

BUILD SMARTER. CLEANER. CHEAPER.



Leading the European construction industry to a low-carbon, climate-resilient digital transformation.

BIMprove harnesses the power of cutting-edge Digital Twin Technology to lead construction sites into the Industry 4.0 revolution.



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BIMprove H2020 Project

Our Benefits



Fast-track Operations

Increase scheduling forecast capacity by 20%, automating progress & quality reporting.

- Upgrade BIM models with as-built real-time data
- Productivity step-up with Big Tech: AR/VR, Artificial Intelligence, Drones & Wearables
- Predictive Analysis with early detection of deviations



A Green and Safe Construction

Making the industry less exposed to labour accidents and committed to sustainability.

- Continuous Safety Monitoring
- Supply Chain Agility
- Optimized Stockpiling
- Waste Avoidance

BIMprove advocates the European Green Deal



Dowscale Costs

Reduction of costs by 20% in construction projects.

- Cost Planning and Control
- Budget Reliability
- Faster Delivery Date
- Lower Operating Costs



Open and Standard

We follow an Open Innovation approach, building solutions with and for the industry

- x3 Experimentation Use Cases
- Contribution to Standardisation Bodies
- Open Access Repository
- GitHub

Our Team

















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Our Approach

The project develops a dynamic digital system for construction sites to fast-track productivity, cut costs and improve working conditions. The solution extends the 3D-based Building Information Modelling (BIM) systems with Digital Twin Technology, introducing a much more dynamic and multi-functional system, reliant on real-time data.



BIMprove Inputs



BIMprove Processes



BIMprove Outputs

Survey Data

BIM

Historical Construction Data (time + cost)

Context Related Information

User Defined Source

Digital Twin

Deviation Detection

Analytics



BIM@Truck

BIM@Wearable

BIM@Anywhere

BIM@Manager

BIM@Client

BIM@Site

This new approach will streamline the digital transformation of the European construction industry, blending Artificial Intelligence with AR/VR, Unmanned Aerial Vehicles (UAVs) and wearable technology. Construction sites will have real-time information available, allowing to identify early-stage errors and being able to predict them, lowering costs and reducing risks. In addition, it will be possible to control resources, minimizing waste and to ensure a high level of safety.



