

LIFE CLIMARCHIBASE

CLIMATE EDUCATIONAL PLATFORM FOR
EXPERTS IN ARCHITECTURE AND REAL ESTATE

Českokobrodská School, photo by Tomáš Hejzlar

Coordinator



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LIFE ClimArchiBase

Climate Educational Platform for Experts in Architecture and Real Estate

The LIFE ClimArchiBase project was established with the aim of connecting education, the sharing of expert knowledge and practical experience in the field of sustainable architecture and construction. Through its online platform, educational programmes, expert consultations and cooperation with key stakeholders, the project contributes to the development of professional knowledge and supports the implementation of principles of sustainable architecture, energy-efficient buildings and responsible resource management in everyday practice.

The project brought together Centrum pasivního domu (CPD), Nadaci Partnerství (CEPF), Rethink Architecture Institute (RAIN) and Česká rada pro šetrné budovy (CZGBC).

Centrum pasivního domu (CPD), the project coordinator, is a professional non-profit organisation that has been supporting the development of high-quality, energy-efficient and sustainable construction in the Czech Republic for more than 20 years. Its activities focus on educating both professionals and the general public, organising professional conferences, seminars and study visits, providing expert information and sharing examples of good practice. Through cooperation with architects, project designers, construction companies, public authorities and academia, CPD contributes to the development of healthy, comfortable and energy-efficient buildings and supports the implementation of innovative solutions in construction practice.

Rethink Architecture Institute (RAIN) is an educational non-profit organisation focused on promoting sustainable architecture and a high-quality built environment. Through educational activities, lectures, seminars, courses and other professional events, as well as cooperation with architects, project designers, investors and public authorities, RAIN contributes to the development of innovative approaches to the design of buildings and cities that take into account environmental, economic and social aspects.

Nadace Partnerství (CEPF) is the largest Czech environmental foundation and has long supported nature conservation, sustainable development and climate change adaptation. Through grant programmes, professional advice, education and cooperation with municipalities, schools and communities, it helps create a higher-quality and more resilient living environment. An important part of its activities is also the promotion of sustainable landscape management, the development of green-blue infrastructure and public involvement in environmental stewardship.

Česká rada pro šetrné budovy (CZGBC) brings together companies and institutions active in the field of sustainable construction. Through education, knowledge sharing, cooperation, the development of methodologies and expert recommendations, and awareness-raising activities, it supports the construction and renovation of energy-efficient buildings with minimal environmental impact. CZGBC has been active in the Czech Republic since 2009, and its activities contribute to the implementation of Vision Zero, which aims to achieve buildings with zero environmental impact throughout their entire life cycle.



Target Groups

Who Shapes Our Buildings and Cities?

The LIFE ClimArchiBase project addresses a broad range of professionals and other stakeholders who influence how buildings, public spaces and cities are planned, designed, constructed, renovated and managed. The main target groups include **architects, designers, landscape architects, project managers, energy specialists, sustainability consultants, urban planners, researchers, educators and academic staff**, as well as **representatives of cities, municipalities and other public authorities** involved in planning, procurement and public investment.

Students of architecture, engineering, landscape architecture and environmental disciplines are another important target group. As the next generation of professionals, they will play an important role in shaping the future built environment. The project therefore helps them gain knowledge of sustainable design, climate mitigation and adaptation, while also connecting them with professional practice and experts from across the construction sector.

Developers, investors and building owners also have a significant influence on the sustainability and overall quality of construction projects. They define project requirements, investment priorities and key decisions from the earliest stages of development. Their understanding of sustainability principles is therefore essential for integrating **environmental, economic and social considerations** into projects from the outset.

By bringing these different groups together, LIFE ClimArchiBase supports the **exchange of knowledge and experience across professions** and helps integrate sustainable construction principles into everyday planning, design, investment and decision-making.

Analysis of the Needs of the Target Groups

What Are the Barriers to More Sustainable Buildings and Cities?

The Czech construction sector is changing, and the experience of professionals, representatives of cities and municipalities, and other practitioners shows that **sustainability is playing an increasingly important role in this transformation**. Energy efficiency, emission reductions and more environmentally responsible construction are no longer marginal topics. They are increasingly reflected in regulations and investor requirements. Architects, designers and municipalities therefore need **new knowledge and, above all, practical information** on how to respond to these changes.

A **lack of clear, reliable information** emerged as one of the main challenges. There is also a need for more **examples of good practice** showing what actually works. Opportunities for further education for architects and designers remain limited, and systematic lifelong learning in this field is not yet a standard part of professional practice.

Cities and municipalities also have an important role to play. As public investors, they make decisions about buildings that will serve communities for decades. This means that **the initial investment cost is not the only factor that matters. Future operating costs, impacts on the surrounding environment and benefits for residents also need to be considered**. Municipal architects and energy and climate managers can help support better decision-making.

One of **the major issues today is reducing the carbon footprint of the construction sector**. It is not only about how much energy a building consumes, but also what it is made of and how it is built. Natural and more environmentally responsible materials, the renovation of existing buildings and the reuse of construction materials are therefore becoming increasingly important. In some cases, making better use of what already exists can be a better solution than building from scratch.

The survey also highlighted issues that receive less attention, even though they have a major impact on quality of life. These include **urban planning, transport, water management, the impact of construction on the landscape and the expansion of settlements into the surrounding countryside**. Decisions in these areas can shape cities and municipalities for many years to come.

The findings therefore show that **sustainable construction is not just about energy-efficient technologies**. It is important to think **about buildings, energy, water, materials and the surrounding landscape as one interconnected whole**.

The survey involved **59 participants in three workshops, 186 respondents to an online questionnaire and 22 experts taking part in interviews and consultations.** Their experience helped identify the main barriers to more sustainable construction today, as well as the areas with the greatest potential for change.



SURVEY



Educational Programmes in Sustainable Real Estate and Architecture

How Do We Design Sustainable Buildings That Work in the Real World?

New technologies and stricter regulations are not enough on their own. For sustainability to become a real part of everyday practice, the people who design, build and manage our buildings and cities also need **up-to-date knowledge, practical experience and opportunities to learn from others**. This is why education became one of the key elements of the LIFE ClimArchiBase project.

The educational activities were shaped by a survey among professionals and other practitioners, which helped identify what information they were missing, which topics they were most interested in and what could help them apply sustainability principles in their everyday work.

The result is **a diverse range of educational programmes and activities**, from more comprehensive courses to shorter seminars, workshops, lectures, excursions and expert discussions. Some take place in person, others online, while some combine both formats. This allows participants to choose activities that suit their professional focus, needs and available time.

The range of topics is broad. The programmes cover **energy-efficient buildings and renovations, reducing carbon footprints, sustainable materials and responsible use of resources**. They also address water management, nature-based solutions and ways to better prepare buildings, public spaces and cities for climate change. Economic, legislative and social aspects are also included, as these can determine whether a good design is successfully put into practice.

But education is not just about theory. **Experience from real-world projects, examples of good practice and working together to find solutions to specific challenges all play an important role**. The activities also bring different professions together, creating opportunities for architects, designers, energy specialists, investors, developers, representatives of cities and municipalities, academics and students – the next generation of professionals – to share their experience.

The educational activities **will continue beyond the LIFE ClimArchiBase project**. The programmes will continue to evolve in response to new technologies, changes in legislation and the needs of the construction sector. This is particularly important in a field that is changing rapidly. **The knowledge gained today can help make sustainability an increasingly common part of** how buildings and cities are designed, constructed, renovated and managed in the Czech Republic.

Within the LIFE ClimArchiBase project, a total of 88 educational activities were implemented, recording 6,984 participations. The largest group consisted of architects, designers and energy specialists (30.7%), followed by representatives of public administration and local authorities (24.9%), and students, academics and representatives of educational institutions (20.2%). Developers, investors, building owners, suppliers and contractors accounted for 14.7% of participations, sustainability consultants and project managers for 5.3%, and other professional groups for 4.0%.



EDUCATION

PRACTICAL EXPERIENCE

Online Information Platform with Interactive Application for Sustainable Project Design

Where Can You Find Practical Guidance for Sustainable Buildings and Cities?

Designing and delivering buildings that are environmentally responsible and prepared for the impacts of climate change requires navigating a wide range of information. Professionals need to keep track of legislative requirements, technical standards, assessment methodologies, certification systems and rapidly evolving knowledge in sustainable construction. However, this information is often scattered across many different sources, making it difficult to navigate and time-consuming to find.

This is why the **ClimArchiBase platform** was created, bringing together knowledge, tools and inspiration for sustainable architecture and urban development in one place. It is primarily intended for architects, designers, urban planners, developers, public investors and representatives of cities and municipalities, but it can be used by anyone involved in the planning, construction, renovation or management of buildings and public spaces. Its aim is to make sustainability topics easier to navigate and support better decision-making throughout the entire life cycle of buildings.

The platform provides an overview of **educational events, professional publications, methodologies, legislative documents, strategies and certification systems**. It also includes databases of organisations and research projects, information on expert consultation opportunities and an extensive **library of case studies** showcasing inspiring examples of buildings and public spaces from the Czech Republic and abroad. Users therefore have easy access not only to theoretical information, but also to proven solutions from real-world practice.

One of the platform's most important tools is the **Interactive Design Manual**, which helps users incorporate sustainability principles from the earliest stages of project development. Based on the type and stage of a project, it recommends relevant topics, requirements and

assessment criteria and links them to widely used methodologies and systems such as BREEAM, LEED, WELL, Level(s) and the EU Taxonomy. This helps project teams better understand the connections between individual requirements and integrate them more effectively into the design of new buildings and renovation projects.

ClimArchiBase is not simply a database of documents, but a dynamic knowledge platform that connects the professional community and supports the exchange of experience. It helps make sustainability principles more accessible and easier to understand for everyone involved in the construction sector. In doing so, it supports the development of buildings and cities with a lower environmental footprint, greater energy efficiency, stronger resilience to climate change and a better living environment for their users.

Within the LIFE ClimArchiBase project, the online platform recorded 12,000 unique page views, while the Interactive Design Guide recorded 2,700 views.



CLIMARCHIBASE

Support of Design and Construction of the Projects

How Can Sustainability Principles Be Put into Practice in a Real Project?

Every project raises different questions, and there is no single sustainable solution that works equally well everywhere. One project may need advice on energy, another on material selection, water management or how to prepare the project as a whole for a changing climate. This is why LIFE ClimArchiBase introduced expert consultations and consultation packages that help identify solutions tailored to each specific project.

They are available to architects, designers and other professionals, as well as developers, investors, cities and municipalities. **Sometimes a short consultation on one specific question is enough. At other times, it is useful to look at the project as a whole.** More comprehensive consultation packages are designed for this purpose, making it possible to connect several topics and work with experts to find solutions throughout the project preparation process.

What exactly can the experts help with? The range of topics is broad. It includes energy-efficient buildings and renovations, carbon footprint, renewable energy, sustainable materials and circular construction. Consultations can also cover building certification, new requirements under European legislation, or how to integrate sustainability into a project from the very beginning, when many important decisions can still be influenced.

Another major area is **preparing buildings, cities and municipalities for climate change.** Consultations help identify ways to improve rainwater management, bring more greenery and trees into cities, retain water in the landscape and reduce overheating. And the support is not limited to buildings. Expert advice can also be used when transforming parks, streets, squares, school grounds and other public spaces.

Consultations do not replace the work of the project designer. **They do, however, help ask the right questions at the right time,** identify potential risks, compare different options and find a direction that can be developed further as the project progresses. For more complex projects in particular, one of the main benefits is the opportunity to consider energy, architecture, technical solutions and environmental impacts together rather than treating each topic separately.

The consultations do not end with advice on paper. In many cases, their recommendations are incorporated directly into the further development of projects, project documentation or

decision-making by investors and public authorities. **In this way, the consultations help move the Czech construction sector towards greater sustainability.**

A total of 494 consultancy services and 88 consultancy packages were provided as part of the LIFE ClimArchiBase project.



CONSULTATIONS



Policy Recommendations

What's Next for the Czech Construction Sector?

The Czech construction sector will face major changes in the coming years. Building more energy-efficient buildings alone will not be enough. If we truly want to reduce the impact of construction on the climate and the environment, we also need to **change the way buildings are planned, renovated, financed, procured and managed**. This is the focus of the Policy Recommendations developed as part of the LIFE ClimArchiBase project. They provide **recommendations for national government, cities and municipalities** and also identify practical tools that can help put them into action.

The recommendations were not developed in isolation. Their preparation drew on **expert discussions and consultations with stakeholders across the construction sector**, CZGBC working groups, cities and municipalities, project partners and the wider professional community. The proposals were discussed, tested and refined throughout the process based on feedback from practice. As a result, they bring together the perspective of public authorities with the practical experience of those who design, build, finance and operate buildings.

The recommendations focus on two main target groups – national government and cities and municipalities – while also providing broader recommendations for other stakeholders. For each group, they identify the main challenges and propose both strategic directions and practical tools that can help drive change.

One of the main challenges at national level is **better coordination and long-term planning**. Responsibility for different aspects of decarbonising the construction sector is currently spread across several institutions, with no single coordinating framework. **High-quality and accessible data on buildings and materials** are equally important. Without them, it is difficult to compare the real impacts of different solutions, assess carbon footprints or plan renovations effectively. The recommendations therefore also highlight the need for better access to data for life-cycle assessment of buildings and materials.

Building renovation is another major area. Instead of making short-term decisions based on whichever funding programme happens to be open, national and local authorities should **plan renovations over the long term according to the actual condition and needs of buildings**. Financing should be more predictable and combine grants, preferential loans and private funding more effectively. Better planning of renovations throughout the building life cycle is also an important part of this approach.

Public procurement can be a powerful tool for change. When selecting designs and contractors, cities and municipalities often place the greatest emphasis on price. However, they should also give greater consideration to **quality, impacts over the entire life cycle of a building, the materials used and their potential for reuse**. The recommendations therefore support the development of green public procurement and practical tools that can help municipalities apply these criteria in real projects.

Rules alone, however, are not enough. Cities and municipalities often lack the staff, time and experience needed to navigate new requirements. They therefore need **practical training, expert advice and opportunities to share experience with others**. **Regional technical assistance** can play a particularly important role by supporting municipalities directly with specific projects – from financing, project preparation and procurement to selecting appropriate technical and material solutions.

There should also be greater scope for the **circular economy**. Buildings can make greater use of **recycled and reusable materials**, while designers can consider their future reuse from the very beginning. Decisions should therefore take into account not only initial costs, but also the life-cycle impacts of materials, their carbon footprint, durability and potential for reuse. Timber, for example, can be one option for public buildings and should be assessed alongside other solutions according to its specific benefits and costs.

A common theme across the recommendations is the need to **move from individual measures towards a long-term, systematic approach**. Better data, well-planned renovations, responsible public procurement, accessible expert capacity and stronger cooperation can help not only reduce emissions from the construction sector, but also create higher-quality buildings that will serve people well for many years.

The recommendations also build on the previous strategic work of **Česká rada pro šetrné budovy**, particularly the Zero Carbon Roadmap, and develop it further with a stronger focus on practical implementation and the needs of municipalities. They are not intended as a one-off list of measures. Instead, they are a **living document that can respond to changes in European legislation, new experience and evolving conditions in the Czech construction sector**. Their aim is to help **translate European climate and energy goals into practical steps that can be applied in the Czech context**.



POLICY RECOMMENDATIONS

Marketing and Dissemination

Why Communicate the Project's Results and Outputs?

To make sure the results of LIFE ClimArchiBase did not simply remain “on the shelf”, it was important to reach the people who can actually use them in practice – architects, designers, investors, cities and municipalities, students, and others interested in sustainable construction.

The main place where all this information comes together is the **ClimArchiBase online platform**. In one place, it offers expert resources, methodologies, examples of good and poor practice, educational events, consultations and an interactive guide that supports the design of buildings and their surroundings.

But communication about the project and its topics did not take place only online. Information was also shared through **conferences, seminars, webinars, workshops, excursions, round tables and other professional events**. These activities created space not only for sharing knowledge, but also for bringing together people from different professions, exchanging experience and discussing specific challenges from practice.

Social media and the media also played an important role. Practical tips, professional topics, event invitations and new project outputs were shared on LinkedIn, Facebook and Instagram. ClimArchiBase was also featured in professional media and industry newsletters, while project experts took part in interviews and expert discussions. Some social media posts reached tens of thousands of people.

All project partners contributed to the communication activities, using their own channels and professional networks. This helped the project reach not only people who were already familiar with ClimArchiBase, but also new groups of professionals and the wider public.

In total, the project recorded **240 marketing and PR activities**. The ClimArchiBase platform itself received **12,000 unique page views**, while the interactive guide recorded **2,700 views**.

The purpose of communication, however, was not simply to “be visible”. The main aim was to **make reliable information easier to access, showcase practical examples and connect the people who can genuinely influence a more sustainable future for the construction sector**. In this way, the knowledge, contacts and resources created during the project can continue to be useful after the project ends.

At least **78 supporters, organisations and experts were actively involved in the project**, primarily through **networking, mutual exchange of experience, and the development of**

further cooperation. They also contributed to the development of expert content and the platform, shared their professional knowledge and experience, and provided input and feedback on the project's content and focus. **This group also includes partners with whom further cooperation was established in the preparation of follow-up projects building on the project's topics and outputs.**

This is why communication should continue beyond the end of the project. **Results and outputs have real value when they remain accessible, easy to find and continue to be used in practice.** Ongoing communication helps keep attention focused on sustainable construction, attract new users to the ClimArchiBase platform, encourage the use of methodologies, examples and the interactive guide, and continue building a professional community that can share knowledge and experience further. In this way, ClimArchiBase can remain a living and useful source of information long after the LIFE project has ended.



Sustainability, Replication and Exploitation of Project Result

What's Next? ClimArchiBase Continues

The end of the LIFE ClimArchiBase project does not mean the end of the activities it has helped to create. During the project, cooperation was strengthened and organisations and professionals working in sustainable construction, energy-efficient buildings and climate change adaptation in the built environment were brought together. Together, they gained further experience, developed a range of useful outputs and opened up topics that are worth pursuing in the years ahead.

This is why the project coordinator and partners have started preparing new project proposals. Their aim is to build on what has worked well within ClimArchiBase, put the experience gained into practice and take some of the topics a step further. New projects can help bring information on sustainable and climate-resilient construction to more professionals and the wider public, offer new educational activities and expert consultations and transfer experience and examples of good practice to other regions.

Partnerships between organisations with different areas of expertise are another important outcome of ClimArchiBase. New projects are now building on these partnerships and extending cooperation beyond Czechia. The new project proposals connect Czech organisations with partners from **Slovakia, Hungary, Estonia, Austria and Germany**. This creates further opportunities for international exchange of experience and knowledge, sharing innovative solutions and transferring examples of good practice in sustainable construction and climate change adaptation.

New project proposals have been prepared by **Centrum pasivního domu (CPD)**, **Nadace Partnerství (CEPF)**, **Rethink Architecture Institute (RAIN)** and **Česká rada pro šetrné budovy (CZGBC)**. Each organisation is building on its own expertise and the experience gained during the project and exploring further opportunities to continue the work already started.

So far, LIFE ClimArchiBase activities have led to **7 new project proposals, 2 of which have already secured funding**. The activities will therefore continue beyond the end of the project through **education and awareness-raising, expert consultations, the sharing of innovative solutions and examples of good practice, international cooperation and the continued use of the ClimArchiBase online platform**. The knowledge and experience gained will also be used in cooperation with **public authorities, professional organisations and policymakers**, helping

to translate the project results into practice and create better conditions for more sustainable construction. Cooperation with ministries, municipalities, industry representatives and professional organisations is also expected to continue, while the results of ClimArchiBase will provide a basis for the preparation of further national and international projects.

LIFE ClimArchiBase therefore does not end on the final day of the project. The knowledge, experience, contacts and outputs developed through the project will continue to provide a foundation for new activities, partnerships and projects in Czechia and abroad. In this way, the work started through ClimArchiBase can reach more people and contribute to making our buildings and cities **more energy-efficient, sustainable and better prepared for a changing climate.**





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Ministerstvo životního prostředí

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