CONSTRUCTION 2050

Building tomorrow's Europe today

JUNE 2019

A NEW CONSTRUCTION POLICY FRAMEWORK

Construction stakeholders call upon the European Commission to strengthen the current construction policy context by creating a new vision for the built environment: “Construction 2050: Building tomorrow’s Europe today”. Building upon the results of the current Construction 2020 initiative, the new framework should be based on the following principles:

- **A specific targeted approach to construction** because the sector is at the crossroads of different value chains and its unique nature requires a unique approach

- **An adaptable policy framework** to address the evolving construction ecosystem and the transformation of the industry

- **A holistic approach towards policy making** in order to implement coherent and balanced policies and legislation.

- **A strong partnership between the European institutions, the Member States and construction social partners and stakeholders** to steer the transformation of the sector with the most adequate policies and tools.

Construction stakeholders believe that the current Construction 2020 initiative should be strengthened in order to fully realise its goals: to support the construction sector in its adaptation to key upcoming challenges and promote the sustainable competitiveness of the sector.

We need to make sure that the future "Construction 2050: Building tomorrow's Europe today" initiative is fully embraced by all actors in the construction ecosystem, Member States and European institutions.

These are our concrete proposals:

- **Establish a single political responsibility within the European Commission** for the built environment in Europe and ensure that all relevant Directorate Generals are involved in future construction policy initiatives.
- **Establish a partnership framework** in which the main construction social partners and stakeholders, the EU institutions and Member States meet to discuss the main challenges, jointly develop priorities, strategies and targeted actions in order to address them.
- Thematic groups should reflect the challenges and priorities jointly defined by all actors.
- **Create Work Programmes for the different thematic groups** to reflect priorities and targeted actions with clear time schedules and corresponding responsibilities, jointly defined by all relevant stakeholders.
- **Create a horizontal steering committee** composed of all relevant actors to guarantee coherence between the initiatives of the different thematic groups.
- **All relevant actors should be duly involved in the decision-making process** concerning studies, policy priorities, and targeted actions.
- **Jointly create roadmaps, deployment and dissemination plans** for the initiatives to increase their political visibility and uptake by construction actors at all levels.

LOOKING AHEAD TOWARDS 2050

Looking ahead and trying to project ourselves in 2050, how do we picture ourselves and our society in this not too distant future?
Around 75% of the EU population will be living in urban areas, in smart cities with energy efficient and accessible buildings, made by more efficient products and appliances. The deployment of smart buildings' management systems will have contributed to a better quality of life and to better renovation and maintenance of our buildings. The use of digital technologies from the design phase, throughout the life cycle of the buildings and the integration of innovative materials will also contribute significantly to the development and application of the principles of the Circular Economy and ultimately to an inclusive transition towards a climate-neutral Europe. Communication technologies will have produced a paradigm shift in our daily life. City planning, autonomous transport systems, new delivery technologies, "mobility as a service" such as car and bike sharing services, and alternative working schemes such as teleworking will have completely changed the way in which people and goods move and interact. Smart infrastructure, constantly connected to our transport, will have improved and made safer the mobility of people and goods across the EU, thereby improving the competitiveness of our economies and our wellbeing.

This sustainable Europe of tomorrow cannot be achieved without all the actors involved in the construction process. In fact, the construction sector is at the heart of our life: construction enterprises and their workers build the homes we live in, the roads on which we travel and the buildings we work or learn in. European citizens spend – on average – over 90% of their time indoors, meaning that our health and well-being strongly depends on how our buildings are built, maintained and renovated. Without the construction sector the European Union cannot respond to its main challenges: competitiveness, youth unemployment, digital economy, urban regeneration, energy efficiency and energy poverty, circular economy, affordable housing, climate change, mobility and connected infrastructure etc. Moreover, the construction sector is a fundamental component of Europe's economic growth and a major source of employment. It generates about 9% of gross domestic product (GDP) in the European Union and provides 18 million direct jobs.

By optimising the way we work, we will improve the life of European citizens by providing higher value with fewer natural resources and higher quality assets for owners and users. Construction is the solution industry: addressing the challenges that the construction sector is facing means addressing the challenges of European citizens.

THE MAIN CHALLENGES FOR THE CONSTRUCTION ECOSYSTEM

More, better and safer jobs

With the retirement of ageing boomers and the unattractiveness of the sector for young people, the construction sector is confronted by the challenge of a significant labour shortage. At the same time there is a need for construction workers to continuously adapt their abilities and competences to new developments such as, for example, digitalisation, circular economy and energy efficiency.

Potential benefit

By investing in lifelong learning, in better working conditions and social protection, in healthier and safer working environment and in better promotion of career opportunities, the construction sector can attract qualified workers and new talents. Addressing the current skills gap and anticipating future skills needs in the construction sector will mean providing more, better and safer jobs for European citizens.

De-carbonisation

Buildings are responsible for approximately 40% of energy consumption and 36% of CO2 emissions in the EU. Hence, they offer a great opportunity for energy efficiency and emissions reduction. To do that, it is necessary to boost market demand for sustainable buildings and adopt a holistic approach in renovation. Moreover, sustainable construction products, use of renewable energy solutions, smart appliances and management systems, can all contribute to the future low-carbon economy.

Potential benefit

In the global fight against climate change the construction sector can play an instrumental role in achieving a fair transition towards the objectives of the Paris Agreement and the Sustainable Development Goals. In fact, higher renovation rates will lead to a reduction of greenhouse gases as a result of lower energy consumption. Moreover, improvement in production processes for building materials and the use of the best available technologies will reduce embedded carbon emissions. Finally, a holistic approach to the renovation of existing buildings is expected to improve the resilience of the existing building stock and contribute to the sustainability of society and the environment.

THE MAIN CHALLENGES FOR THE CONSTRUCTION ECOSYSTEM

Sustainable construction

Construction with its linked sectors is responsible for about half of the globally extracted materials whereas construction and demolition waste accounts for approximately 25-30% of the waste generated in the EU. From the perspective of a Circular Economy, the sector offers great opportunities for improvement in resource efficiency and material recycling and reuse. However, the current market for recycled materials and reused products is far from strong due to uncertainty about quality and consistency (i.e. performance levels) and the price difference between primary and secondary raw materials/new and reused products.

Potential benefit

Putting circular thinking at the heart of the construction sector will boost the market uptake of recycled materials and reused products. Moreover, it would support greater use of innovative materials and the life cycle design of buildings, making them suitable for deconstruction, to allow reuse of products and better recyclability of materials.

Digital transformation

The industry is on the brink of a digital transformation that will change the status quo forever. However, this transformation needs to be steered in an optimal way to make sure that it adds value for the whole sector and does not leave any actor lagging behind.

Potential benefit

The digitalisation of the construction sector has great potential to increase productivity, reduce construction costs, alleviate burdensome and physical tasks, facilitate renovation and maintenance through better data collection and analysis, increase the traceability of materials for future re-use and recycling. This would also mean healthier, more satisfied and well-informed owners and occupants.

THE MAIN CHALLENGES FOR THE CONSTRUCTION ECOSYSTEM

Research and Innovation

Innovative business models, new materials, digital collaboration, offsite manufacturing are only few examples of the many innovative solutions developed in the construction sector. However, innovation uptake and R&D investments are lower than in any other sector. The challenge consists of stimulating more research and innovation and setting the right framework for construction companies to adopt and integrate new technologies in their processes and daily operations – hence transforming their business

Potential benefit

Policies and supported initiatives aimed at facilitating the integration of innovation and increasing R&D investments would boost penetration of modern construction methods and the use of digital technologies on a larger scale.

Infrastructure maintenance and investments

Public infrastructure in Europe is ageing and requires maintenance and upgrading. At the same, the market demands new infrastructures to interconnect the national transport, energy and digital infrastructures. Against this backdrop, a mix of public and private capitals to finance the construction of new and the maintenance of existing infrastructure, which would be overall less expensive than the cost of non-investment, is needed.

Potential benefit

The maintenance of existing infrastructures and the construction of new infrastructures will improve mobility across Europe and the safety of EU citizens. Moreover, the maintenance of the existing infrastructure and the construction of new ones will help to reduce the environmental impact of transport as well as travelling costs. Finally, climate-proof and resilient infrastructure will protect citizens and make the EU more competitive at the international level.

THE MAIN CHALLENGES FOR THE CONSTRUCTION ECOSYSTEM

Ensuring a level playing field at the EU and international level

In the construction sector, the lack of and incorrect interpretation of rules has led to practices such as undeclared work, social fraud/abuse and bogus self-employment. These phenomena create unfair competition for construction enterprises and unfair treatment for workers. In addition, the European construction market has attracted third country companies and workers. It is of crucial importance that these players respect all the applicable EU rules, as well open up their markets on a reciprocal basis, to European businesses.

Potential benefit

Addressing these challenges, amongst other means by public procurement and State Aid legislation, will mean ensuring a level playing field at EU and international level. This would create fairer and more competitive conditions for companies in the EU construction ecosystem and more equitable conditions for construction workers.

Urban development and cities

By 2050, cities will be increasingly smart: the relevant sectors of the cities (efficient buildings, renewable energy supply, electric transport, sustainable public infrastructure, commerce, industries, public institutions) will be linked to one another through integrated planning and new technologies. The construction sector bears the challenge of being fully integrated in this context of smarter urban development and management.

Potential benefit

Better integration of the construction sector into the urban dimension would ensure smarter urban development. This would play a paramount role not only in achieving better mobility of goods and people but also in ensuring affordable housing for European citizens.

HOW TO ADDRESS CONSTRUCTION CHALLENGES?

THE UNIQUE CIRCUMSTANCES OF THE CONSTRUCTION SECTOR JUSTIFY AN APPROPRIATELY TARGETED APPROACH

Mainly comprising SMEs, with the associated challenges this generates, construction is an industry like no other. In contrast to other industries that produce goods (e.g. manufacturing), the construction site, equivalent to the factory in other sectors, moves from project to project, not remaining at a fixed location. Meanwhile, its "product", the finished building or infrastructure, remains fixed and is not shipped out when completed. At the same time, construction output is a tangible asset, so construction enterprises do not belong to the services sector in its classical sense i.e. producing intangible goods as end products. This fundamental starting point means that construction cannot be compared like for like with any other sector. In addition:

- Workers must come to the construction site, wherever it is located. Companies cannot move sites to where labour is available.
- Work spaces overlap. Different types of trades must work in the same area, making workflow planning more challenging.
- The work site is dynamic. Construction sites grow as they progress—for instance, a site may move many kilometres in the course of completing a highway.
- Staging and setup are continuous. Every construction project initially requires the creation of an entirely new workspace.
- There are many uncontrolled variables. Climate and geography vary significantly and sites are exposed to unpredictable conditions, including geological and topographical ones.
- Long lasting nature of the outcome. Contrary to consumer goods, buildings and infrastructure have a much longer lifespan, of over hundred years for many of them.

Given its specific characteristics, the construction sector calls on the European institutions to recognise its unique nature and respond with the special focus it needs, developing tailored measures that enable solutions to be found, for the good of the EU's economy and citizens.

HOW TO ADDRESS CONSTRUCTION CHALLENGES?

FROM CONSTRUCTION VALUE CHAIN TO ECOSYSTEM: THE NEED FOR AN ADAPTABLE POLICY FRAMEWORK

In a Circular Economy the end and beginning of value chains blur into each other as linear processes disappear. We need to think more in terms of stages in the life cycle. With this in mind, the value chain is set to become rather an ecosystem, in which all players are co-dependent and their collaborative working method based on strong cooperation and transparency. Thus, setting the right framework conditions for this evolving ecosystem is crucial, to support the transformation of the built environment and the construction sector. For this reason, **the construction sector calls on the European institutions to set an adaptable policy framework to address the evolving construction ecosystem and the transformation of the industry.**

THE CONSTRUCTION SECTOR NEEDS HOLISTIC POLICY MAKING

The construction industry is impacted by - and supports the delivery of – EU policy in many key areas. For this reason, there is a need to ensure that relevant policy frameworks and regulatory measures ensuing from them do not contradict each other, or overlap in a way that creates a burden - and unnecessary expense – for the industry. With this in mind, it is crucial to coordinate efforts at all levels of government in order to implement coherent and balanced policies and legislation that ensure a level playing field for public and private actors. Therefore, **the construction sector calls on the European institutions and Member States to ensure a holistic approach towards policy making in order to implement coherent and balanced policies and legislation.**

A STRONG PARTNERSHIP BETWEEN THE EUROPEAN INSTITUTIONS, MEMBER STATES AND CONSTRUCTION SOCIAL PARTNERS AND STAKEHOLDERS

Individual actors alone cannot solve the current challenges of the construction sector. In fact, the high complexity and interrelation of the sector requires a collective effort by public and private actors in order to coordinate all activities under a common and shared strategy. For this reason, **the construction sector asks for a strong partnership between the European institutions, Member States and construction social partners and stakeholders to steer the transformation of the sector with the most adequate policies and tools.**