

Hrvatski dom herceg Stjepan Kosača

MOSTAR GREEN DESIGN BIENNALE

12-15/10/2022

www.sarajevogreendesign.com



Grad Mostar



Publisher

Sarajevo Green Design Foundation

Edited by

Elma Durmisevic

Design

Jasmina Koluh

Branding

Sasa Vidakovic / svidesign.com

© 2022 by Sarajevo Green Design Foundation

All rights reserved

No part of this book may be reproduced in any form without written permission of the copyright owners.

All images in this book have been reproduced with the knowledge and prior consent of the artists concerned, and no responsibility is accepted by producer, publisher, or printer for any infringement of copyright or otherwise, arising from the contents of this publication. Every effort has been made to ensure that credits accurately comply with information supplied.

Printed in The Netherlands



This year's event will bring together 20 experts, architects, designers and researchers from 11 countries as well as 35 students from 5 universities around the theme of circular design and digitalisation. The aim of the Biennale is to capture and share the leading innovation and developments that will shape the **sustainable and circular world of tomorrow**. At the centre of the debate are concepts, strategies and tools for effective resource use within built environment. This year's themes are dealing with digitalization and implementation of circular economy in architecture as well as transformation of historic sites and design of healthy and inclusive green buildings and cities. Biennale will be opened by City Mayor Mario Kordic, rectors of the University of Mostar and University of Džemal Bijedić, founder of Green Design Foundation & Biennale Elma Durmisevic, president of European Association of Architects Ruth Schagemann and representative of EU Interreg project Digital Deconstruction.



MOSTAR GREEN DESIGN BIENNALE 12-15/10/22

Day ONE / Wednesday 12 October 2022 / Opening

17:00-18:00 MOBILITY EXPO

18:00-18:45 OPENING

- Opening Sarajevo Green Design Foundation
- Mostar City Mayor
- Rectors of Universities
- President of the Architects Council of Europe
- EU Digital Deconstruction Project representative

18:45 CLASSIC MUSIC INTERMEZZO

19:00-20:00 OPENING LECTURES VISION 2025

- Elma Durmisevic, Amsterdam/Sarajevo, "Reversible architectural design, and digitalisation a key to Climate proof Building" (Founder of Sarajevo Green Design Foundation and EU Laboratory for Green Transformable Buildings in the Netherlands)
 - Duncan Baker Brown, 'Design in the Age of Emergency' (circular architecture UK and London perspective)
 - Ruth Schagemann, Germany, Circular architecture - "Courage to change" (president of Architects Council of Europe)
- 20:00 OPENING GREEN DESIGN EXHIBITION AND RECEPTION

Day TWO / Thursday 13 October 2022 / Digitalisation

12:00 TOWNHALL MEETING - Green cities ambition versus state of the art regulation

- Natasa Tabor, towards green city planning framework - "Towards integrated spatial planning in Bosnia and Herzegovina" (Sarajevo Canton Planning Institute)

14:00-16:30 TOWNHALL MEETING potential fields of collaboration ACE and SGDF/ GDC Location City Hall Mostar

18:00-18:30 ACE ARCHITECTS COUNCIL OF EUROPE SESSION

- New European Bauhaus Forum BiH ACE Selma Harigton, Irland - "WHAT IS THE NEW EUROPEAN BAUHAUS TO US: Connecting the dots, drawing the lines"
- Carl Backstrand, White - Stockholm, Sweden - "Towards a climate neutral building sector supported by an interdisciplinary approach"

18:45-19:15 LECTURES

- Jean Yves Luxemburg, Bridging the technological gap for Circular Budlings & digitalisation - "Bridging the technological gap for Circular Budlings & digitalisation"
 - Dominik Breitfuß - "BIMstocks – digital twins for material passports"
 - Birgul Colakoglu/Istanbul Digital Architeture - "Integrating Circularity into Architecture Curricula"
- 19:45-20:30 GREEN FASHION SHOW/LOCATION PUBLIC SQUARE / Šetalište Mostar
- Naida Vilic, Designer

Day THREE / Friday 14 October 2022 / GREEN CITIES

14:00-16:30 WORKSHOPS

Student's workshop "reactivation of city's neglected spaces"

Presentation of student's workshop results and walk along the intervention sites

18:00-18:45 HERITAGE SESSION

- Igor Kuvac, Banja Luka, "Emerging environmental problems. Visualization."
- Presentation of students' workshop result

• Senada Demirovic, Mostar, Mostar Intervention sites - "Urban reconstruction in continuity - Mostar as a new experience"

- Gil Paled, "Heritage conservation of UNESCO World Heritage protected cities and buffer zones – challenges and opportunities"

18:45-19:30 LECTURES

- Bojan Spasojevic, "Urban heat islands"
- Damir Androsevic, "Energy Transition in BiH - focus on electricity production"
- Sanela Klaric Green Building Council - "BH Cerification"

20:30 Opening of the EU Green Design Centre for South East Europe (First phase)

Mostar rock school concert at the GREEN DESIGN CENTRE Location Mostar

Day FOUR / Saturday 15 October 2022

Feed visit Ljubuski Park including (roman wine route) wine tasing and lunch/ dinner





SARAJEVO
GREEN DESIGN
FOUNDATION

Day Three
GREEN CITY
14 OCTOBER 2022

14:00-16:30
WORKSHOPS
Student's workshop "reactivation of city's neglected spaces"
Presentation of student's workshop results and walk along the intervention sites

18:00-18:45
HERITAGE SESSION

- Igor Kuvač, Barja Luka, "Emerging environmental problems: Visualization," Presentation of students' workshop result
- Senada Đemirović, Mostar, Mostar Intervention sites - "Urban reconstruction in continuity - Mostar as a new experience"
- Gil Paldé, "Heritage conservation of UNESCO World Heritage protected cities and buffer zones - challenges and opportunities"

18:45-19:30
LECTURES

- Bojan Spasojević, "Urban heat islands"
- Damir Andreosević, "Energy Transition in BiH - focus on electricity production"
- Sarajlić-Platić Green Building Council - "BH Certification"

20:30
Opening of the EU Green Design Centre for South East Europe (First phase)

Mostar rock school concert at the GREEN DESIGN CENTRE Location Mostar



SARAJEVO
GREEN DESIGN
FOUNDATION

Hrvatski dom herceg Stjepan Kosača

**MOSTAR
GREEN DESIGN
BIENNALE
EXHIBITIONS**
12-25/10/22
www.sarajevogreendesign.com



SARAJEVO
GREEN DESIGN
FOUNDATION

Šetalište Mostar

**MOSTAR
GREEN DESIGN
BIENNALE**
13/10/22
www.sarajevogreendesign.com

**GREEN
FASHION
SHOW**
NAIDA VILIC





SARAJEVO
GREEN DESIGN
FOUNDATION

**MOSTAR
ROCK
SCHOOL**

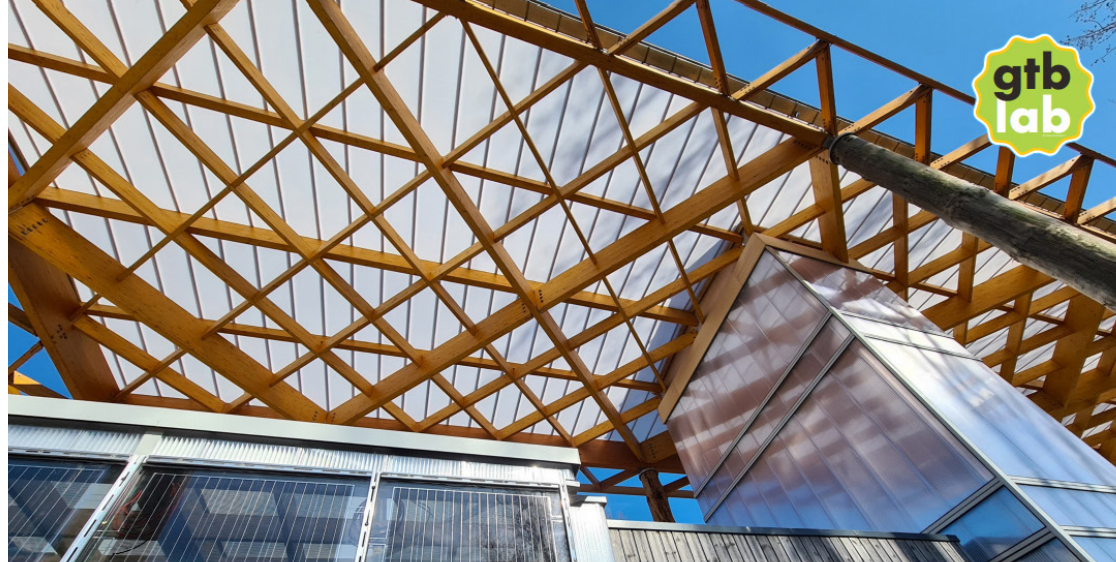
The school that rocks!

Green Design Center Site / Mostar

**MOSTAR
GREEN DESIGN
BIENNALE**
14/10/22
www.sarajevogreendesign.com

Laboratory for Green
Transformable Buildings
4D architects, Amsterdam
Elma Durmisevic Architect,
The Netherlands

Circulair
Building
Platform



GTB LAB

www.gtb-lab.com

EU Laboratory for Green Transformable Buildings

by Elma Durmisevic

GTB Lab is an EU Laboratory for Circular Buildings that showcases circular building design and construction solutions. In the lab testing and validation tools measure the performance of circular design and construction.

GTB Lab demonstrates:

- Circular building design
- Construction without value degradation of materials
- Use of Digital tools/BIM for management of circular material streams
- Standardisation of Circularity Profiles
- management of circular material streams

Architect: Elma Durmisevic, 4D Architects
Structural Engg: Jaap van Heijster, AB
Installations: Jaap Wiedenhoff, ABT bv
Contractor: Jongen Bouwpartners
Suppliers: De Groot Vroomshoop Groep, Jansen AG, Pilkington, TheNewMakers, Rodeca, AMMANU

4D
architects



Circulair
Building
Module

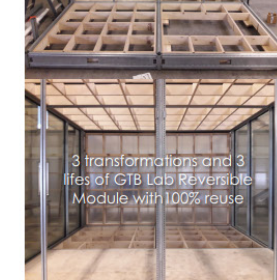


GTB LAB

www.gtb-lab.com

EU Laboratory for Green Transformable Buildings

Reversible connections



3 transformations and 3
lives of GTB Lab Reversible
Module with 100% reuse

Laboratory for Green
Transformable Buildings
4D architects, Amsterdam
Elma Durmisevic Architect,
The Netherlands

16,3 tons of CO2 saved by direct use of tree
trunks during Dutch forest maintenance

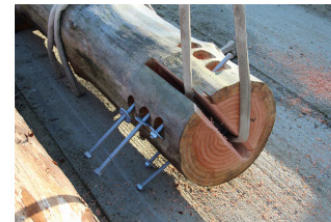


GTB LAB

www.gtb-lab.com

EU Laboratory for Green Transformable Buildings

by Elma Durmisevic



GTB Lab demonstrates:

- Circular building design
- Construction without value degradation of materials
- Use of Digital tools/BIM for management of circular material streams
- Standardisation of Circularity Profiles
- management of circular material streams



Circulair
Building
Module

Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands

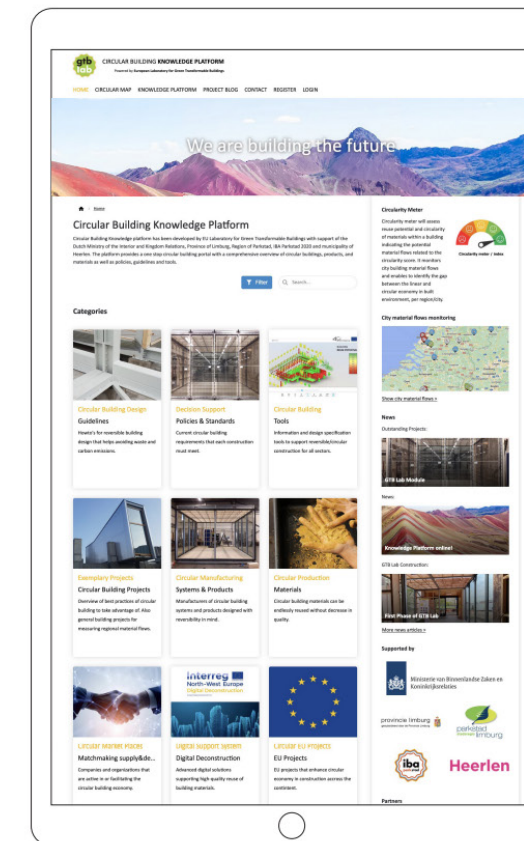
Circulair
Building
Platform



GTB LAB

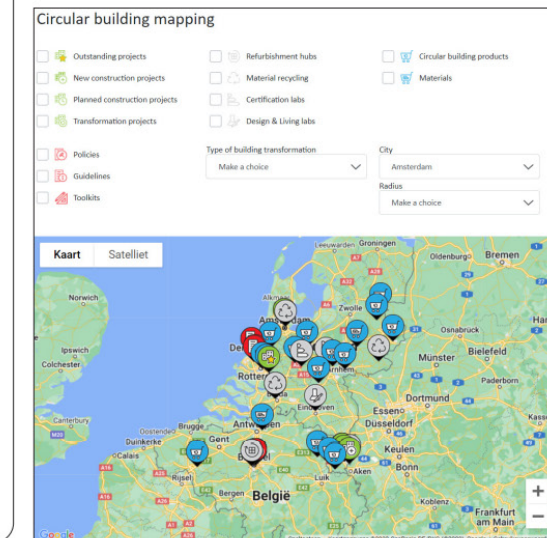
knowledgeplatform.gtb-lab.com

Circular Building Knowledge Platform



The Circular building knowledge platform is one stop shop for information about circular built environment envisioned by Elma Durmisevic. Main objective of the platform is to inform stakeholders in the built environment about the state of the art regarding regions transition towards circular built environment. The platform provides information about circular building **policies, tools, guidelines**, and experiences from **exemplary projects**, and much more.

The Knowledge Platform also functions as a monitoring system of **circular material flows through regions and cities** by capturing the construction material stream through cities. In addition to circular design and construction methods, avoiding waste also starts with data collation and monitoring. Circular material flow monitoring and data collection will play a crucial role in shaping the circular region of the 21st century.



Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands



GTB LAB

www.gtb-lab.com

Partners

A co-production of **Ministry of the Interior and Kingdom Relations (NL)**, **Province of Limburg (NL)**, **IBA Parkstad**, **Region of Parkstad** and **Municipality of Heerlen**
with founder and creator of GTB Lab **Elma Durmisevic**

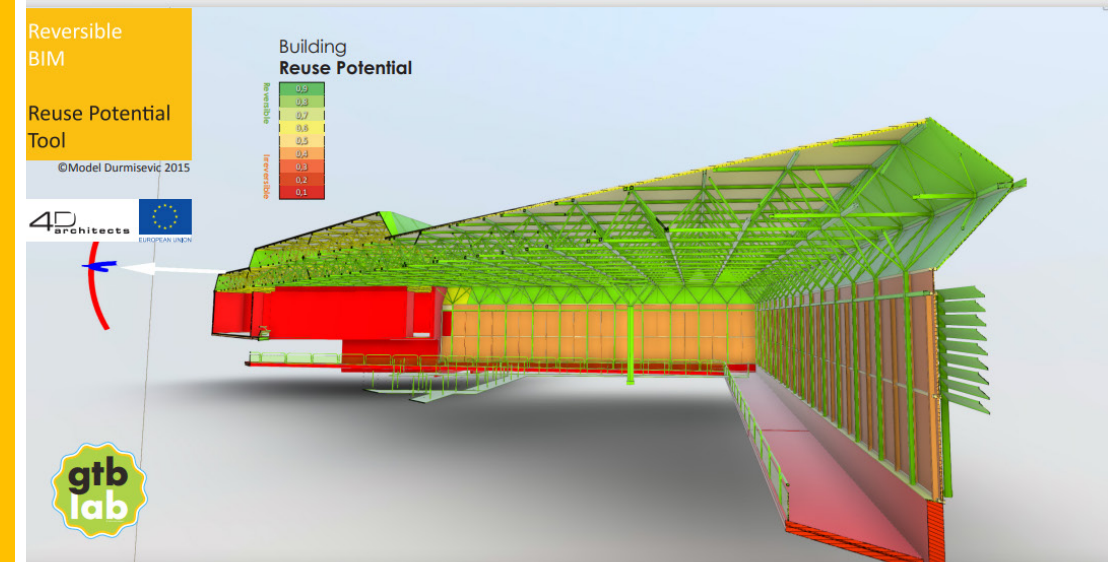


GTB Lab © by Elma Durmisevic

Architect: Elma Durmisevic, 4D Architects Amsterdam
Structural Engineering: Jaap van Heijster, Adviesbureau Brekelmans
Installation services: Jaap Wiedenhoff, ABT bv
Contractor: Jongen Bouwpartners
Suppliers: De Groot Vroomshoop Groep, Jansen AG, Pilkington, TheNewMakers, Rodeca systems, AMMANU - LED Intelligence

Circulair
Building
Platform

Digital assessment of Reversibility/Reuse Potential



Reversible BIM

www.gtb-lab.com

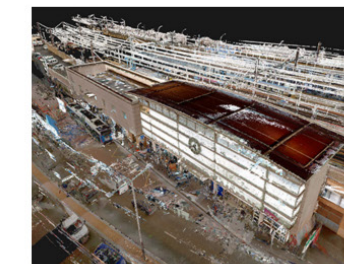
Digital inventory of Reuse Potential

Reversible BIM is a digital tool that provides insight in the reuse potential of buildings and materials reflecting their embodied value and reuse strategies.

To do this, the model analyzes relations and dependencies that individual elements have within a building structure. The reuse potential of materials is mainly determined by their technical and physical dependencies within a building.

1. Data gathering

Point cloud data from 3D surface scanning is imported into Revit as the main modeling reference. 3D scanning files are mapped with the **technical drawings** which provide additional information not included in the point cloud.



2. Data processing

A **basic BIM model** is created taking care that all elements are clustered according to their main building function and their can be relations analyzed.

3 BIM plugins

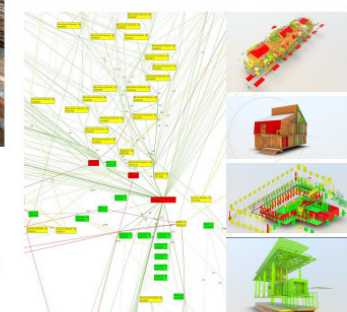
Reversible BIM plugins are used to add to each element reversibility parameters, such as connection type, lifecycle, basic function, assembly sequence, carbon footprint, level of prefabrication, product geometry, etc.

4. Revit2Excel2Revit

Reuse Potential is calculated and being exported to an element sheet including parametric values per element, per material type and per building function.

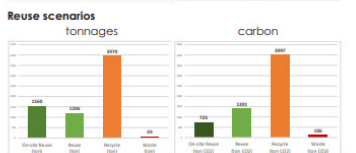
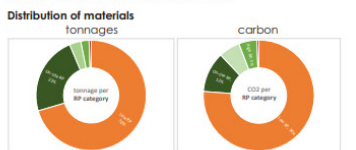
5. Reversible BIM

A **color-coded 3D Viewer** enables non-Revit users to view the model and retrieve reversible information through several custom-made color-coded views. The colors reflect the element functions, the assembly sequence, number of relations between elements, reversibility and Reuse Potential of the materials.



6. Reporting reversibility

Reversible BIM provides **several types of reports in graphical or numerical form** for decision-makers, such as position, dimensions, tonnages, carbon emissions and volume, and most important: the Reuse Potential of the material. This value corresponds to the reuse options of materials, deconstruction steps and indicates the embodied value of the material.

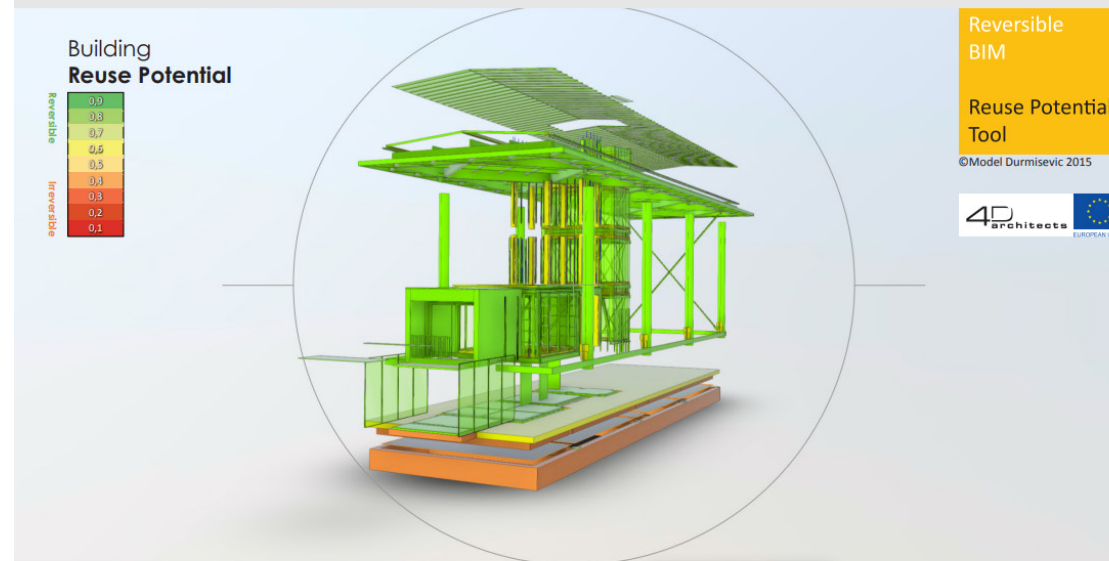


7. BIM objects library

Finally, a **BIM object library** of all elements with high reuse potential is made available to the architects. Such catalogs will boost reapplication of valuable materials in new designs.

Circulair
Building
Platform

Digital assessment of Reversibility/Reuse Potential

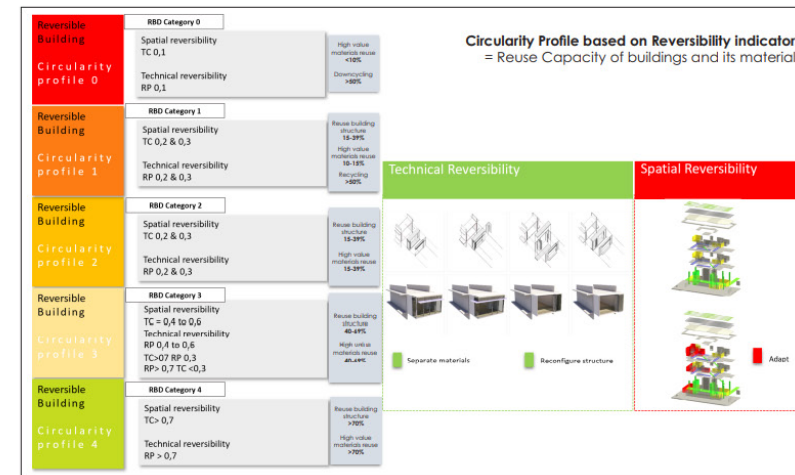


Circularity profile

GTB Lab

Method Elma Durmisevic 2019 4D architects

www.gtb-lab.com



Circular Building Profile is measured by mapping the Reuse Potential versus recycling and waste disposal.

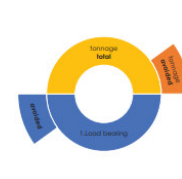
Circular Building profile is a follow up of Reuse Potential calculation (method developed by E. Durmisevic and verified by EU H2020 project).



31%
Direct reuse



48%
Reuse by repair



21%
Recycling

Circulair Building Platform

Circulair Building Platform

Laboratory for Green Transformable Buildings
By Elma Durmisevic, The Netherlands



DIGITAL DECONSTRUCTION

Increasing the reuse of materials on (de)construction sites

Background

Construction and demolition waste accounts for about **33% of all waste** within the EU. Circa 50% of this amount is currently recycled in most EU countries, however, the majority of waste is destined for backfilling and other low value applications. Poor knowledge of material and product composition, building reversibility, disassembly capacity of buildings and poor digitization of the construction sector are factors hindering better exploitation of multi-layered capacity of buildings and their circular opportunities.

Digitalization

A highly digitalized deconstruction process (using digital tools to support inventory, strategies for material recovery and planning of deconstruction process) can contribute to a circular built environment, bringing key enabling technologies on digital deconstruction platform to be exploited, such as: Building Information Modelling (BIM), scan-to-BIM methods, reversibility assessments of buildings integrated in BIM, materials databases and blockchain.



Pilot sites
Starting upper left, moving clockwise:
Office Building Heerlen NL,
Gare du Villeneuve (Paris) FR,
Hof ter Laken Heist-op-den-Berg BE,
Housing Lomme (Lille) FR,
Residential - Gare du Nord Paris FR,
Ettelbrück Station LUX,
Roman museum Heerlen NL

Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands



DIGITAL DECONSTRUCTION

Digital support system for high-quality reuse of building materials

3D scan & screening

Buildings are digitalized using **3D Scanning** LIDAR techniques to create a 3D point cloud, which, after processing, provides a virtual tour of the building.

Scanning and screening is the first step of buildings digitalization, providing **point clouds, panoramic pictures and asset inventories**. It is an automated and initial overview of the of the resources available in the building.

The point clouds are used to create the Reversible BIM model and the asset inventory is pushed to the materials database.

Reversible BIM

Towards reversible BIM

Reversible Building Reuse Potential Tool

Reversible BIM gives an overview of the **reuse potential** of materials reflecting their embodied value and reuse strategies.

RBIM extends existing BIM practices with end-of-life activities and the **initial digital objects** provide **geometry, composition and connections**.

RBIM defines the reuse options of materials which is stored in the Materials Database.

The **Materials Database** is an easy-to-use market tool that contributes to making existing buildings sustainable and circular.

Linking **material passports** to buildings/materials with blockchain technology creates a secure and legal basis for trading, and therefore reuse of materials. All sorts of data can be linked to the passports, such as **CO2 impact, ownership, transaction history** and **material properties**.

Digital materials & buildings database

Blockchain

CIRDATA

Code	Category	Orientation	Type	Orientation	Material	Material	Material	Material	Material
00000001	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000002	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000003	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000004	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000005	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000006	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000007	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000008	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000009	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete
00000010	Concrete	Horizontal	Concrete	Horizontal	Concrete	Concrete	Concrete	Concrete	Concrete

Circulair
Building
Platform

Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands

Circulair
Building
Platform



DIGITAL DECONSTRUCTION

A BIM-based dashboard with multiple visualizations

DDC integrated platform

The platform helps end-users to define the most sustainable and economical deconstruction and reuse strategy for buildings.

Preliminary sketches of end user interfaces

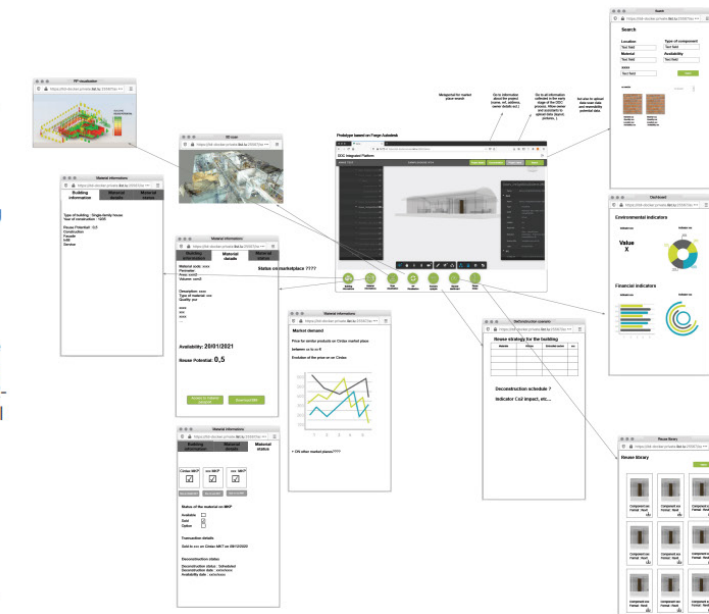
Source: LIST

Stakeholders are actors from the design phase (architects, engineers, deconstruction experts, etc.)

1. construction phase (contractors, deconstruction companies, and suppliers, etc.)
2. public and private clients (building owners)

By linking the digital system to **innovative BIM technologies**, a cycle is created between design, construction and demolition. Scarce resources are reused in this way and will drastically reduce the huge CO₂-emissions, pollution and raw material consumption of the construction industry.

The innovative digital decision support system, integrates various digital tools (3D scanning, R-BIM, a digital materials & buildings database, blockchain technology).



Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands

Circulair
Building
Platform



DIGITAL DECONSTRUCTION

Partners

DDC is an EU Interreg Project and a collaboration of 14 partners working on long term effects, system development, innovation networks, pilot implementation and communication.

Technological development

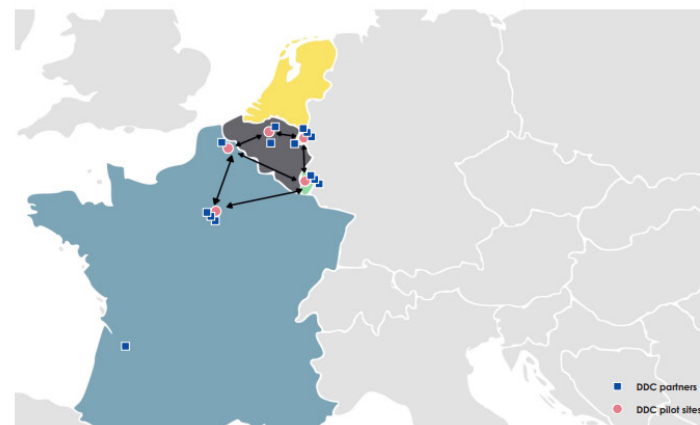
The main three digital tools (3D scanning, Reversible BIM, Materials Database & Blockchain) are integrated into one DDC platform.

Exchange of knowledge

A Transnational Innovation Network and 4 Regional Innovation Hubs bring together external stakeholders from IT, construction, engineering, government and real estate sector to participate in co-design, testing and validation of the digital tools offered by the DDC system.

Pilot sites

To test, fine-tune and demonstrate the DDC system, 5 pilot sites provide valuable inputs and feedback.



Green Design Centre and
Innovation Park Mostar
4D architects, Amsterdam
Elma Durmisevic Architect,
The Netherlands

Circulair
Building

GREEN DESIGN CENTRE MOSTAR

GDC Ambition:

- Development and showcasing of innovative circular/green building concepts
- Create an interaction platform and meeting space between the inhabitance, innovation and creativity
- Bring innovation closer to the inhabitance by interactive ICT platform
- bring knowledge institutions, schools, designers and production industry together
- Promote research that will inform decisionmakers on scoring, evaluating the performance circular building
- new meeting and expo place that will have educational, entertainment, and innovation agenda

Architect: Elma Durmisevic, 4D architects
Structural design: ABT
Installation design: ABT
Contractor: Kostrukcije
Services: Alfatherm
Supervision: ARHIPLUS

EU Horizon2020 Pilot
demonstrating reversible building
design principles



Green Design Centre and
Innovation Park Mostar
4D architects, Amsterdam
Elma Durmisevic Architect,
The Netherlands



GREEN DESIGN CENTER MOSTAR

South East European green innovation hub



The development of GDC presents reuse of a old ruin as a platform for construction of dynamic and exchangeable modern units demonstrating new approaches in design that enables disassembly, transformation and reuse of all its parts.



GDC is developed with local stakeholders bringing together a steel manufacturer, and a wood cluster as well as a local producer of installation components around new concepts of construction.



Creator and founder of Green Design Center, Elma Durmisevic, SGDF

Partners: City of Mostar, EU BAMB consortium, University of Dzemal Bjedic, University of Mostar, Industry cluster



Circular
Building

Green Design Centre and
Innovation Park Mostar
4D architects, Amsterdam
Elma Durmisevic Architect,
The Netherlands

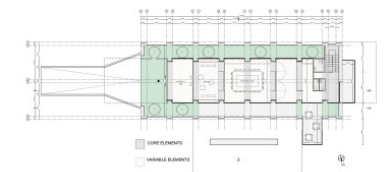


GREEN DESIGN CENTER MOSTAR

Innovation Park for Circular Buildings and Sustainable Development

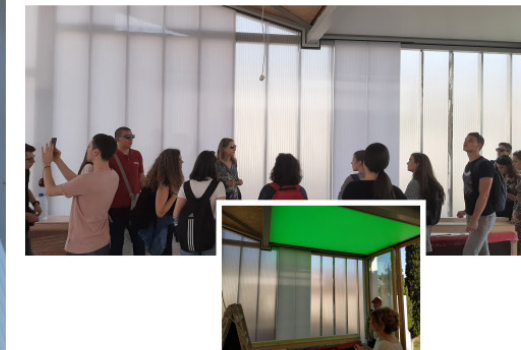


Green Design Center in Mostar (GDC) will be a creative hub bringing creative and production industries together around Reversible Building Design concepts. GDC will be used for educational purposes and as a construction innovation platform.



Transforming a former military camp and industrial zone from the beginning of 20th century into a nucleus of Green Building Innovation and socio-cultural cohesion.

Introducing new identity to the space and the city.



Circular
Building

Super Circular Estate
Erol Oztan, Architects
Heerlen, The Netherlands



SUPER CIRCULAR ESTATE

First Circular Neighbourhood in the Netherlands



Environmental impact
= savings per house

- 184,5 ton material
- 46,21 ton CO2
- 335 GJ



**Material
Passport**

Green Campus
Istanbul Technical University,
University of
Sarajevo
Prof. Birgul Colakoglu



SUPER CIRCULAR ESTATE

New circular economy processes
100% reuse of a social housing high-rise



Super Circular Estate project (SCE) is an EU UIA housing project in Kerkrade NL. The project tested a construction approach relying on mining of materials from neighbouring existing building for new construction.



During the last two years, the SCE consortium was pushing the boundaries of what is feasible in circular construction, while deconstructing the existing 10-story flat building built in 1960s and developing and testing options for the restart of new life of its products and materials.



As a result of the UIA SCE experiments, three new houses have been constructed by reusing more than 90% of materials from the existing building. Besides, 9 deconstruction and reuse strategies have been tested. Many challenges with respect to the difference between circular and conventional building process have been addressed by SCE consortium members and elaborated in Expert's zoom-ins.



**Green
Architecture**



Selma Harrington | Architects Council of Europe-Executive Board member and Past-President | New European Bauhaus Forum Bosnia and Herzegovina - Founding Member | PhD Architecture (University of Strathclyde) MPH European Studies (Trinity College Dublin) | MSC Architecture (University of Sarajevo) | ArchitectMRIA NonAIA

As NEB Community partner

We apply the New European Bauhaus Idea to think globally and act locally and invite the creative professionals to: **Act NOW**, with kindness, to yourself, fellow human beings, animals, plants, air, water and soil. **Connect** across disciplines and beyond boundaries; **Engage** with local authorities, civic society and legislators; **Enhance** and apply learning, innovation, adaptability and resilience. **Strengthen** the role of creative and cultural professions



Borut Cink, EU Policy Officer | JRC | NEB Unit

The New European Bauhaus co-creation phase took place in the first half of 2021 and saw more than 2.000 contributions from all over the world, which helped to shape the initiative. One of the core principles of the New European Bauhaus is a multilevel approach to transformation – from global to local – and therefore the ambition is to not limit the initiative's scope to the European Union. Building the international dimension of the New European Bauhaus is a work in progress. There are already pathways for entities based outside of the EU to join the movement and contribute to its implementation. They include: - Possibility to join the New European Bauhaus Community as Partners (non-profit entities) or Friends (companies and public authorities). - Funding opportunities (NB eligibility criteria depend on each programme – e.g. Horizon, LIFE, Creative Europe, etc.). -The New European Bauhaus Prizes award excellence and creativity of completed projects and ideas by young people, integrating the three values of aesthetics, sustainability, and inclusion. The 2023 edition of the prizes will allow entities based in the Western Balkans to participate. -The call for transforming places of learning collects and connects transformation initiatives from around the world that are focused on future formal and informal learning practices and environments. Contribute to the international and other dimensions of the New European Bauhaus and contact the New European Bauhaus Unit at the Joint Research Centre of the European Commission.



Arturo Villar | PhD in Energy Engineering | Global Innovation Founder & Co-ordinator of Global StartUpCities Initiative | Expert evaluator for the EU COM | JRC Scientific Publications Reviewer (Clean technologies and Environmental issues)

Launched in 2018, the Global StartUpCities

Initiative aims to interconnect innovation ecosystems outside the big hubs and accelerate new economic opportunities through matchmaking among start-ups, investors, and corporates in Europe. The StartUpCities focus on the person-centred approach seeing entrepreneurs & innovators as our key economic boosters. Since 2020, the initiative scaled-up for global level with the bottom-up European innovation Area" as the umbrella and connector for boosting these new European business opportunities for an European entrepreneur in any continent. The Global StartUpCities Summit, known as Unique Summit, is the annual milestone planned to be held annually each time in a different country. The challenge is to kick-off with the first BiH city in 2023 to grow and to become 2023 to grow and to become a StartUpCity (new economic engine) utilising the NEB Forum BiH.



Breza
Amela Omerhodžić | Executive Officer at the Unit for Finance, Inspection and Governance of Breza Municipality

Municipality Breza- A Sustainable Environment

Planned: Implementing joined projects between local authorities, NGO's and academic community according to NEB principles (Local area plan development, business zone development, energy audit for collective buildings, waste management) (Positives: participatory process and innovative approach to local problem solving) (Obstacles: lack of capacity of smaller municipalities to implement the NEB ideas.

Our Mission, Vision and Goals

Strengthen the profile, potential and capacity of the creative professions in the epicentre of the Western Balkans region to further and implement the New European Bauhaus Initiative; Re-evaluate local and regional spatial practices and policies, strengthen local, regional and international collaboration, contribute both to quality of built environment and processes of the European integration; A knowledge exchange platform in the field of architectural and urban design, education, environment, heritage, and sustainability; Connecting virtual and physical space in Banja Luka, Mostar, Sarajevo and other centres in Bosnia and Herzegovina; An open and poly-centric platform for the exchange of knowledge and information among creative networks and individuals, interested to advance, engage and promote responsible and sustainable design in their local environment, in Bosnia and Herzegovina and beyond; Promote a bottom-up approach and civic engagement with local community; Identify specific local challenges in greening and de-carbonizing the economy, including the former mining zones in central Bosnia; Contribute to the UN Sustainable Development Goals seeking the paradigm shift in planning and caring for the cultural heritage and natural environment; Plan future networking events in partnership with the existing organizations such as the Association of Architects of Bosnia and Herzegovina, Centre for Spatial Research Banja Luka, Green Design SEE Biennale Mostar, LIFT/Dani Arhitekture Sarajevo, and others; Identify opportunities for a cross-disciplinary engagement with local authorities in Bosnia and Herzegovina; Identify funding for joint project initiatives, including participation in the EU funded projects, and resilience Strengthen .



Tijana Tufek-Memijević, PhD Architecture and Urban Planning at Cracow University of Technology | BArch and MArch at University of Sarajevo | Licensed Architect in BiH | Owner at Candarc LLC design company Chicago | Visiting Lecturer at Politechnia Krakowska | BHAAS Board of Directors | International Member ISOCARP | APA | AIA NEI Committee on the Environment

Over more than a decade, the Bosnian Herzegovinian American Academy of Arts and Sciences (BHAAS) organizes a large cross-disciplinary scientific diaspora gathering titled the "Days of BHAAS." The 13th Days of BHAAS in June 2022 in Sarajevo held 33 specialized symposia with over 1000 participants from 26 countries, making it the largest scientific gathering in the Western Balkans region. The event placed a special focus on sustainability and interdisciplinarity through academic and scientific outreach creating opportunities for collaboration among international communities, academia, local government, policy makers and the civic society. This year, the Academy's sustainability programme consisted of scientific symposia in sustainable economy, architecture, urban planning and civil engineering with peer-reviewed research publication. Additionally, a plenary session was hosted on the topic of climate change and the adopted SDG framework for Bosnia and Herzegovina, as well as a Round-Table session on the EU New European Bauhaus Initiative, thus officially launching the New European Bauhaus Forum Bosnia and Herzegovina (NEB Forum BiH).



Ciaran Cuffe, EU Parliamentarian

As a Green Party Member of the European Parliament from Dublin, Ireland

I took part in the Sustainable Urban Development Symposium 2022 to discuss the New European Bauhaus (NEB) initiative, its role as the "soul" of the European Green Deal, and how it relates to my work in Brussels. Some of our Green priorities for the NEB include ensuring that it reaches throughout Europe to all kinds of regions and not just cities, and that it involves the cultural and creative sectors on an equal footing. The NEB has huge potential to harness the power of design and community in the transition to a sustainable future. As an architect and urban planner by training, I am particularly encouraged by the role the NEB can play in bringing inclusivity and aesthetics to the design of energy efficient building renovation and re-imagining of the public realm. Tackling the emissions and energy consumption of our building stock is an essential part of transitioning to a climate neutral future and limiting the warming of the planet. For me, the inclusion principle of the NEB is vitally important here; we need to involve communities in the changes to their built environment, and emphasise a design process that involves minorities and marginalised communities, while at the same time keeping accessibility central. Similar to the 100 Climate-Neutral and Smart Cities Initiative, another key aspect to the NEB will be the possibility for shared experiences and learning best practices from each other across Europe.



Mostar
Salem Maric | Mostar City Council Head

After eight years with no local government, Mostar finally formed the City Council in 2021. Together with a new Mayor it adopted a City Development Strategy 2021-31. Mostar is at the threshold of very important future development projects for the city and the entire region; We are a tourist-friendly city and an increasingly sought out tourist destination; We have a significant collection of artworks opened to various visitors; We are the city of artists, poets, painters, bohemians and romantics, who always sparked bright even during the darkest moments in our history. We are resilient, our experiences make us stronger, we think positively and believe in better tomorrow. Our future is inspired by our past; We not only dare to believe in better tomorrow, we do our best to make it happen.



Professional dialogue



Jovana Romčević Šukalo | Architect & Product Designer | Founder & Creative Director of MAM Design Studio | President of Banja Luka Association of Architects

Architects and urban planners in the era of digital transformation Smart City Solutions in Banja Luka

One of the strategic goals of Banja Luka's development strategy for 2018-2027 is the development of the smart city concept, which includes the modernization of various types of services. In 2020, the results of the Future City Innovation Challenge – Banja Luka competition were announced, with the 10 final proposals selected for further support in implementation. Most of the solutions affected the basic function of the city – traffic and communication [...] The key challenge was to stimulate the design and implementation of innovative and technology-based solutions that help build a more equitable, accessible, and enjoyable city to live in. However, the architects and urban planners weren't recognized as stakeholders to co-design blueprint solutions that contribute to a future city. I argue that

combining architectural concepts with a digital transformation momentum, architects and urban planners should be included to collaborate with other stakeholders in understanding and creating the future city vision, and help interpret, develop and implement new trends.



Aida Abadžić Hodžić | Professor at the Department of Art History at Faculty of Philosophy in Sarajevo | PhD at Sarajevo University | Post-doc Researcher at the Universities of Heidelberg, Graz and Berlin | BA at the Faculty of Philosophy Zagreb (Art History, French Language and Literature) (Member AICA and DocomomoBH.



Dr Aida Idrižbegović Zgonić | PhD Architecture| MSC Architecture | Vice-Dean for International Cooperation| Associate Professor at the Department of Theory and History of Architecture and Protection of Architectural Heritage | All at the Faculty of Architecture Sarajevo

NEW EUROPEAN BAUHAUS IN THE FRAMEWORK OF B&H HIGH EDUCATION: Possible modalities of action

The paradigm shift in the education concept and process in Bosnia and Herzegovina needs to include and strengthen the matters of the sustainable development across the curricula in all disciplines of science, humanities and technical disciplines, actively engaging students in research and applied projects, developing critical thinking and problem-solving approaches. Through well-thought out seminars the educational process could become dynamic and holistic across the whole country through joint projects in higher education, academia and international collaboration, thus stimulating the important linking with industry. The Higher Education 2030 Project provides a framework to apply the principles of the New European Bauhaus, whilst drawing on the principles of the historic Bauhaus which was orientated towards communities and their needs. The selected example of international collaboration within the academic curricula at the Architecture Faculty Sarajevo demonstrates and highlights the possibilities and measurable experiences of application of problem-based teaching and learning within the design studio project conceived around the analysis and interventions in the parts of historic urban fabric in Sarajevo.



Nataša Peđa Tabori | PhD Engineering Sciences Spatial Planning at Vienna University of Technology | Master Urban Planning at the First Faculty of Architecture "Luđovic Quaroni" La Sapienza University, Rome | BA at Architecture Department of Bezalel Academy of Arts and Design in Jerusalem

Challenges in the Contemporary Urban Planning in the Sarajevo Canton

The research question that is being posed in this paper is: What challenges does urban planning face in the Canton of Sarajevo in the XXI century? The following preliminary challenges are as follows: inadequate spatial planning system at the level of Bosnia and Herzegovina; the drafting of a new urban plan in specific socio-economic and political conditions, as well as the absence of building code since 1936; a complicated and inefficient procedure of obtaining a building permit. The main contribution to discussion is the affirmation of a scientific, professional, modern, sustainable, resilient integrative approach to urban planning in Sarajevo Canton, with a special reference to crises (climatic, political, financial, other), fully respectful of universal values and consensus, but also of geographical, natural, social, political, economic, and other specificities of Sarajevo.



Dr. Elma Đurmišević | President of Sarajevo Green Design Foundation| Director EU Laboratory for Green Transformable Buildings and 4D architects Amsterdam

A Path to Green Metropolis and Regional Green Innovation Park in B&H

It is through cities that mankind is increasingly present at the planet through which it mediates its relationship to the various stocks and flows of environmental capital. It is critical to understand the capabilities of cities to transform what is today a negative environmental impact to a positive one. The complex systemic and multi-scale capacities of cities provide massive potential for a broad range of positive correlation with nature's ecological systems. Each city needs to unlock its path and capacities of its own Green Metropolis and such Green Path to the development of Sarajevo as well as a set up for regional Green Design Innovation park has been unlocked by Sarajevo Green Design Foundation.



Igor Kuvač | PhD Architecture | Assistant Professor at University of Banja Luka| Faculty of Architecture, Civil Engineering and Geodesy| Chair of the Centre for Spatial Research

Navigating Transition through Urban Acupuncture in Banja Luka

My paper illustrates an urban acupuncture approach, in a small-scale project led by the Centre for Spatial Research (Banja Luka, BiH) which applies a multidisciplinary collaborative and participatory approach to place making in order to strengthen the community. Since 2017, a series of small-scale urban interventions, realized within students' workshops have expanded the network of open public spaces. This added new layers to urban landscapes are rescuing and caring for the previously abandoned, peripheral and dangerous urban voids. Challenged to critically review and reflect on the contemporary urban environment, the workshops' participants engaged in innovative modelling and contributed to micro-urban transformations of post-translational contemporary city.



Senada Demirović | From Mostar, studied French, Arabic and Architecture in Rabat | BArch AF Sarajevo | Final Year Architecture at Horsens Polytechnic, Denmark | PhD Architecture AF Sarajevo | Co-founder of IDEEA Urban House project Mostar

Heritage conservation as key potential for Mostar sustainable development -Partizan sports ground Mostar

The modern urban development of the cities of Bosnia and Herzegovina after the war destruction from 1992 to 1995 coincides with the transition of the social order from socialist to capitalist, which makes the process particularly complex. [...] Considering it as a city of extraordinary possibilities, contemporary Mostar has a particularity of being stuck in time due to the burden of trauma it carries and which constantly hinders its development processes. The war devastation in Mostar resulted in a huge stock of ruined buildings, especially in its historic parts. However, these ruinous objects have significant value as historical monuments. If the right process of conservation and reconstruction is applied, that would enable a paradigm change from a "victim city" to a "confident city". That would capitalise on the positive heritage values, generating a model of sustainable development (in built environment and society) directed at integrating space, and paving a way for a new experience of city of Mostar.



Jasmin Sirić | BArch at Architecture Faculty | Sarajevo | CEO of Sintexa | Architecture, Visoko| Co-founder of LIFT - spatial initiatives & Coordinator of Days of Architecture | Co-founder and partner in a Polygon workshop | Founder SETUP NGO Visoko | Special Jury Ideas Awards Collegium Artisum um (2012, 2013, 2014, 2016) | Nominee for the Aga Khan Award (2021); BigSEE Architecture Award 2021, 2022.

Creation of Selman Selmanagić Square in Ciglane, Sarajevo

The "Selman Selmanagić square" project included several activities, the most important of which was the international competition related to the Ciglane Square and Viewpoint. The project was part of the anniversary celebrations of the "Bauhaus 100" and a festival Days of architecture, wishing to mark a 100 years since the foundation of one of the most important architecture and fine arts schools in the world. [...] The Ciglane residential settlement is an example of modern housing construction from the former socialist state of Yugoslavia. [...] The competition was focused on how to improve the concept of living in a complex residential settlement and make it a place of collective, friendly living and a space for new experiences for its residents and visitors.



Harris Pipiš | DrSc Architecture & Urban Design at ETH Zurich| MSC Urban Design at Technical University Berlin | Dipl ENG Landscape Architecture at University of Sarajevo | Co-Director Integrated Urban Solutions at Drees & Sommer International | Lecturer in Smart City Solutions at Stuttgart Technical University

Applied urban research as basis for the Urban Re-activation and Transformation of Sarajevo

Cities and regions in the Balkans share common histories and similar spatial patterns, struggling with imbalanced spatial developments, shrinking economies and stagnation of small and medium settlements. Looking into recent history: in the latter half of the twentieth century, Balkan cities represented urban laboratories as places for experimental practice, attempting to apply the socialist ideals to the practice of city-making. In addition, the cities are experiencing a socio-economic and political transition, including a technical revolution and severe effects of climate change. Today, the majority of the local urban planning instruments exhibit clear discrepancies between inherited practices and future development aspirations. These phenomena in their correlation, lead to unbalanced and unsustainable development.



Dr. Venera Simonović and Dr. Sanela Klaric | International Burch University

Green building certification for a private dwelling: A single family home in Jeleč

Energy efficiency criteria for a building [...] are not always directly related to its green performance. Some are compulsory but others are arbitrary even though they feature in the overall summation and ranking of the performance. Our paper deals with the assessment criteria such as: integrated design, life cycle assessment, construction waste management planning, operational waste management, environmentally responsible sources, health, IAQ , local food production, applied on a single family dwelling in Jeleč, municipality of Foča.



Šetalište Mostar
**GREEN
FASHION
SHOW**
13/10/22

NAIDA VILIC

Student at the University of Travnik, Faculty of Technical Studies, majoring in "Textile Engineering and Design". I graduated from the High School "for Textiles, Leather and Design" in Sarajevo, with the Major: "Textile Designer".

The problem with fast fashion brands is still the fact that it is fast fashion, cheap pieces of clothing that someone on the other side of the world sews for very little money, while the pieces themselves last a very short time because the brand owners want you to buy a new one in a few months. Then there is the problem of the accumulation of unsold clothes that are burned. Consumers who buy fast fashion for little money are supporting environmental pollution by throwing away those clothes. I, as a fashion designer, and all of us who think about both people and the environment, do not look at fashion as a luxury that should be achieved at any cost, but as a humane and emotional right. My creations are entirely made from recycled textile



With a little bit of creativity, we can do good for the health of our planet, and look amazing while doing it.

The fashion industry is one of the biggest polluters of the environment, because it faces major problems, one of the problems being pesticides used in cotton production as well as major pollution caused by dyeing chemicals that pollute rivers in cities where textile factories are located.

At the same time, employees also get sick because they work near such chemicals. Today, almost every news portal writes about microplastics in the oceans, and a large part of it comes from washing clothes made of synthetic fibers such as polyester.



The school that rocks!

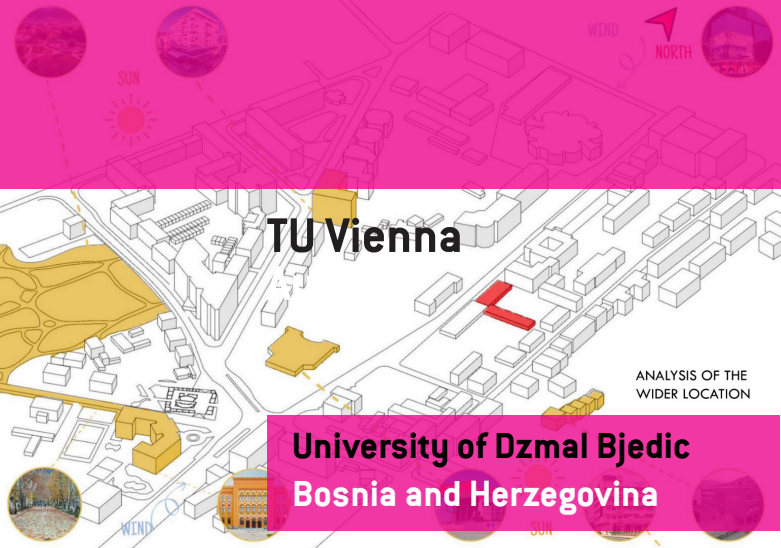
Green Design Center Site / Mostar

**MOSTAR
GREEN DESIGN
BIENNALE**
14/10/22

www.sarajevogreendesign.com

STUDENTS EXPO

Students Expo from four Universities
Green Architecture and Urban Planning



OKC "ABRAŠEVIĆ" - ATELJE PRAKTIKUM III

STUDENTI: ČANO OMER / HASIĆ JASMINA / SANDŽAKTAR ADIS PROFESORICA: SENADA DEMIROVIĆ HABIBIJA STUDIJ DIZAJN INTERIJERA



Day one
Wednesday 12 October 2022
VISION 2030



Elma Durmisevic
Founder of SGDF and GTB Lab
The Netherlands and B&H



Mario Kordic
Mayor of Mostar,
Bosnia and Herzegovina



Ruth Schagemann,
President of Architects
Council of Europe (ACE)



Duncan Baker Brown,
Architects RIBA Climate
Action Expert Advisory, UK

Day two
Thursday 13 October 2022
Digital Architecture



Jean Ives Marie
BIM Y, Luxemburg



Dominik Breituß
TU Vienna, Austria



Birgul Colakoglu
Istanbul Technical
University Turkiye



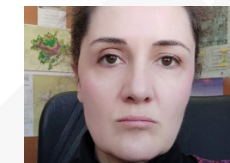
Carl Bäckstrand
White arkitekter A/S and ACE
Sweden

SPEAKERS 2022

Day one
Wednesday 12 October 2022
VISION 2030



Selma Harrington
ACE board member, Ireland



Natasa Tabor
Canton's Planning
Institute Sarajevo



Senada Demirovic
IDEAA Urban House
Bosnia and Herzegovina



Igor Kuvac
University of Banja Luka,
Bosnia and Herzegovina



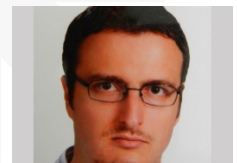
Gil Peled
Eco- Challenge,
Jerusalem, Israel



Sanela Klari
Green Building Council
Bosnia and Herzegovina



Erol Otzen
Block Materials, architect
The Netherlands



Damir Androsevic
BaseNet,
Bosnia and Herzegovina

