



Call for abstracts

The overall **ambition** of the World Sustainable Built Environment conference, BEYOND 2020 is to collectively formulate a **roadmap for the built environment** to support the implementation of the **UN Sustainable Development Goals**. After careful analysis the Scientific Committee has selected **19 topics** that form the initial framework for the conference program. The idea is that all topics have one or more connections to each of the UN Sustainable Development Goals.

To achieve this the conference program will provide participants with an **expert analysis of the future context** including foresight and futures thinking particularly for the period 2020-2030; leading edge position papers on climate change; technological innovations; mobility; urban futures; regional differences; disasters and refugee settlements; leadership, governance and management; change processes; scaling up of innovations; mitigation, adaptation, transition and transformation; and processes of resilience.

The **Scientific Committee** is seeking contributions that acknowledge the context and ambition and have a clear focus on at least one of the UN SDGs whilst recognizing that contributions may well be broader than this and may impact positively on more than one SDG. The contributions being sought need to address identified challenges and demonstrate innovations that begin to solve these challenges. We envisage that the contributions are likely to cover a range of possibilities including for example technological solutions, behavioural change, governmental interventions, economic and financial mechanisms, new theoretical concepts and directions, bottom up community actions and social movements, education, training, retraining programs and new approaches to research and innovation programs.

NR	TOPIC TITLE	TOPIC DESCRIPTION
1	New governance approaches for a sustainable built environment	<p>New and advanced types of governance are needed on all levels, in public authorities, private businesses as well as in civil society. We are looking for e.g. innovative approaches to encourage individual and collective responsibility (including central-local relations, multi-agency working, participatory models), new policies and taxation models, convincing showcases of public procurement initiatives, striking and innovatory business models etc. to reach a more sustainable built environment.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What types of governance have been successful in a specific setup? - What are the lessons learnt from the evaluation of certain policies? - What are the ingredients for successful public procurement?
2	Life-long learning for all	<p>High-quality learning on all levels needs to be ensured for creating a sustainable built environment: from school to polytechnic/ university, and during work life independently of gender, age, or socio-economic background. We are looking for strategies that facilitate learning throughout life for individuals and societies and are the keystone or organising principle for education policies.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to enable a deeper knowledge of the sustainable built environment? - What is your success story for inclusive and life-long learning in a specific context? - What are the keystones to facilitate learning independently from gender, age, or socio-economic background?
3	Energy systems for the future	<p>We need to shape the post-fossil energy society today. What are the best practices based on the regional setup? Share your activities around energy conservation, renewable and clean energies. Tools, initiatives and system thinking will be shared in this session.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to achieve a clean energy strategy? - What are the main sustainable energy systems of tomorrow? - How to develop the energy efficiency of the existing building stock further in different parts of the world?

4	Sustainable businesses and economic models	<p>Alternative economic models and new business models are needed in order to support sustainable transitions in the building sector. We look for contributions that challenge the prevailing idea of economic growth in favour of the promotion of human prosperity and the safety of our planet.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What are the recent experiences of shared economy? - How can insurances and risks awareness push for more sustainable investments? - How can sustainability reporting be a tool for new business models? - How can generosity become a leading value for business?
5	Architectural morphology	<p>The connection between the form and the design of buildings and structures, and their long-term sustainability is an underdeveloped knowledge field. What is in fact the most sustainable building design seen over its life-time? In order to future proof buildings and structures more evidence-based design is needed.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What happens to buildings and structures after they are built? - How can adaptability and flexibility be employed in order to support limit resource flows over time, but also to support participation and empowerment of the user? - How can architectural design become a sustainability parameter? - What effective methods do we have to study socio-material relationships?
6	Digitalization for responsive cities	<p>Responsive cities evolve from smart cities with citizens in the centre of action. We are looking for new approaches taking digitalization and connected cities to the next level discussing e.g. from the impact on future jobs to safe work environments to citizens who use smart technology to contribute to planning, design and management of their cities.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to keep cities from becoming a playground for business while residents and their quality of life are pushed aside? - How to respond to city-wide challenges more intelligently and inclusively? - What are the future approaches for using big and rich-data for insightful analysis and management of cities?

7	Social inclusion for liveable societies	<p>Inclusive societies provide certain rights to all individuals and groups in society. It is based on mutual respect and solidarity, with equal opportunities, decent living standards and valuable urban health & well-being for all, where diversity is seen as a source of strength and not as a divider. We are looking for new approaches to create socially inclusive societies, which focus on e.g. adequate and affordable housing, participation, fuel poverty, demographics addressing gender and age perspectives (kids, elderly), access to health care and social services, job opportunities, education and training.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What approaches are needed or have already been adopted to create socially inclusive societies? - How to attain fair access to resources and services? - How to establish adequate, affordable housing and safe as well as healthy environments?
8	Climate change mitigation and adaptation in the built environment	<p>Mankind is threatened by Climate change especially in the cities and fast urbanising coasts where most of the world's population lives. Globally, we are challenged by weather-related disasters that damage our water, energy, transport, buildings and telecommunications infrastructure. These impacts of a changing climate add to existing challenges such as urban sprawl, population growth, pollution and the loss of biodiversity and refugee communities and settlements. Fast and intelligent climate mitigation and adaptation measures are needed to make the Paris agreement a reality.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What are the key priorities for the built environment in climate change mitigation and adaptation? - Adaptation and mitigation innovations for a low carbon-built environment? - Success stories and scalability potentials? - Planning for the aftermath of extreme threats and disasters through temporary and more permanent settlements? - How to build resilience into all aspects of the built environment whether new or adapted from the existing?
9	Health, comfort and well-being for a better life	<p>Many people around the world spend more than 80% of their time in buildings. Hence, a good indoor environmental quality is crucial to make us feel comfortable and productive at home, work or school. Urban planning and development play a major role as well on how we perceive the outdoor environment in terms of air quality, noise levels and recreation spaces. The indoor and the outdoor quality of life is looking for your solutions, findings and recommendations in this session.</p>

		<p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to achieve a better air quality in cities and communities? - What are the lessons learnt from various research projects around the world? - What makes a good indoor environmental quality in residential, office/work and education buildings?
10	Design for hope	<p>The built environment, humans and natural surroundings, represent needs and desires transferred into architecture. It is perceived differently by people, locally and globally. “Beautiful architecture for happy people” looks for new ways to create buildings and places that respect the local context and biodiversity; are strongly rooted in history (not sure about this?), landscape and the community; and are sustainable, beautiful and a pleasure to live in.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to challenge the ways of creating and transforming built environments for people and with people? - How to create beautiful built environments that respect the local context and biodiversity? - What are the lessons learnt from practice and research?
11	Resilient transport systems and mobility solutions	<p>Transport Networks facilitate the flow of goods and people within and between countries and form the lifeblood of modern society. On the other hand, they are considered as the main sources for air pollution and lead to a large number of fatal accidents globally. Increased mobility demands on a global scale are accelerating these challenges. Approaches towards e-mobility are making progress but offer a few downsides at the same time, e.g. the use of scarce materials for all the batteries required and the rethinking of infrastructure and city planning. In some parts of the world, the younger generation is exploring new ways of mobility, e.g. beyond ownership of vehicles.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to achieve a safe, affordable and accessible transport infrastructure? - What are the key lessons learnt from research projects? - What are the main innovations for a sustainable mobility sector and how can these be scaled to meet the larger issues?

12	Urban transition - from the current state to a future state	<p>Evidence shows that cities have to change and transition to a different state if they are going to be able to cope with large impacts from climate change and natural disasters. Through this transition they also contribute globally to reduce climate change induced problems. This transition will affect all components of the city as well as the current patterns and cultural norms of everyday life.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What are the priorities within urban transition strategies and how are they implemented at scale? - What are the crucial political, managerial and policy approaches to urban transition strategies? - What can we learn from practice to date in relation to successful strategies to implement urban transition strategies
13	Urban metabolism and circularity	<p>The built environment is known as a large contributor to global resource consumption and producer of construction waste. Urban metabolism facilitates the description and analysis of the flows of the materials and energy within cities. A circular economy can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling, and upcycling. New production and consumption patterns will be necessary to use our natural resources more carefully.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How to achieve circularity in the built environment? - What are good practices to reduce construction waste? - What drives the urban metabolism of cities?
14	Technology and material innovations	<p>Technological innovation is in the centre for sustainable transitions. New and resource efficient material needs to be developed and effectively introduced to the market. The re-introduction of traditional building technologies can also develop local material markets and support a broader participation in constructing human settlements.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What are the technological possibilities for new efficient building materials? - How can transitions to fossil-free construction be promoted and managed? - How can the use of local materials and traditional technologies be promoted and up-scaled? - How can material use promote human health and prosperity?

15	<p>Promoting green and blue structures for sustainable living environments</p>	<p>Green spaces and blue structure are important for living environments, local resilience, health and the well-being. Parks, playgrounds, roof vegetation, open water and stormwater solutions are examples of incorporating green and blue structures. They can help to ensure that citizens have adequate opportunities for exposure to nature, biodiversity is maintained, ecosystem services are offered, environmental hazards such as air pollution or noise are reduced or impacts of extreme weather events mitigated. We are looking for innovative approaches to increase the quality of urban settings through integration of green and blue structures in the built environment.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What are the innovative strategies to include blue structures in planning in design? - How to design for ecosystem services in the built environment? - How to promote green spaces that are easily accessible for all population groups?
16	<p>Transformation and conservation</p>	<p>Existing buildings and structures can be a great material and cultural resource when planning for sustainable cities. However, approaches to urbanisation and transformation might come into conflict with the protection of both the formally established heritage and unprotected buildings and structures that signify a collective cultural or societal history.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - What importance do history, heritage and culture have for developing sustainable built environments? - How can urban regeneration be aligned with (inclusive meaning?) heritage and participation? - How can cultural representation be understood in sustainable development?
17	<p>Urban planning and design</p>	<p>Rapid urbanisation is one the largest global challenges. New cities are to be constructed and existing cities are to be transformed for future sustainable societies. Infrastructures, mobility, land use, and resource distribution are among the wide range of topics that are addressed.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How can urban and rural development be aligned? - What are the possibilities and downsides of densification? - How can urban design fight segregation and promote even resource distribution? - How can liveable cities be designed with respect to noise, health, recreation and social interaction?

18	Management and leadership	<p>Sustainable transitions are bound to challenge existing businesses, interest spheres and privileges. Be it in sustainable building projects, inside and between companies or at a societal and international level. To mitigate these challenges managerial, organizational and processual perspectives can be mobilized. This stream is open for contributions studying management aspects of transition processes and other processes, management of sustainable building, leadership in change processes involving sustainability or circular elements, strategy for businesses, third sector associations and public organisations.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How can processes of sustainable or circular transition be understood and/or supported? - How can partnerships overcome fragmentation and/or create a drive for sustainability? - Which are the sustainability leaders and how is leadership carried out in sustainable and circular transition - How can levels of management contribute and or constrain sustainable change?
19	Housing for all	<p>If current trends in urbanization and income growth persist by 2025 the number of urban households that live in substandard housing – or are so financially stretched by housing costs they forgo other essentials will expand unacceptably. This could mean that the global affordable housing gap would affect one in every three urban dwellers by 2025. In addition, the housing for the future needs to be both affordable, well designed and meets the challenges of climate change.</p> <p>Guiding questions but not limited to:</p> <ul style="list-style-type: none"> - How do we unlock and control land supply and encourage brown field development and change of use for housing? - How do we reduce construction costs and construction quality and meet climate change performance criteria? - How do we improve the adaptation and maintenance of the existing stock? - How do we lower financing costs for renters and buyers and also expand the output from developers and construction firms?