



LIST OF THEMES / TABLES

Table 1: Talent and Technology

- Focuses on the challenge of the shortage of skilled labor and the need to attract and retain new technological profiles for the sector's transformation.

Table 2: Strategic Challenges

- Addresses the main challenges of the sector and how innovation is a key tool to redesign the future of construction.

Table 3: Industrialized Construction

- Aims to analyze the state of industrialization in Spain, including the latest advances, barriers, and needs for the growth of this technology, as well as initiatives such as Industrialization Hubs.

Table 4: Robotics in Construction

- Focuses on robotics as a driver of transformation, exploring automation and robotization solutions to improve productivity, safety, and sustainability.

Table 5: Artificial Intelligence in Construction

- The implementation of AI-based tools in the construction sector is one of the major challenges, enabling resource optimization and quality improvement across the entire construction value chain.

Table 6: Digitalization in Building

- Digitalization has been one of the major transformations in recent years. This table will cover topics including the role of the Digital Product Passport (DPP) for innovation and sustainability, the impact of data on material traceability and decision-making, and production monitoring of materials.

Table 7: 3D Printing in Construction

- Analyzes the current state of 3D printing applied to construction, discussing scalability, efficiency, sustainability, and the challenges of integration.

Table 8: Digitalization in Civil Works

- Focuses on analyzing and discussing the technologies, methodologies, and processes that allow capturing information directly on civil works sites.



Table 9: Sandbox and Other Testing and Validation Techniques

- Focuses on barriers to innovation, such as technical and legal risks, and how tools like sandboxes can help overcome them, along with advanced analyses, pilot and real-scale simulations, standardization, and certification.

Table 10: Materials and Circular Economy

- Covers topics such as circularity, efficiency in the value chain, and compliance with decarbonization and waste management goals.

Table 11: Driving Innovation

- Addresses public-private collaboration, technology transfer, and knowledge sharing among different ecosystem actors.

Table 12: European Research Framework Program

- Analyzes the European Research Framework Program, Horizon Europe, the future FP10, and funding opportunities for the sector.

Table 13: Sustainability

- Covers challenges and advances in sustainability, including environmental assessment, labels and certifications, and the impact of the Construction Products Regulation (CPR).

Table 14: Energy Efficiency

- Strategies, technologies, and management models to optimize energy consumption throughout the lifecycle of infrastructure. Includes passive building design, digital monitoring solutions, innovative materials, and smart systems, as well as public policies, regulations, and financing mechanisms for scalable implementation.

Table 15: Cybersecurity

- Focuses on protecting intellectual property and critical data, addressing risks from poor access management and cyberattacks.

Table 16: Water Cycle

- Focuses on efficient water management in construction processes, urban spaces, and landscapes, as well as mitigating climate change impacts.



Table 17: Heritage

- Covers innovation in heritage restoration, the role of digitalization, and challenges in adapting to climate change in historical environments.

Table 18: Mobility and Sustainable Urban Environment

- Analyzes how city sustainability depends on land use and mobility management, promoting an integrated urban model.

Table 20: Innovation in Machinery

- Focuses on innovation in construction equipment, including sustainability, digitalization, and autonomy.

Table 21: Software Strategies and Models

- Discusses software strategies in construction, including custom development and data integration for innovation.