

# FRISSBE project presentation

fire-safe sustainable built environment

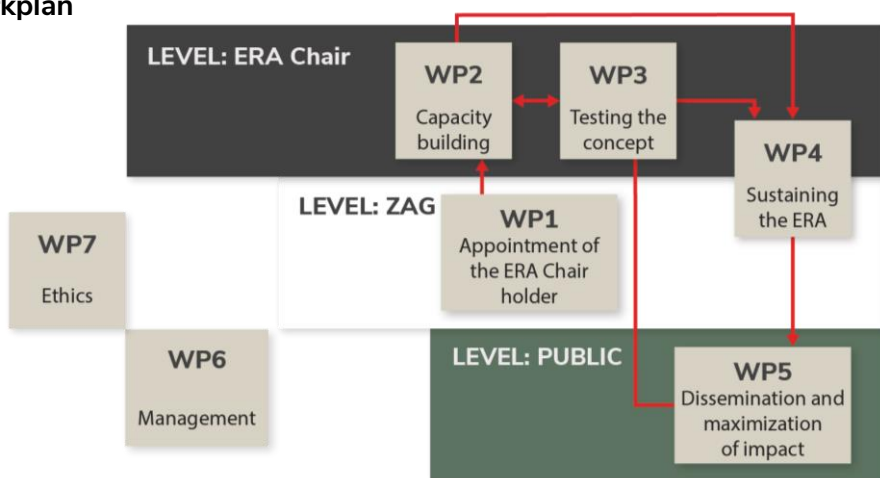
## Project description

The FRISSBE project will implement new practices at the Slovenian National Building and Civil Engineering Institute, ZAG, by attracting and maintaining high quality human resources under the direction of the ERA Chair holder. The project will lead to lasting, sustainable structural changes to achieve excellence at ZAG and spread excellence in the region. Designed structural changes aim to achieve excellence in the field of fire-safe sustainable built environments, modify ZAG's research and innovation landscape, intensify strong cooperation with industry and result in enhanced competitiveness in attaining projects. Changes will be tested in a new autonomous unit, the FRISSBE ERA Chair, and transferable to ZAG as a whole. Structural and dissemination measures are balanced with testing and improving the concept. Structural measures involve improving the workflow, focusing on project preparation and quality management, building a network with stakeholders, and intensifying cooperation with industry. The concept will be tested on a few levels: testing the research enhancement process, building capacity in applying for competitive funds, and building sustainable relationships with industry. Dissemination activities focusing on two-way cooperation with identified stakeholders will enhance ZAG's network and positively contribute to its attractiveness. FRISSBE will have regional impacts in terms of research, education, and engineering. The team will build a strong interactive ecosystem with the InnoRenew CoE and the University of Primorska, as well as other supporters of the project. Added value of the project is amplifying the capacities of the Fire laboratory co-financed with ERDF funds, ensuring conditions to foster excellent research. The project will yield 3 PhD students and 6 postdoctoral researchers. The long-term sustainability of the ERA Chair will be achieved by combining national and EU research and innovation funding with industry funded research and development.

## General objective

The main objective of the FRISSBE project is to establish an ERA Chair for fire-safe sustainable built environments at the Zavod za gradbeništvo Slovenije (eng. Slovenian National Building and Civil Engineering Institute, ZAG in short), where cutting edge research infrastructure for fire testing is being established. The combination of the new research infrastructure and the ERA Chair will create the appropriate conditions for high-quality outstanding researchers and research managers to move and engage with the beneficiary, aiming to achieve excellence in the scientific field of fire-safe sustainable built environments and modify their research and innovation landscape. With adequate institutional support, outstanding researcher, the ERA chair holder will have a decisive and positive impact on the culture and performance of the beneficiary.

## Workplan



The FRISSBE work plan consists of 7 work packages. The work flows through these packages in an orderly and measurable way that is designed to reduce risk and increase efficiency.

**WP 1** (Appointment of the ERA Chair team and support staff) is the fundamental WP and comprises all necessary activities to establish the ERA Chair, including the selection of the ERA Chair holder, their team and support staff. Particular care shall be given in this WP to establishing a bilingual environment at the beginning of the project for a seamless communication between the ERA Chair staff (including the ERA Chair holder), the rest of ZAG, and the FRISSBE interactive ecosystem. **WP 1** addresses **project objective Obj 1**.

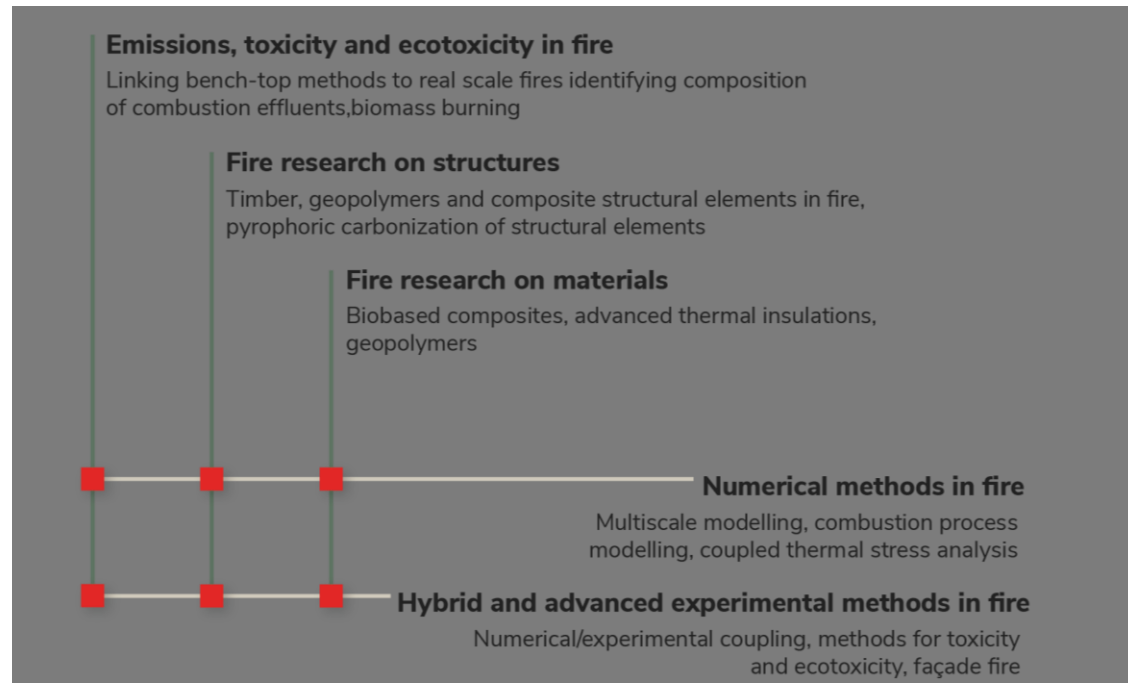
**WP 2** (Capacity building) and **WP 3** (Plan development and testing the concept) reach inwards towards the core ZAG from the FRISSBE ERA Chair. The principle employed is PDCA (Plan-Do-Check-Act). WP 2 is the core WP – it is dedicated to capacity building (Plan-Do), particularly implementing the excellence component of the structural change. WP 3 complements WP 2 by testing and adjusting the activities (Check-Act) in WP 2 in an operational research, administrative, and grant writing environment. In WP 3 the concept will be tested, and the effectiveness of ERA Chair internal measures will be measured. This implementation supports an iterative approach that will ensure an optimal solution is found. **WP 2** addresses **project objectives Obj 2 and Obj 3** and **WP 3** addresses **Obj 4, Obj 5**.

**WP 4** (Sustaining ERA Chair) **extends beyond** the timeframe of the project. It is dedicated to sustaining the FRISSBE ERA Chair long after the project will end. In that respect it is essential for the long term strategy of ZAG. The impact of WP 4 is focused on supporting and sustaining change at ZAG beyond the project lifetime. WP 4 also creates a loop back to WP 2 and WP 3, but only beyond the project timeframe. **WP 4** addresses **project objective Obj 6, Obj 7 and Obj 8**.

**WP 5** (Dissemination and maximizing of impact) **reaches out** towards different stakeholders through deployment of the research and related processes in practice and through dissemination of the project results. WP 5 will have impact beyond the beneficiary, for example, an impact on research process in similar institutions and industry as well as knowledge transfer to industry and better cooperation with different stakeholders. **WP 5** addresses **project objective Obj 9**.

**WP 6** (Management) deals with management of the FRISSBE project, including all necessary coordination activities of the ERA Chair, the rest of ZAG, and the EC. **WP 6** addresses **project objective Obj 10**.

**WP 7** (Ethics requirements) deals with ethics requirements addressing human subjects, protection of personal data, and the environment. WP 7 addresses **project objective Obj 11**.



## FRISSBE ecosystem

The FRISSBE project and, based on it, the established FRISSBE ERA Chair (created at ZAG on a department level), strive to create and support a strong R&D centre focused on, but certainly not limited to, Southern and Central Europe for fire research. In FRISSBE ERA Chair, the key of success in terms of performance and impact lies in an integrated approach, covering basic functions of the ERA Chair such as R&D on methods, materials and structures, graduate and post-graduate training, complementary research on, e.g., bio-based materials and recycled materials as well as strong industrial research.

This is achieved through a wider interactive ecosystem, comprising the FRISSBE ERA Chair as well as other units of the host institution and two strongly connected institutions: the [InnoRenew CoE](#), established under the H2020 WIDESPREAD-2-Teaming: GA No. 739574, providing excellence in complementary bio-based materials research, and the [University of Primorska](#) (UP), complementing the ecosystem with wider multidisciplinary research, bachelor's, master's and doctoral degree-granting function, and stronger interaction with peers. Both institutions have firmly expressed their willingness for cooperation with the FRISSBE ERA Chair. The InnoRenew CoE has been successful in hiring researchers and support staff from abroad (57 employees in 2019, nearly 50% from abroad, including from outside of Europe) and will support the beneficiary and the ERA Chair holder by transferring its practices to establish a strong recruitment and retention policy that will make ZAG and FRISSBE an attractive workplace, with a culture of engagement and employee participation in the sustainability of the institute. UP will offer the ERA Chair holder a part-time teaching position at the Faculty of Mathematics, Natural Sciences, and Information Technologies to organise and deliver courses in the Sustainable Built Environments MSc program and supervise students in the Renewable Materials and Healthy Built Environments PhD study programme. The beneficiary, in turn, will provide internships and research infrastructure for students from these programs to gain practical research experience and conduct their studies.

