### enterprise europe network

### SECTOR GROUP CONSTRUCTION







### EDITORIAL

#### Welcome to B2B@Concreta 2022

By Céu Filipe - Chair of Cultursal & Creative Industries Sector Group

For two days running, inspiring plenary sessions, informative workshops and targeted 1:1 meetings promise knowledge gain and new business contacts.

Under the topics Sustainability and Circular Economy, this <u>matchmaking</u> will be focused on:

- Technical and technological innovations, solutions and new materials
- Trends in construction, architecture, design and engineering

- The design of the future, in an all-inclusive, visionary way.

The B2B will be running alongside the trade fair <u>CONCRETA</u>, which is much more than a hub for sales opportunities. It is an event about innovation, thought and interaction, uniting industry and professionals to reflect, inspire and instigate architecture and construction in Portugal.

CONCRETA includes a diverse agenda of parallel events, providing the conditions for securing international co-operation and hosting business meetings, as well as materialising networking and brainstorming sessions and finding new clients and distributors.

Of the different themed areas created specially for this edition of the biennial event, worth special mention are the Dream LabEspaço - dedicated to start-ups connected to the fields of construction, architecture and design and creative industries as a way of making use of new talents and making the most of opportunities - and Praças Concreta - a stage for original practices, techniques and products which promise to mark the future, where exercises in provocation, encounter and reflection will take place.

This edition will also see the provision of the digital platform E+E Concreta, specially selected and highly focused on creating a global ecosystem for the sector and forging closer relations between visitors and exhibitors, promoting sharing of experiences, knowledge, business and encounters.



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Overview of the Construction Sector In Portugal The event also embraces <u>Elétrica – Exhibition of Electrical and Electronic Equipment</u>, aimed at professionals in both fields: the exhibition presents the latest innovations and solutions for bringing the market and sustainable requirements into line. This sector is one of the ones which most reflects the rise in construction in Portugal, both in the refurbishment and newbuild market

#### Why become a coorganiser?

Portugal encourages creativity, entrepreneurship, constant innovation and audacity. EEN partners and international SME will find a trusted country at the forefront of technological developments.

By becoming coorganisers, partners will introduce companies in their home countries to Portuguese companies that are innovative, competitive, sophisticated, sustainable, and are a worldwide reference in key sectors such as textiles, fashion & design, home furnishings, construction, architecture, machining & tooling, life sciences, technology, energy, and tourism & travel.

The B2B@Concreta will be a unique opportunity for SME to:

- Find partners and expand their business
- Discover New Products & Services
- Prepare Purchases or Projects
- Meet New Suppliers
- Get Information about the latest trends

#### Why Portugal?

Portugal is a bridge to business, mainly for the following reasons:

- Short transport distance.
- Unique variety of manufacturers.
- Language skills.

- Internationally recognized for their expertise, quality and continuous innovation in the design and production of Construction solutions (architecture and engineering awards).

- Ability of large construction and public works companies to develop projects in different locations and with specific technical requirements (highways, bridges, public housing, tourism infratructures, dams, etc.).

- High motivation to technological modernization and integration of R&D dynamics in projects.
- A door to Portuguese speaking countries (>261 M people).
- Attractive telecommunications infrastructure.

A country with 18 industrial clusters, 26 collaborative laboratories, 30 Interface Centers for Technology, 23 tech parks,
158 incubators and 17 Digital Innovation Hubs (DIH)

- 3rd year in a row as the world's leading destination.





## ABOUT THE NEW CONSTRUCTION SECTOR GROUP

The Enterprise Europe Network (EEN) is the largest services provision network in the world to support SMEs and offer assistance to innovate and grow in the international market. The Network consists of more than 600 organizations, including chambers of commerce and industry, institutions that support research, innovation and entrepreneurship, research and technology centres, with presence in more than 60 countries in Europe, Middle East, Asia and America. The Network member organisations employ more than 3.000 experts providing tailored services to SMEs. These experts, combining their international business expertise with local knowledge, have teamed up in 15 key sectors to provide customised support and advice.

The Construction Sector Group focuses on the construction ecosystem including activities carried out during the whole lifecycle of buildings and infrastructures. As such, the sector group covers the design, construction, maintenance, refurbishment and demolition of building and infrastructure.

This newsletter publishes twice a year, disseminating information related to the construction sector such as brokerage events, partnering opportunities, success stories etc.





Cluster Habitat Sustentável, recognized since 2009 by the Portuguese government, is a very broad cluster since it involves agents from the raw materials extraction sector to the production of building materials, as well as construction and other activities involving suppliers of goods and equipment for the built environment (Habitat), embracing buildings, infrastructures, and cities. This Cluster had adopted the subject of Sustainability as a dynamic factor for its strategic development.

The Cluster is managed by a non-profit private association named "Associação Plataforma para a Construção Sustentável", founded in 2007 and presenting currently 162 members, from which 112 are companies of different sectors, 12 Industrial associations, 24 R&D centres, and 14 other public and private agents.

The Cluster aims to create synergies among its members for the development of new products, technologies and building systems, and new practices for sustainable cities, leading to innovation through sustainability, aiming for more competitiveness. Sustainability is, from the beginning, the driving force for innovation and the desired transformation for the Cluster, with an impact on economic, social, and environmental aspects. In 2015, the organization received the "Gold Label" from the European Cluster Excellence Initiative, which identifies the best cluster management organizations in Europe. This classification was successfully renewed in 2018, a fact that was noted with great satisfaction by the repercussion and international recognition of the Cluster.







Cluster Habitat Sustentável aggregates the Habitat chain value leading to the integration of products, solutions and systems in all construction processes.

Therefore, one major group involve companies producing materials and products, including the extractive sector, ceramics, mortar, cement and concrete, metals and composites, plastics, wood and derivatives, paints and varnishes and waste recycling, among others.

Another group is composed by the construction sector and services related to building activity, engineering, architecture and systems for the built environment, acclimatization and domotics. In this last area, some companies are also involved in the Portuguese ICT Cluster. Finally, the real state sector is also present, creating a bound between the production sectors and markets. In all of these sectors in the Habitat value chain the current challenges related to circular economy, digital transformation and efficient use of resources are critical for the cluster companies' sustainability and future competitiveness.

Its main activities are divided into six areas, which are "Intercluster collaboration and participation in international networks"; "Promotion and dissemination of the Clusters and its members"; "Intelligence, monitoring e evaluation of the Habitat value chain and the Cluster itself"; "Working groups cooperation and promotion"; "Cluster capacity building"; and "Cluster management and coordination".

"The Sustainable Habitat Cluster, managed by the Platform for Sustainable Construction Association, is responsible for managing and monitoring the DAPHabitat System. The DAPHabitat System is a registration programme for specific Environmental Product Declarations (EPD) for products and services in the habitat sector, based on objective and independent criteria, aligned with ISO 14025 and EN 15804. These documents provide information on the environmental performance of products and services and are verified and certified by an independent third party. The Portuguese DAPHabitat registration system allows any interested entity to request the development of Product Category Rules (PCR), which guarantee the transparency of the EPD elaboration process, and also allows any entity to register its EPD, regardless of its country of origin.

In order to ensure the highest quality and international acceptance of EPDs, the DAPHac agreements with the ECO Platform, an international organisation that brings together Europe EPD registration programmes for the construction sector. EPDs registered by the DAPHabitat registered and digitalised in the European database, allowing the highest comparison of the performance of construction products and services."

Read more at: www.centrohabitat.net







#### EUROPEAN GREEN TECH IN THE SPOTLIGHT: MAKING CONSTRUCTION SUSTAINABLE

By Dr Sonja Angloher-Reichelt and Dr Katerina Tzitzinou

Green is the new black. There are no doubts about it. We've all heard the slogans and buzzwords, but we might still be wondering, what does this really mean? How can companies get on board and go green, especially those working in specific sectors, like the building one, with their own distinct challenges? How do the latest sustainable solutions help deliver economic growth? What kind of help does the Enterprise Europe Network offer? Read more at https://bit.ly/3zLL68F

#### JOIN THE PACT FOR SKILLS IN CONSTRUCTION

#### By the European Construction Industry Federation

The Pact was initiated by the European Commission in the framework of the "EU Skills Agenda", and developed by the European Construction Industry Federation (FIEC) and the European Federation of Building and Woodworkers (EFBWW), together with the European Builders Confederation (EBC), to mobilise concerted efforts among private and public stakeholders for quality investment in Vocational and Educational Training (VET). This initiative aims at upskilling and reskilling the construction workforce in particular as regards green and digital skills. It will benefit the European construction sector and up to 3 million of its workers across the EU.

Stakeholders' commitments will revolve around 5 key principles:

- 1. Building strong partnerships, including with VET institutions;
- 2. Monitoring occupational supply/demand and anticipating KSC needs;
- 3. Working against discrimination;
- 4. Attracting more young people and women in the sector;

Promoting a culture of lifelong learning for all, supported by adapted incentive. Read more at <u>https://www.fiec.eu/news/news-2022/join-pact-skills-construction</u>

#### CONSTRUCTION ACTIVITY IN EUROPE RECOVERING BUT WAR IN UKRAINE IS SET TO HAVE AN IMPACT

By the European Construction Industry Federation

"The construction sector, which had already proved to be more resilient than other sectors the previous year, also began recovering with strong growth in the first half of 2021. Overall, total investment in construction increased by 5.2%", says Rüdiger Otto, FIEC Vice-President for Economic and Legal Affairs, commenting on the release of FIEC's Statistical Report.

Investment in construction is also expected to resume growth in 2022. Nevertheless, construction activities are already being impacted by the war in Ukraine which means that projections for this year are likely to change while those for the medium term remain uncertain.

Read more at https://www.fiec.eu/news/news-2022/fiec-releases-statistical-report-2022



#### CONCRETE FROM 100% RECYCLED AGGREGATE

By Miroslav Kývala, Executive of Red Beton, www.redbeton.cz

The rapid growth of the world's population and its concentration in large cities brings a great rush to the construction industry and the production of building materials. It is the recycling of building materials, that is an effective solution to meet the requirements for the construction of new buildings and at the same time achieve sustainable development on earth.

Construction rubble can be processed directly at the place of its origin, i.e. on the construction site, and then it can be used to produce concrete with comparable properties to that of concrete made from natural aggregates. This saves both the costs of transporting it to the landfill and the associated carbon footprint. This fundamentally reduces landfilling, which brings significant economic savings and has a positive impact on protection of the nature and therefore on overall sustainability on earth. Last but not least, the mining of natural aggregates and its transport to concrete plants will be reduced, which again saves both transport costs and the carbon footprint and what is even more important, the resources of natural aggregates are limited and therefore we must use them economically.

Today's European standard for concrete production EN 206 allows only partial replacement of natural aggregates in the production of concrete. But our solution makes it possible to use up to 100% recycled aggregate for the production of concrete.

For the time being, structural engineers and designers adhere to the EN 206, but concrete from 100% recycled aggregate can be used without problems for building foundations, underlying structures, infill concrete, noise-absorbing elements, etc. If the designers accepted the specific properties of recycled concrete in the project, it could also be used in structural elements of buildings and thus find a much wider application.

It is necessary to change the established practices in the recycling of construction waste and to increase the use of recycled building materials in the construction industry, so that we can ensure sustainable development on earth, as the new waste legislation of the European Union ultimately requires.







### INTERNATIONAL CONFERENCE ON CONSTRUCTION, ENERGY, ENVIRONMENT AND STAINABILITY



The second International Conference on Construction, Energy, Environment and Sustainability – CEES 2023 – will take place in Funchal (Madeira Island), Portugal, from 27 to 30 June 2023, and is being organized by <u>Itecons</u> in collaboration with CONST-NRC (Canada).

Globally, we are faced with resource scarcity, climate change and increased urbanisation. More than ever, there is a need for increasing the sustainability of the built environment and construction activities.

As concerns with sustainability, efficiency and wellbeing continue to grow, the construction industry must not only continue to embrace new technologies, processes and materials, but also continue to address the many challenges facing the existing building stock. The International CEES conference aims to bring together construction, energy and environment researchers, engineers, planners, stakeholders and policy makers to address these challenges.

In order to achieve a sustainable built environment and a sustainable construction activity, professionals from a wide range of backgrounds need to work together, from researchers working on the development of innovative construction materials and technologies, on building physics and energy performance, or on studying the environmental effects of manmade infrastructure, to those working towards the adoption of the industry 4.0 principals or those working in a more regional and urban scale, all the while without neglecting the social and economic aspects of sustainable construction and housing.

In this context, we are looking for contributions related with, but not limited to, a wide range of multidisciplinary topics, which are arranged in seven general themes:

- Construction materials and technologies
- Building physics
- Energy
- Water and sanitation
- Environment
- Construction and industry 4.0
- Community challenges and policies

Read more at: <u>website da Conferência CEES</u>



#### SYSTEM FOR ENVIRONMENTAL PRODUCT DECLARATIONS FOR THE HABITAT



In order to identify and reduce the negative impacts coming from the production activities of the habitat value chain, it is important to study the products and services environmental performance in this value chain. The environmental declaration of type III are based on Life Cycle Assessment (LCA) studies, which aim to identify the potential environmental impacts of products/services. Therefore, the Environmental Product Declarations (EPD) appear as a communication tool of environmental information of products/services ensuring its scientific validity, once it is a document verified by a third part independent prior to publication.

The DAPHabitat System appeared in order to cooperate in the preparation and publication of this type of documents in Portugal, being a national registration programme of Environmental Declaration of type III for products for the habitat.

The DAPHabitat System was built within the scope of project "approved within the framework of a Collective Efficiency Strategy of the Sustainable Habitat Cluster", and aimed to develop a verification and registration system, with national and international visibility, for Environmental Product Declarations (EPD) specific for products of the habitat, based on objective and independent criteria, allowing for the realization and availability of PCR (Product Category Rules) that substantiate the creation of EPDs that are accurately validated on a database with public access.

Read more at: <u>https://daphabitat.pt/</u>

#### **EMPOWERING CONSTRUCTION SMES TO BUILD A SUSTAINABLE EUROPE**

European Builders Confederation - EBC Manifesto 2019-2024

After a long financial crisis, construction SMEs are on the path to recovery, but stronger support from the European Union is still essential. Both, the European Parliament and the European Commission must focus on improving the political environment and economic framework to truly value construction SMEs for what they are: the backbone of the economy.

We need an enabling framework that will empower construction SMEs and craftsmen to build a sustainable Europe defined by:

- Inclusive Economic Growth
- Sustainable Buildings
- More, better and safer jobs
- A fair internal market
- A digital single market
- Suitable standards

Read more at <u>https://bit.ly/3OQ1gSD</u>



#### **NEW EUROPEAN BAUHAUS – BEAUTIFUL, SUSTAINABLE, TOGETHER**

#### Regenerative Design Criteria

The New European Bauhaus is a creative and interdisciplinary initiative that connects the European Green Deal to our living spaces and experiences. In order to pull to pieces the disciplinary and sectoral silos that have proven to diminish or negate the effectiveness of past sustainability efforts, the New European Bauhaus should function cohesively, across clusters, disciplines, and sectors, as well as modes of ideation and production, with the aim of exploiting the regenerative potential of building sector activities and building artefacts.

The objective of a regenerative design process is to create buildings, cities, and settlements that:

- Store more anthropogenic carbon than they emit;
- Generate more energy than they use;
- Enhance rather than deplete biodiversity;
- Incentivise the restoration and expansion of natural landscapes as critical preserves or, where appropriate, renewable material sources;
- Take fullest advantage of natural ecosystem services rather than seek to technologically replicate or replace them;
- Siphon off the waste streams of industrial and consumer activities through value-added processes that transform detritus into new forms of 'raw' industrial material;
- Prioritise durability repair, maintenance, upgrade over the construction of new buildings and the consumption of material and energy it entails
- Safely and securely house all citizens but especially those underserved populations who continue to struggle for access to the barest of shelters;
- Engage citizens in the transformation of their communities;
- Re-enfranchise communities whose deep cultural knowledge has been at best ignored in an era of global economic exchange; and
- Use the power of digitised data collection, parametric modelling, and systems optimisation to continually reassess and adjust the ways in which our constructed environments perform with respect to the health of the human and terrestrial metabolism.

Read more about the "Conclusions of the High-Level Workshop on 'Research and Innovation for the New European Bauhaus', jointly organised by DG Research and Innovation and the Joint Research Centre" at <a href="https://bit.ly/3BwutiE">https://bit.ly/3BwutiE</a>





#### B2B Virtual plasma Surface Engineering 2022

5 - 23 September – online and presencial – Germany

The PSE 2022 - International Matchmaking is an important part of the International Conference on Plasma Surface Engineering in Erfurt (DE). The scheduled B2B-Meetings offer an ideal opportunity to identify potential cooperation partners and to establish interesting business contacts. Every participant selects his conversation partners individually and has 20 minutes to exchange about projects, products and services.

More information.

#### **B2B@CONCRETA 2022**

#### 13 14 October - online and onsite - Porto - Portugal

The match-making event brings together companies (buyers as well as suppliers) from a large number of European countries. This is a unique opportunity to generate new business contacts and contracts. The model is time - and cost efficient and result in business! Meetings will take place in a dedicated area and will be arranged in advance by means of this website.

More information.

#### B2B Projects4GreenEnergy: Connected

8 – 9 November – online – Germany

The Saxon Energy Agency (SAENA) & the Enterprise Europe Network invite you to join the online event with focus to companies, research institutions, universities and cluster that are active in the fields of energy and greentech. More information.

# MEETINGS & CONFERENCES - Build & Connect 2022, Towards the zero-carbon home : innovations and lifestyle changes

22-23 November – onsite – Strasbourg, France



Build & Connect aims to accelerate and massify transformations in the building sector to put it on a sustainable path towards decarbonisation by 1) enabling the exchange of pioneering practices and technologies to accelerate and deploy them on a large scale, 2) by bringing together players who are willing to act, it federates professionals wishing to accelerate the ecological and digital transformation of the building sector.

The conference is organised by the only French competitiveness cluster dedicated to innovation in the sustainable building sector: The Cluster Fibres-Energivie. It is supported by 15 sponsors in the manufacturing, engineering, real estate, finance and insurance sectors and has made its mark as a major event in the calendar



in the large cross-border region made up of the Grand Est region of France Northeastern France, Switzerland, Belgium and Germany.

The event brings together some 800 decision-makers for a program of high-quality lectures and discussions. In parallel with the Build & Connect conferences program, Enterprise Europe Network organizes one-to-one meetings between the participants to enhance discussions and to foster cross-border partnerships in the construction sector.

More information

#### Building Green 2022 exhibition in Copenhagen November 2022

Matchmaking with Danish SME's within Sustainable Construction and Materials during the Building Green 2022 event. We run two sets of matchmaking:

- ON-SITE November 2<sup>nd</sup> and 3<sup>rd</sup>
- ONLINE November 9<sup>th</sup> and 10<sup>th</sup>

Building Green Copenhagen is the largest sustainability event within the construction industry in Denmark. Here, all parties in the construction industry meet for inspiration and exchange of experience to boost sustainable construction and architecture in Denmark. You can meet and share experiences with architects, contractors, entrepreneurs, city planners and others with an interest in sustainable construction and architecture at Forum in Copenhagen.

For two days, the November 2nd and 3rd 2022, you can experience an extensive program on-site with inspiring Danish and international speakers and interesting debates on 5 stages, and a large exhibition with sustainable solutions and products for construction. It will be possible to book <u>1:1 Meetings</u> with exhibitors ON-SITE and the week after ONLINE.

Topics addressed: Sustainability; Materials; Innovation; Biodiversity; Wooden construction; Biomaterials; Construction process; Creative Placemaking; Climate adaptation; Infrastructure.

Please sign up as OPI for this event: <u>https://buildinggreen2022.b2match.io/</u> - And please share with your construction sector SMEs.

This is an easy way to meet with Danish companies to see if a co-operation could be established.

#### **CONCRETE ROADS 2023**

25 to 29 June 2023 in Krakow, Poland



The Polish Cement Association, together with EUPAVE - European Concrete Paving Association and their partners will hold the 14th International Symposium on Concrete Roads, from 25 to 29 June 2023 in Krakow, Poland. Concrete roads are important elements in responding to challenges that are not needed in the future in terms of infrastructure. Environmental protection requires strong action, among others in terms of reduced CO2 emissions not only at the construction stage, but throughout the entire life cycle of the pavement. In turn, the growing intense car movements, including heavy traffic, make strength more and more important. Find out more: <a href="https://concreteroads2022.com/pages/25">https://concreteroads2022.com/pages/25</a>





### **PARTNERING OPPORTUNITIES**

**BOPT20220728009** - A Portuguese company is specialized in precision machining, mechanical project, development and manufacturing of control jigs, robot tools and part positioning apparatus for the control of productive processes. The SME uses innovative equipment, high and fast precision technology. The SME is looking for subcontracting or manufacturing agreement and is also looking for commercial agency agreement with partners with knowledge in mechanical engineering, automotive, food, power and nuclear industries.

**BOCZ20220630011** - Czech SME specialised in production of concrete from 100% recycled aggregates, obtained by recycling construction waste, is offering cooperation based on commercial agreement to companies from Austria, Germany, Switzerland, Netherlands, Sweden.

**BOTR20220726015** - A leading Turkish company in elevator sector has overspeed governors, tension pulleys, sheaves, safety gears, flexible cable flats, lubricators, compensation chain and accessories, cabin locking mechanisms etc., in its product range. In order to expand its market, the company offers distribution services, commercial agency, manufacturing and acquisition agreements.

**BOGR20220722009** - Greek company that is specialised in the production of prefabricated elements from concrete and prestressed concrete, which combine significantly low costs as well as stability insurance seeks, business partners.

**BRGR20220719019** - A Greek construction company, operating since 1982, is looking for permanent concrete safety barriers, supporting passive road safety and any other road applications. CE certification and EN 1317 testing are required. The company is Interested in supply or license partnering.

**BOHU20220719015** - The main activities of the Hungarian-based company are the production of process pipelines, high-quality construction of steel structures and various sheet metal works. The company has many years of experience in assembling and welding both carbon steel and stainless-steel units. The company is offering to act as subcontractor.

**TOCZ20220715011** - An innovative Czech company focuses on nanotechnologies that improve life and the environment in cities. Due to the photocatalytic effect, outdoor facade coatings ensure the self-cleaning function of building surfaces and, in addition, reduce emissions around houses and decrease the intensity of solar radiation, which causes to cool the surface. Partners are sought for a commercial and distribution agreement with technical support.

**BOLT20220707010** - A Lithuanian company offers its production capacities for small to medium-scale production in the field of wood and plastic. The company consists of highly educated engineering personnel with long years of experience in the manufacturing industry which provides services and full help for companies in need of high-end products. The company itself is young and has a big interest in both long-time partners and/or short-term agreements.

**TOPL20220707006** - Polish producer of metal construction materials (material roof support, installation feet, channels, pipe clamps, etc) with 60 years of experience offers its technology and is eager to enter foreign markets.



They provide support in assembly and service for devices manufactured by the company as well as technical consultancy and support for constructors in choosing the right technology.

**BRPL20220701005** - A Polish company is looking for producers and suppliers of prefabricated wooden houses, pergolas, and aluminium winter gardens. The firm is interested in single-storey (optionally with mezzanine), modern-looking houses with a tongue and groove siding. Pergolas should have an electric sliding roof, and winter gardens' walls also should be movable. Cooperation in the form of a supplier agreement is requested.

**BOPL20220316021** - A Polish company specialising in the design and construction of wooden and garden architecture as well as wooden furniture is looking for partners interested in contracts for production and distribution services.

**BOPL20220620008** - Drabest is one of the leading Polish companies in this industry. They offer steel, aluminium, garden and home ladders in various options. Distributors of ladders, scaffoldings and shelving sought.

**BOFI20220622009** - A Finnish SME produces lighting systems for business premises such as offices, warehouses, terminals and production facilities as well as for outdoor use. The products can be tailored to each customer and they include features like motion and daylight detectors, adjustment of dimming, color temperature etc. The SME is searching for distributors and agents.

**BOGR20220628009** - A Greek company with 40 years' experience in the field of processing, manufacturing and setting up aluminium/steel double-glazed frames (doors, windows, pergolas, etc.) offers double-glazing with greater energy efficiency and luxurious showrooms through a manufacturing or franchise agency agreement.

**TOES20220418008** - The Spanish company specialised in satellite radar and artificial intelligence technologies, offers its solution for large engineering works control and monitoring. The company is looking for partners within the civil engineering sector wishing to adopt new digitalized tools for infrastructure monitoring.

**BOTR20220623016** - A Turkish construction chemicals producer with 35 years of experience in the market known for its high-quality products grouped in seven different headings such as epoxy and polyurethane based floor coatings, special paint and protective coating products etc looks for distributors, commercial agents and offers manufacturing and private label manufacturing agreements.

**BOUA20220616003** - The Ukrainian company is looking for partners in the design of buildings and structures to conclude a contract or outsourcing.

**TOAT20220621002** - An Austrian SME developed a solution to visualize the exact location from which a sound comes on a picture taken by a smartphone mounted on an apparatus with microphones. The technology is cheap, easyto-use, handy and delivers high-quality results. The technology can be used to localize unwanted noise in the fields of product development, quality control and maintenance to meet regulatory noise requirements or detect defects. Partners are sought for commercial agreements and license agreements.

**BOIT20220615005** - A group of Italian entrepreneurs have created a digital ecosystem based on building information modelling, mixed reality and artificial intelligence to integrate in a single model the useful information in every phase of the life cycle of a boat. It reduces possible design errors, costs and times, obtaining product/process optimization. The team is looking for partnership via outsourcing or subcontracting agreements.

**BRES20220610001** - A Spanish company specialized in asphalt and road construction with more than 70 years of experience in the sector, looks for solid bitumen and bitumen drum melters for making different types of asphalt mixes in its manufacturing process. The firm is interested particularly in products that can already be found in the market. The Spanish company is looking for cooperation partners in the form of supplier agreement.



**BOAT20220609016** - An Austrian manufacturer of customised lightweight construction solutions for ceilings and walls is looking for sales partners/distributors. Composite parts meet the highest demands for economical architectural applications indoors and outdoors. Whether ceiling cooling, ceiling heating, wall heating or acoustic ceilings - almost countless possibilities of lightweight panels for architecture are offered. Lightweight panels for architecture accommodate modern design and offer almost endless possibilities.

**BOCZ20220609002** - A Czech engineering office performs any design work, related to engineering services, mechanical design, project, light assembly works, local sourcing. The company focuses on technical inspections and quality control during production, installation of mechanical components in accordance with customer records and documentation. The company offers cooperation on the basis of an outsourcing agreement.

If you are interested for a specific partnering opportunity, please contact your local EEN partner - <a href="https://een.ec.europa.eu/">https://een.ec.europa.eu/</a>

**BOFR2022022014** - French company developing firebreaks including fireproof and bio-based insulation and binder has reached marketable stage of its products and is now looking for partners to launch industrial manufacture. To this end, the company is looking for investors under financial and/or joint venture agreement to co-develop the industrial production stage

#### BOSK20220314020 Published

A Slovak SME offers works and workforce in the area of locksmithing, welding, electrical and construction sector for developers and companies in Germany, the Netherlands and Austria based on subcontracting or outsourcing agreements.

If you are interested for a specific partnering opportunity, please contact your local EEN partner - <u>https://een.ec.europa.eu/</u>

**TOFR20220222018** - French company developing firebreaks including fireproof and bio-based insulation and binder has reached marketable stage of its products and is now looking for partners to launch industrial manufacture. To this end, the company is looking for partners interested in 1) acquiring a licence and develop the manufacture and sale of the products or 2) co-developing new fire-rated products, according to the partners' needs under R&D cooperation agreement.





### AIDA CCI: www.aida.pt Enterprise Europe Network: www.een.ec.europe.eu European Foundation for Cluster Excellence: <u>www.clusterexcellence.org</u> Quality audit - GOLD LABEL Platform for European Clusters: www.clustercollaboration.eu LiderA - Sustainability assessment system: www.lidera.info General Information about Sustainability: www.theenvironmentalhandbook.com Futurebuild: www.futurebuild.co.uk/ ECTP - European Construction Technology Platform: <u>www.ectp.org</u> Sustainable Build: www.sustainablebuild.co.uk BuildingGreen: www2.buildinggreen.com International Iniciative for Sustainable Built Environment: www.iisbe.org CIB World: www.cibworld.nl BRE - Building Research Establishment: <u>www.bre.co.uk</u> Concreta: www.concreta.exponor.pt Cluster Habitat Sustentável: www.centrohabitat.net.pt





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### Overview of the Construction Sector in Portugal

### Abstract

The **construction** sector has a strategic importance as a driver of growth in the Portuguese economy. Over the years, Portugal has become one of the main destinations for those wishing to invest in the real estate and construction sector. But in a period marked by disruption that, globally, has reshaped the world's largest ecosystem, what can we expect from the future of this sector?

The year 2020 was marked by the beginning of the pandemic caused by Covid-19, which profoundly affected economic activity in the world. The public health measures that were necessary to impose as a way to control the pandemic were reflected in an unprecedented contraction of the economy.

GDP contracted 7.6% in real terms after having grown by 2.5% in 2019, reflecting the effects of the pandemic on Portuguese economic activity. Domestic demand contributed negatively to this variation in GDP, since there was a decrease of 4.6% compared to the previous year, as a result of the contraction of private consumption.

Throughout the pandemic, a lot has been questioned about the possible weakening of the sector. In fact, a large part of the economy was affected and there was fear that new constructions and developments would be stopped.

However, despite the crisis environment, the construction sector in Portugal showed dynamism and resilience in the pandemic, with Investment and GVA in the 1st half of 2020 even recording positive changes.

COVID 19 unbalanced the production and distribution chains of the products needed for construction and brought a consequent increase in production costs, mainly due to the scarcity of raw materials, but also of labor. Even so, the sector was able to remain active, highlighting, for example, the fact that the residential construction segment, in 2020, kept a high level of national and international demand.

However, with the conflict between Russians and Ukrainians, the problems worsened. The war increased the prices of energy, namely oil and gas, further aggravating the high production costs of this industry. The biggest impact on the activity of this sector comes from the increase in the cost of construction materials, mainly iron and aluminum and PVC that are causing the most imbalances, followed by fuels, concrete and steel.

Despite the fact that 2021 was a year of profound changes, with an impact on any industry, similarly to what was observed in 2020, activity in the sector maintained a moderate and overall positive evolution, with Portugal expected to recover its growth trajectory from 2022.

But the transformation in the **construction ecosystem** was already marking the sector before the pandemic, with an evolving market environment, technological progress and new players. Catalysts such as industrialization, new materials, digitalization, stricter regulations on sustainability and safety are redefining the future of the industry for years to come.

The population in general has also changed their perspective and the way they think about their homes and are increasingly looking for a better use of spaces.

Thus, regarding the activity in residential construction, we have observed a proactive response, through the reconstruction and renovation of private spaces and the rehabilitation of residential buildings, which resulted in an increase in the sale of construction materials.

Changes in the way of working, more time at home, the appearance of new working and living models, and the use of more intuitive technological tools have also contributed to a favorable evolution in the area of remodeling.

The commitment to renovating spaces, such as the kitchen, which has become the center of family life, bathrooms and outdoor spaces (patios, swimming pool) in order to make them more pleasant and suitable for studying, working or exercising, is an increasing trend.

The impact of renovation on the civil construction sector brings several benefits, both in economic and environmental terms. This is a crucial vision to encourage the construction sector to play its role in favor of a low carbon economy, a path towards sustainability that the construction sector must also follow.

This is also a European priority for all member states, including Portugal. In 2020, the European Commission presented its Strategy on the Renovation Wave initiative, with the intention of doubling the renewal rate in Europe in the next ten years and contributing to making the European continent carbon neutral by 2050. This is a path that many companies in the construction sector are already following, however there is still a long way to go before reaching all the objectives.

### **Macroeconomic Environment**

According to data published by INE – Instituto Nacional de Estatística in July 2022, the main indicators available for 2021 show the resilience of the construction sector in an economic context conditioned by the COVID-19 pandemic.

If in 2020 some indicators had registered negative variations (-3.7% in buildings and -3.9% in licensed dwellings) or slight growth (+1.3% and +0.9%, respectively, in buildings and dwellings graduates in new construction for family housing), in 2021 there were significant growths in all these indicators, both in relation to 2020 (+8.2%, +8.7%, +12.6% and +11.0%) and compared to 2019 (+4.3%, +4.4%, +14.1% and +12.0%, in the same order).

However, in 2020, even in the context of the pandemic, the **number of companies operating in the Construction sector** grew by 2.1% (+6.0% in 2019). In real estate activities, there was a higher growth, corresponding to 4.2% (+9.5% in the previous year). However, there were decreases in the number of births of companies in both sectors (-18.5% in Construction and -18.3% in Real estate activities).





#### Fig.1 - Weight of births of construction companies and real estate activities in the total number of births

The value and number of **housing** transactions continued to increase, reaching new highs in the available series in 2021. The median price of family housing and the median income of new rental contracts for family housing also recorded successive growth during the two years of the pandemic, more intense in 2021.

In 2021, **Construction GVA** (Gross Value Added) represented around 5.0% of the economy's total GVA, growing by 3.8% in real terms compared to the previous year (+3.0% in 2020). The real rate of change in the economy's total GVA was 4.3%, after the 7.2% decrease observed in the previous year, which corresponded to the first year of the pandemic.

The **Housing Price Index** (IPHab) maintained its growth dynamics, reaching an average annual rate of change of 9.4%, 0.6 p.p. above the growth recorded in 2020.

The median housing appraisal values increased by 9.0%, the number of households transacted grew by 20.5% and the median rent in new lease contracts of family dwellings increased by 7.7% (+7.7%, -11 .2% and +5.5%, in the same order, in 2020).

In 2021, the Portuguese housing stock was estimated at 3,619,109 buildings and 6,002,874 dwellings, which corresponds to increases of 0.25% and 0.32%, respectively, compared to 2020 and an absolute increase of 9,131 buildings and 19,628 dwellings.

In 2021, the median price of dwellings transactions in Portugal was €1,297/m2, having increased +9.0% compared to the previous year. The median price of housing remained above the national value in the



sub-regions of the Algarve (€2,000/m2), Área Metropolitana de Lisboa (€1,813/m2), Região Autónoma da Madeira (€1,436/m2) and Área Metropolitana do Porto (€1,370/m2).

In the period under analysis, 47 municipalities had a median price higher than the national value, located mostly in the Algarve (14 out of 16 municipalities) and Lisbon Metropolitan Area (16 out of 18) sub-regions. The municipality of Lisbon ( $\leq$ 3,531/m2) recorded the highest price in the country. Values above  $\leq$ 2,000/m2 were also found in Cascais ( $\leq$ 3,046/m2), Loulé ( $\leq$ 2,671/m2), Oeiras ( $\leq$ 2,644/m2), Lagos ( $\leq$ 2,368/m2), Porto ( $\leq$ 2,278/m2), Albufeira ( $\leq$ 2,212/m2), Odivelas ( $\leq$ 2,156/m2), Aljezur ( $\leq$ 2,107/m2), Tavira ( $\leq$ 2,083/m2), Lagoa ( $\leq$ 2,073/m2) and Vila do Bispo ( $\leq$ 2,028/m2).

Área Metropolitana de Lisboa and Algarve showed price differentials between municipalities of more than €2 000/ m2.

In 2021, the median rent of the 87,349 new rental contracts for family housing in Portugal amounted €6.04/m2, up 7.7% year-on-year (+5.5% in 2020). There was also a 9.4% increase in the number of new contracts signed in relation to the previous year.

The value of rents was above the national value in the sub-regions Área Metropolitana de Lisboa ( $\leq 8.90$ / m2), Algarve ( $\leq 6.85$ /m2), Área Metropolitana do Porto ( $\leq 6.51$ / m2) and Região Autónoma da Madeira ( $\leq 6.33$ / m2).

Área Metropolitana de Lisboa concentrated more than a third of new lease contracts (29,919). Área Metropolitana de Lisboa and Área Metropolitana do Porto together accounted for 52% of total new contracts in the country and the Algarve for 5.8%. Baixo Alentejo had the lowest number of new leases (438).

Among the 308 municipalities in the country, 32 municipalities had incomes above the national value. Lisbon presented the highest value ( $\in$ 11.24/m2), with the emphasis also on those with equal to or greater than  $\in$ 7.5/m2: Cascais ( $\in$ 10.95/m2), Oeiras ( $\in$ 10.00 /m2), Amadora and Porto (both  $\in$ 8.85/m2), Almada ( $\in$ 8.58/m2), Odivelas ( $\in$ 8.43/m2), Loures ( $\in$ 7.90/m2), Matosinhos ( $\in$ 7.83/m2), Loulé and Albufeira (both  $\in$ 7.63/m2) and Lagos ( $\in$ 7.53/m2).

In 2021, the average annual rate of change of the new housing construction cost index was 5.7%, i.e., 3.6 p.p. above that observed in 2020. The acceleration of the index resulted from the growth of the two components: materials registered a change rate of 6.2% (1.2% in 2020), while the labour force increased by 5.1%, i.e., up 1.8 p.p. more when compared to the previous year.

For 2022, the **construction sector prodution** is expected to increase more than 3.3%, with the building construction segment growing by 1.6% and the civil engineering segment increasing by 5.2%.

Concerning the housebuilding, in 2021, the volume of production in the residential segment grew around 4.5%, in real terms.

The residential segment maintained a high level of demand, both domestic and international, and continued to benefit from historically low interest rates. As a result, companies operating in this segment of activity presented a very favorable performance, particularly those that perform repair/maintenance work on residential buildings. Thus, repair & maintenance works continued to take on the most dynamic role within the residential segment, increasing at a rate of 5.2% in real terms, while the production of new housing construction rose 4.5% from the previous year's level in real terms.



The data already known for 2022, refer that the production index in construction went from a year-on-year growth of 1.9% in May to 1.7% in June, there was a slowdown in activity in both segments:

- Construction of Buildings increased 2.0% in June (2.2% in May);
- Civil Engineering went from a variation of 1.5% to 1.2% in June.

In 2021 and when compared to 2020, the **public works market** registered a negative performance, but it should be noted that this year proved particularly favorable, with significant growth, both in the level of bids and in the number and value of contracts. Thus, even with the homologous breaks in 2021, the truth is that the absolute values calculated throughout the year assumed maximums of the entire series, excluding 2020.

The expected evolution for the civil engineering segment production in 2022 is very positive and reflects a reinforcement of the growth rate of this component compared to the previous year, from +6.0% estimated for 2021 to a forecast increase of +3.3% in 2022. With this growth, the production value of this segment is expected to correspond to about 48% of the total production planned for the Sector in 2022. This optimistic forecast is based both on the expectation of the weight of public investment in GDP strengthening (from 2.5% in 2021 to 3.0% in 2022, according to the European Commission's forecasts) and on the increase in the use of Community funding that Portugal receives from various Community Fund Programmes (Portugal 2030, PRR - Recovery and Resilience Programme). On the other hand, there was a very significant increase in the values associated with the public works market in the period 2020/2021, compared to those calculated in the years immediately preceding, what is expected to result, already in 2022, in a volume of works significantly higher than that observed in recent years. This way, a growth of +3.3% in the production of the civil engineering segment in 2022 is being forecast.

### Employment

After a long recession period that began in 2002 and lasted until 2016, the construction sector's production has been growing since 2017 and has been accompanied by an increase in the number of construction workers, from 290.000 (on average) in 2016, to 305.400 workers (on average) in 2021. Facing 2020, the construction employment grew 2.8%, above the total employment of the economy, which increased 2.7%.

As a result of the increase in construction employment along 2021, there was a reduction in the unemployment from the construction sector, higher than that recorded for total unemployment (-15,4% and -14,2% respectively). At the end of December and according to the data provided by the IEFP - Institute of Employment and Vocational Training, 20.500 unemployed people from construction were registered in the employment centers, representing 6.5% of the total number of unemployed registered (316.000). Compared to the same month of the previous year, this total number results from a decrease of 52.400 unemployed, while, as far as Construction is concerned, less 3.700 unemployed were registered.

In Portugal, the total employment in the economy is expected to grow 1.6% in 2022 and 0.5% in 2023 while the unemployment rate is expected to decline to 6.0% in 2022 and to 5.7% in 2023.

In 2022, construction sector production is expected to increase +3.3%, with the building construction segment growing by 1.6% and the civil engineering segment increasing by 5.2%



### Export profile of companies in the Construction sector

In 2020, of the approximately 47 thousand non-financial companies in the Construction sector, 4.6% had an export profile (+1.6% compared to 2010), employing 16.3% of the sector's personnel (-1, 3%) and representing 21.4% of GVA (-4.0%).

The impact of the pandemic in 2020 was mainly evident in companies with an exporting profile, with decreases in all variables for this group, compared to 2019, when compared to the deceleration observed for companies without an exporting profile.

### **Row Building Materials**

**Portuguese Building Materials** are committed to innovation and technology, following new trends and offering a diversified offer of high performance, sophistication and design. This sector includes the sectors of Ornamental Stones, Ceramics, Wood, Cork, Metals, Cement, Plaster, Concrete and Its Works, Plastic, Paints and Varnishes, and Glass, involving more than 12 thousand companies and employing close to 100 thousand people.

With a clear export vocation, it sells to 186 markets, the main ones being Spain, France, Germany, the United Kingdom, Angola and the United States of America. The value of exports is around 3.7 billion euros and has a weight in national exports of goods of 6.1 percent.

Main Export Soctors

Main Export Sectors		
Sectors	2020 *	%
Metals	1.457	42,8
Wood	406	11,9
Ornamental Stones	366	10,8
Ceramics	354	10,4
Cork	244	7,2
Plastic	228	6,7
Cement	217	6,4
Paints and Varnishes	116	3,4
Glass	15	0,5

\* Unidade: Milhões de euros | Fonte: INE; CIP



Stadiums, palaces and hotels. Portuguese building materials are present in demanding works around the world. Superior quality, innovation and design are the reasons that lead to a global presence.

Rockefeller Center in New York, Conference Palace Hotel in Abu Dhabi, Sagrada Familia in Barcelona are emblematic buildings that portuguese materials helped to build or renovate.

Cement, metal, glass and plastic. Cork, wood, stones and ornamental stones, paints and varnishes or ceramics. Portuguese materials have a versatility that allows the realization of the most daring ideas advocated by modern architecture. Cork exterior facades. Pink marble floor, the most crystalline in the world.

Portuguese building materials have a quality and style and that is why they are chosen for bases, finishes and decorations of emblematic works.





### Portugal and the Euroconstruct countries

According to the last Euroconstruct conference held in June 2021, the European construction sector recovered faster than initially expected from the losses suffered as a result of the Covid 19 pandemic.

The construction sector in the Euroconstruct area is estimated to grow by 3.8% in 2021, after a drop of 5.1% in 2020. It is expected that the pre-pandemic level will be reached in 2022 also due to the stronger economic conditions. favorable at the EC-19 level.

However, it is estimated that the growth of the construction industry will be lower than that of the global economy after 2022.

According to the table below, it can be seen that 2017 was the year with the best performance in the construction sector in the Euroconstruct countries. Portugal also saw a growth of 11.2% in that year, having then seen a deceleration in this sector. In 2020, the growth was 3.4%, with an estimated growth of 0.4% in 2021 and 1.0% in 2022.



#### (% change in real terms) **Total Construction Output** Forecasts Outlook Country / Year 2018 2022 2023 2017 2019 2020 2021 Austria 2,5 3,6 3,6 -3.3 3.5 2.4 1.9 Belgium -4,7 1,9 2,1 3,3 1,6 6,1 2,4 Denmark 3.0 1.3 7.8 6,1 2.9 1.8 2.0 Finland 1,9 1,7 -1,8 1,4 1,1 -0,8 -3.0 France 3,9 3,1 2,2 -12,7 7.0 3.3 1,5 Germany 2,1 2,0 2 -0,9 -0,6 0,2 0,2 Ireland 14.9 13.1 -6.4 14.6 9.5 8.4 -8,6 Italy 0,5 1,9 3,4 -4,6 8,7 4,7 3,6 Netherlands 3,9 6,6 3,1 -2,5 -1,6 4,4 4,0 -2,0 5,4 Norway 3,5 1,8 -0,1 2,0 0,2 Portugal 11,2 10,3 8,4 3,4 0,4 1,0 1,4 Spain 5,1 6,4 4,5 -10,4 5,5 6,0 3,5 Sweden 2,7 6.2 -1.0 1,2 1.4 1.4 1.9 Switzerland 0,9 -0,3 0,5 -0,6 0,6 1,2 -0,7 United Kingdom 6,0 -0,1 2,4 -11,1 11,4 5,2 3,2 Western Europe (EC-15) 2,5 2,6 -5,2 4,1 2,0 3,4 2,9 Czechia 7,0 -0,9 2,8 4,5 1.1 -3.6 2.3 Hungary 19,8 25,5 16.3 -7,1 -1,3 7.9 7,6 Poland 14,4 4,9 -2,0 -0.2 2,9 3,3 7,2 Slovakia -12,7 1,9 3.8 8.0 -4.7 8.3 4.3 Eastern Europe (EC-4) 12,8 -3,8 -0,5 8,5 5,1 3,9 3,8 **Euroconstruct Countries (EC-19)** 3,7 3,0 2,8 -5,1 3,8 3,0 2,1

Fonte: Euroconstruct, Junho 2021

In 2020, there were sharp drops in total construction production in most EC countries, with the exception of Denmark, Finland, Portugal and Sweden. The countries with the biggest drops were France, Slovakia, United Kingdom, Spain, Ireland and Hungary.

The expansion cycle of this industry has been notorious in recent years, with above-average growth, with growth prospects until 2023. In terms of non-residential construction, which has been hardest hit by the crisis, a slower recovery is expected in the coming years. Residential construction is expected to continue to show more stable growth rates.

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- AICEP PortugalGlobal
- Enterprise Europe Network AEP
- Enterprise Europe Network AIDA CCI

