from its project until its demolition. The most significant percentage of actions taken to reduce the carbon in the civil construction sector are directed towards the operational use of carbon that represents 28% of the emissions, with the remaining 11% coming from incorporated carbon.

CONSTRUCTION
SECTOR | BUILDINGS

39%

of Carbon Emissions

OPERATIONAL
CARBON

28%

**Daily use of energy
of 1 building**

INCORPORATED
CARBON

11%

**Emissions in the phase
of the buildings'
construction**

HOW CAN WE REDUCE CARBON?



**TO OPT FOR
RETROFIT
VS. NEW
CONSTRUCTION**



**CLIMATIZATION
SOLUTIONS AND
NATURAL LIGHTING**



THE USE OF
**SUSTAINABLE
AND
RECYCLABLE
MATERIALS**



TO PRIORITISE
SUPPLIERS THAT
PROVIDE **CERTIFIED
MATERIALS
AND PRODUCES**

IN COMPLIANCE WITH THE
COMPANY'S ESG STRATEGIES



NORMATIVE
GUIDELINES
OF ACQUISITION
OF **LOW-CARBON
MATERIALS**



INVESTMENT
IN **CARBON
COMPENSATION**



Nuno Fideles

ASSOCIATE ARCHITECT &
SUSTAINABILITY CONSULTANT
BREEAM AP
SAVILLS PORTUGAL

DECARBON- ISATION OF THE PORTUGUESE REAL-ESTATE:

WHERE DO WE STAND?

With the aim of attaining decarbonisation purposes in the real-estate sector in Portugal, **the legislation included in the new Bases of the Climate Law was created.**

When it comes to new buildings, these ought to be of almost zero energy, the so called NZEB (Near Zero Energy Buildings). However, according to national legislation, by applying this rule to all the new buildings since 2021, the number of buildings that is covered by this rule is reduced considering the totality of building stock (less than 10%).

Thus, there is yet a long path to walk. It is certain that there is still some unfamiliarity on the investor's behalf in Portugal,

associated with the myth that to build sustainably is far more expensive than traditional construction. It is important to highlight that we have been sensing an interesting shift of paradigm for the last six months in the area of rehabilitation, where many real-estate funds have tried, through the rehabilitation of existing buildings, to profit from the opportunity to improve them and to provide answers to the market with efficient and certified buildings.

Likewise, Savill's sustainability team has more than 22 buildings where these improvements are being done and accompanied in the area of consulting and BREEAM IN USE certification. The market now begins to interplay with many tenants and companies that look for spaces with these characteristics, so that they can fulfil their ESG goals. ■



Paulo Santos

MANAGEMENT SYSTEMS
AND ADENE CERTIFICATIONS
DIRECTOR
AGENCY FOR ENERGY

2030, AND NOW?

It might seem like a traditional cliché, but time does fly, and we cannot lose it. Let alone in times of climatic emergency, accentuated by the energetic urgency in which Europe is, where the building sector, as far as responsible for 1/3 of consumed energy, has a key role.

Portugal is in line with the remaining member-nations in this critical moment. We have ambitious national goals for the horizon of 2030 when it comes to the reduction of the emissions of greenhouse gases (from 45% to 55%, compared to 2005) which, in matter of buildings, include the decrease by 70% of the emission in the service sector and by 35% in the residential sector.

This is a colossal challenge for the building sector, since the built heritage is old and inefficient energetically: according to certified energetic data (www.sce.pt), only 10% of the buildings in Portugal have an A or A+ rating in Portugal.

This in a framework where all the new buildings have now to

be NZEB (Nearly Zero Energy Buildings) from which, in addition to the above ratings, it is demanded a minimum amount of renewable energy. A new set of standards that, in spite of dealing only with the energetic dimension, already is orienting the market of real-estate promotion for efficient buildings in the different dimensions of sustainability.

The real transformation, however, has to take place in the existing buildings, through big and small rehabilitations, those too oriented by the NZEB standards.

A transformation that the country needs and that the families want, as shown by the recent mobilisation achieved with the Programme of Support to More Sustainable Buildings. More than



100 000 private applications to the Environmental Fund in less than a year, for a full support of investment close to 95M€ in the improvement of energetic efficiency. Alongside other programmes for buildings of services and public administration, there will be 610M€ of support for the investment of energetic development of buildings, within the Recovery and Resilience Plan.

This premise glimpses a horizon beyond 2030, with the Long-Term Strategy for the Renewal of Buildings (LTSRB), whose aim is to improve the whole built heritage until 2050. The priorities of the LTSRB are the structural rehabilitation, resorting to the improvement of the insulation of walls and coverages by the substitution of efficient windows, followed by the increase of efficiency of climatization and hot water technical systems and the setting of systems of harnessing local renewable energy (mostly solar).

In this path, we will witness the concretisation of new visible trends in the revision proposals of the European Directives: the substitution of the notion NZEB for ZEB (Zero Emissions Buildings), the enactment of buildings' individual renovation passports, the development of technological aptitude indicators and of possible global warming of the building, the reinforcement of the infrastructure to ensure sustainable mobility and the imperativeness of the optimisation of energetic consumption both in buildings and services.

A future that hopefully will be more sustainable for us and for our sons that is just right there, across the corner of 2030. ■

TOGETHER WE ARE BETTER

On this journey towards Planet Net Zero, investors, developers and occupiers must be crew members of the same rocket.

To fulfil the Net Zero goal is a very ambitious aim and with a wide scope that covers the organisation and all of its respective supplying chains. A goal that will only be fulfilled successfully through engagement, dialogue, and the transparent sharing of investors', promoters', and occupiers' data.

It is necessary for the corporate patchwork to establish a plan of reduction of the carbon emissions related to their operations, considering the management of its internal reductions, but also of its supply chain.

If in the residential sector factors such as localisation and price still overcome the matters of sustainability, in office and logistic segments it is far more noticeable.

At this moment, the search for workspaces (office's buildings) and logistics (warehouses) that can fulfil social, environmental, and economical responsibility policies of companies has grown exponentially in the past months.

In this field, the big companies that are a reference in the market are striving for ESG goals, sending a clear message to the real-estate building, obliging for it to find solutions: sustainable buildings that fulfil this criteria.

Stamps such as energetic certifications with the superior ratings to minimal standards, certificates with water efficiency (AQUA+), or international certificates of sustainability in LEED or BREEAM buildings are almost mandatory in new research patterns. ■

WHAT MEASURES CAN BE ADOPTED IN BUILDINGS?



THERMAL AND ACOUSTIC INSULATION SYSTEMS



AIR QUALITY, ENERGY, WATER CONSUMPTION AND HVAC MONITORING SYSTEMS



PHOTOVOLTAIC PANELS



USE OF SUSTAINABLE MATERIALS



RECYCLING OF MATERIALS



BIOPHILIA



ELECTRIC VEHICLE CHARGING STATIONS



PARKING FOR ELECTRIC BICYCLES



ENCOURAGING THE USE OF SUSTAINABLE MEANS OF TRANSPORT



João Inácio

PROPERTY
MANAGEMENT DIRECTOR
SAVILLS PORTUGAL

THE SHIP HAS SAILED. IS YOUR BUILDING ON BOARD?

THE ROLE OF TECHNOLOGY IN THE REAL-ESTATE MANAGEMENT

In 2020, the world did a fast-forward and promoted a set of global changes in the priorities of companies and buildings. Changes that take place at a rampant speed. The enactment and the application of these measures will be crucial to keep up with the fulfilment of ESG policies and the Sustainability goals of today.

The rise of Proptech solutions is proof of how the technological factor indisputably marks the differentiation in the running and in the appreciation of a building, allowing to reach maximum efficiency profits. Sustainable buildings or those that contribute for the decrease of its ecological

footprint shall no longer be an exception nor a case-study highlighted in a prospectus but will become the rule that will lead to the fulfilling of the established goals for 2030.

The now high standards of the companies have made companies such as Property Management to raise the bar and the scope of given services, going way beyond traditional maintenance of common areas and the coordination of services. The use of technological tools and equipment to monitor energetic consumption of a building, the enactment of solutions for the charging of cars, bicycles, or



scooters, as well as the production of electric energy, act as an indisputable differentiating factors in a highly competitive market.

The trend of enacting Hybrid Work Models, inherited from Covid-19, legitimates the urgency of automatization in the area of Property Management. The occupation of office spaces has become more fluctuating, due to the integration of technological systems, it is possible to proceed to configurations aiming to reduce the consume of energy by identifying office areas that are not being used in certain moments and of lighting and AVAC systems, hence avoiding unnecessary expenses.

Technology also applied to the residential market, being fundamental so that residential buildings can keep up with the growing environmental standards and concerns, contributing for a more sustainable built heritage, thanks to the potentiation of a more efficient and modern management.

Savills Portugal Property Management Department has more than 15 years of experience with management operations overlooking the whole national territory, in the different areas of real-estate: Residential, Offices, Retail and Industry. We have opted on a proximity management, focus mainly on the appreciation of real-estate patrimony, in security, in the comfort of condominiums and tenants, and in the optimisation of equipment use.

At Savills, we use technology as an innovation vehicle in the optimisation of current processes in real-estate management and in the streamlining of interaction in-between the users of the buildings and the buildings' managers. For instance, the GECOND Programme, a tool of real-estate management developed in partnership with a software-house, allows for the manager to answer all of the needs and to perform multiple functions.

We have also established a compromise with sustainability strategies that go all the way to preoccupation and zeal when it comes to the health and the well-being of people as active elements in environments both internal and external. ■

**Legislation and
Public Endorsement
FISCAL
BENEFITS
and Financial Support**



SUSTAINABILITY IS A DRIVING FORCE FOR **INNOVATION** IN THE ECONOMY

Sustainability is a driving force for innovation in the economy, offering countless opportunities for the transition to a greener economy. In this new reality, companies want to be game changers and to embrace a transition for environmentally friendly models.

For this purpose, incentives and financing mechanisms of the different processes of innovation, investigation, and communication were developed.

PROGRAMMES AND STRATEGIES

PROGRAMME	AIM	DESCRIPTON
Environmental Fund	The renewal of buildings within the PRR framework	To reduce by 30% the consume of primary energy in the intervened buildings and a decrease by 20% of water consumption. It has a financial aid that sums up to 70 million euros.
COMPETE 2020, SEUR PO and Regional PO	Different financing lines that can be used in the framework of a green economy	Financing for the development of initiatives that improve the efficiency of water use; to change the patterns of production and consumption; to create green brands; to implement certifications; to improve the energetic efficiency of multiples processes; and to opt on renewable energy.
Energetic Efficiency Fund (EEF)	Strategy that allows for the financing of programmes integrated in the National Action Plan for Energetic Efficiency (NAPEE)	To support technological projects in the areas of transportation, residential and services, industry and public sectors and support to transversal actions that foment energetic efficiency

PROGRAMMES AND STRATEGIES

PROGRAMME	AIM	DESCRIPTON
Innovation Support Fund	To support innovation and technological development projects.	To stimulate investment strategies in energetic efficiency, stimulating partnerships between Portuguese companies and the national scientific and technological system
Long-term strategy of buildings' renewal (LTSBR)	Intervention in the different surroundings of the buildings and in financing programmes with private and public investment	Based on four cornerstones: the improvement of comfort and the fight against energetic poverty; the increase of energetic efficiency; total decarbonisation and the gradual increase of comfort. It will mobilise roughly 144 thousand of millions of euros until 2050
Efficient House Programme 2020	Improvement of the environmental development of buildings in the residential stock	Optimisation of the environmental performance of private housing buildings when it comes to energetic and water efficiency and in the management of urban waste.
IFRRU Programme 2020	Investments in urban rehabilitation and energetic efficiency	To support investment in urban rehabilitation and energetic efficiency in the whole national territory, always when the rehabilitated buildings are located in an area marked by the municipality
City Mission	To reach carbonic neutrality until 2030	Porto, Guimarães and Lisbon are amidst the 100 selected cities to integrate the «100 Climate-neutral and Smart Cities by 2030». The three municipalities will have access to 360 million euros to attain carbonic neutrality until 2030. This project was developed by the European Commission.

BENEFITS

PROGRAMME	DESCRIPTON
Benefits related to the IMI	The municipalities can fix a reduction up to 25% of the rate of the municipal tax over buildings (IMI), when the urban buildings are efficiently energetic
Benefits related to the IMT	Urban buildings or autonomous fractions with more than 30 years or located in urban rehabilitation areas benefit from an IMT exemption as long as they comply with certain conditions



Rita Alarcão Júdice

PARTNER AND CO-HEAD
(REAL-ESTATE
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PLMJ

Sofia Nogueira Leite

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LEADING THE WAY

Is the real estate market ready for the important path of decarbonization? Is there a genuine awareness of the critical role the real estate market can play in this very inevitable transition?

The commitments under the Paris Agreement have translated into a general will to implement measures to decrease carbon footprint and to abandon fossil energy sources. The real estate sector, deemed responsible for ca. 40% of carbon emissions worldwide, is in a top position to make a difference.

Notwithstanding the fact that real estate players are clearly motivated to meet the Paris Agreement's goals - photo-voltaic panels on the top of buildings and chargers for electric vehicles are spreading; abandoned rural properties are being used as land for renewable energy production; tenants are asking for green leases, energy saving solutions and more sustainable construction materials and equipment; building certifications (e.g., LEED, BREEAM, VERDE) are setting a trend in the valuation of real estate portfolios - one must ask: is the Portuguese

legal framework ready for the change that is as desired as unavoidable?

In respect of residential and office buildings, the (new) Portuguese legal regime of buildings' energy performance and energy certification requires that the energy needs of new or refurbished buildings are close to zero. This legal regime - which transposed green energy European Directives to meet the goals of the Paris Agreement - aims to promote - within buildings' construction and refurbishment - environmental comfort, adequate thermal behavior, proper energy management, and the self-consumption of electricity from renewable energy sources, as well as larger efficiency and durability of buildings' technical systems. However, apart from minor requirements in the field of electromobility and indoor air quality maintenance systems,

which are imposed on owners of new buildings destined for commerce or services (the failure of which entails the application of pecuniary fines), said legal regime does not seem to disincentivize construction or refurbishment works performed in breach of the purpose of energy reduction, nor to limit the use of buildings with lower energy performance ratings.

In any event, property investors will certainly start considering the capex needed to decarbonize a building, so we will probably see brown discounts being negotiated in a property transaction and consequently more pressure for the necessary decarbonization measures.

Making this transition to carbon neutrality will depend not only on the motivation of owners but also on the legal framework to achieve it. Fostering of renewable energy self-consumption and electric mobility, as well as the complementary adoption of carbon offset measures (such as the installation of vertical gardens on the façade and green rooftops, or the creation of community vegetable gardens and composting areas), require a creative approach to the various challenges that the existing legislation offers, especially in respect of licensing and buildings incorporated under horizontal property (so-called “condominium”), with different owners.

In terms of building occupation, despite the demands for green leases, it is unlikely that landlords will sign off to green clauses – and undertake specific obligations such as energy and water efficiency measures – without adequate incentives, namely from

a tax perspective, particularly considering recent changes in Portuguese lease law, which contributed to a certain degree of uncertainty in respect of the lease legal framework.

Portugal was extremely innovative in the process of bureaucratic simplification and is today one of the leaders in the digitalization of public services. This is an opportunity that cannot be missed, yet we still see few measures. So far, the Portuguese Government has announced the following:

- Supply and installation of solar panels shall be taxed at a lower VAT rate between 01.07.2022 and 30.06.2025
- Green premium is expected during 2022 over personal tax income, in particular individuals' right to tax deduction, up to €500,00 per family, in connection with expenses incurred by such individuals with thermic and hydric efficiency measures and renewable energy production
- Measures to pursue more energy efficiency in residential buildings, in public buildings and in services buildings, will be financed by European Funds (Fundo Ambiental), although subject to the maximum global amounts of, respectively, €300million, €240million and €70 million;
- Lower income families are entitled to vouchers in the maximum amount of €1,300.00 (plus VAT), to allow them to install more modern and efficient equipment at their houses, namely doors, windows, heating or cooling system, solar panels, insulation

- Within industry decarbonization, the Government has approved the relevant criteria allowing entities pursuing energy efficiency measures to benefit from financial support with eligible expenses and in the amount between 30%-65% of the measures in question
- Aiming the reduction of bureaucracy, the Government plans to approve a procedure to facilitate processes within certain types of private projects (e.g., renewable energy, water collection infrastructures, logistic platforms), by eliminating the need for redundant licensing acts, which it expects to extend to other areas namely planning and zoning, industry, retail, services and agriculture

Overall, one would expect not only faster approval of appropriate legal measures, but also more ambitious measures, to support the overwhelming task that is faced by the real estate sector, namely in the form tax incentives, to reward lessors, owners or other real estate investors who are on board with sustainability goals. More than ever, the laws governing real estate activities must be clear and appropriate to the reality of its agents as well as to the objectives of decarbonization. ■

GREEN LEASES

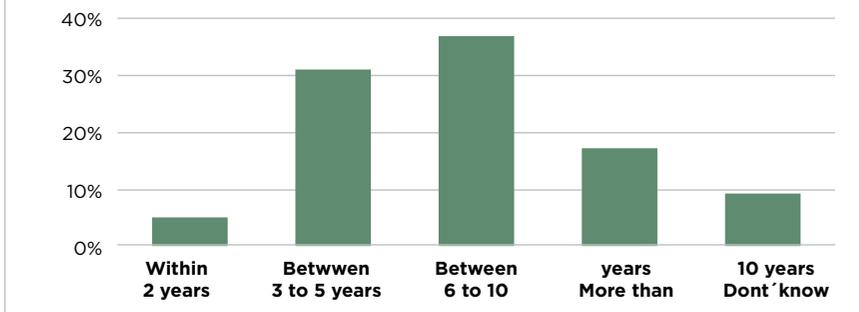
According to the “Annual Sustainability Report 2019” done by Savills Investment Management, **73% of institutional investors see green leases clauses being universally implement between tenants and real estate investment managers by July 2029**, with an average consensus pinpoint September 2026.

With the year of 2030 coming closer, the deadline for all market agents to draw a game plan is tightening, running a serious risk of not fulfilling the goals agreed on the Paris agreement, if passive strategies proceed to be applied, “waiting to see what others do”. It is important to highlight that in most European countries there still is not a legislative framework with clear and objective rules that ought to be fulfilled. In Portugal, the current legislation simply obliges the existence of energetic certificates, the monitoring and reporting of the air quality.

However, as ESG strategies come forward in the real-estate sector, through the environmental impact buildings have, the construction of efficient buildings or the

investment in the modernisation of buildings in an obsolete state, the introduction of the so-called green clauses gains strength, so that it can be ensured the fulfilling of these legal dispositions, even if at first they might be light, they lead to efficient management, that allows for a significative reduction of carbon and that works as an essential instrument for a synergy between the ESG agendas, both of owners and occupants. Moreover, if we consider the significance and the weight of the S in ‘ESG’ referring to the impact buildings have on life and well-being of all citizens.

Expectations of green leases clauses becoming universally implemented between tenants and real estate investment managers



Source: Savills Investment Management Research Study "Annual Sustainability Report 2019"

Even if currently green clauses might be understood as a mere intention of future effort and comprise to the fulfilment of sustainability principle between parties, they will have to inevitably be included in traditional lease contracts, no matter the type of

contract, in order to ensure that landlords and tenants swim in the same direction: towards the goals of carbon reduction and energetic efficiency, simultaneously sharing the knowledge of each's ESG principles, working together for its attainment.



IMPACTS

THE REDUCTION OF **CARBON EMISSIONS**;

THE ESTABLISHMENT OF MEASURES AND EQUIPMENT THAT ALLOW FOR BETTER **ENERGETIC EFFICIENCY**;

THE MANAGEMENT AND THE REDUCTION OF **RESIDUES**;

THE USE OF SUSTAINABLE **MATERIALS**;

INCENTIVES TO THE USE OF 'GREEN' AND SHARED **TRANSPORTS**;

A STRONG SENSE OF SHARING AND GROWING TRANSPARENCY BETWEEN **OWNERS AND TENANTS**;



CHALLENGES

THE **INSUFFICIENT FORMATION** OF MANAGEMENT TEAMS FOR THE FULFILMENT AND COMPLIANCE OF THE GREEN LEASE CLAUSES

ADDITIONALLY **FINANCE CHARGES**

DIFFICULTY IN THE ENACTMENT, READING AND PROCESSING OF IMPORTANT DATA FOR THE **OPTIMISATION OF RESOURCES**

SUSTAINABLE ACTS AND MEASURES SEEN AS **TIME CONSUMING** AND WITH **COSTS**



VALUE-ADD

BETTER QUALITY TENANTS

THE INCREASE OF VALUE OF THE ASSET

THE **MANAGEMENT OF THE ASSET** ACCORDING TO ESG GOALS AND INSTITUTIONAL INVESTORS AND TENANTS

THE **IMPROVEMENT OF THE IMAGE AND REPUTATION** OF THE PROMOTERS

IMPROVEMENT OF THE ENVIRONMENT AND WORK CONDITIONS

MEETING TAXONOMY TARGETS

PICK ONE COLOUR: **GREEN OR BROWN?**

THIS IS A CERTAINTY:
IT'S JUST A MATTER OF TIME

Fact-check: about 75% of the buildings within the European Union are not energetically efficient

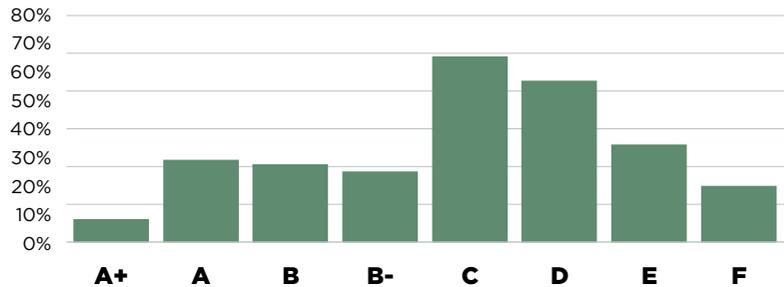
Buildings that do not reply efficiently to the high environmental standards will be seen as obsolete assets, possibly being risk assets in investment portfolios.

If some years ago the whole environmental agenda seemed a far away and optional reality, a leaning of a few visionary companies, today this narrative could not be farther away from the truth. The quite straight-forward choice on its genesis can lead to significantly different paths. Green buildings define as proprieties that fulfil strict sustainability criteria in different operational variants, for instance, high incomes in energetic efficiency. Opposed to 'Brown Buildings' that stand for the significant percentage of built stock that presents considerable energetic loss, due to the higher operational costs both for owners and occupants.

Even if the reasons why 'going green is the only way' are clear and advantageous, these still make many hesitations when it comes to the benefits and income obtained by the enactment of optimisations and sustainability measures, thus creating resistance on the owners' behalf, who do not recognise yet its contribution and relation to financial gain.

In Portugal, according to data made available by the ADENE in the Energetic Certification Building System, out of a total of 1.697.014 buildings (housing and services) certified between the years 2014 and 2022 only 3,1% obtained an energetic certification A+ rating and 10,9% an A rating. More than 40% of buildings with energetic certification issued between 2014-2022 have an energetic of C or D rating and 20% with the energetic E or F rating.

Residential and Services Buildings Certificates issued by energy class (2014 - 2022)

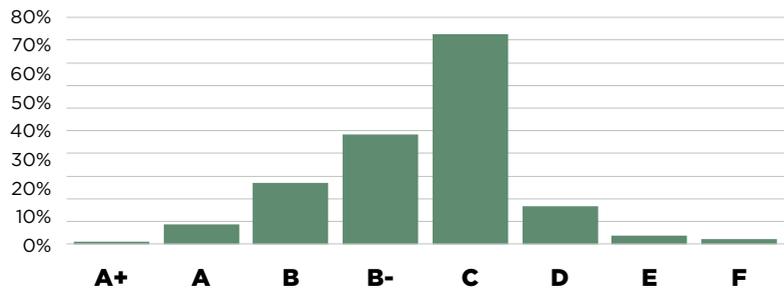


Source: ADENE

The scenery worsens if we consider the energetic certification data of services buildings. Out of the 195.743 certificates issued between the years of 2014 and

2022, only 0,4% had an energetic A+ rating and 4,3% A rating. 46,4% present an energetic C rating and 24,1% belongs to the B- category.

Services Buildings Certificates issued by energy class (2014-2022)



Source: ADENE

According to the 2050 RNC, Portuguese Economy's Carbon Neutrality Long Term Strategy in 2050, the buildings of both services and household will be significant in the decarbonisation through an electrification almost

complete of energy consumption, sustained by a better energetic efficiency attained by the effort of building's insulation through the use of solar thermal energy and heat pumps.

Residential buildings and services:

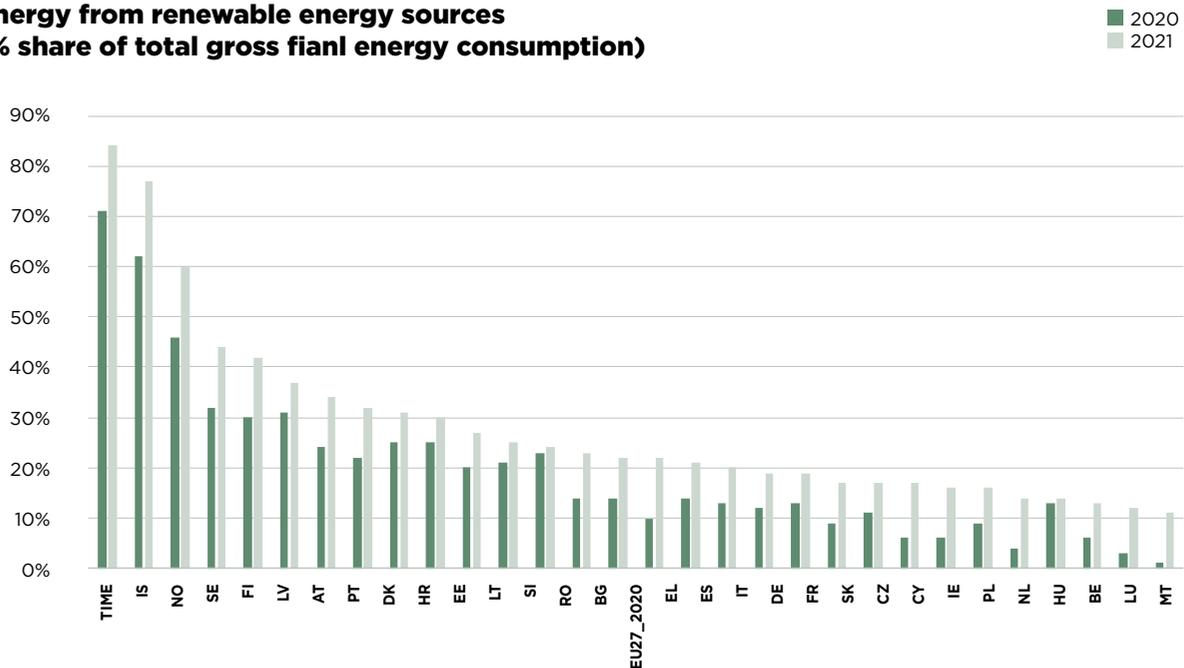
- Responsible for 5% of national GEE emissions;
- Responsible for about 30% of the consumption of final energy;
- Consumed energy associated to the heat supplying, the cooling of the spaces, lighting.

The established plan by the 2050 RNC predicts a reduction of emissions in the residential sector by -97% and 96% and by 100% in the services sector, by comparison to 2005, in 2050, once renewable energies were incorporated in the heating and cooling will be from 66% to 68%.

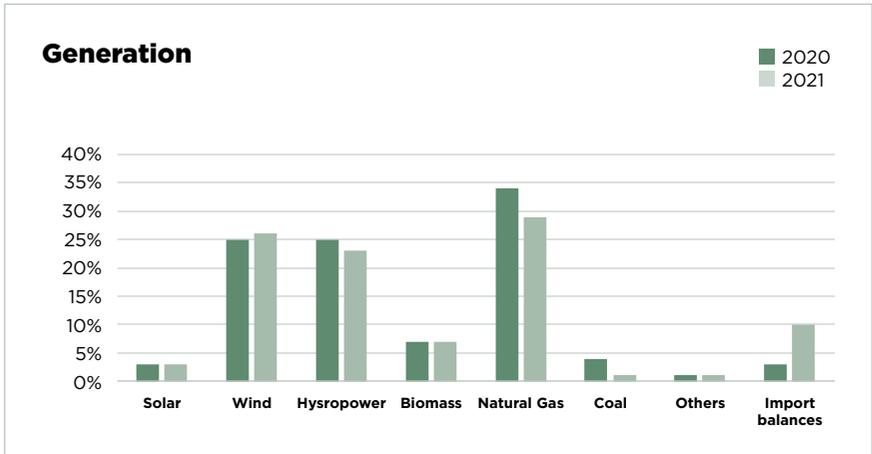
Additionally, a continuous commitment to urban rehabilitation of an obsolete and energetically inefficient built heritage will create an opportunity for the introduction of the improvement of energetic and water efficiency, through the use of low-carbon materials and sources of renewable energy, both of the essence for the fight against energetic poverty.

For the services sector, the plan foresees an extensive electrification accompanied by solar thermal energy for the heating of the water and the prominence of heat pumps for the climatization of spaces.

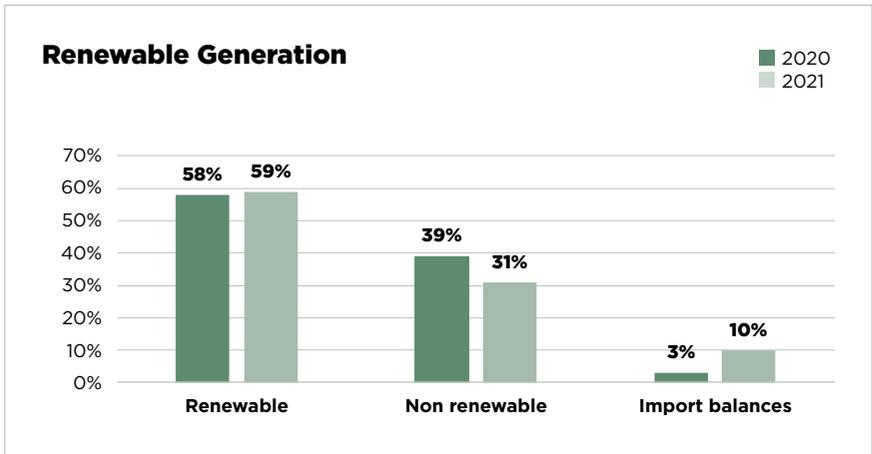
**Energy from renewable energy sources
(% share of total gross final energy consumption)**



Source: Eurostat



Source: REN



Source: REN

According to data published by REN in 2021, the national renewable production fuelled 59% of the consumption. The main renewable source was air that supplied 26% of the consumption and hydroelectric, which stands for 23% of the consumption.

When it comes to non-renewable energy, natural gas fuelled 29% and coal 1%. The balance of exchanges with abroad was of importer for the third consecutive year, which represents 10% of national consumption, being the highest importing balance since 2012.

Portugal has stood out by the amount of produced and consumed renewable energy. In 2020, Portugal went beyond the goal of 34,1% of renewable energy through the substitution of thermoelectric fossil production by renewable energy production. Additionally, according to Eurostat, Portugal is the fourth EU country that consumes the most energy produced by renewable sources of energy, after Austria, Sweden, and Denmark. ■

Green Buildings	Brown Buildings
<p>Higher occupancy</p> <p>Quality Tenants</p> <p>Higher rents</p> <p>Lower operational costs</p> <p>Greater visibility</p> <p>Increased attractiveness</p> <p>Higher market value</p> 	<p>Higher vacancy rate</p> <p>Falling rental prices</p> <p>Increased tenant's turnover</p> <p>Higher maintenance costs</p> <p>Lower attractiveness</p> <p>Stranded Assets</p> 

EU TAXONOMY

A COMMON DIALECT TOWARD A RESOURCE-EFFICIENT ECONOMY

The “European Green Deal” done by the European Commission, has as its premise to establish strategies and to foresee answers that react to environmental challenges, transforming the European economy in a modern, innovative, competitive, resource-efficient economy, in which all players have the same dialect.

Put more simply: the EU Taxonomy aims to be a powerful tool for the fulfilment of the above premise. It will be the key to provide a common language that identifies which are the economic activities

considered environmentally sustainable that can be used by different activity sectors and business, allowing for stakeholders to identify the most sustainable business and technologies.

To match the Taxonomy’s regulation, companies will have to chose to collaborate significantly for one of the established environmental goals, simultaneously compromising not to commit acts that will jeopardise the remaining goals and to fulfil all of the minimal security requirements.

The construction sector and the real-estate market are of the essence for a successful transition into a low-carbon economy, since they represent 40% of the global consumption of energy and are responsible for a similar percentage of GEE. It is expected that the search for assets compatible with taxonomy criteria to increase, being imperative for the buildings’ projects to be in absolute agreement with the taxonomy, creating extra value.



Iris Kempers

ASSOCIATE | SUSTAINABILITY
ADVISOR
SAVILLS NETHERLANDS

EU TAXONOMY

THE GATEKEEPER TO THE SUSTAINABILITY CLUB

Since the implementation of the Sustainable Finance Disclosure Regulation (SFDR), there's been a regulatory drive for investors and other financial market players to become sustainable. However, what lacked was a definition of what that meant. For this reason, the EU commission created EU taxonomy; a set of regulatory technical standards to determine who is environmentally sustainable and who is not.

EU Taxonomy is a “framework to facilitate sustainable investment” that decides whether an economic activity is environmentally sustainable or not. The EU refers to it as both the EU Taxonomy and the Taxonomy Regulation. Although it is not mandatory, and only covers environmental sustainability, EU Taxonomy offers a lot of handholds for society to determine their environmental sustainability and does its best to eliminate greenwashing.

What does that mean in practice? We've already established that this regulation is about determining whether an economic activity is environmentally sustainable or not. EU Taxonomy determines that based on six environmental objectives:

- Climate change mitigation
- Climate change adaptation
- The sustainable use and protection of water and marine resources
- The transition to a circular economy
- Pollution prevention and control
- The protection and restoration of biodiversity and ecosystems

For each of these, there's a specification of the “do no harm”-principle. If you want to be sustainable, you can't have a negative impact on any of these. What that means will follow. Let's first explain these a little further.

CLIMATE CHANGE MITIGATION

This theme is about mitigating climate change; driving down CO2 levels in the atmosphere. This can be done by either avoiding emissions, or capture and storage from the atmosphere. It's similar to the choices we make when cooking; either we avoid making a mess or we clean up the mess afterwards. Since the atmosphere is already pretty messy, both forms of mitigation will help.

In real estate, this means choosing to be self-sustaining in your energy demand by placing solar panels on your roof, or using district heating as a greener form of energy. It could also be to use greenery to passively cool your building in summer, instead of installing air-conditioning units.

CLIMATE CHANGE ADAPTATION

Even with all the mitigation we can do, the atmosphere is still a mess and climate change is happening. We need to deal with extreme weather conditions, heat stress, and floods. Climate change adaptation, then, is about creating a real estate stock that is resilient to climate change.

Practical measures to implement are water-bearing rooftops, possibly even green, to combat heat stress and deal with peak precipitation. Other ideas are water catchment systems in the landscape to avoid floodings, or adding greenery to our cityscapes to mitigate all effects of climate change.

Architecture can also help a great deal in optimizing climate resilience of a building. In the Middle East, for instance, there's

examples of buildings that were designed to make the most of early morning and late afternoon sunshine, whilst keeping the sunlight out at midday. This means the building has plenty of daylight, but even with glass facades it won't heat up like a greenhouse. One such example is the Burj Doha, which uses an intricate pattern of steel "butterflies" that are dense or more sparse depending on the orientation on the building.

THE SUSTAINABLE USE AND PROTECTION OF WATER AND MARINE RESOURCES

Freshwater is a limited resource, and thus it would be unsustainable to squander it. On top of that, our marine ecosystems are vital in keeping our planetary climate stable, providing food, capturing carbon from the atmosphere and regulating weather just to name a few. Therefore, in order to be sustainable, people should not harm our marine environment and be mindful of the use of water.

For real estate, this means installing water-saving fittings, maintaining water quality during new builds and analysing and protecting ecological potential. Think of taps that process a maximum of six litres a minute, or ensuring that groundwater levels are stable during new builds.

THE TRANSITION TO A CIRCULAR ECONOMY

Thomas Rau, the architect, recently remarked; "sustainable conduct is optimization or the existing system. Circular conduct requires changing the system". Which is exactly what the EU commission is trying to inspire by

incorporating this theme into the Taxonomy Regulation.

Transitioning to a circular economy in real estate means rethinking material use. Instead of building the way we used to, which is linear in its use of materials, we need to reuse materials, and minimize the use of material. Where safety requirements often push for the use of more steel, or concrete, circular material use means using as little material as possible and thus generating as little waste as possible. Also, instead of bolting everything down to ensure endurance, circularity means thinking about repurposing (parts of) a building eventually. It requires flexibility.

A great example of a circular concept is the building that houses the Dutch energy company Alliander, redesigned by RAU. Instead of tearing down the existing building and rebuilding on a neighbouring plot from scratch, about 90% of all building materials were re-used.

Another aspect of circularity is the amount of waste generated during construction work, with special emphasis on hazardous materials.

POLLUTION PREVENTION AND CONTROL

This theme concerns the use of specific components or materials in construction and renovation that can be dangerous to our health. Components that emit formaldehyde or other carcinogenic VOCs. In real estate, this means taking a close look at the paints, varnished, ceiling tiles and other components of the building to determine whether a safer choice can be made.

Another aspect of this theme is the presence of pollutants in the soil, and noise or air pollution as part of construction or renovation.

THE PROTECTION AND RESTORATION OF BIODIVERSITY AND ECOSYSTEMS

The most elusive of the six themes is the one that also has the most potential for measures that offer integral solutions across the board. Biodiversity is difficult to measure, and thus difficult to analyse and monitor. Also, for long periods of time it was thought that the urban landscape had very little biodiversity to protect.

This view is changing, and we now know that especially in urban areas we're a lot more dependent on biodiversity than previously thought. Let's look at the issue of coastal flooding. The science isn't clear on exactly how many people on the planet are currently at risk. Some estimates say it's more than 60 million people, others say it could be 250 million people or more. The point is, it's a whole lot of people. And we know that even an unrealistically large reduction of carbon emissions won't stop sea level rise. This will continue over the coming several decades even if we had a way to completely stop all emissions everywhere in the world.

Clearly, reducing emissions alone isn't an effective solution for this major problem. But enhancing biodiversity could be. Coral reefs and mangrove forests provide natural protection to 100 to 300 million people living in coastal areas.

Of course, in real estate, solutions are applied on a slightly smaller scale. By implementing a rooftop garden you can add to biodiversity in the neighbourhood, but also save on heating in winter and cooling in summer. On top of that, it can store water, create a healthier environment for the end user and even quantifiably cut down on sick days from employees.

DO NO HARM - PRINCIPLE

As mentioned before, there's a "do no harm"-principle that's fundamental to EU taxonomy. It means you cannot negatively impact any of the six themes mentioned above. In practice, this creates a narrow path to navigate in real estate. One interesting case study that springs to mind is circular social housing projects on previously un-built land, which wouldn't be sustainable because it does harm to biodiversity and/or an ecosystem. Another case study is that of a wind farm at sea. It can be really great to mitigate climate change, but studies show it could be harmful to marine life.

POSITIVE CONTRIBUTION

Finally, on top of the "do no harm"-principle, EU Taxonomy specifies that you need to demonstrate a positive effect on at least one of the six environmental objectives. What that can look like, however, is only specified for the first two; climate change mitigation and climate change adaptation.

CONCLUSION

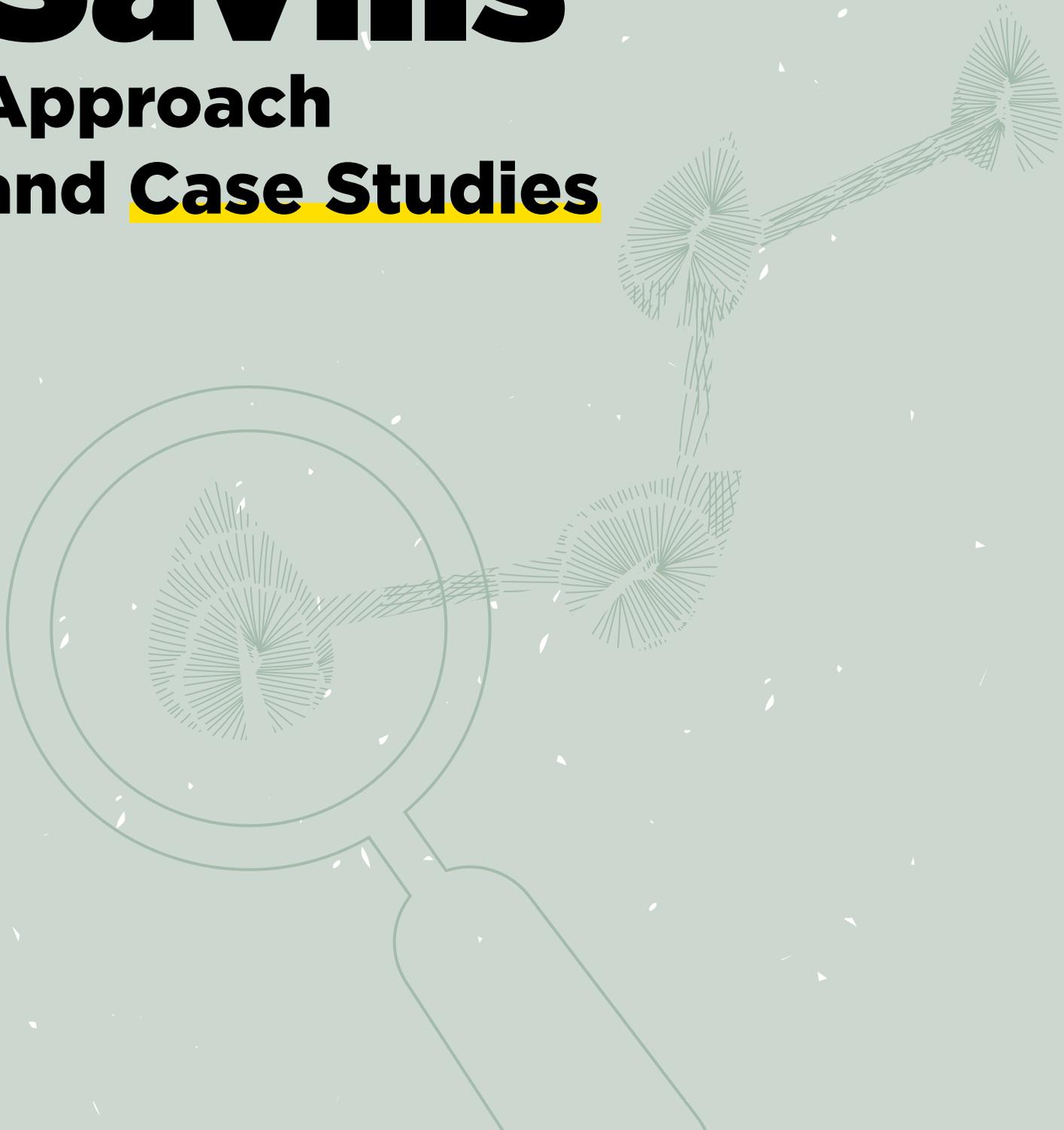
All in all, EU taxonomy shows that the EU commission is taking drastic measures to combat the deterioration of our planet and that they are stepping up to the role of mitigating adverse effects of the global economy. There's a lot of drawbacks that should still be addressed, and in the coming months we'll see the first examples of how EU taxonomy might not work ideally yet. However, if the commission allows us to learn, real estate has been given a tremendous opportunity to innovate in a responsible way and give back to the planet, and society. ■

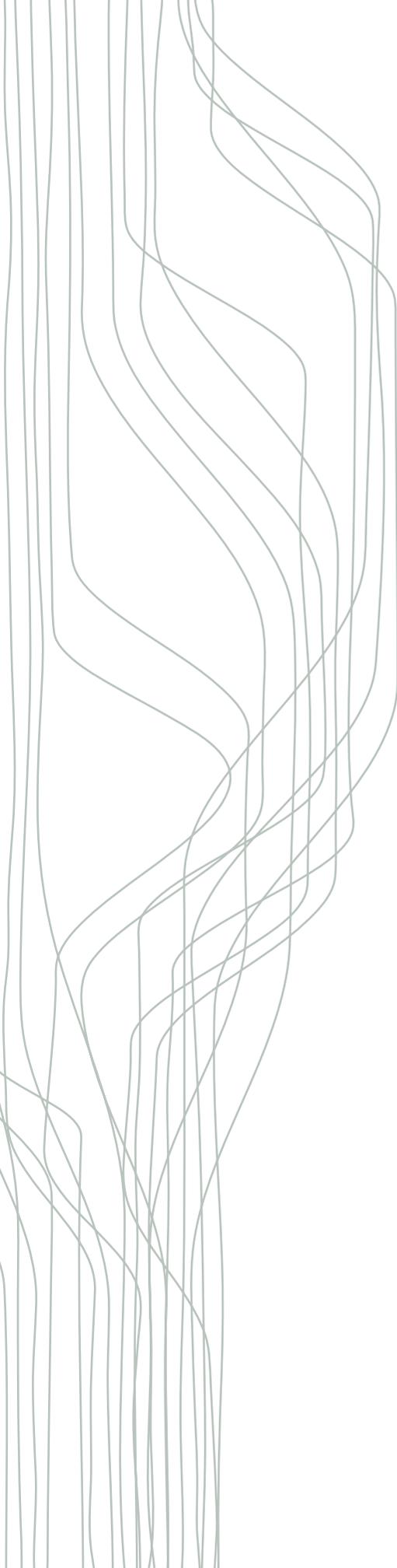




Savills

Approach and Case Studies





SUSTAINABILITY IS A PRIORITY AT SAVILLS

Based on a social-corporative responsible agenda, Savills stand out for achieving changes in ESG goals (Environmental, Social and Governance responsibilities), both business wise and when considering the assets of our clients.

We focus on the visible sustainability outcomes and improvements, with a highly qualified team of architects, consultants, and partners, ensuring various excellent Consultancy and Sustainability services.

Since we believe in the policies that we enact, we have opted on changing our headquarters for a building projected and rehabilitated by us, with sustainability criteria and ESG policies that will allow us to reach the goal proposed by Savills EMA, that of NET ZERO EMISSIONS in 2030.

WORKING TOWARDS A MORE SUSTAINABLE AND EFFICIENT FUTURE

As integral member of BCSD (Companies for Sustainability), Savills, alongside 141 Portuguese companies in or with representation in Portugal, has signed the manifesto in which defining goals are drawn for the efficient strategy against global warming, also considering the guidelines established in the 26th United Nations Conference on Climate Change.

These premises, common to all areas, should have as its focus carbonic neutrality, mitigation, and adaptability to climate change, aiming for the conservation and appreciation of natural resources.

SAVILLS EME

ESG AND

OUR APPROACH

At Savills we recognise the need for urgent action in addressing the climate crisis and rapidly transitioning to a greener, safer, and more resilient economy. We actively engage with the communities where we work to achieve positive social and economic impact and to ensure that local views and needs inform projects which we work on.

1.

GOOD HEALTH AND WELLBEING

We provide healthy workplaces, encourage healthy lifestyles and raise awareness of mental health and wellbeing;

2.

QUALITY EDUCATION

We create opportunities for growth and development to our people and within the communities we operate in;

3.

GENDER EQUALITY

We actively promote gender equality and aim to create a diverse and inclusive environment for all

4.

AFFORDABLE AND CLEAN ENERGY

We aim to maximise energy efficiency, minimize carbon emissions and work continuously towards net zero carbon target globally;

5.

DECENT WORK AND ECONOMIC GROWTH

We are committed to operating responsibly and offering fair, safe, and diverse workplaces;

6.

SUSTAINABLE CITIES AND COMMUNITIES

We work with government, national and local communities to create sustainable places;

7.

RESPONSIBLE CONSUMPTION AND PRODUCTION

We seek to reduce our environmental impacts through active management and responsible procurement.

8.

CLIMATE ACTION

Work continuously to reduce carbon emissions and remain aligned to TCFD (Task Force on climate related Financial Disclosures)

9.

LIFE ON LAND

We expect our suppliers to operate responsibly and seek to protect biodiversity and ecosystems.



MB4

SUSTAINABILITY IN THE HEART OF LISBON

Originally conceived for household in the 80s, the building Miguel Bombarda evolved throughout time to become **one of the most emblematic offices' building in the centre of Lisbon.**

10

office floors

7.477 m²gross
floor area

Saldanha / Av. da República

Two of the principal office's areas of the city in the surroundings of the building

OUTSTANDING LOCATION

Excellent transport network nearby

CHALLENGE & SOLUTION

The idea of renovation proposed for the MB4 building considered 3 main elements: materiality, sustainability, and identity.

Savills tried to give a new character to the building, even if many of the elements present on it today, where the main inspiration for the new proposal. The earthy tones, colours that characterize Lisbon and its urban landscape, the arches that separate the spaces without interrupting them (as it happens in so many Portuguese squares), the natural lighting that breaks through the common and work spaces, associated with pop-culture: this is the reflex of neon art, created exclusively for MB4.

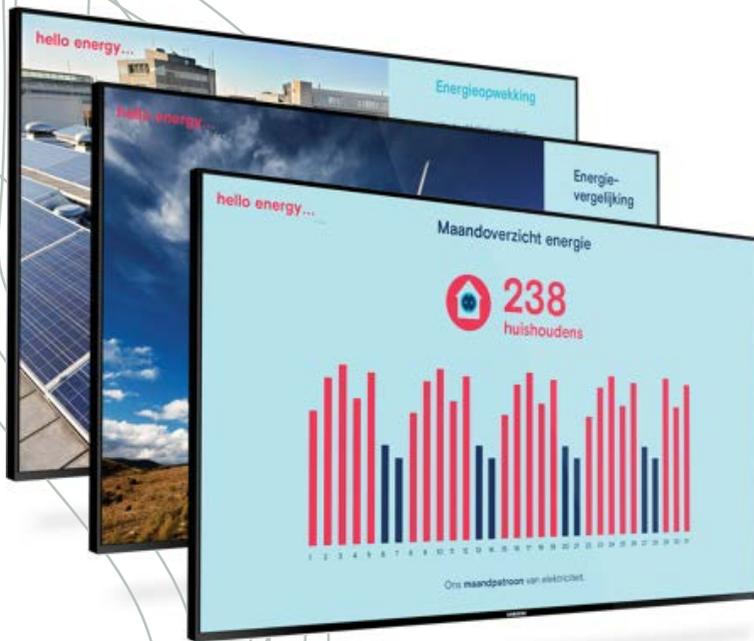
The idea of sustainability is imperative for the building to be even more efficient and for its operational costs to be lower, as well as to reduce the footprint on the planet. From constructive solutions until the choosing of the materials, all elements were considered as parts of a whole.

On the outside, an area with seating places was created, designed to minimize the impact of the entrance for the parking area, integrating the latter in a new interpretation of height, which includes a vertical garden. The office floors are inspired by their original format, meaning that there are no partitions nor floor coating. All infrastructures are new and include LED lamps.

The net-zero transition, and well-being are also essential parts of this project. MB4 has amenities that have a positive impact on the environment and on collaborators' well-being, considering ESG and WELL criteria.

When it comes to sustainability, a state-of-the-art technology was used, providing content and insight on different devices that include sustainability metrics, meteorological and public transportation updates, all of this in real time.

A challenging project that has also given today a place for Savills Portugal current headquarters.



hello energy... ..

A GAMECHANGER FOR US

THE CHALLENGE

Going net-zero is one of the main drivers for Savills and their clients. In order to make that transition, Savills wants to get their own reporting in order and create structures for accountability and governance. Moreover, they want to create a wider impact on society and the environment. They welcomed new expertise into their team, as Nuno Fideles, Associate

Architect, became the first accredited architect BREEAM AP professional in Portugal, together with Bárbara Clemente, first Well AP and other colleagues in the team. Part of their local strategy is to retrofit a number of assets to create a new sustainability standard for both offices and residential buildings.



THE SOLUTION

MB4 in Lisbon, owned by Avignon Capital and housing Savills Portugal offices, serves as a flagship example of inclusive and accessible amenities that have a positive impact on the environment and employee wellbeing, such as a work café, an installation for cyclists, daycare facilities and many more features such as photovoltaic plants that powers 20% of the building. hello energy's data services assisted with the implementation of installation 20 indoor climate sensors, screen services in the building and connecting all energy data points.

With all these insights gathered such as visualising the building's consumption, hello energy helps to start a dialogue with the tenants by inspiring them to take simple and fun actions to improve.

Not just for MB4, but for many more buildings in Portugal.

- Creates awareness and stimulates tenants to reduce their own consumption;
- hello energy provides daily engaging content in different buildings and insights on different devices, including sustainability metrics, real-time weather and public transport updates;
- Shows off the beautiful features of the buildings such as the hybrid electric fleet, the photovoltaic plants, other renewables, air quality monitoring, and daycare facilities;
- Integrates with the latest technology to save on carbon footprint;
- Earns Savills points for BREEAM-in use and WELL certifications and allows for easy reporting on ESG

hello energy goes beyond the technical and theoretical. We now have a daily touchpoint in our building, showing the true impact of how much energy we're saving, in a way that's easy to understand for our clients and tenants.

Nuno Fideles

ASSOCIATE ARCHITECT,
BREEAM AP &
SUSTAINABILITY CONSULTANT
SAVILLS PORTUGAL

THE RESULTS

Ever since covid, the demand for sustainability consultancy has doubled for Savills Portugal. Increasingly more companies have their own ESG targets set, driving this demand. Nuno says: “we even have companies/tenants choose specifically to lease our offices, because our attention to sustainable measures and wellbeing, such as air quality monitoring.” By retrofitting some of their assets, Savills manages to save about 75% of the embodied carbon compared to newly built offices.

- A software solution that engages tenants and other stakeholders
- More tenants choosing Savill’s offices because of their attractive qualities, which increases profit per square meter
- hello energy’s software helps ESG due diligence and reporting features allow better impact metrics
- Paving the way for more impact with a growing network of buildings with active tenant communities

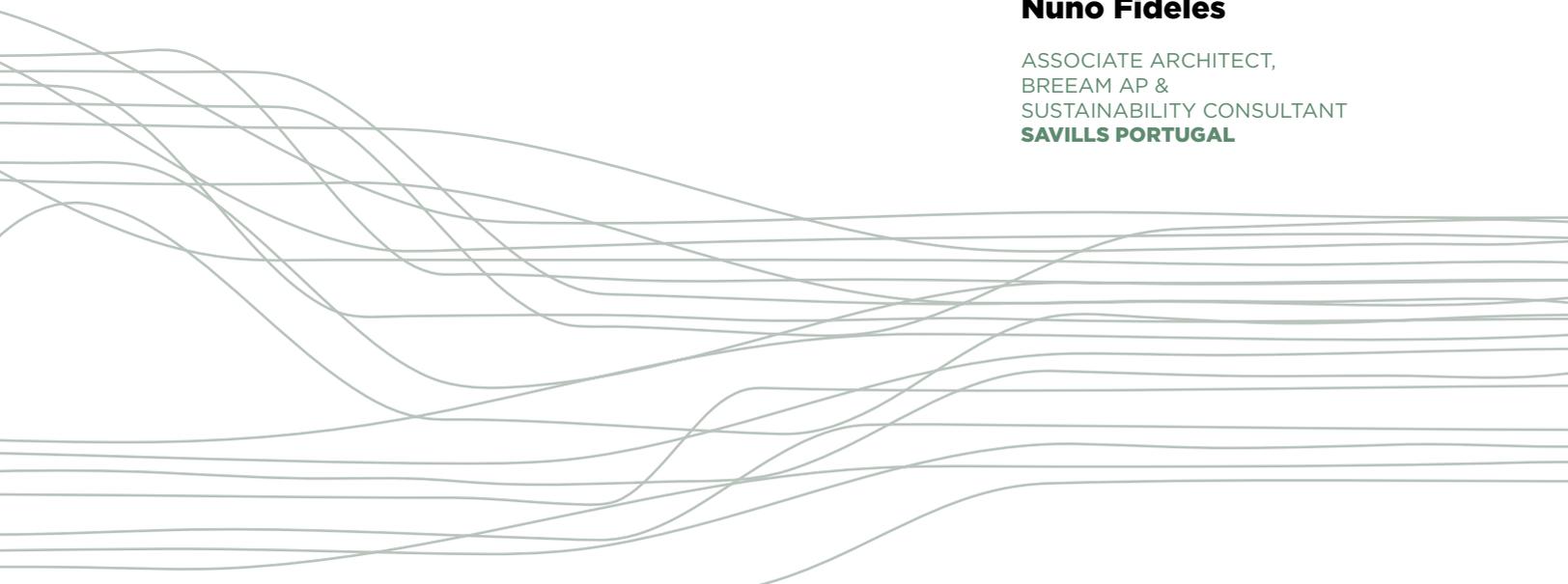


The demand from tenants for sustainability in buildings has increased by more than 200% since Covid. It’s no longer a ‘nice-to-have’ but a ‘must-have’. If in two years you’re building isn’t meeting any ESG criteria, you’re pretty much out of business.

Sustainability pays off for all involved. We’re creating cutting edge (office) buildings together that not only save energy, attract more investors but also creates a happy workforce.

Nuno Fideles

ASSOCIATE ARCHITECT,
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Câmara Municipal de Braga
Câmara Municipal de Cascais
Câmara Municipal de Lisboa
Câmara Municipal de Matosinhos
Câmara Municipal de Oeiras
Câmara Municipal do Porto
Eurostat
Governo de Portugal
Institute for Real Estate Economics
Joint Research Centre
MDPI
Porto Energy Hub
REN
Savills
Sphera
Urban Land Institute
World Green Building Council

Savills Portugal would like to thank all those who contributed to the success of this publication through their know-how, experience and opinion.

Thank you for contributing to a better planet, thank you for being 'Beyond Green'.

**Rita Alarcão Júdice
e Sofia Nogueira Leite**
PLMJ

Paulo Santos
ADENE

Emídio Pinheiro
EGF

José Gomes
Cofina

Nuno Plácido
TOO GOOD TO GO

Eunice Maia
MARIA GRANEL

Emma Sairennen
SITRA

António Martins
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Katarzyna Chwalbińska-Kusek
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BEYOND
 **GREEN**

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