

NEWSLETTER – issue 20.02.2013

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A conservation effort in Appenzell, Switzerland, could lead to the revival of local heritage buildings made with the unique Strickbau construction technique.Niklaus Ledergerber, president of the cultural





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The Stiftung Sparkasse, owner of the Public Weighhouse, which is one of the eight case studies within the project 3Encult, has launched an ideas competition for a "house of photography" for the historic

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http://www.3encult.eu/en/

Preserving Both Our Energy and Our Heritage: The 3rd EWCHP Conference

EWCHP-2013



As part of 3ENCULT's ongoing activities, the 3rd European Workshop on Cultural Heritage Preservation (EWCHP) will take place in Bozen/Bolzano on September 16–17, 2013, with an additional training day on September 18, 2013. Hosted by EURAC Research and the 3ENCULT project, the workshop is a European Cluster Workshop on research and development activities in the field of cultural heritage and its preservation for future generations.

The workshop will bring together European activities and initiatives that encompass the current state-of-the-art R&D in the field. The workshop will provide a forum for scientists, curators, owners of cultural heritage real estate, and other experts involved in cultural heritage preservation to discuss and share experiences. In a special training day on 18th

September, 2013, participants will have the possibility to take part in a more in-depth workshop, working hands-on with tools developed in the projects, or discussing a topic of interest in a smaller group. The specific workshops will be announced on the Conference Web Page.

Topics at the 3rd EWCHP will include: Energy Efficiency in historic buildings and districts, scenarios, solutions and tools; Determination & assessment of the impact of climate change on cultural heritage objects; Assessment of the impact of indoor environments on movable and immovable cultural heritage objects; and Smart monitoring methods and technologies.

Abstracts can be submitted up until 1st April, 2013 on the conference website/papers

For more information: EURAC - Maurizio Gretter +39 0471 068287

New 3ENCULT study tour on energy efficient solutions for historic buildings focuses on Mediterranean municipalities



Mediterranean municipalities and heritage site managers are invited to join us in Bologna in April 2013. European cities are home to a wealth of landmarks with great cultural and social value. How can we improve energy efficiency and use renewable energy in buildings whilst also protecting our heritage? How can we ensure that this renewal brings benefits to the community?

ICLEI Europe, in cooperation with the City of Bologna and the University of Bologna, will hold a study tour on 24 April 2013, focusing on the South of Europe. Following the success of the first study tour, which took place in Copenhagen in June 2012 and targeted Northern Europe, this tour aims to offer up-to-date information to local leaders and municipal staff dealing with buildings, energy and cultural heritage in the Mediterranean region. Learn from experts how advanced

materials and technological options can be utilised to achieve better energy efficiency in harmony with cultural heritage. Explore your options through investigating the relevant context of local policy and urban planning. A combination of presentations by experts and guided site visits will be organised, including:

• The Palazzina della Viola – a XVI century building and 3ENCULT case study, turned into a service area for 7,000 international and exchange students reaching Bologna University every year. Following the

refurbishment, post-intervention diagnoses are regularly performed in the building and are used to evaluate ways to improve both user comfort and energy efficiency.

• The Palazzo D'Accursio - a 13th century sandstone palace owned by the Municipality that represents a unique combination of architectural and decorative styles. A great example of a centuries old building becoming a living, valuable energy efficient historic monument, in use by citizens.

View the **programme** of the study tour. Do you want to learn more? Join us also for the Workshop "Preserving community history through energy efficiency" taking place in Bologna on 23 April 2013.

Limited space is available – so secure your place now by registering. For more information, please visit the website or contact us at ccp-europe@iclei.org.

For more information:

ICLEI - Giorgia Rambelli +49 761 36892-0

Workshop "Preserving community history through energy efficiency" - 23 April 2013, Bologna (Italy)



Historic buildings are the trademark of numerous European cities, towns and villages, and a living symbol of Europe's rich cultural heritage. Yet, they also have a high level of energy inefficiency and significantly contribute to greenhouse gas emissions.

Aiming to find an optimal balance that deals with maintaining the site as a historical monument on the one hand, and applying energy efficiency retrofit measures on the other, requires a careful approach. This includes discussions with different stakeholders to find a win-win solution for all. This workshop aims to ensure exchange and knowledge-sharing between actors, specifically local government representatives from the energy and building departments(as well as heritage protection offices) from

across Europe. During this workshop, organized by ICLEI Europe in cooperation with the City of Bologna, you will explore together with peers and experts:

- Is energy efficient refurbishment of historic buildings economically feasible? Discussion on funding available, collaboration among projects, time for recovering investment, social and economic benefits for the community.
- **Rebuilding history:** Exchange on reconstruction after a natural disaster, including guidelines, recommendations and experiences on how to save historic buildings and energy for the future.
- Analysing the case: discussion exercise participants to pool their ideas and showcase their experience.

Interested in exploring solutions targeted at warm climate areas? Join us for the study tour energy efficient solutions for historic buildings: focus on Mediterranean, taking place in Bologna on 24 April 2013.

Limited space is available – so secure your place now by registering. For more information, please visit the website for the programme or contact us at ccp-europe@iclei.org.

For more information: ICLEI - Giorgia Rambelli +49 761 36892-0 Palazzo d'Accursio: public tender for the refurbishment of Sala Urbana soon launched



The Municipality of Bologna will soon launch a public tender for the refurbishment works to be carried out in the Sala Urbana (also known as Coat of Arms Hall), located in the Municipal Arts Collection Museum of Palazzo d'Accursio. Works are expected to start in spring 2013.

The tender follows a series of investigations, conducted in collaboration with the University of Bologna and the local 3ENCULT case study team, to assess the stability of the building and the level of indoor comfort. These include, among others: thermography, Ground Penetrating Radar testing, Blower Door Tests, Heat flow meter measurements; Hygrothermal monitoring with the use of wireless sensors (WSN); "Spot" measurements of expressive parameters of the Hygrothermal, visual and

acoustic comfort; Psychometric and lighting maps. The monitoring and analysis of energy consumption in the selected areas were followed by a series of dynamic energy simulations to evaluate the effectiveness of different intervention methods. This aided in selecting the best performing energy and environmental solutions. Three types of intervention were selected:

- the replacement of all fixtures with a selective double-glaze;
- the replacement of the terracotta-tiled wood roof with a ventilated roof, providing a package of wood fiber insulation;
- the renovation of the limestone plasters.

The cost of replacing the windows is supported by GovernEE, a complementary project funded by the Central Europe program, dealing with issues regarding, in particular, the governance in energy saving projects. All other operations are funded by the city of Bologna. A good practice of collaboration among funding lines and projects!

For more information:

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Training Local Authorities and Private Property Owners in Retrofitting Heritage Buildings



3ENCULT feeds the project's experience in the Fourth Forum of TrainRebuild, the European Forum on Training and Skills For Re-"Building". TrainRebuild seeks in this event to elicit the views of local private property owners' associations and municipalities members of the Covenant of Mayor in jointly undertaking retrofit programs for heritage buildings.

TrainRebuild's objective is to encourage retrofitting in a wide range of buildings by targeting specifically property owners (via their associations) and local authorities with dedicated training and information packages. In several forums different aspects have been addressed – this last one on 3rd of December 2012 in Brussels focussing on

heritage buildings and their specific demands. Issues addressed in the four sessions range from policy and finance over good practice examples to specific training experiences:

- SESSION I POLICY AND FINANCE
- Policy and Financial Support Instruments at Local Level to Support the Retrofitting of Heritage Buildings
- SESSION II TOOLS AND GOOD PRACTICES
- Benchmarking Successful Projects and Practical Tools to Improve the Renovation of Heritage Buildings
- SESSION III TRAINING OF LOCAL AUTHORITIES

- Training Local Authorities Experts in Carrying Out Retrofit Programs for Heritage Buildings
- SESSION IV TRAINING OF PROPERTY OWNERS
- Training of Building Practitioners in Carrying Out Retrofit Programs for Heritage Buildings
- 3ENCULT stated that consistent reduction in energy demand is possible also in historic buildings respecting their heritage value if a multidisciplinary team finds the right solutions for the single building. There will be no "standard solutions" in heritage buildings, but the project is providing a pool of solution and guidelines how and when to apply them.

On the example of the Public Weigh House in Bolzano/Italy, one of eight 3ENCULT case studies, the process ranging from the comprehensive diagnosis of both conservation and energy aspects over the analysis of a broad range of possible solutions towards the selection of the best ones for the single building is shown.

Date & place: 3.12.2012, 9.00- 17.30, Brussels

Further information: Alexandra Troi (EURAC), +39 0471 055600

Programme: Click here to open the attachment

City of Bolzano triggers dialogue on urban regeneration and energy retrofit in the historic city context



TTo reach its ambitious goal of carbon neutrality and increase the energy efficiency of its building stock, the city of Bozen/Bolzano developed the "bonus cubatura" – the possibility to add volume to a building (e.g. an additional store) if the it undergoes deep energy renovation and facilitate therewith the financing of the intervention. This opens however a lot of questions with regards to the conservation of the historic context.

Policy makers and architects, engineers and conservators met at the symposium, explaining each their specific views and experiences and looking for linking points. What measures are necessary to energetically refurbish a

historic building as a whole or individual units of the building? How can the technical possibilities be used in a careful manner or which technical means are necessary to achieve sustainable energy efficiency, without losing the architectural features of a building?

At present, there are quite some experiences in the field of renovation available. But they are very different and are often isolated. The city of Bolzano would therefore like to contribute in collaboration with various professionals at this conference to share their experiences.

The event is also result of a "tavolo tecnico" where EURAC feeds in the experiences from the international research project 3ENCULT to be used and implemented in the local context.

Target group of the conference are experts in the field of energy-efficient renovation and interested citizens.

Date & place:

29.11.2012, 9.00- 13.00, Bozen/Bolzano, Italy In the afternoon ENERTOUR to retrofitted buildings in Bozen/Bolzano

Further information: Alexandra Troi (EURAC), +39 0471 055600

Programme: Click here to open the attachment Whipping Swiss cottages into green shipshape



By making Strickbau wood log buildings more energy efficient whilst restoring them in line with conservation principles, scientists are participating in their revival and use for modern living.

Scientists aim to create a sustainable future for the **Strickbau building technique**, typical of the Swiss Appenzell region. The challenge is to use modern features, while respecting historic architecture, to bring them back from the verge of extinction. Working alongside Swiss conservation experts, researchers from the EU funded **3ENCULT** project are looking for the best way to optimise the **energy efficiency** of the old buildings, in line with **Swiss monument conservation guidelines**. By reducing energy inefficiencies the project is aiming to help reduce greenhouse gas emissions, while

also reducing costs and improving living comfort.

Today, not every Strickbau house is what it seems. "The outward appearance is often just a copy of the old traditional Strickbau style," **Alexander von Kienlin** explains, "Inside the houses are often hybrid constructions of industrial ready-made elements." Von Kienlin is an architect and architectural historian who has become an expert on the matter. He also works for the **Institute of Historic Building Research and Conservation** (IHBRC) at the ETH Zürich, Switzerland.

Developed during the **18th century**, Strickbau features a highly recognisable architecture with even planking and wooden shingles on the facades. "The genuine Strickbau buildings are built with **massive wood**, hence very robust and much better suited for the climate here," adds Von Kienlin. What gives the buildings their strength is that beams have to be conical to enable dove-tail connections at the corners, meaning beams are fitted perfectly on top of each other. At the beginning of the 20th century, however, this **technique** was slowly **abandoned**. The **manufacturing knowledge** was also **lost**.

Previous restoration efforts have been studied by the local conservation body of St. Gallen together with the IHBRC. "In the past a great many wrong decisions were made, which led to distortions and ultimately to the demolition of some houses," Uta Hassler, IHBRC director, tells youris.com. Strickbau buildings were often totally gutted and rebuilt with a modern interior.

The research of the **3ENCULT** project aims to remedy this situation through an **energy efficient retrofit of Strickbau without losing their historic character**. One of the scientists' aims is to achieve **airtightness** in the house by adding new windows and finding solutions for moisture transport. In addition, ensuring adequate **inner insulation** is another key issue. That's because outer insulation would destroy the unique and listed look of such buildings. To do so, the **3ENCULT** research team is testing different techniques, such as vacuum-insulation- and wood-wool-panels, to identify the most suitable solution.

Despite all the efforts to revive Strickbau with modern, energy efficient, restoration methods, its building technique is on the verge of extinction. Indeed, it is no longer taught in building trade professional training. However, there is a **recent revival** and interest is coming back with some carpenters acquiring the skill. It will take time, however, before they acquire the same level of knowledge as their elders. Von Kienlin concludes: "According to experience, it takes up to **two generations for a lost craftsmen technique** to be carried out in the same quality level after their reintroduction."

Article by:

Corinna Engelhardt, youris.com

For more information:

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A conservation effort in Appenzell, Switzerland, could lead to the revival of local heritage buildings made with the unique Strickbau construction technique.

Niklaus Ledergerber, president of the cultural heritage preservation commission of the Swiss canton of Appenzell, is an expert in local building history. He tells youris.com about the possible rehabilitation of the Strickbau, which is a type of log construction typical of the Appenzell region. It is characterised by layered wooden beams enmeshed at the corners with a so-called dovetail connection to give the building strength.

Q: The Strickbau was developed in the beginning of the

18th century. Why did it happen just in the canton of Appenzell?

A: In the Appenzell region, wood as a building material existed everywhere. Everyone had access to it. Most of the farmers could handle it on their own. Only the most important buildings such as the churches, schools, rectories and town halls were built primarily with stones. Another reason for the widespread use of the Stickbau in the region is that it can withstand its relatively high humidity thanks to its corner connections that have no excess endings and therefore present no weak spots. So, we can say, that mainly the landscape and the climate made the Strickbau suited for Appenzell.

Q: Today the Strickbau is no longer the first choice of building style. How did that change happen?

A: In the end of the 19th century, wood became scarce as a building material. Those who did not own their own wood sometimes were forced to use the so-called bolt-building technique. This involves filling a wooden frame with clay or bricks. From the 1950's onwards, the bolt-building technique became more and more established due to a change in the choice of building material—as low priced isolation mats came onto the market—and the mechanisation of the construction technique. The bolt-built houses were also less costly in terms of labour.

Q: Why are many of the old Strickbau buildings being demolished?

A: Wood is not a permanent building material. It is very fragile and can be subjected to structural damages. A replacement building often makes more sense than undertaking extensive restoration of a Strickbau. There is also a law, which requires that for every new farm house being built, the existing farm building has to be demolished. This is to preserve the landscape with single, detached, farm houses. Fortunately, today we also have the possibility to declare the most unique Strickbau buildings as historic monuments. Only one of six criteria, related to their historical or folkloristic importance, has to be fulfilled.

Q: Is getting an old Strickbau refurbished a realistic way to keep such buildings?

A: Some Strickbau buildings do get refurbished. But they do not always respect the original construction, nor conservation principles. Often important partition walls, floors or even roof structures are removed to allow better room shapes. Now we have to look at whether we can modernise old Strickbau buildings while conserving them. The trials of the 3ENCULT project going in that direction are now in their third year. Primarily, we hope that we can show people living in old Strickbau buildings how they can improve their energy efficiency and renovate them easily to achieve the same level of comfort as new homes. We are working on two key aspects: an ecologically friendly insulation and an adaption of the floor height to accommodate people taller than 1.70 meters.

Q: Do you think the future of the Strickbau is safe?

A: I am sure that there is a future for the Strickbau, in the same way that many people today reclaim the original, old and simple materials they are made of. However, the Strickbau has to be adaptive. The results of 3ENCULT project will help to preserve their traditional and elaborate structural technique. It will therefore contribute to keeping the important heritage of this type of construction alive. Soon we would like to start using a thin layer of glazing for the historic look of the inner window and in a few years we might also try using vacuum glazing. Already at this stage, we've received Smart Window certification together with our French manufacturer "André Meniuserie", and it is ready to be used in other historic buildings as well.

Interview by: Corinna Engelhardt, youris.com

For more information: Youris - Corinna Engelhardt +39 02 7002572

Top Marks for 3Encult



The mid-term assessment of the 3Encult project on energy efficiency and heritage buildings revealed that the project is on track with all of its objectives and technical goals.

The 3Encult project received two thumbs up from members of an evaluation committee at its mid-term assessment report this past September:

"Many aspects of this project, in its work programme, collaboration, management and dissemination, are exemplary," write evaluators Sara Van Rompaey and Owen Lewis. "While a number of detailed constructive recommendations are made, no overall corrective recommendations are warranted."

Project coordinator Alexandra Troi highly appreciated the level of detail with which the evaluators looked at the project, supported the development of tools (e.g. the extended "Raumbuch" for diagnosis and solution development) and products and expressed where they'd see specifically important issues as e.g. the interaction with EPBD and CEN working groups, but also clustering activities such as the organisation of the 3rd European Workshop on Cultural Heritage Preservation.

And that the experts clearly share 3ENCULTs positive approach to the – sometimes controversially discussed – issue of heritage conservation and energy saving when writing "With the recast EPDB directive the need for energy upgrade of our (historic) existing buildings is now top priority on the European Research agenda. The 3ENCULT project demonstrates that this EPDB2 is a unique chance for our cultural heritage by reconsidering the approach of conservation work in general, so that an energy efficient retrofit does not have to be a necessary threat but a "CHANCE" to ameliorate the way we live with and in our heritage buildings. When maintained as a healthy living space our monuments, listed or not, will have a better chance to survive."

Coordinated by EURAC's Institute for Renewable Energy the project combines twenty-two partners from ten European countries, representing research, industry and government. In the next phase of the work, the partners of the research consortium are collecting and validating all results, which will eventually be widely disseminated.

Further information: Alexandra Troi (EURAC), +39 0471 055600

3ENCULT presents a new methodology of Environmental Impact Assessment



A new methodology based on Environmental Impact Assessment (EIA), developed by 3ENCULT, will soon be applied to the eight case studies selected by the project, representing a diverse, and comprehensive, mix of European built heritage (urban and rural, cold and warm climates, humid lowlands and dry mountain areas).

The aim of the methodology is to provide guidelines for identifying and better integrating cultural and energy indicators within conservation works of built heritage. Through doing so, environmental, social and political decision-making is supported. This methodology has been developed as an instrument that identifies different stakeholders' perspectives as part of a process that includes energy and culture in environmental impact assessment. This process also involves public participation.

This methodology, developed on the basis of a survey conducted by 3ENCULT, wishes to identify and find a balance between the value of cultural heritage and energy efficiency.- In doing so the methodology refers to European and

international cultural charters and conventions, as well as to energy standards and directives. The identified indicators will be integrated in scenarios and setups for the democratic process, public hearings and decision-making. Scenarios will include passive and active energy retrofit solutions to be evaluated in a multidisciplinary decision forum, and will take into account local and even universal environmental impact assessment.

Article by Torben Dahl, Ola Wedebrunn, Christoffer Pilgaard The Royal Danish Academy of Fine Arts, Schools of Architecture, Design and Conservation

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3ENCULT brings forward innovation on photovoltaic glass



Integrating renewables in listed buildings is often a challenge. The 3ENCULT consortium looks for innovative, non-invasive solutions that can be applied ad hoc to selected cultural heritage buildings.

A new semitransparent photovoltaic glass with the thermal isolating properties required for windows has been developed by the 3ENCULT partner Grupo Unisolar / Soliker (G1S). Through the use of amorphous silicon technology, the photovoltaic material deposited on the glass is paired down or removed by a laser, making the glass translucent and enabling it to generate electricity at the same time. As a result of the procedure, brightness of the glass is decreased, allowing for solar control. Up to 40 percent semi-transparency is possible, enabling for gvalues to be

adjusted almost at will. The outer appearance is the same as a standard glass used for windows, making it suitable for historical buildings. The thermal insulation capacity is enhanced by an air chamber and different low emissive back glasses, controlling the U-factors - depending on the location as low as 1.2 W/(m2K).

This photovoltaic glass will soon be utilised at the Salamanca Industrial Engineering School, of Béjar, Spain (3ENCULT case study 7). Two options of application are still under discussion with the University. The first one foresees the application of the photovoltaic glass as a curtain wall to the Eastern façade of the School - an area of about 20 m2, which hosts a laboratory of electronics, allowing easy monitoring. The second option consists of replacing the windows glazing with the photovoltaic glass. The final choice will be undertaken according to the owner's wishes and to the cost of the intervention.

For more information:

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Heritage and Industry



Industrial heritage is defined by "The Nizhny Tagil Charter for the Industrial Heritage, 2003" as a symbol of a culture that is of great historical, technological, social, architectural or scientific value. The Spanish association Llámpara met the 3ENCULT consortium in Salamanca to discuss heritage and industry. Protecting Industrial heritage means not only preserving artistically valuable buildings, but also pursuing the local social and economic development of the industrial areas where such buildings are located. At Llámpara, researchers have focused their effort on promoting and cataloguing industrial heritage in Spain, specifically in the areas of Béjar and Sierra de Francia. Following criteria related to quality, sustainability and innovation, the association has developed a database that includes 265 items, mostly industrial heritage related to the food industry, construction and energy production, in 84 locations in the region, covering an area of 781km2.

The information collected and processed on these buildings includes: 3D laser scanning, completed with sketches, panoramic photographs and plans documentation, and 3D models created in collaboration with the Photogrammetric Laboratory of the School of Architecture in Valladolid.

Llámpara promotes the protection of industrial heritage and its activities with dedication, sharing the output of research conducted through a website, a blog, participating at international congresses, and through the "Llámpara Patrimonio Industrial" journal, which promotes discussion and dialogue among researchers on this topic.

For more information: CARTIF - Miguel Ángel García Fuentes +34 983 546504 or directly www.llampara.org

Palazzina della Viola becomes an international hub for the University of Bologna



A fresh start for the XV century building of Palazzina della Viola in Bologna, Italy. The Palazzina, one of 3ENCULT's case studies, has been refurbished after 16 months of work.

The building is now the headquarters of the University's Department of International Exchange – a working area for exchange and multiculturalism of about 1,300 m2. The area hosts 40 employees who interact with around 5,000 international students and more than 2,000 exchange students annually. The inauguration, which was open to citizens, took place at the end of September and was chaired by Prof.Ivano Dionigi, Dean of the University

of Bologna, together with Josè Viegas Filho, Brazilian Ambassador to Italy, and Matteo Lepore, Bologna's councillor for International Relations (in the picture from left). The Palazzina symbolises the continuous joint effortand the crucial collaboration between the City and the University.

Since the end of the refurbishment works in March 2012, an extended and innovative cloud sensing network was installed in the building. The system, developed by the DEIS Dept. of University of Bologna, consists of about 40 nodes, each equipped with a number of sensors. These nodes are distributed throughout the four levels of the building. The sensors continuously record energy and structural and environmental data, which is then stored in a database. The data is accessible in real-time through a website for data visualisation and downloading, creating a valuable data bank for further studies.

Light distribution maps, air temperature and relative humidity data have been obtained through a number of "movable" WSN nodes located on the first floor. These nodes are used to perform post-intervention diagnosis and facilitate greater analysis of employee behaviour and use of the building. This in-depth evaluation will help to find ways of improving both the comfort and energy consumption of the Palazzina, a "living lab" for the University of Bologna.

For more information:

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In Copenhagen to learn more about energy efficiency in historic buildings



Local political decision-makers and technical staff involved in monument protection and energy planning networked and exchanged in the beautiful city of Copenhagen at the 3ENCULT study tour, which focused on buildings in cold climate regions.

On 26 June, participants from Northern Europe and the Baltic Region explored innovative approaches in bridging the gap between preserving European landmarks and increasing energy efficiency through visiting a number of exemplary buildings in Copenhagen. Why Copenhagen? The Danish capital has already reached its target of 20% emissions reduction by 2015, and now aims to become the world's first Carbon neutral city by 2025. The CPH

2025 Climate Plan lays out a holistic approach for achieving a better quality of life for citizens in line with carbon neutrality, including new jobs and investment through a joint collaboration between the local government and all stakeholders involved in the process. This plan includes sustainable retrofitting of buildings and districts through a "story telling" approach, in which the city's cultural heritage becomes the protagonist of five main stories of Copenhagen's past, relaying to citizens the importance of preservation.

A great line-up of experts guided the participants through observing and experiencing the most innovative measures implemented, discussing the difficulties encountered, and sharing input and capacity-building options for involving community and stakeholders. The study tour included:

- the Fæstningens Materialegård its recent and ongoing energy restoration has been carried out not only to reduce carbon emissions and improve efficiency, but was fully intended from the outset to be an inspiring case study, one that would prove the feasibility of retrofitting to other listed building owners in Copenhagen;
- the Masteskurene and Mærsehuset The "Masting sheds and top sail" building complex has been a great success, with new life breathed into the building complex whilst retaining its character. The project was nominated for the Mies van der Rohe Prize as good example of renovation that preserves an historical trademark and meets the users' needs;
- the Osram Building –a shining example to both Copenhagen and the rest of the world of the energy savings that can be achieved through sustainable retrofitting. The building, previously used for the manufacturing of light bulbs, has been extensively "energy renovated" while retaining respect for the building's unique history.

For more information:

ICLEI - Giorgia Rambelli +49 761 36892-0



Publication of ideas competition for case study 1, the Public Weighhouse of Bolzano

The Stiftung Sparkasse, owner of the Public Weighhouse, which is one of the eight case studies within the project 3Encult, has launched an ideas competition for a "house of photography" for the historic building.

The building of Romanesque origins (13th century) is placed in the historic city Centre of Bolzano. It is part of the "Portici di Bolzano", which represents a for this time typical composition of street market with a central grain trade. Within the runtime of the project 3Encult it is planned to do a refurbishment project of the building. The project planner will be selected through a two-stage architecture tender: first stage is the ideas competition to define the future utilization concept of the Weighhouse as a "house of photography" and second stage is an architecture competition to define the refurbishment project.

The publication of the ideas competition, a few days ago, is the first step towards the energy conscious retrofit of the building: already in this early stage every proposed utilization concept has to consider the aspects of preserving the cultural heritage as well as the improving of the energetic performance of the building, exploiting the energetic potential of the building in the best way and taking into account a relative concept already during the development of the utilization concept.

Further information and the text for invitation to tender can be found under: http://www.stiftungsparkasse.it/ under (Ausschreibungen / Wettbewerbe or Bandi / Concorsi).

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PROJECT INFORMATION

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