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

Sarajevo Green Design Foundation aim at broadening the discussion about future design concepts that will element negative impact of human action on the ecosystems of the planet through out Bosnia and Herzegovina through four Green Design Days in 2023. Green Design Days will share exhibition, students work and program of Green Design Bienale Mostar 2022 through Banja Luka, Tuzla, Sarajevo and summry event in Mostar. Green Design Biennla ein Mostar brought together **20 experts, architects, designers and researchers** from **11 countries** as well as 35 students form 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 opned by City Mayor Mario Kordic, rectors of the University of Mostar and University of Dzmal Bjedic, founder of Green Design Foundation & Biennale Elma Durmisevic, president of European Association of Architects Ruth Schagemann and representative of EU Interreg project Digital Deconstruction.

President of SGDF and creator of Green Design Biennale, **Elma Durmisevic** 



# 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 Emeregency' (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 Stokholm, 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, BanjaLuka, "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





























# Green Design Biennale Mostar

Overview

10th Green Design event organised by SGDF in collaboration with City of Mostar (4th Green Design Biennale) envisioned by President of Sarajevo Green Design Foundation Dr. Elma Durmisevic, brought together international network and knowledge in the field of green and circular design, into a unique multidisciplinary, multi-layered and creative platform in Mostar.

Special focus on this year's Biennale was on digitalization and implementation of circular economy in architecture and design of healthy and inclusive green buildings and cities. Number of exhibitions, lectures, town hall discussions, green fashion show and students workshops involving 5 regional universities were organised to highlight these themes.

President of Architects association of Europe Ruth Schagemann and board members of ACE Carl Backstrand and Selma Harrington presented the ACE vision and efforts in the field of circular architecture and taxonomy.

Lectures elaborating EU Digital Deconstruction project (use of digital tools and platforms in transition towards circular buildings and resource management throughout the cities) we given by Elma Durmisevic and Jean Yves Marie.

Great examples of circular building projects in UK were highlighted by **Duncan Baker Brown**.

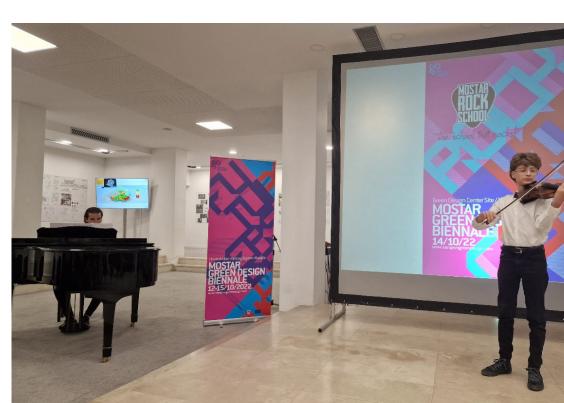


Efforts towards development of Digital material passports at University of Vienna were presented by **Dominik Breitfuß**.

Education of architects was discussed by **Birgul Colakoglu, Igor Kuvac** talked about research and activism for awareness buildings. Gap between existing city planning regulations and planning regulation for circular cities was addressed by **Natasa Tabor.** 

Roll of certification and health in architecture were highlighted by **Sanela Klaric** and **Aida Kulo Cesic**.

**Senada Demirovic** talked about heritage and socio-cultural issues together with **Gil Peld** while **Damir Androsevic** highlighted the infrastructural gap to support energy transition in B&H.





# **GREEN DESIGN CENTRE MOSTAR**

# Innovative Park for Circular Buildings and Sustainable Development - Mostar

Special part of this year's program was dedicated to the opening of the first phase of the Innovation Park for Circular and Green Buildings (Green Design Centre for South East Europe) in Mostar envisioned and created aby Dr Elma Durmisevic 4D architects.

Green Design Centre is envisioned as Innovation Park / Design Laboratory for South East Europe being a part of the EU innovation network around circular buildings together with GTB Lab in the Netherlands.



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

The development of GDC presents a 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.







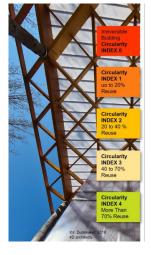
Creator and founder of Green Design Center, Elma Durmisevic, SGDF Partners: City of Mostar, EU BAMB consortium, University of Dzemal Bijedic, University of Mostar, Industry cluster

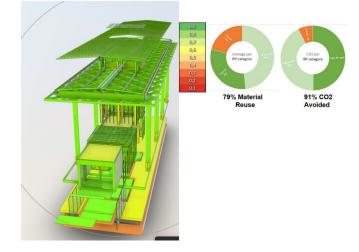






Elma Durmisevic Founder of SGDF and GTB Lab The Netherlands and B&H





Elma Durmisevic founder of Sarajevo Green Design Foundation, Green Design Biennale and Green Design Centre in Mostar

Current position: Head of 4D architects Amsterdam and Laboratory for Green Transformable Buildings The Netherlands

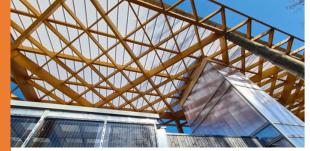
Elma Durmisevic, holds a PhD at Delft University of Technology on Transformable Building Structures, and Design for Disassembly in Architecture. As Associate Professor at the University of Twente, Durmisevic developed one of the first master program for dynamic and circular buildings that introduced green engineering in architecture.

Durmisevic is a leading architecture authority on Reversible Circular Building Design and Transformable Buildings. Currently founding director of EU Laboratory for Circulir Buildings in The Netherlands "Laboratory for Green Transformable Buildings", head of 4D Architects office in Amsterdam, EU UIA Expert for Super Circular Estate in the Netherlands, leads development of EU Digital Deconstruction Platform for circular economy in construction (EU Interreg project) and was initiator of one of the first EU Horizon 2020 projects on circular buildings "Buildings as Material Banks Project".

Hear vision is one in which homes become extensively transformable, and disassembly and reconfiguration is possible at all construction levels, spatial as well as material. Durmisevic indicates that dynamic changes in use of buildings coupled with growing environmental issues will require fundamentally different way of building design in the future. Hear design portfolio in last 25 years includes urban planning, multifunctional buildings and sports facilities, offices, villas and flexible and energy saving building systems.

During 20 years of research Durmisevic developed tools for measuring circularity and reversibility such as: Reversible BIM module, Reuse Potential tool, Transformation Capacity Tool.

Furthermore, Durmisevic's design guidelines for reversible building design are integrated into EU guideline for design of circular buildings. Durmisevic is author and editor of number of books, scientific papers and articles, and invited speaker on series of public lectures, international conferences and universities.





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

# **Green Design / Opening Lecture**

The exponential increase in population and contemporaneous increase in standard of living for many, will mean that the demand for essential goods & services (transportation, cars, planes, but also housing, materials, water, food) will increase by at least a factor 2 in the next few decades. If the need to support an additional 3 billion people and effect of increase per capita consumption is added it is clear that the linear material flow (from excavation to disposal) present in the existing industrial systems is not sustainable. Many scientists speculate that if 9 billion people have a western life style in 2050 we would need 6 Earth's to provide the necessary resources to sustain a population. A point has been reached when search for sustainable solutions for the resource feedback loops has become unavoidable.

At the times of global climate crises and when natural materials supplies are gradually depleting and becoming increasingly expensive the durability of buildings and products is becoming a major issue. Issues as adaptability, reconfigurability, reuse and recycling will be critical to the building and product value in the future.

The aim of green design is to close the loop of industrial processes and bring material and energy back into a industrial cycle while eliminating the concept of waste. Unlike car and product design where concept of industrial ecology (closed life cycle of products) has been investigated and applied in the past, this approach is revolutionary when it comes to the building design. Considering the fact that the modern economic systems relay on ever increasing consumption of products, that product and building use cycle is becoming ever shorter and that most end-of-life scenarios for buildings and products is waste disposal, there is huge task put in front of designers and production industry. The main question put in front of designers in 21st century is how to design and produce zero waste and carbon neutral products and buildings? This question can be successfully answered only by joint efforts of designers and industry and a more systematic design approach using modern digital technologies and tools that enables timey integration of the requirements of all life cycle phases of a building and materials from the beginning of a design process.



Mario Kordic Mayor of Mostar, Bosnia and Herzegovina



### Mario Kordic, Mayor of Mostar

City of Mostar is a key partner of Green Deign Biennale and traditionally opens its doors to biennale visitors and hosts green town hall meetings during Biennale. Green Design Biennale could always count on direct support of city's Mayor.

The mayor is the holder of executive power and represents the City.

- 2. He is responsible for the proper functioning of the city administration and is supervised by all employees of the City of Mostar.
- 3. Organises the work of the city administration and develops the Internal Organisation Regulation and has the power to create a general policy department.
- 4. Preparation and enforcement of city council decisions;
- 5. Resolves the issues put to it by the Statute;
- 6. It shall apply the laws and regulations, implemented by the City under instructions of the HNZ/K or FBiH on 7 October 2009. It draws up a budget/budget plan, proposes it to the City Council and implements it in accordance with city council decisionson 8 October 2013. It submits a semi-annual and annual report on the implementation of the budget/budget to the City Council in 9 October 2013. It oversees public institutions owned by the City and will undertake the property of the City on 10 October. It ensures cooperation between the City Administration and the Ombudsman. (article 43 of the Statute of the City of Mostar)



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

### Ruth Schagemann President of Architects' Council of Europe (ACE)

Ruth Schagemann, (b. 1974) is an architect who studied architecture at the University of Braunschweig and at the University of Stuttgart in Germany. In 2006 she founded the Architect's office VICEVERSA Architektur + Medien together with her husband. She was elected member of the executive board of the Architects` Council of Europe (ACE) from 2016 until 2021, Coordinator of the European Network of Architects` Competent Authorities (ENACA), member of the Coordination Group Europe of the Federal Chamber of German Architects and is head of department of national and international professional policy at the Chamber of Baden-Württemberg. Since 1. January 2022 she is the President of Architects' Council of Europe (ACE)

### Courage to change

It is clear that climate change, environmental exploitation and demographic trends are having a dramatic impact on how landscape is shaped, used and viewed. How we live together and the living conditions of the inhabitants of ever larger cities with ever higher demands, for example, have long made it necessary to look at nature from more than just aesthetic or economic points of view.

Turning away from the use of fossil fuels is the first duty — Europe, for example, is to become the first climate-neutral continent by 2050 according to the will of the European Commission. In our continent, the climate crisis and its consequences have only just reached the broad public, and now we are being confronted with the reality of a warlike invasion of a sovereign European country with brutal consequences. Russia and Ukraine — are both countries of global importance in the field of fossil energy sources, but also of basic food provision.

All this will not pass us by without leaving a trace. The need for a paradigm shift in design, planning and building is finally being recognised across Europe. After the debate on content, it is now high time to act and we as architect are part of this change.

We already know a lot, have adequate experience with existing best practice examples. Although we are constantly expanding our knowledge, we still have a lot of catching up to do and much to assert against other target interests. My appeal is therefore: Let us look courageously into the future and make the needed changes together.



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

Duncan Baker-Brown Founder of BakerBrown, Climate Literacy Champion (Principal Lecturer) at the School of Architecture Technology & Engineering (ATE) University of Brighton, Member of RIBA Council, Co-Chair RIBA Climate Emergency Expert Advisory Group, Architects Climate Action Network (ACAN), Architects Declare Steering Committee, Member of Brighton & Hove City Circular Economy Oversight Board, Member of South Downs National Park Design Review Panel, Member of Governance Board for UK Net Zero Carbon Buildings Standard Brief Biography Duncan is a practicing architect, academic and environmental activist. Author of 'The Re-Use Atlas: a designer's guide towards a circular economy' published by RIBA, he has practised, researched, and taught around issues of sustainable development and closed-looped systems for more than 25 years. He recently founded BakerBrown, a research-led architectural practice and consultancy created to address the huge demands presented by the climate and ecological emergency as well as the challenges of designing in a post-COVID world. Over the years Duncan's practices (and academic (live' projects) have won numerous accolades including RIBA National Awards and a special award from The Stephen Lawrence Prize for the Brighton Waste House – the prize money has since been used to set up a student prize for circular, closed loop design at the University of Brighton where Duncan teaches. Duncan has worked on projects as diverse as 'The Greenwich Millennium Village' in London, the RIBA's 'House of the Future', the multi-award-winning 'Brighton Waste House' and recently he designed a new building for Glyndebourne Opera that will be constructed from waste flows and organic materials grown on site. Duncan is currently working on schemes for Net-Zero Carbon social housing with Brighton & Hove City Council, where he has recently lead on drafting of their recently published Circular Economy Route Map.

Duncan is currently Module Coordinator for both undergraduate Technology and Professional Practices. He is Principal Investigator for two EU Interreg research programmers focusing on the re-use of construction waste, building deconstruction and re-construction. Duncan curated and organised the recent international digital summer school in August 2021. Named 'The School of Re-construction', it asked 11 teams of students (totaling. 80+), and team leaders from across the world, to consider the social, economic, political, ethical, phenomenological and environmental issues associated with re-use or 'Mining the Anthropocene' as BakerBrown calls it. Duncan is principal investigator for the University of Brighton steering a year-long study into affordable strategies for low carbon retrofitting of social housing for seven local authorities known as The Greater Brighton Economic Board.

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

## Lecture Series

### Mining the Anthropocene; exercising the right to reuse

Recently humans have suffered the COVID-19 pandemic, climate-induced mass bush & forest fires, floods and world-wide draughts. Add to that a war that is currently holding much of the world to ransom because of its reliance on exported fossil fuels. As a consequence, even the world's most affluent countries are suddenly very much aware of the real value of Planet Earth's finite resources. No wonder 'everybody' wants to know how to reduce the need to consume stuff, and re-use what they have rather than throw the old thing away in order to buy a new one. It's becoming ever more obvious to many people that we need immediate systemic change to facilitate a dramatic reduction in the harvesting for our planet's raw materials, whether that is climate-heating fossil fuels or iron ore, timber or sand. Fossil fuels and raw materials are just too expensive for most people to afford. Duncan Baker-Brown will consider how to implement circular systems that will dramatically reduce our need for mass consumption of new resources by reusing what humans have already processed; to Mine the Anthropocene.





Jean Ives Marie BIM Y, Luxemburg



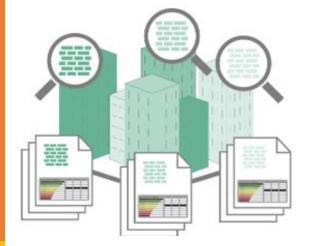
Jean Yves Marie is Civil engineer, graduated from the National School of Arts and Industries of Strasbourg since 1998, Project Manager Professional since 2011 and Professional Risk Manager since 2013. Jean Yves Marie had extensive experience in managing large projects in France, Luxembourg, Germany, Italy and Tunisia that allow it to cover all aspects of construction (project management, delegated project management, engineering company, building, civil engineering, maritime works and MEP). Currently he is managing BIM-Y, a tech company providing a solution of 3D as-built database and the first digital platform of exchange of material from deconstruction in Luxembourg.

### Bridging the technological gap for Circular Budlings & digitalization

Summary: Bridging the gap! But which gap are we talking about? how the digital can fill it? What we need to enhance the circularity and how the technology can help us to reach this goals? We will explore together the different perspectives to improve circularity of buildings.



**Dominik Breitfuß** TU Vienna, Austria



# Dominik Breitfuß is Researcher with focus on: — Assessment and Digitalization of building stock — BIM based Workflows

#### Fducation:

TU Wien, Master programme in Architecture 2018 - 2021 ffl Wien TU Wien, Bachelor programme in Architecture 2012 - 2018 ffl Wien Bundesrealgymnasium, Graduation with focus on computer-science 2004 - 2012 ffl Salzbur

### Profectional Expriance:

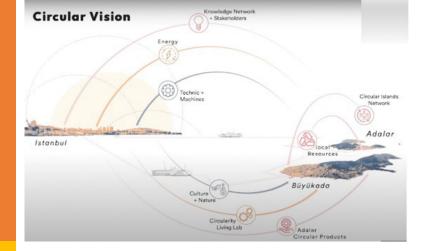
Integrale Bauplanung Industriebau, TU Wien project assistant 2021 – present ffl Wien student assistant for research projects 2019 – 2021 ffl Wien G4S Burgtheater, billeteur 2017 – 2020 ffl Wien Gemeinnützige Wohn und Siedlungsgenossenschaft "die Salzburg" construction technician 2018 ffl Salzburg construction technician 2017 ffl Salzburg Freinbichler Gesellschaft mbH, logistician 2016 ffl Salzburg Reneé Floret Scheide, intern – architecture 2014 ffl Paris Mayer & C0 Beschläge GMBH, electroplating 2013 ffl Salzburg h.moser

### BIMstocks — digital twins for material passports

Accurate documentation and descriptions of the materials used in the existing building stock are still unavailable and thus prevent an increasing "circular economy". Recycling and reusing materials in the building sector is crucial in terms of resource conservation, and the research project "BIMstocks" deals with these topics. The building stock of Vienna was analyzed based on ten representative use cases, and the material masses were digitized with the help of Building Information Modelling (BIM). By evaluating the BIM models, which represent "digital twins", material building passports were also created semi-automatically to generate an extrapolation for the whole city of Vienna. In this presentation, the workflow for creating "Digital Twins" and the problems and potentials that emerged in the project will be discussed.



**Birgul Colakoglu** Istanbul Technical University Turkiye



**Birgul Çolakoglu,** graduated at Yildiz Technical University (YTU) in 1981 and completed her Ph.D. in Design and Computation in 2000 at the Massachusetts ?Institute of Technology. She worked as Postdoctoral researcher at the MIT Architecture Department in 2001. She worked at Yıldız Technical University between 2001-2015 and run Computational Design Graduate Program from 2008-2015 at YTU. Currently, she works as a professor in Architectural Design and Computing Program at stanbul Technical University. (ITU) Her research is focused on computational design education, computational tool development and circular Design. She was eCAADe president from 2019-2021. Currently, she is head of Advance studies in the Architecture Center, and coordinator of the Architecture Master program at ITU.

### "Integrating Circularity into Architecture Curricula"

The increased population and inadequate design and construction interrupt the systems of the earth causing a serious crisis that threatens the existence of sustainable living on the earth. Rethinking the traditional subjects and clarifying the challenges to the architecture discipline and education in these serious environmental and social crises will significantly affect architects' training. The presented educational methodologies will illustrate the integration of circularity concepts in different scales into architecture curricula.



Carl Bäckstrand
White arkitekter A/S and ACE
Sweeden

**Carl Bäckstrand,** Swedish Architects and Federation of Swedish Innovation Companies ACADEMIC EDUCATION 2002 Visiting Scholar, Dept of Architecture, MIT, Cambridge, MA, USA 1994 Master degree, School of Architecture, Lund University, Sweden 1992 Landscape Dept, School of architecture, Royal Academy of Arts, Copenhagen, Denmark LANGUAGES Swedish, English, Intermediate French EMPLOYMENT White arkitekter AB

POSITION Deputy CEO White arkitekter AB Senior architect, Partner BOARD Member of Board White arkitekter A/S Member of Board Stiftelsen för arkitekturforskning ARQ Member of ACE Board 2022-2023 SELECTED INTERNATIONAL PROJECTS The Hippodrome, Montreal 2021, masterplan in collaboration with Rayside Laboussiere, Ongoing The GoDown Art Center, Nairobi, 2020, Ongoing City hall and Library, Vaudreuil Dorian, Invited competition, 2019 Page 2 / 2 Reinventing cities C40 Montreal, 2019 Invited competition in collaboration with Arup and Rubin & Rotman architects Smart City Challenge, Yellowknife, 2018, Invited competition Luminothérapie Montréal, 2018 International design competition with STGM architects OUH, Odense, 2015-2017 University Hospital, Steering group in collaboration with KHR, and Dall Lindhartsen Bristol Arena, Bristol, 2015 Invited competition, urban planning and indoor arena in collaboration with ARUP New Islington, Manchester 2013 Master planning FarRoc, NYC, 2013 International competition, Urban development Garshingen Mensa, Munich, 2012 Invited competition Ecocity Laval, 2012 Masterplan Workshop, design development

PROJECTS IN SWEDEN 2012 PQ Kiruna competition, urban development, City of Kiruna 2011 Kv Närlunda, housing Helsingborg, Veidekke 2010 Kv Prion competition, offices and housing, Malmö, Vasakronan Lund Science City, masterplanning, Lund, Lunds kommun och ESS konsortiet 2009 Carlsgatan, competition, urban development Malmö, Jernhusen Adm building Police dept Rosengård, competition Malmö, Skanska H+ ,Urban development, Helsingborg Kvarnholmen, master planning, Kalma

### Towards a climate neutral building sector supported by an interdisciplinary approach

Experiences from Sweden how businesses are pushing for more circular thinking and solid wood solutions to mitigate carbon emissions. Case studies on project and policy level to show the collaborative work with architects, developers, investors, city officials and national policy makers. And what impact the EU taxonomy might have in the future.



**Selma Harrington**ACE boar member, Ireland







Architects' Council of Europe Conseil des Architectes d'Europe **Selma Harrington** | ARCHITECTS COUNCIL OF EUROPE (ACE)ffl ACE Executive Board member — Coordinator Research and Development (current) and Past-President (2010-13) ffl Founding Member of the New European Bauhaus Forum Bosnia and Herzegovina ffl Registered Architect MRIAI HonAIA

Born and educated in Sarajevo, Bosnia and Herzegovina, where I've obtained a Bachelors' and Masters' Degree in Architecture, I am now based in Dublin, Ireland and hold a PhD Architecture from the University of Strathclyde and an MPhil European Studies at the Trinity College Dublin. With a well of experience in crossing borders and boundaries in Europe, Africa and Asia, trough educational and design leadership and professional advocacy, I am deeply committed to advancing the role of architecture and creative disciplines in society, economy and education. Through professional networking and joint projects, I advise, motivate and engage creative communities on local and global tasks and projects for culturally sensitive just green transition in built environment.

#### WHAT IS THE NEW EUROPEAN BAUHAUS TO US: Connecting the dots, drawing the lines

The New European Bauhaus initiative was launched by the EU COM's President Ursula van der Leyen with the aspiration to make the EU Green transformation a cultural movement. At the same time, wishing to overcome isolated approaches, the initiative actively enabled synergies and engagement among creative professions, institutions and civic society.

This paper discusses a specific "audience building" activity of the Architects Council of Europe and a foundation of the New European Bauhaus Forum Bosnia and Herzegovina (NEB Forum BiH), set to translate and transpose the ideas of the New European Bauhaus into local and domestic context. The Forum observes the relationship and (dis)continuities between space as realm of public action, practice and culture in the built environment through a cross-disciplinary lens from professionals and networks in academia, civic society and local (planning) authorities. The paper is inspired by the action research conducted with the Forum and its findings presented at the Round Table on the New European Bauhaus in Sarajevo in June 2022. Connecting a grouping of professionals from the built environment, architecture, art and education from several regional centers with the Bosnian diaspora, several blended themes were explored, from global to local, digital and remote, physical, analogue and direct, to systemic and practical.

The Forum charts a common ground and an action field among diverse approaches identifying the needs and directions for further action in the shared environment(s). Tracing the unique "Bosnian connection" to the original Bauhaus up to the present-day shortcomings in the processes of the European integration, this paper sketches a template framework for application of the New European Bauhaus ideas in the local context. At the same time, it argues for a stronger recognition and structured support for the Forum as a platform of the novel form of education, environmental learning and engagement.



Natasa Tabor Canton's Planning Institute Sarajevo

Nataša Pelja Tabori finished her bachelor studies at Architecture Department of Bezalel Academy of Arts and Design in Jerusalem in 1999. She conducted her Master studies in Urban Planning at the First Faculty of Architecture "Ludovico Quaroni" at La Sapienza University, Rome in 2002. She earned her doctorate in Engineering Sciences Spatial Planning at Vienna University of Technology in July 2021. She worked at offices in Israel, Italy and Bosnia and Herzegovina, amongst which is Renzo Piano Building Workshop, where she collaborated on the Ars Aevi Project — Museum of Contemporary Art in Sarajevo. Since 2000 she works at the Institute for Canton Planning, currently as Head of the Development Planning Department. Her research interest is in the field of Spatial and Urban planning and coding of Sarajevo Canton in reginal and Continental European context. She is the author of articles published at REAL CORP 2018, AESOP 2019, International Conference on Sarajevo in the World 2020, and UN Interfaith Harmony Week 2021. Tabori Pelja translated Sarajevo Haggadah to Bosnian language in 2008 and bears the Role of the Court Interpreter for Hebrew language in Bosnia and Herzegovina.

#### Lecture

The question is: What needs to be done to bring Bosnia and Herzegovina closer and integrated into the system of modern spatial planning of continental Europe? Whether it is necessary only to follow the European Green Plan for the EU or is it necessary to make systemic changes and adaptations to make the new approach to planning enforceable. What condition is the spatial planning system in? What's missing in regulatory and operational terms? The transformation of the EU economy for a sustainable future can be an opportunity for Bosnia and Herzegovina to make systemic reforms as part of accession processes to allow integration to be essential and constructive, and to recognise and correct the shortcomings of the legacy system.



**Senada Demirovic** IDEAA Urban House Bosnia and Herzegovina



Senada Demirovic Habibija is PhD architect from Mostar, born on April 30th 1975. She studied architecture in Morocco, Bosnia and Herzegovina and Denmark. She is employed in the city administration of the City of Mostar as an expert advisor for urban planning. From 2000 to 2003, she worked as an architect in the Mostar's Aga Khan Trust for Culture and the World Monuments Fund office, on the reconstruction of the cultural heritage of Mostar and Herzegovina region. In the period from 2012 to 2018, she was a curator at the Center for Architecture, Dialogue and Art ADA Mostar, and in 2019 she founded an association "Urban House IDEAA", a laboratory that explores the important relationship between design, emotional state and spatial-social needs of the society. She is a lecturer at the University "Džemal Bijedi" Mostar in the study program "Interior Design". From the beginning of her career until today, she has been involved in a large number of local and international projects, educational programs and conferences, and she has been the organizer of a significant number of architectural events in Mostar. The two projects in which she participated, which are historically significant for post-war Mostar, are the inscription of Mostar on the UNESCO World Heritage List (2005) and the candidacy of the city of Mostar for the European Capital of Culture 2024 (2019). She has published a significant number of scientific papers, and her first book is currently being prepared. She actively speaks English, French and Italian. She is the mother of three children.

### Urban reconstruction in continuity — Mostar as a new experience

"The city of Mostar lives on the river and its banks for centuries. The Neretva River adorns Mostar but also divides it into two banks. Apart from the Neretva River, which naturally separates Mostar, the man made an artificial division almost 30 years ago along the road known as the Boulevard. This physical division caused Mostar to be divided socially, ethnically, culturally and at every other level. In order for the city to experience catharsis and create new values, it is necessary to be understood rather than built, because the city is not just buildings and streets, the city is much more, it is a mosaic of stories and narratives. Culture can be the driver force of a change and the creator of a new healthy and creative environment where development strategies based on culture and the creative industries can overcome the trauma of division and provide this city with a prosperous future archiving spatial, social and experiential continuity."



**Igor Kuvac** University of Banja Luka, Bosnia and Herzegovina



**Igor Kuvac,** BArch MArch (2009) at Faculty of Architecture, Civil Engineering and Geodesy, University of Banja Luka (AGGF) ffl Best student of the generation ffl PhD degree at the University of Granada (Spain) (2017) ffl Erasmus Mundus Fellow with a dissertation titled Forced Transition – New settlements of Displaced Persons after the War (1992-1995) in Bosnia and Herzegovina. Born in Sarajevo in the 1984 Winter Olympic year. I work as an Assistant professor at the Department of Architectural Design at the University of Banja Luka, where I coordinate the Master's program of Architecture and Urbanism, and teach different modules on architectural and urban design. I am a co-founder and Head of the Center for Spatial Research, which experiments with innovative models of urban design, and I coordinate Small SCALE and other projects. I explore the different spatial scales as well as the cultural context of contemporary urban transformations, focusing equally on urban and anthropological themes.

### Emerging environmental problems

Environmental pollution is one of the greatest global challenges. Its facing means continuous work on changing the entire planetary system by implementing globally coordinated strategies at different levels, scales and geographies. Unfortunately, the current situation shows that the efforts made so far have not been sufficient, thus, it is necessary to use all weapons available and to act both globally and locally. As the great ideas can be equally implemented through the simple projects at the local level, this lecture will present such small-scale action in Banja Luka city. The example of the Sewage pipes festival shows how an emerging environmental problem could be visualized and familiarized with the public.



**Gil Peled** Eco- Challenge, Jerusalem, Israel



**Gil Pled,** Eco-architect and community urban planner, founder of Eco-Challenges Sustainable Design & Consultancy. Gil is currently working at the Israel Antiquities Authority as the Conservation Architect of the Old City of Acre and coordinator of the Conservation and Development Committee. He has also initiated and is managing the digitization project of the Old City conservation archive. Gil has initiated and participated in several pioneering green initiatives including green retrofits of existing buildings, design of sustainable and affordable neighborhoods, public green spaces, urban parks and community gardens. He is working towards a research degree (PhD.) at the University of Twente on Sustainable Transformations of the Holy Sites in Jerusalem.

### Challenges and opportunities

World Heritage Cities and their Buffer Zones are facing several challenges to their unique tangible and intangible values. These challenges, from humans, nature, and climate, can become, with new or revised outlooks, opportunities and enhance existing heritage conservation, management, and protection systems. The Old City of Acre provides us an environment to examine some of the issues and scenarios, as well as their relevance to additional WHCs including the Old Town of Mostar.



Sanela Klaric Green Building Council Bosnia and Herzegovina

Sanela Klaric was born on 28 August 1970 in Sarajevo. After completing high school (Druga Gimnazija), she graduated from the Faculty of Architecture in Sarajevo in 1998. She worked for OSCE and the UK Government as an independent consultant on justice and rural development projects in Bosnia and Herzegovina, as well as on EU projects focused on civil sector networking and broader support to the civil sector in the Western Balkans and Turkey. Ms. Klaric is also an associate of the UK-based consultancy Catalyst, a member of the Global Alliance "Green New Deal" (set up by MPs all over the World) a member of the organizational board of the Sarajevo Green Design Festival, as well as a member of the Supervising Board of BiH Association of Architects. She is chairwoman of the Association of Landscape Architects in BiH, as well as founder and chair women in Green Building Council association, bringing together experts from various sectors such as architecture, economy, rural development, education, nutrition, environment and EU integration. Green Building Council focuses on designing and implementing sustainable projects to enhance prosperity in Bosnia and Herzegovina. She is a Vice president of the Board of Engineering Chamber in FBiH as well as member of the Education Board in Olympic Committee of BiH. Ms. Klaric is an expert in EU integration, in the fields of sustainable development, circular economy, rural development, environment, energy efficiency, sport sustainable buildings and infrastructure and natural materials. She has moderated a number of public events, and designed and implemented training for government institutions, the non-governmental sector and political representatives.

Ms. Klaric obtained her MA (2008) and PhD (2014) at the Faculty of Architecture of the University of Sarajevo, with support from professors at the Technical University in Vienna. She focused on sustainable architecture and natural materials and their potential to contribute to balanced and sustainable socio-economic development in Bosnia and Herzegovina. She has published several papers and spoken at a number of conferences. She was also one of the first speakers at the TED University event in Sarajevo, nominated by her students.

At the moment, Ms. Klaric is Associated Professor in the Architecture Department at the International Burch University on the topics of Architecture design of individual houses, sustainable architecture, Energy Efficient Architecture, Sustainable sport building and infrastructure, natural materials and Green cities. She cooperates closely with universities and research centers throughout Europe and the world. She is also Member of the Parliament FBiH 2019-2022. She is a member of The Global Alliance for Green New Deal.

Her passion for achieving sustainable development in Bosnia and Herzegovina though the use of natural materials is reflected in the book "Sustainable Housing", based on her Doctoral thesis, as well as in her projects and research. Ms. Klaric's ultimate goal is to promote the great development potential of Bosnia and Herzegovina through its own natural resources, supported by an interdisciplinary approach and linking together the fields of architecture, housing, rural development, environment protection, climate change, economy, and employment. Sanela's family is the greatest treasure in her life.



Damir Androsevic
BaseNet,
Bosnia and Herzegovina



#### Manager BaseNet d.o.o. 2013-present day

Energy and environmental consulting, management and organization of business, contacts with clients, negotiations, organization of office work. Bosnian standardization institute – 2018 – present day. Member of the technical committee for standardization

Participation in the work of the technical committee MALcom Sarajevo 2010 – 2011.

Electrical Engineer. Power engineering, solar and wind power engineering, power generation and transmission equipment, contacts with clients, preparation and submission of tenders, dealing with import and transport of goods..

Various international and local organizations – 2007 – present day. Freelance consultant and interpreter. Consultant in various capacities for energy and environmental development. Info Magazine 2005-2010 Associate journalist. Writing technology news and texts for the Info Magazine Portal and the hard copy version, International Services and Consulting – ISC Sarajevo 2001-2007. Consulting, quality control, organization of various seminars and workshops, translation of English language (written, consecutive, simultaneous),

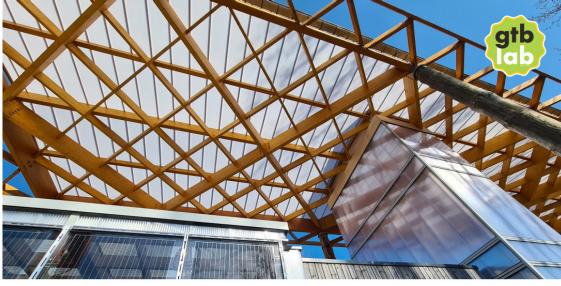
# OVERVIEW OF CHALLENGES AND REQUIREMENTS FOR SUSTAINABLE ENERGY TRANSITION IN BOSNIA AND HERZEGOVINA

Energy transition is an issue we are facing due to climate changes challenging the old ways and making us adopt new ones. Replacement of fossil energy sources is rarely easy or straightforward. There is a rising global awareness and pressure to control and mitigate the climate change through agreements like the Kyoto Protocol and the Paris Agreement but there is no certainty and the process is evolving, depending of changing political, social, technological, economy and environmental situation.

Energy transition is difficult and complicated and for countries like BiH it is even more true. Bosnia and Herzegovina is not supposed to have a big problem with energy transition. A small country with abundant untapped hydropower potential of up to 60%, and huge wind and solar potential in Herzegovina with its Mediterranean climate and features. Unfortunately, reality is quite different.



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



# **GTB LAB**

www.gtb-lab.com

### **EU Laboratory for Green Transormable 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: Installations: Contractor: Suppliers:

Elma Durmisevic, 4D Architects Structural Engg: Jaap van Heijster, AB Jaap Wiedenhoff, ABT by Jongen Bouwpartners De Groot Vroomshoop Groep, Jansen AG, Pilkington, TheNewMakers, Rodeca, **AMMANU** 











# **GTB LAB**

www.gtb-lab.com

## **EU Laboratory for Green Transormable Buildings**

Reversible connections











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



# **GTB LAB**

### www.gtb-lab.com

### **EU Laboratory for Green Transormable 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













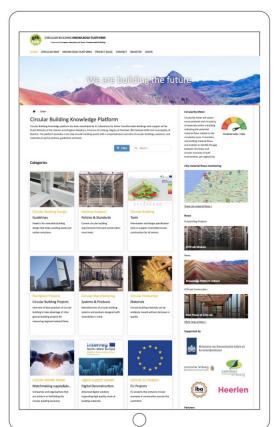
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Transformable Buildings
By Elma Durmisevic,
The Netherlands



# **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 citles 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.

Circular building mapping

Outstanding projects     New construction projects     Planned construction projects     Transformation projects	Refurbishment hubs  Material recycling  Certification labs  Design & Living labs	Gircular building products	5
Policies	Type of building transformation	City	
Guidelines	Make a choice	✓ Amsterdam	~
a Toolkits		Radius	
TOURNS .		Make a choice	~
Kaart Satelliet	Aliman El 7 m		
Norwich pswich	AL MANAGEMENT AND ALL MANAGEMENT		
Norwich	All Zan	Osnabruck Munster  Padeth	
Norwich pswich	American Transfer of the Control of	Osnabruck  Munster  Bielefeld	om
Norwich	Rotter Antween	Outround Essence	
Normeth  Sprench Controller  C	De Control of the con	Ornahous  Munster  Bielefeld  Exeno  Dusselforf  Keijen	orn
Normach  (playeth Cockpleter)  Constitution  Constitution  Districts  Districts	De C E GE FRONT CONTROL CONTRO	Oursebruck  Muneter Bielefeld  Dormund  Essen  Dusseloof  Keulen	orn

Laboratory for Green
Transformable Buildings
By Elma Durmisevic,
The Netherlands



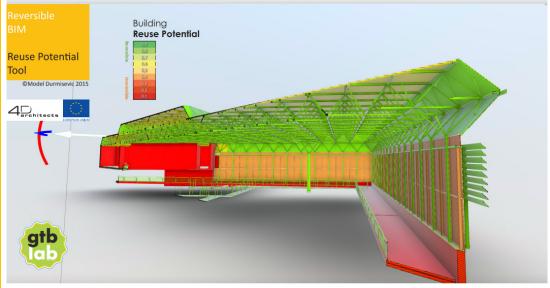
**GTB LAB** 

www.gtb-lab.com

### **Partners**



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.



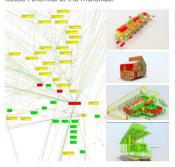
#### 4. Revit2Excel2Revit

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

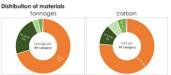
A color-coded 3D Viewer enables non-Revit users to view the model and retrieve reversible information through several custom-made color-coded views. The colors reflect the element functions, the assembly sequence, number of relations between elements, reversibility and Reuse Potential of the materials.

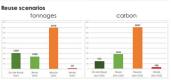




#### 6. Reporting reversibility

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.





### Reuse options

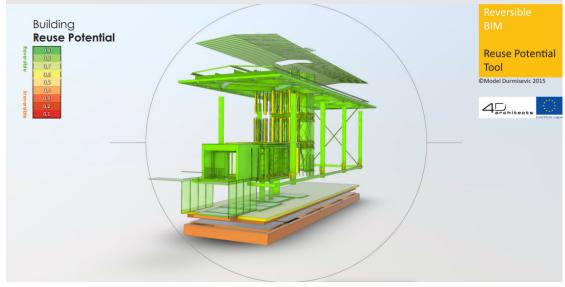




#### 7. BIM objects library

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.

Digital assessment of Reversibility/Reuse Potential

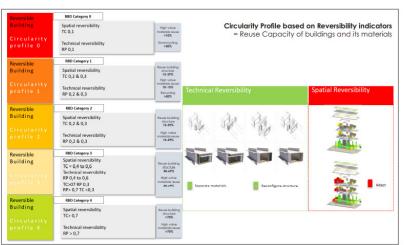


# Circularity profile

www.gtb-lab.com

### **GTB Lab**

Method Elma Durmisevic 2019 4D architects



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



4 Dr. Elma Durmisevic, founder GTB Lab

**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 multilayered 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.















# Circulair Building Platform

## 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 NI

Laboratory for Green Transformable Buildings By Elma Durmisevic, The Netherlands



# DIGITAL DECONSTRUCTION

### Digital support system for high-quality reuse of building materials



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 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.

Circulair Building Platform 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.





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# **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.

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 CO2emissions, 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).

### Preliminary sketches of end user interfaces

Source: LIST



Circulair Building Platform

Laboratory for Green Transformable Buildings By Elma Durmisevic, The Netherlands



# **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.

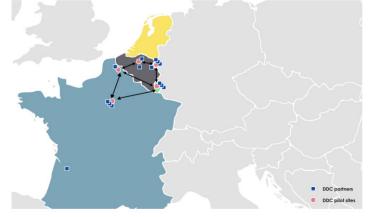
### **Exchange of knowledge**

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.





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



Circulair Building 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



Circulair 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



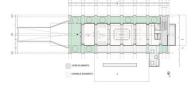
Green Design Center in Mostar (GDC) will be a creative hub bringing creative and production industries together around Reversible Building Design concepts. GDC will be used for educational purposes and as a construction innovation platform.



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.







Circulair Building **Super Circular Estate** Erol Oztan, Architects Heerlen, The Netherlands



# **SUPER CIRCULAR ESTATE**

First Circular Neighbourhood in the Netherlands



46,21 ton CO2335 GJ

UIA

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



# **SUPER CIRCULAR ESTATE**

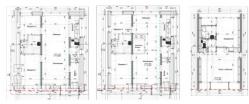
New circular economy processes 100% reuse of a social housing high-rise



Super Circulair 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.











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 Stratchcyde) | MPhil European Studies (Trinity College Dublin) | MSC Architecture (University of Sarajevo) | ArchitectWRIAI HonAIAI

### 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 sol; Connect across disciplines and beyond bounderies; Engage with local authorities, civic society and legislators; Enhance and apply learning, innovation, adaptability and resilience; Strengthen the role of creative and cultural professions



Tijana Tufek-Memisevic, PhD Architecture and Urban Planning at Cracow Uni-versity of Technology | Barch and March at University of Sarajevo | Licensed Architect in Bill | Owner at Cander LLC design company Chicago | Usiling Lec-turer at Politechnila Krakowska | BHAAAS Board of Directors | International Member 1SOCARP | APA | 1 AIA NEI Committee on the Environment

Over more than a decade, the Bosnian Herzegovinian American Academy of Arts and Sciences (BHAAAS) organizes a large cross-disciplinary scientific disappor agathering titled the "Days of BHAAAS." The 13th Days of BHAAAS in June 2022 in Sarajevo held 33 specialized symposia with over 1000 participants from 26 countries, making the largest scientific gathering in the Western Balkans region. The event placed a special flocus on sustainability and interdisciplinary of the second ore than a decade, the Bosnian Herzegovinian American Academy of Arts and Sciences

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 bot-

tom-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 part-nership 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 op-

portunities 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.ity and resilience Strengthen



### Borut Cink, EU Policy Officer | JRC | NEB Unit

Bonut Cink, EU Policy Officer J JAC | NEB Unit
The New European Bauhaus co-creation induse took place in the first half of 2021 and saw
more than 2,000 contributions from all over the world which helpost is shape the initiative.
One of the core principles of the New European Bauhaus is a mulblewel hypproach to transformation - from global to local - and therefore the ambition is to not limit the initiative's scope
to the European Inolino. Building the international dimension of the New European Bauhaus
is a work in progress. There are already pathways for entitles based outside of the EU to join the
movement and contribute to its implementation. They induce. Possibility to join the New European
Bauhaus Community as Partners (non-profit entitles) or Friends (companies and
public authorities). Funding opportunities (Nie 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 deas by journip people, intergraining the three
ties based in the Western Balkams 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 internationall and ther dimensions of 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 Initiative aims to interconnect innovation ecosystems outside the big hubs and accelerate new economic opportunities through matchmaking among start-ups, meetors, and corporates in Europe. The StartupCities focus on the person-centred approach seeing entrepreneur's & inno-time to the startup of the startu engine) utilising the NEB Forum BiH.



### Municipality Breza- A Sustainable Environment

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



### 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 in clusters to the design of energy efficient building rerovation and ne-imaging straining and community in the straining 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 build environment, and emphasize a design process. or the patients of the charges to the following the charge to the receiver the charges that involves communities and emphasise a design process that involves minorities and marginalised communities, while at the same time keeping accessibility certar silinative to the 100 interact-neutral and Smart Cities initiative, another key aspect to the charge of the charge to the charge the charge to the charge to



Mostar Salem Marić | Mostar City Council Head

After eight years with no local government, Mostar finally formed the CIty Gourcil in 2021. Together with a new Moyer it adopted as CIty Benedpment's Strategy 2021-13. Mostar is at the threshold of very important future development projects for the city and the entire region; We are a four-inst-frendly city and an increasingly sought out tourist destinations, where a significant collection of artworks opened to various visitors. We are the city of artists, poets, paint-re, bothemians and ormanics, who always sparked bright were during the destreat moments in our history; We are resilient, our experiences make us stronger, we think positively and be-lieve 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 Architecte

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

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 interprete, develop and implement new



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 DecomposeBH

Dr Aida Idrizbegović 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 |

# 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 Herspovina 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 problems of the properties of the properties of the properties of the properties. Through well-throught 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 cerebred amount the nanalysis and interventions in the parts of historic urban fabric in



Nataša Pelja Tabori | PhD Engineering Sciences Spatial Planning at Vienna University of Technology| Master Urban Planning at the First Faculty of Architecture "Ludovico Quaroni" La Sapienza University, Rome | Ba At Ar

### 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 preliminarily challenges are as follows: inadequate spatial planning system at the level of Bosnia and the Herzegowins; the drafting of a new urban plan in specific socioe-conomic 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 integral approach to urban planning in Sarajevo Canton, with a special reference to crises (climate, 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 Durmišević | 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 maximal is increasingly present at the planet through which It mediates Is 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 riy needs to unlock its path and capacities of its own freen 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 Lusk, 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 rescuring and carring for the previously abandored, peripheral and damlandscapes are rescuring and carring for the previously abandored, peripheral and urban urban environment, the workshops' participants engaged in innovative modelling and contributed to micro-urban transformations of post-transitional contemporary (Ly).



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

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

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 particularly to being stuck in time due to the burden of trauma it carries and which constantly hinders its development processes. The war devestation in Mostar resulted in a huge stock of runde 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 Sirčo | BArch at Architecture Faculty | Sarajevo | CEO of Sinteza | Architecture, Visoloj Co-Gounder of LIFT - spatial initiatives & Coordinator of Architecture, Visoloj Co-Gounder of LIFT - spatial initiatives & Coordinator of Coordinator

### Creation of Selman Selmanagić Square in Ciglane, Sarajevo

The "Selman Selmanagić square" project included several activities, the most important of the was the international competition related to the Ciglines 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 Cigliane 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.



Haris Piplaš | 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 Reactivation 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 practices within urban space, attempting to apply the scollast ideals to the practice of the process of the



Dr. Venera Simonović and Dr. Sanela Klarić | 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 rainking 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, 1AQ , 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



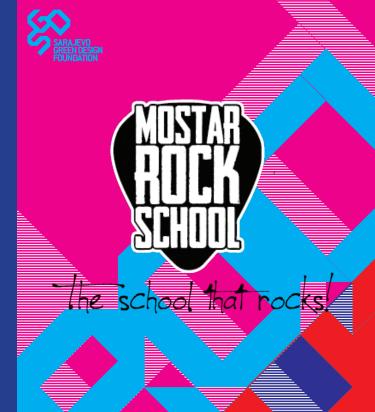


With a little bit of creativity, we can do good for the health of our planet, and look amazing while doing it.

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.





Green Design Center Site / Mostar

# MOSTAR GREEN DESIGN BIENNALE 14/10/22

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Students Expo from four Universities

Green Architecture and Urban Planning



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









# SPEAKERS2022

Day one Wednesday 12 October 2022 VISION 2030



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

Day two Thursday 13 October 2022 Digital Architecture



Jean Ives Marie BIM Y, Luxemburg



**Selma Harrington** ACE boar member, Ireland



Wednesday 12 October 2022

Day one

VISION 2030

**Senada Demirovic** IDEAA Urban House Bosnia and Herzegovina



**Erol Otzen**Block Materials, architect
The Netherlands



**Mario Kordic**Mayor of Mostar,
Bosnia and Herzegovina



**Dominik Breitfuß** TU Vienna , Austria



Natasa Tabor Canton's Planning Institute Sarajevo



**Igor Kuvac** University of Banja Luka, Bosnia and Herzegovina



**Damir Androsevic**BaseNet,
Bosnia and Herzegovina



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



Birgul Colakoglu Istanbul Technical University Turkiye



**Gil Peled** Eco- Challenge, Jerusalem, Israel



Sanela Klari | Green Building Council Bosnia and Herzegovina



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



Carl Bäckstrand
White arkitekter A/S and ACE
Sweeden





AGGF Univerziteta u Banjoj Luci
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17.00 17:10 Green Design Day Banja Luka

Pozdrav direktorke ENEF-a prof. dr **Darije Gajić** ObraĆanje prodekanice za nauČno- istraživaČki

rad AGGF-a, prof. dr Maje Milić Aleksić

17:10- 17:20 Otvaranje GD Days 2023, ObraĆanje osnivaČa i

kreatora GDB/GD Days

**Dr. Elma Durmisević,** Predsjednik SGDF BH / Direktor "Laboratory for Green Transformabl Buildings" / 4D Architects Amsterdam,

Nizozemska

17:20- 18:00 GDD Panel Pejzaž zagađenja

ObraĆanje Moderatorke, doc. dr Isidore Karan,

IstraživaČki centar za proctor

Uvodni video - Festival kanalizacionih cijevi,

Vrbas, Banja Luka

Panel diskusija

**18.00 – 18:30** Otvaranje putujuĆe izložbe

Green Design Biennale (AGGF, Studentski grad)

Prezentacija Studentskih radova mentor radionice

Senade Demirović Habibija

Obra anje predstavnika studenata, autora dijela

izložbe, Jovane LekaniĆ

**18.30 – 19:00** Green "Modna Revija",

dizajn **Naida Vilić** 

**19:00** Green Koktel

(AGGF, Studentski grad)













