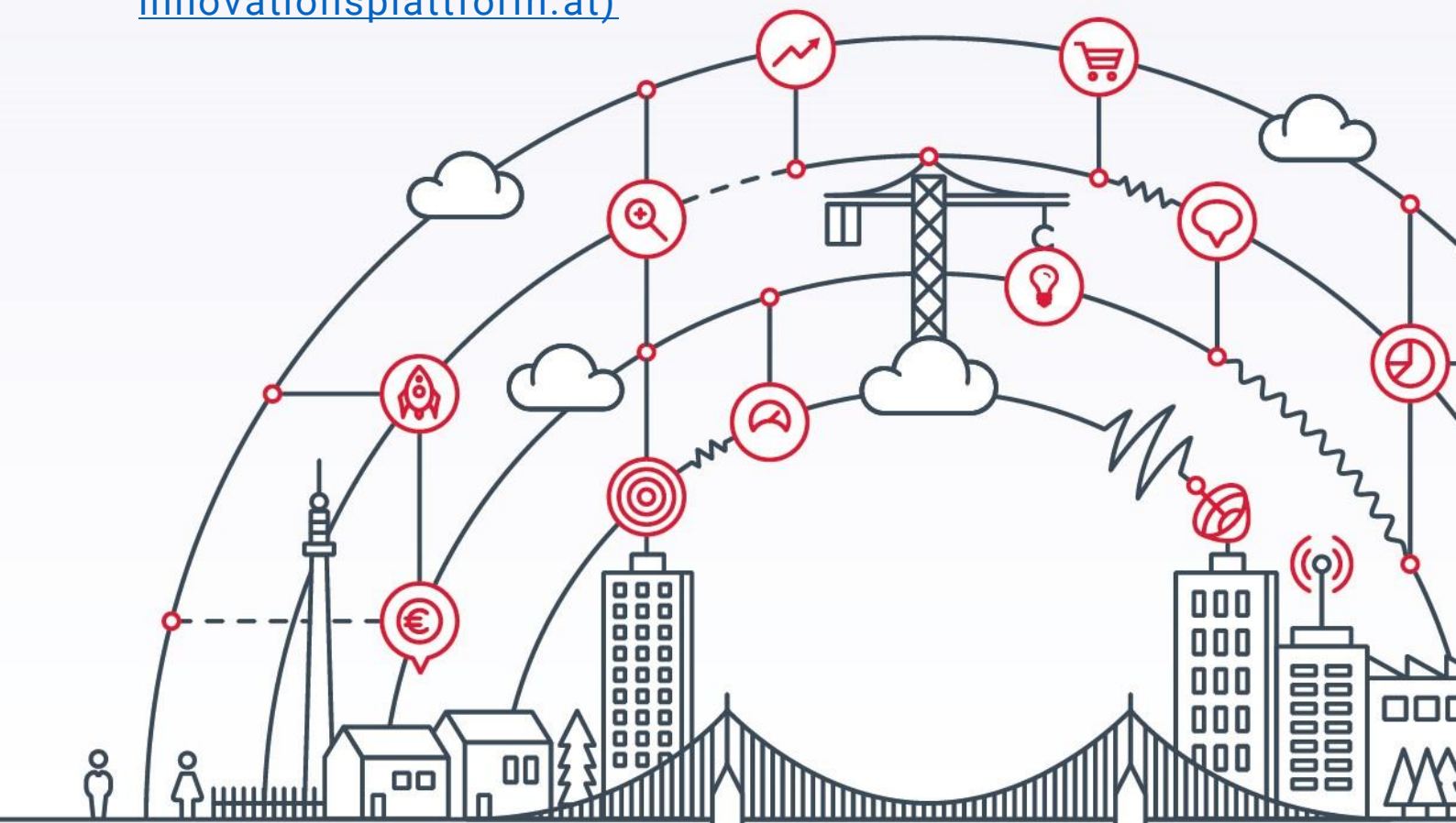


Modular building system for the renovation of municipal buildings – Wiener Wohnen

This is a translation – for the original challenge description, contacts and submission go to:

[Modulares Fertigteil-System für die Sanierung Wiener Gemeindebauten - IÖB Innovationsplattform \(ioeb-innovationsplattform.at\)](https://www.ioeb-innovationsplattform.at)



An initiative of

 Federal Ministry
Republic of Austria
Labour and Economy

 Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology

In cooperation with

BBG BUNDES
BESCHAFFUNG

Challenge Sponsor

Stadt Wien – Wiener Wohnen



Point of Departure

Stadt Wien - Wiener Wohnen manages, renovates and operates Vienna's municipal housing estates. This includes around 220,000 municipal apartments, around 5,000 pubs and over 47,000 garage and parking spaces. This makes Wiener Wohnen the largest municipal housing management company in Europe. Around 500,000 Viennese live in 1,800 municipal buildings.

More than 100 years ago, the ambitious municipal housing program was launched to create affordable and high-quality living space. Now, with the Vienna Climate Roadmap for climate neutrality, the City of Vienna is pursuing a key project for generations to come. Social housing is also fulfilling its responsibility towards Vienna's unique quality of life. With a multitude of measures, municipal housing contributes to climate protection in Vienna and to the achievement of climate targets - both in the renovation of existing housing complexes and in the construction of new buildings.

With this IÖB-Challenge, an initiative is set to specifically promote energy efficiency and sustainability in renovations.

The building envelope of existing municipal buildings of Wiener Wohnen is currently being renovated with the conventional system: ETICS (External Thermal Insulation Composite System) for the wall, windows are replaced and roof superstructures are put on. This currently prevailing system often results in long construction times and renovation cycles. Stadt Wien – Wiener Wohnen wants to start renovating with an innovative, new, modular renovation system that can be used in series.

Main Question

Which innovative renovation methods using ready-made, modular building elements (facade, roof, staircase) reduce the life cycle costs as well as the construction site times of Viennese municipal buildings?

Desired situation

The goal is to find companies or company partnerships that can plan and also implement a modular construction method. The goal is to have everything from a single source - from development (inventory in 3D - design to detail development) to installation on the construction site.

The vision: In the future, the renovation of suitable residential buildings should be carried out in a modular system. For example, prefabricated elements could be delivered from a central warehouse directly to the construction site and installed within a very short time.

An innovative modular facade system with a high degree of quality-assured prefabrication is desirable so that, among other things, construction defects can be reduced, and the construction site time shortened. Shortened construction time will also reduce the burden on tenants.

In a facade element, the windows and doors should already be pre-assembled - just like in a prefabricated house. Modular construction can increase recyclability and strengthen the desired circularity in construction.

In addition to the "shell" (facade), barrier-free design of the common areas is also an important concern. The entire stairwell core could be replaced in one go in a modular system. In the mostly centrally located stairwell, wiring (technical equipment) could be redesigned as well.

The system should be flexible so that technical components could possibly also be installed or integrated in it - starting with decentralized ventilation units, PV modules, facade greening up to line distributions.

With regard to the framework conditions, the following aspects should be considered:

- **"Klimaaktiv"**: In innovative renovation projects, efforts should be made to obtain the "GOLD" certification of the klimaaktiv criteria catalog of the City of Vienna.
- **Energy sources and photovoltaics**: gas (in general) and electricity (heating systems) as the main energy sources are not permitted in innovative renovations of municipal buildings (decarbonization). Exception: Electricity to operate a heat pump system in combination with a photovoltaic system.
- **"ÖkoKauf"**: The building materials used must meet the requirements of the ÖkoKauf Vienna program or an equivalent certification.
- **Facade greening**: In the case of renovations, high-quality and climate-effective facade greening should also be planned and co-developed, taking into account the fire protection requirements of the City of Vienna

Call for proposals

Do you have an interesting (partial) solution? Are you currently developing one? Are you an expert? Then enter a submission!

Take the chance in this market exploration to present your innovative approaches and show potential for how Vienna's municipal buildings can be renovated in the future. Submit via the online forms: It is not necessary to submit a final concept, study, plan or design especially prepared for this challenge. The aim is to convey your own implementation idea, the concrete use of the product and competence.

Click "Submit Solution" and have the following ready:

- A cover picture

- A meaningful description:
Explain your solution idea(s) or specific product for the challenge described above. Focus on feasibility and think about the evaluation criteria. What makes your solution innovative? Feel free to cite reference examples. Present your competencies and implementation experience. If necessary, support your explanations with sketches and plans for good comprehensibility.
- A summary of the added value
- For any information that you cannot disclose publicly, there is a special field for “Confidential information”. Only the moderator and the jury can see what you enter into this field. The number of characters is limited – the Innovation Dialogue will offer you the opportunity to provide further details. P.S.: The jury members are committed to confidentiality. You can also send further confidential information to one of the moderators of the challenge via e-mail.
- Optional: Upload a file (e.g. existing product brochures or illustrations that supplement – but do not replace! – your description)

NOTE: With this Challenge, we are currently in the market exploration phase. Therefore, the following is not yet necessary for participation, in order to attract interest: concepts which are completely new or have been specially developed for this Challenge, detailed technical designs or feasibility studies. Please be concise (as a guideline: a maximum of five A4 pages or ten presentation slides in total).

Benefits of the Challenge and further course of the project

With this Challenge, Stadt Wien - Wiener Wohnen will gain an overview of possible solutions and potential partners.

For companies, this means: By participating in the Challenge, you will be on the radar of Stadt Wien – Wiener Wohnen. Even after the Challenge has ended, your submission will remain visible to other interested parties as your virtual calling card. You are putting yourself in a good position for further public procurement projects. You may draw the attention of cooperation partners.

Those companies, whose solutions stand out in a particularly positive way with regard to the specific evaluation criteria, will be invited to a subsequent Innovation Dialogue on *January 10, 2023*. If you are among these winners, you will have the opportunity to present your solution during a market discussion with Stadt Wien - Wiener Wohnen. You will exchange ideas directly with those responsible for the project.

The Challenge and the Innovation Dialogue create sensitivity and understanding regarding suitable innovations on the part of the public-sector client. This is important, as it allows the public-sector client to take innovative approaches into account in subsequent purchasing projects under the Federal Procurement Act following the market exploration phase.

Depending on the results, the further project plan provides for the following:

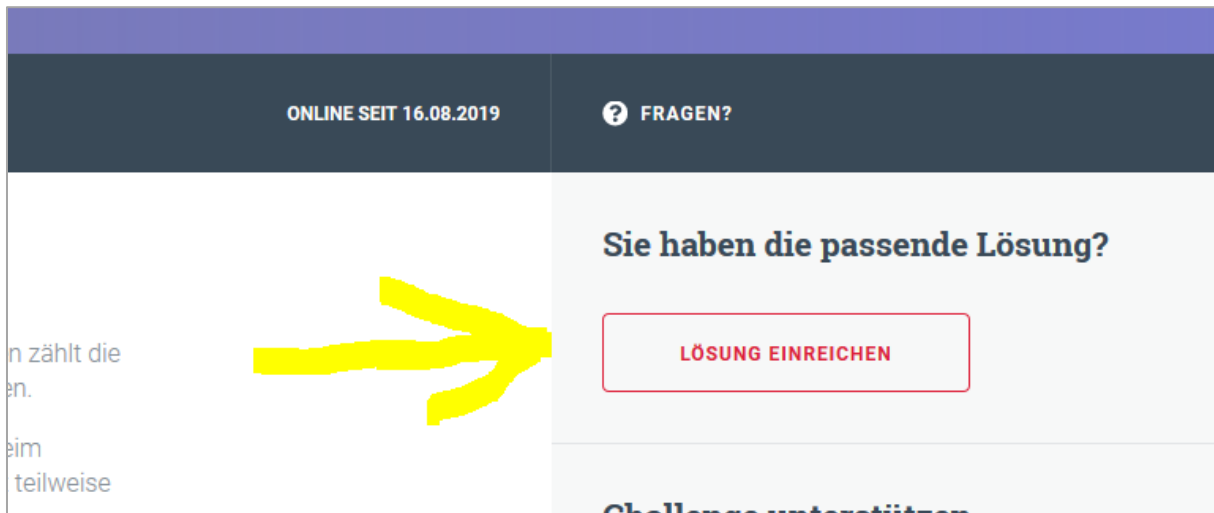
Wiener Wohnen is open to any award process under the Federal Public Procurement Act.

Your Questions

Contact the moderator or post your question about the Challenge. Our moderators will check, research and publish your question together with the answer. This way, all potential participants are certain to receive the same information.

How to submit a solution/idea

Go to the challenge page. Click on the button "Lösung einreichen" on the top right side of the page.



- **Beschreibung**
Post a meaningful description (make references to the description of the challenge and evaluation criteria on the right side of the challenge page)
- **Mehrwert**
Highlight the benefits of your solution.
- **Titelbild**
Upload a picture to be displayed on the landing page of the challenge.
- **Kooperationspartner**
If you are handing in a joint contribution with other companies, this is where you make sure they are represented with logos and names.
- **Dateien & Infos**
If necessary in addition to the descriptions above: add pdf-files (e.g. existing product brochures). But: Keep your contribution manageable for the jury.
- **Vertrauliche Infos**
If necessary, place a confidential information for the jury, the sponsor and moderator (e.g. indication of approximate price range). All other parts of the contribution will be public.

Please be aware of the fact, that a challenge is market research / market engagement prior to a possible procurement. The challenge will not decide upon a contract award nor will it lead to any unfair advantage in a tender. Please balance your time and effort.

Contact Information

PPPI Service Center
Lassallestraße 9B
A-1020 Vienna

www.ioeb.at

www.ioeb-innovationsplattform.at

PPPI Service Line: +43 1 245 70-817

