

A Landscape Architecture Guide to the 17 Sustainable Development Goals



A Landscape Architectural Guide to the United Nations 17 Sustainable Development Goals

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As a result of partnership between the International Federation of Landscape Architects and International Landscape Biennial Barcelona we present this booklet to provide guidance and encouragement to the global professional community of Landscape Architects in their obligations to meet the 17 UN Goals.

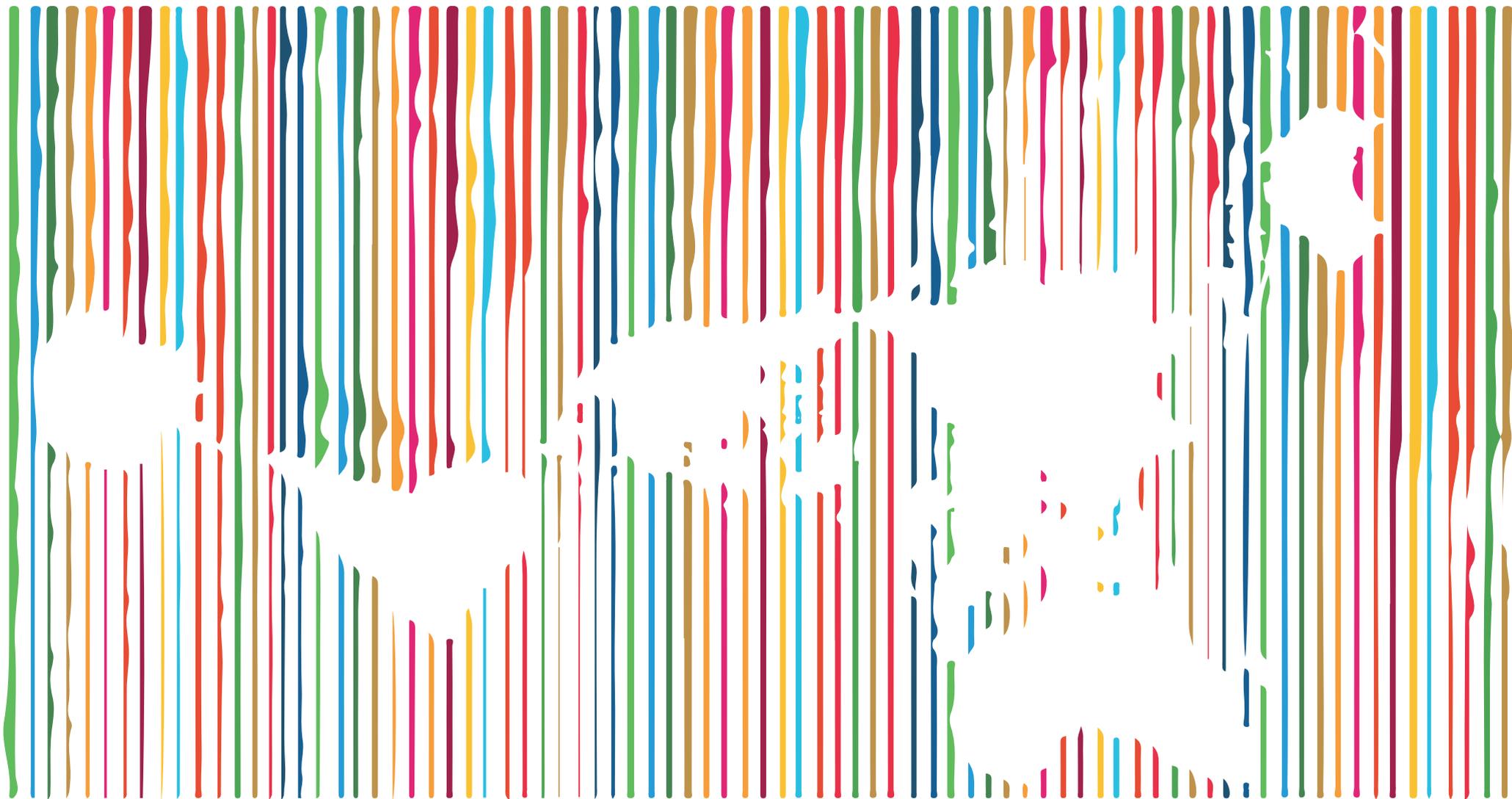


UNIVERSITAT POLITÈCNICA DE CATALUNYA

LANDSCAPE CONTRIBUTION TO THE UNITED NATIONS 17 SUSTAINABLE DEVELOPMENT GOALS

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INTRODUCTION

Transforming our world: the 2030 Agenda for Sustainable Development

Since 1945, the United Nations has aimed to be a centre for harmonizing nations' actions across the earth. Whilst the primary aim for its foundation was to maintain international peace and security after the second world war, the extreme environmental challenges we face as a planet have driven the United Nations to embrace governance towards sustainable development.

In 2016, the United Nations set out a global Agenda entitled Transforming our World: the 2030 Agenda for Sustainable Development. The text of the Agenda proposes a global action plan to achieve prosperity for people while embracing a shift towards a sustainable and resilient path for development. The Agenda is articulated in 17 Sustainable Development Goals (SDG) and 169 targets, balancing the three dimensions of sustainable development as defined by the Brundtland report in 1987: economy, equity and environment.

The philosophy of governance for the 2030 Agenda aims to integrate the governments of all 196 UN member nations and all other private and public stakeholders to impact society effectively. Professional organizations have a specific role in enacting the 2030 Sustainable Development Agenda - Landscape Architecture is a discipline with the potential to address all 17 SDGs.

A Landscape Architecture Guide to the 17 Sustainable Development Goals

Consequently, the International Federation of Landscape Architects, through its Executive Committee, embraced a shift within its governance, including organisational structure and business plan, to reflect on and support the 2030 Agenda. This publication aims to visualize the contribution of Landscape Architecture to the Agenda and, more specifically, by means of case studies show outstanding achievements by practitioners in enacting the 17 United Nations Sustainable Development Goals.

This publication has three aims. On the one hand, it illustrates the recent actions by IFLA concerning the Sustainable Development Goals by giving voice to the five **IFLA Regions**: Africa, Americas, Europe, Middle East and the Asia Pacific; IFLA's four **Standing Committees**: Education, Professional Practice, Communication and Finances; and IFLA's **Working Groups**. By aligning goals and targets, we identify strategic cooperation with United Nations departments, programs, institutes, and advisory bodies. The publication also reveals ongoing activity (2016-2021) and illustrates IFLA's future actions in support of the SDG-s and their targets.

Secondly, the publication aims to illustrate the 17 Sustainable Development Goals with case studies of works selected from projects that have been completed by Landscape Architecture practices globally. Cooperation between **IFLA** and the **Barcelona International Biennial of Landscape Architecture and its International Rosa Barba Prize** aims to determine an internationally recognized sample of best practice for effective communication. The case studies selected address the promotion of each of the Sustainable Development Goals and illustrate the wide range of planning, design and management projects where Landscape Architects have committed to sustainable practice. The intention is to showcase the direct contribution by Landscape Architects through professional practice to the 2030 Agenda.

Thirdly, the two previous aims complement a global survey conducted by IFLA through its membership, the seventy-seven National Associations representing the profession of Landscape Architecture globally, confirming IFLA as the international umbrella organization representing the Landscape Architecture profession globally. Led by the Professional Practice and Policy Chair, IFLA established in 2020 a survey to evaluate knowledge, acceptance and national based activity related to the Agenda for Sustainable Development amongst member National Associations. The purpose is to understand better and disseminate on-going national initiatives among the IFLA membership, thereby contributing to the raising of awareness and sharing of knowledge, skills and techniques in support of Landscape Architecture's drive for sustainable development.

This Landscape Architecture Guide to the 17 Sustainable Development Goals aims to render visible the potential of Landscape Architecture to be a key contributor to the 2030 Agenda, promoting IFLA's contribution through leadership and practical example, the Rosa Barba awarded projects as exemplar case studies, and the actions currently being taken at an association and national level throughout the world. It is a humble publication with an ambitious goal, to inspire practitioners and all those concerned with a sustainable planet to passionately work towards this global project. Every project, initiative and action counts, and we will be most effective if we work collectively and with a common focus to make change possible.

On behalf of the Editorial Committee,
Marina Cervera Alonso de Medina, Chief Editor.

PREFACE - IFLA

WHO WE ARE

IFLA is the body representing Landscape Architects worldwide. A truly global federation, IFLA currently represents 77 national associations from Africa, the Americas, Europe, Asia Pacific and the Middle East. Our mission as Landscape Architects is to create globally sustainable and balanced living environments for the benefit of humanity worldwide.

IFLA officially represents the world body of Landscape Architects through its member associations that are organised in regions. Landscape Architects practice in the public and private sectors and in academia. We are a not-for-profit, non-political, non-governmental organisation.

Our mission is to promote the Landscape Architecture profession within a collaborative partnership of allied built-environment professions, demanding the highest standards of education, training, research and professional practice, and providing leadership and stewardship in all matters.

IFLA's OBJECTIVES ARE TO

- Develop and promote the profession and discipline of Landscape Architecture, together with its related arts and sciences, throughout the world.
- Establish the profession in its continuing role as an instrument of aesthetic achievement and social change for the public welfare.
- Contribute in identifying and preserving the intricate balance of those ecological systems upon which the future of civilization depends.
- Establish high standards of professional practice in design and planning of the landscape, its management, conservation and development.
- Promote educational and professional international exchange of knowledge, skills and experience.

IFLA STRUCTURE AND GOVERNANCE

The World Council, comprising members of the Executive Committee and the appointed members of the national or multi-national associations, is the governing body of IFLA.

IFLA's Executive Committee is responsible for the general management of IFLA and the development of policies. The committee is comprised of President and Treasurer, 5 Regional Presidents and four chairs of our standing committees. The committee members are nominated by the membership and elected for a two year term.

WHAT WE DO

IFLA connects with the profession of Landscape Architects globally. Specifically, IFLA has a number of core objectives:

1. To establish, develop and promote the profession, discipline and education of Landscape Architecture, combined with its diverse range of arts and sciences on an international basis.
2. To establish, develop and promote the highest standards of education and professional practice influencing the widest range of Landscape Architectural operations (including but not limited to planning, design, ecology, biodiversity, management, maintenance, culture, conservation, and socio-economics).
3. To develop and promote international exchange of knowledge, research, skills and experience in all matters related to Landscape Architecture across all cultures and communities.

In order to achieve these objectives the governing body of IFLA:

1. Encourages and supports the formation and development of new and existing national and multi-national professional associations of Landscape Architects.
2. Encourages and supports the establishment of Regions, regional groups and associated councils or assemblies, and special interest groups.
3. Holds congresses, conferences and other relevant meetings.
4. Allows the formation of appropriate committees and working groups for task-specific purposes in accordance with predetermined strategies and plans.
5. Encourages and supports the formation, establishment and development of Landscape Architecture educational opportunities, standards and research worldwide.
6. Encourages and supports all levels of government to establish and to improve legislation relating to the profession of Landscape Architecture.
7. Collaborates and cooperates with appropriate international bodies and professional groups for the progression of the profession.
8. Encourages and supports the publishing and distribution of research information relevant to the profession's progression and development.
9. Makes appropriate representations to governmental, non-governmental, national and international agencies in support and on behalf of existing and potential national associations.
10. Encourages and supports any other action that will benefit the profession of Landscape Architecture in an appropriate fashion throughout the world.

COMMITTEES

IFLA's has four international standing committees which drive, co-ordinate and deliver initiatives, policies and programmes across IFLA's membership.

Each committee manages working groups which focus on a particular topic central to profession; for example, Climate Change and supporting emerging professionals. These working groups have individual elected chairs as well as regional representatives to ensure a global perspective is applied to their work.

The Education and Academic Affairs Committee (EAA)
The Professional Practice and Policy Committee (PPP)
The Communications and External Relations Committee (CER)
The Financial and Business Planning Committee (FBP)



PREFACE - INTERNATIONAL LANDSCAPE BIENNIAL

WHO WE ARE

The institutions that support us are the Official College of Catalonia (COAC) and the Universitat Politècnica de Catalunya (UPC). The Landscape Biennial consists of an executive committee, a scientific committee and a technical team.

The scientific committee is formed by different professionals who have contributed their work and personal experience to launch the Biennial as a global reference at the landscape level. The people who are part of the committee rotate according to the edition, but the restless and self-critical spirit of the members is collective. One of its main tasks is to reinvent the contents and forms of each Biennial to offer debate topics of significant impact and inviting lecturers who are at the forefront of the professional, teaching and research world. The professional who promoted the whole world of the Biennial was Rosa Barba, architect doctor for ETSAB and director of the Landscape Master studies of ETSAB. At the same time, there is the technical team composed of members linked to schools of architecture and landscape (national and international) that are the team for the organization of the event, from the pop-up green to the Symposium. They also manage the organization and dissemination of all events, exhibitions and social media.

The success and growth of the Landscape Biennial is due to the different institutions that have supported the project. They are assisting us in highlighting the international dimension of the initiative, generating relationships between professionals, schools and others. It is also relevant to acknowledge the help of our sponsors who year after year, with more or less return, have trusted our project by contributing their grain of sand. They are Ajuntament de Barcelona, Diputació de Barcelona (DIBA) and Àrea metropolitana Barcelona (AMB). We also have to name the collaboration with Fundació Banc Sabadell.

An essential part of the Biennial organization is the group of volunteers who encourage us. Most are students or alumni of landscape masters, agricultural schools, architectural studies, etc. We highlight the efforts made by students of the master's degree MAP and MBLandArch, and the students of the ETSAB, who collaborate with the preparation of pop-up green during the Symposium and round tables.

WHAT WE DO

From European to International Biennial of Landscape Architecture

After having been recognized at European level and after the first seven editions: "Refent paisatges" (1999), "Jardins insurgents" (2001), "Només amb natura" (2003), "Paisatge: un producte / una producció" (2006), "Tempesta i ímpetu" (2008), "Paisatges Líquids" (2010) and "Biennial versus Biennial" (2012); There was a turning point in the eighth edition which brought us closer to new landscape realities in the world through the internationalization of its Rosa Barba Landscape Prize. This announcement was consolidated with the following editions "A Landscape for you" (2014), "Tomorrow Landscapes" (2016) and "Performative Natures" (2018). Now it becomes an excellent diffusion tool with relevance in landscape project interventions.

Symposium

Each edition has its Symposium articulated under a motto. All kinds of theoretical and practical reflections are included to enhance an interprofessional debate. The Symposium takes place for two days and round tables, debates, presentations by the finalists of Rosa Barba, interventions by the invited lecturers and other events. The Symposium is held at the Petit Palau de la Música de Catalunya and is also broadcast live in the event hall of the College of Architects of Catalonia (COAC).

Rosa Barba International Landscape Prize, by Banco Sabadell Foundation

The Rosa Barba International Landscape Prize is convened with the collaboration of the Banc de Sabadell Foundation and joins the framework of the 11th International Landscape Biennial of Barcelona. There is a single prize, a grant of 15,000 euros delivered during the Symposium. The winner and the finalists present their projects during the conferences. The projects selected for the International Jury will be published in the catalogue of the 11th Biennial and also upload on a digital creation website of the Biennials (Paisateca).

International Prize for Landscape Schools, by Banco Sabadell Foundation

The International Landscape School Prize is convened in collaboration with the Banco Sabadell Foundation and it is part of the 11th International Landscape Biennial of Barcelona. Each school can present a maximum of the five best projects of their institution. Students can present projects made between the five years previous to the Prize call.

There is a prize, an economic grant of 1500 euros, delivered during the Symposium. The winner and the finalists presented their projects during the symposiums and the exhibition at the UPC Barcelona TECH. The projects selected for the International Jury will be published in the catalogue of the 11th Biennial and present a digital body creation website for biennials (Paisateca).

Exhibitions and Publications

The professional and academic reflection of the awards mentioned above will materialize in two thematic exhibitions and later in a publication in the form of a catalogue that will be the enduring witness of that edition.

The leading exhibitions that are organized are projects selected by the Rosa Barba Prize, located at COAC, and school projects, located at ETSAB. The aim is to disseminate and promote professional and academic practices. The exhibitions of the plans, both schools and Rosa Barba, are itinerant through several universities and cultural centres around the world.



COAC



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DE CATALUNYA

Sabadell
Foundation

International Federation of Landscape Architects Potential Contribution to the UN 17 Sustainable Development Goals

End poverty worldwide.

Landscape Architects work to create and maintain the urban forest, improve air quality, integrate low cost urban food production and produce low cost materials for construction.

Landscape Architects promote action based on transformation, innovation and resilience regarding food security and food sovereignty.

A crucial tool is the development of stable relationships between national and local governments, professional boards and community associations.

Landscape Architects are primarily concerned with ecological health.

The status of natural ecosystems and communities that inhabit them. The natural environment contributes towards the physical and mental health of our populations.

Education in Landscape Architecture is being adjusted to meet critical challenges facing the natural environment and communities globally.

Nature based solutions require technical skills and research leadership that higher education can offer.

Sustainable design that is appropriate to place is inclusive.

It considers and incorporates the needs and expectations of all community members irrespective of ethnicity, gender, age and ability.

Water management in urban areas requires new approaches that integrate knowledge about territorial patterns and processes into development of management practices.

Landscape Architects contribute their skills to the management of water resources and the delivery of water and sanitation services for billions of people.

Good design reduces the need for heating and cooling.

Mitigating the urban heat island effect by increasing tree canopy is one way Landscape Architects can contribute.

Landscape Architects create comfortable and safe work places that aid productivity.

Healthy and attractive cities support sustainable economic growth.

Landscape Architects work on major infrastructure projects, such as road and rail corridors, waterways and flood control, that can have a positive effect in connecting communities and natural ecosystems.

Landscape infrastructure can be a primary organiser of city structure.

Good design can be a catalyst for managing migration and promoting a common ground.

Responsible and well managed migration policies can benefit economies and local communities.

Landscape Architects apply Nature Based Solutions to sustainably protect, manage and regenerate natural or modified ecosystems, addressing social challenges effectively and adaptively, while providing benefits for biodiversity and human well-being.

Landscape Architects develop and implement strategies to reduce food waste, responsibly manage chemicals and waste, and remediate contaminated and post-industrial sites.

Landscape Architects support sustainable consumption and focus on sustainable lifestyles.

IFLA has declared a Climate and Biodiversity emergency and committed its members to the principles embedded in the United Nations SDG 13.

Our commitment is the reduction of greenhouse gas emissions, the protection of nature and the adoption of principles in ecosystems based planning and design.

Landscape Architects can make a positive contribution towards an integrated and strategic approach to the management of blue-green infrastructure, including the reduction in discharge of nutrients, pollutants, sediments and debris from the land into waterways and the sea, and the management and attenuation of flooding.

Landscape Architects work to integrate urban ecosystem corridors and nodes with similar systems in peri-urban, rural and regional areas.

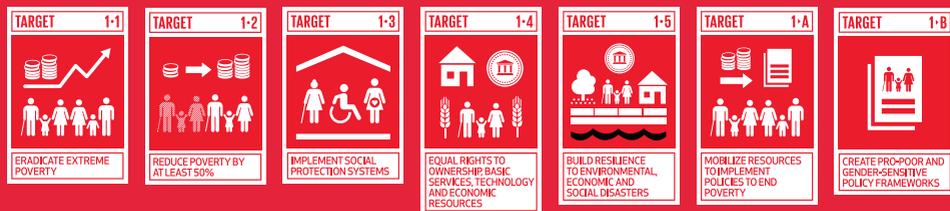
These provide bio-system refuges, support threatened species and connect communities.

Landscape Architects design safe places that are active and where people are comfortable to be in. Safe places are inclusive and can reduce violence.

For IFLA, one of the main objectives is to strengthen our partnerships with other international organisations like UNESCO, FAO, UIA, ISOCARP, ICOMOS, IUCN and others, and to work together to find the best ways to enhance a sustainable future.

1 NO POVERTY

1 NO POVERTY



Maimuna Saleh-Bala , James McGregor and Carey Duncan,
IFLA's Africa Region representatives

SDG 1 aims to end poverty worldwide. Apart from a minimum monetary amount of what it takes to live for a day, UNDP indicates that poverty is also a lack of opportunity and access to education, adequate nutrition, civic participation and decent employment. It brings with it slum living or homelessness, sexual and economic exploitation, limited or no health services, inadequate or non-existent training options, inequalities, etc.

Sustainable Economic Development links poverty firmly to environmental damage and natural disasters as these exacerbate poverty. Building resilience of the poor to environmental, economic and social disasters is specifically identified as one of the SDG 1 targets as is the access to basic services, ownership and control over land and natural resources. Landscape Architects, with our education in strategic planning, situation analysis, landscape and ecosystem assessment, knowledge of economic development, ecological literacy, sustainability and the relationship between landscape, economic and human health, provides an excellent mix of services that can, if directed, significantly reduce poverty levels through worthy job creation. Working strategically with other professions, organisations and institutions, Landscape Architects can contribute to reducing poverty through initiating actions which start a process:

- Improving environmental comfort and reduced thermal stress through landscape restoration and preserving or restoring ecological integrity.
- Linking employment to environmental actions such as installing and maintaining urban forests.
- Training in "new" environmental sectors and building capacity locally.
- Integrating low-cost community food production.
- Reducing damage and losses from rising sea levels, storms and flooding through climate change adaptation.
- Economic development and job creation.

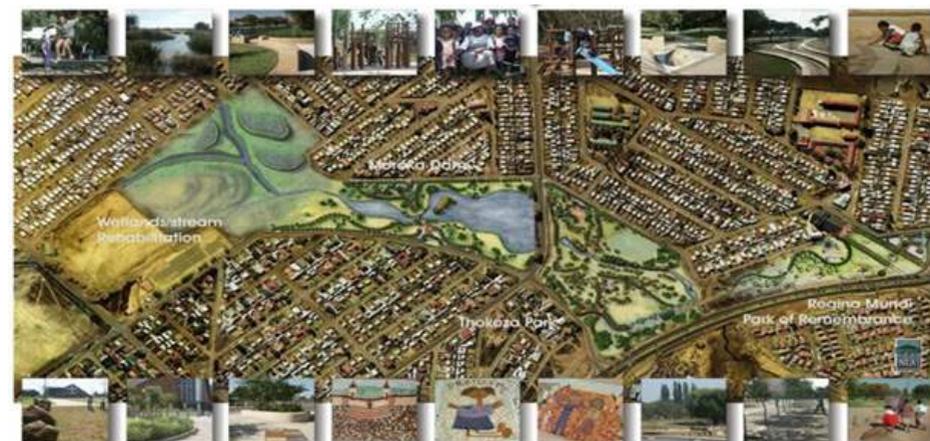
The tourism sector, in particular, provides an opportunity to address all these aspects in a coordinated way. The central role of Landscape Architects in the relationship between Poverty Reduction – Capacity Building – Landscape Enhancement and Climate Change Adaptation has been demonstrated in the Sustainable Tourism Development and Marketing Master Plan for Lagos, Nigeria 2017. Landscape Architects working with local consultants, identified the "bleisure" market (business+leisure) as having a high potential for reducing poverty through the creation of employment, while improving resilience by protecting and enhancing the coastal zone ecology with its numerous offshore islands.

In Africa, where 27 of the world's 28 poorest countries are found, similar ideas and relationships are illustrated:

Sabyinyo Silverback Lodge lies hidden at the foothill of a chain of volcanoes (virungas) and surrounded by the tropical forest of Rwanda. Through benefits from ecotourism, the Sabyinyo Community Livelihoods Association (SACOLA) delivered over \$3.3 million in revenue since 2006 and has reached out to more than 5,800 households, thus removing the burden from the park's natural resources and its iconic mountain gorillas.

Conflict Rural Landscapes in the Nature Reserve Planning of Benue River Valley Farm Estate is an ongoing project addressing climatic anomalies that are fuelling deadly clashes between farmers and Fulani herders in Nigeria. Solving issues of access to scarce resources helps enhance rural livelihoods and minimises conflict.

Moroka Dam Precinct Project, Soweto, South Africa 2002 Identified as a Showcase Project for the World Summit on Sustainable Development, this project demonstrates that success can be achieved when sustainable design and social equity principles are rigorously applied throughout the planning, design and implementation process. The design focused not only on the outcome, but also purposefully strove to valorise the process of rehabilitation and integration of the dam and wetlands. In the process 15 unskilled women were trained in the art of mosaic through which they told their stories. 210 people from the local community were also employed on the project.



©NLA/Graham Young. Project Credits: Sustainable Tourism Development and Marketing Master Plan for Lagos, Nigeria: Landscape Architect James MacGregor and management consultants E+Y Sabyinyo/Silverback Lodge: Landscape Architect Hitesh Mehta FASAL FRIBA FAAK /Benue River Valley Farm Estate: Landscape Architect Tunji Adejumo FSLAN / Moroko Dam Precinct Project: Landscape Architect Graham Young and Newtown Landscape Architects / Contributed by Maimuna Saleh-Bala (PhD) FSLAN, Chair Professional Practice and Policy IFLA Africa, Vice President Society of Landscape Architects of Nigeria (SLAN) and Coordinator Landscape Architecture Programme A.B.U Zaria Nigeria. James MacGregor, President, ecoplannet sarl, Moroccan Association of Landscape Architects (AAPM), IFLA Delegate. / Carey Duncan, Landscape Architect, City and Regional Planner, President of IFLA Africa.

End poverty in all its forms everywhere.

More than 700 million people, or 10% of the world population, still live in extreme poverty and is struggling to fulfil the most basic needs like health, education, and access to water and sanitation, to name a few. The majority of people living on less than \$1.90 a day live in sub-Saharan Africa. Worldwide, the poverty rate in rural areas is 17.2 per cent—more than three times higher than in urban areas.

LINEAR PARK CUERNAVACA RAILROAD - 10TH BIENNIAL - ROSA BARBA PRIZE FINALIST, SPECIAL MENTION AND PUBLIC OPINION PRIZE - JULIO GAETA, LUBY SPRINGALL

In August 2016, the government of Mexico City called an International Ideas Competition for the construction of the Cuernavaca Railroad Linear Park. The project is located in the corridor of the Cuernavaca Railroad built in 1898 to connect Mexico City with the port of Acapulco.

The project contributes to growth and transformation, to the necessary balance between housing and mixed programs, to the essential balance between economic and social development, and between preservation of heritage and enhancement of its transformation condition.

We are interested in people, in places and in the creation of ecosystems that allow us to understand our existence; that enhance our human essence by linking it with the physical reality; by the creation of meaningful places. We have obtained our most important works through competitions:

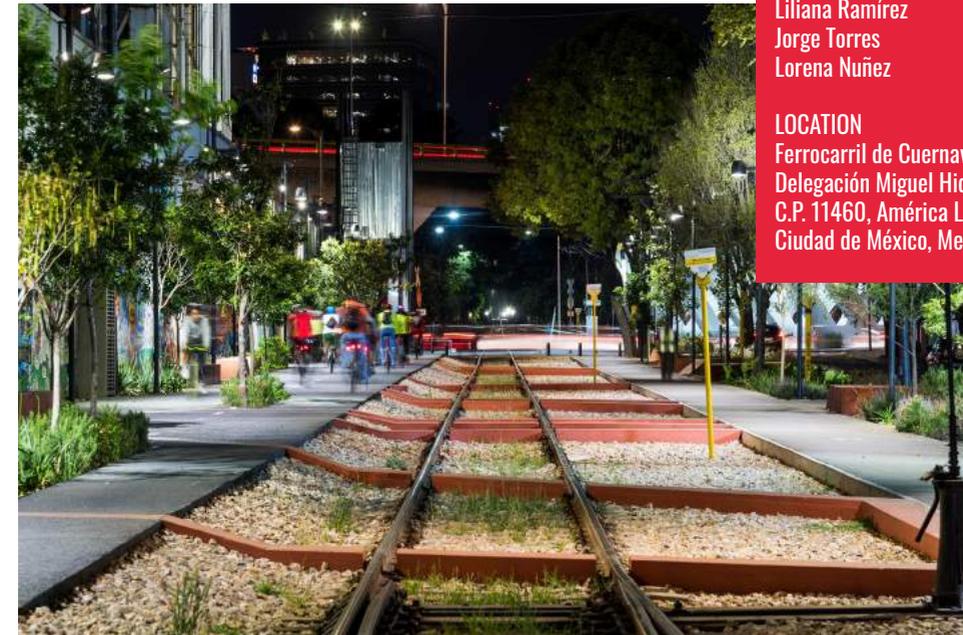
This project has been awarded with: First Prize at Quito Biennial for Urban Design and Landscape Architecture; 3 Silver Medals and 1 Gold Medal in different biennials of Mexican Architecture.



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2 ZERO HUNGER

TARGET 2-1  UNIVERSAL ACCESS TO SAFE AND NUTRITIOUS FOOD	TARGET 2-2  END ALL FORMS OF MALNUTRITION	TARGET 2-3  DOUBLE THE PRODUCTIVITY AND INCOMES OF SMALL-SCALE FOOD PRODUCERS	TARGET 2-4  SUSTAINABLE FOOD PRODUCTION AND RESILIENT AGRICULTURAL PRACTICES	TARGET 2-5  MAINTAIN THE GENETIC DIVERSITY IN FOOD PRODUCTION	TARGET 2-A  INVEST IN RURAL INFRASTRUCTURE, AGRICULTURAL RESEARCH, TECHNOLOGY AND GENE BANKS	TARGET 2-B  PREVENT AGRICULTURAL TRADE RESTRICTIONS, MARKET DISTORTIONS AND EXPORT SUBSIDIES
TARGET 2-C  ENSURE STABLE FOOD COMMODITY MARKETS AND TIMELY ACCESS TO INFORMATION	Carlos Jankelevich, IFLA's Agricultural Landscape Working Group Chair					

The IFLA World Group on Agriculture and Landscape (WGAL), as part of the IFLA Permanent Commission on Professional Practice and Policy (PPP), contributes in varying degrees with each and every one of the seventeen Sustainable Development Sustainable Goals (SDGs) of the United Nations 20-30 Agenda, particularly the Second of these objectives “Zero Hunger”, which proposes to reduce the World Hunger that affects more than eight hundred million people globally by the year 2030.

Our group IFLA WGAL, aims for responsible responses regarding the bond between Agriculture and Landscape Architecture, favoring binding actions in favor of Territorial Justice and Food Security. The latter, through innovative conceptual frameworks, community involvement and landscape management aims to:

- Awaken understanding and awareness of the bond between Agriculture and Productive Landscapes so to address managing solutions to conflicts and demands identified as priorities.
- Boost the advancement and completion of an inventory of agricultural heritage systems in each region and nation in response to the safeguarding of agricultural biodiversity and wildlife and the dissemination of indigenous knowledge source and ancestral cultures.
- Explore and deepen mutual collaboration opportunities between Agriculture, Urban Agriculture, Productive Landscapes, Public Space and Cultural-natural Heritage.

Carlos Jankilevich, IFLA WGAL Chair, is an architect with a specialty in landscaping, environmental planning and urban design. He serves as Coordinator of the Integrated Landscape Research Program (PIIP) and the Landscape Observatory of the University of Costa Rica. In addition, he is president of the firm Tropica Internacional, a business group dedicated to consulting, design and construction of Landscape Architecture works in Costa Rica, Central America and the Caribbean.



The IFLA World Group on Agriculture and Landscape has the following agenda:

- Promoting actions based on transformation, innovation and resilience regarding, food security and food sovereignty.
- Establishing a core of thematic axes on emergencies and priority issues as to generate lines of action and projects by local teams the implementation of which be guaranteed through participatory monitoring actions.
- Identifying and promoting efficient levels of production and consumption according with the living conditions, needs and idiosyncrasy of the communities and their environment.

WGAL's Action Plan in respect to SDG 2 emphasizes the need to develop projects, measures and activities leading to:

- Priority attention to the nutritional needs of regions and communities under food emergency.
 - Self-sufficiency and new productive paradigms based on agro-biological diversity and its relationship with public and residential spaces.
 - Promotion of alternative agriculture as a way to domestic production, self-consumption and sale
 - Enhancement of integrated rural and urban production closer to nature and a better landscape quality.
 - Finding new ways for integrated low-cost food cultivation mainly with preeminence of vegetables and fruits.
- Within this wide spectrum of challenges and opportunities a crucial tool is the development of liaisons and establishment of stable relationships with national and local governments, professional boards and community associations.



The bond between agriculture and landscape is a unique opportunity to strengthen social and ecological resilience.

It is time to rethink how we grow, share and consume our food. If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centered rural development and protecting the environment.



LANDSCHAFTSPARK BELVEDERE KÖLN - 9TH BIENNIAL 2016- FRANK LOHRBERG

The “Belvedere Park” in Cologne exemplifies a new type of urban park, the “productive park”. Different to the main tradition of Landscape Architecture the design does not substitute productive land uses like agriculture but makes use of them to create a park.

A new path was created allowing the people to surround the area. The emblematic path design – half mineral-bound, half water-bound surface – is made for both, urban dwellers and agricultural vehicles. A second feature of the park are four steel lookouts which mark the path. From the highest platform of the lookout “Domblick” visitors can observe the whole scenery – from the nearby highway, to harvesters on the fields, to the Cologne Cathedral at the horizon. The lookout “Felderblick” is formed as a catwalk allowing the visitors to delve in the aesthetic features of field crops like the heavy fragrance of rapeseed flowers or the cracking sound of grain ears. The farmers involved in the design process and independently offered to grow more flowering catch crops. In addition, a resident Institut for plant breeding acted as a co-producer of the park. Situated right in the middle of the area the Institut created a “science barn” and a crop plant garden showing traditional species cultivated in this area, partly since more than 3.000 years.

The two examples highlight the general approach which is not to substitute agriculture in order to make a park, but to make use of it to create a new form of park.

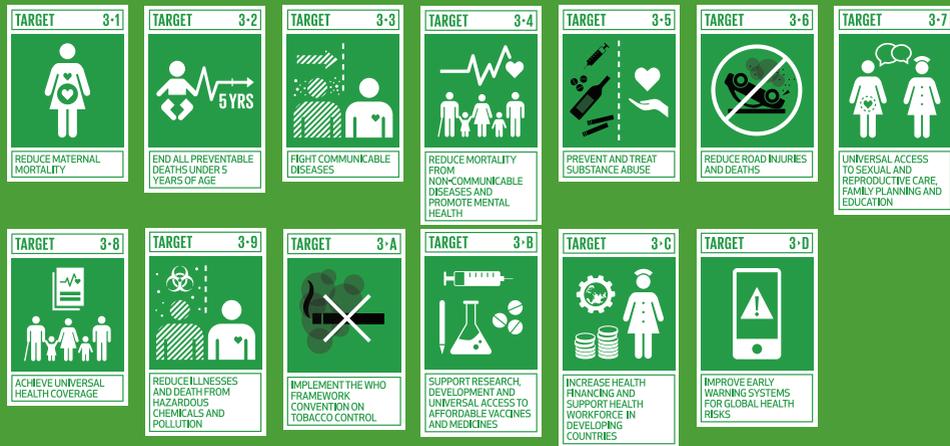


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3 GOOD HEALTH AND WELL-BEING



Ricardo Riveros,
President IFLA Americas Region

"The WHO has said that the Americas will be the Region most affected by the coronavirus. The health and well-being of the Region is then in a crisis like everywhere else, but in a deeper way. For this reason, in the Region of the Americas we have wanted to know how Landscape Architects have been affected by this situation in their work and educational environments, as well as from a human and citizen perspective.

We developed this through 2 conferences. We invited Landscape Architects from Latin America and North America to talk about what's current in relation to the Covid-19, and also to think about the future. In a first conference cycle, within the framework of World Landscape Month, we invited twelve speakers to discuss: "the landscape in quarantine" and the post-Covid-19 scenarios for our profession. In three days of conferences we met and talked about Landscape Architecture and Covid-19. At that time we had more than five hundred online viewers. While the conferences have been seen by more than a thousand people adding up to the three days.

The second cycle: "Seeding an idea" was broadcast in English with guests from the US, Canada, Costa Rica, Mexico, Chile and Colombia. The conference allowed ideas to be planted on the future of Post-Covid-19 Landscape Architecture from various perspectives such as climate change, education, the next generations, industry and food security. All of them are topics of great relevance to the profession. The event supported by IICA-OAS, FAO-UN, LAF and the Central University of Chile.

3 GOOD HEALTH AND WELL-BEING



In this way, IFLA is proposing to understand the magnitude of the coronavirus health crisis from profession of Landscape Architecture with the intention of becoming a global contribution to health and well-being.

The lectures are available on the IFLA AR YouTube channel. The channel is: iflaamericas"



Images from the lecture series organized by IFLA AR

Ensuring healthy lives and promoting the well-being at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality, but working towards achieving the target of less than 70 maternal deaths per 100,000 live births by 2030 would require improvements in skilled delivery care.

TEL AVIV'S CENTRAL PROMENADE RENEWAL - 10TH BIENNIAL - ROSA BARBA PRIZE FINALIST - UDI KASSIF, GANIT MAYS-LITS, MAOR ROYTMAN

Since its inception in the late 1930's, the central promenade of the young Bauhaus city of Tel Aviv played a key role in establishing the ever changing connection between the city and its shore. In all of the various phases of its life, whether the modest walkway of the 1930's, the neglected site of the 1960's, or the renovated version of the 1980's, the elevated boardwalk acted as a border that blocked the natural pedestrian flow between the city and its beach. The current renovation project aimed to transform this historical blockade by creating a new continuous interface that enables free pedestrian flow to and from the sandy beach throughout the city's central waterfront. Moreover, serving as the main waterfront public space of the entire metropolitan area, the new promenade and its sitting-terraces was designed to offer a generous array of seats and relaxation opportunities along the seafront, in order to host great many new visitors and create a hospitable and lively public domain for this large dense urban area.

The strategic objectives of the project focused on the following key aspects:

New flow - Mending the physical rupture between the city and the sea by creating a continuous stretch of sitting-stairs and ramps all along the waterfront, thus enabling a free and unmediated flow from the street level to the sandy beaches.

Continuity - connecting lengthwise the central promenade to the city's water front walkways south and north to create a continuous pedestrian and cycling route along the waterfront.

Equality and Accessibility - Allowing accessibility in all aspects and adding a new accessible lower walkway to enable disabled, the elderly, toddlers and strollers, to reach the beach all along from a public space of equality.

Ecology – utilizing careful structural and detailed design in order to minimize the project's environmental footprint. Among the methods used were the development of a construction strategy that used pre-cast elements, bamboo woodwork as well as the reuse of existing infrastructure.

The new renovated promenade is commonly considered a transformative project due to its central position and the radical change it made in the relation between the city's-built fabric and its major natural resource – the sea. Changing from a mistreated public space, that was used mainly by tourists and neighboring residents, the new promenade is a host to over 9 million visitors a year, a record number in comparison to Israel's population of 9 million.

Now that the project is built people from all walks of life that were previously avoiding this territory come often to enjoy the sea side, take a break from the hectic city, relax, read quietly or play together in front of the open horizon, turning this public space to an all year round and around the clock hub of activity. Tourists mix with a vast number of local residents from the densely populated surrounding metropolis, making the new promenade the liveliest, yet close to nature, public space in the country.

The new 'in-between' space that was created in order to mediate between the city and its beach, had become a vital melting pot for a new urban culture, where spontaneous bands of acrobats, backgammon players, young moms, sportsmen and many more, turn the promenade into their common social-platform.



AUTHORS
UDI KASSIF, GANIT MAYS-LITS, MAOR ROYTMAN

LOCATION
Tel Aviv promenade- Herbert Samuel street, Dan Metropolitan Area, Tel Aviv-Yafo, Israel.



4 QUALITY EDUCATION

4 QUALITY EDUCATION



<p>TARGET 4-1</p> <p>FREE PRIMARY AND SECONDARY EDUCATION</p>	<p>TARGET 4-2</p> <p>EQUAL ACCESS TO QUALITY PRE-PRIMARY EDUCATION</p>	<p>TARGET 4-3</p> <p>EQUAL ACCESS TO AFFORDABLE TECHNICAL, VOCATIONAL AND HIGHER EDUCATION</p>	<p>TARGET 4-4</p> <p>INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS</p>	<p>TARGET 4-5</p> <p>ELIMINATE ALL DISCRIMINATION IN EDUCATION</p>	<p>TARGET 4-6</p> <p>UNIVERSAL LITERACY AND NUMERACY</p>	<p>TARGET 4-7</p> <p>EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP</p>
<p>TARGET 4-A</p> <p>BUILD AND UPGRADE INCLUSIVE AND SAFE SCHOOLS</p>	<p>TARGET 4-B</p> <p>EXPAND HIGHER EDUCATION SCHOLARSHIPS FOR DEVELOPING COUNTRIES</p>	<p>TARGET 4-C</p> <p>INCREASE THE SUPPLY OF QUALIFIED TEACHERS IN DEVELOPING COUNTRIES</p>	<p>Salma Samaha, Chair IFLA Education and Academic Affairs Committee</p>			

Education is both a goal in itself and a means for achieving the other SDGs. That's why Landscape Architecture education is not only an integral part of sustainable development through Goal 4 but also a key dynamo and an essential strategy in the pursuit of the SDGs implementation.

Education is explicitly formulated in the Sustainable Development 2030 agenda as a stand - alone goal SDG4 besides several other education - related other SDGs targets and indicators including health and well-being (Target 3.7), decent work (Target 8.6), climate change mitigation (Target 13.3), etc.

Based on the interactions among the UN Sustainable Development Goals and following the decision to align IFLA's working groups to the SDGs, the Education and Academic Affairs committee developed an inclusive strategy involving LA practitioners, researchers, educators and students "leaving no one behind".

In a quickly changing world, education needs are being called into question in terms of tackling critical challenges, working on providing a "quality education for lifelong learning for all". In response, we are developing education capacity building global programs related to LA Continuing Education for practitioners and building teaching capacity in LA for educators based on existing regional projects and experiences to be able to reach members according to their specific national needs.

In addition to improving quality of life, access to inclusive quality LA education can help equip practitioners with the tools required to develop innovative solutions to the world's greatest problems. We seek to emphasize the link between all LA stakeholders practitioners, researchers, educators and students:

-Through the Education Capacity Building Working Group we are working on active collaborations to overcome any lack of adequately trained educators and practitioners specifically related to sustainability issues.

-Through the Education Recognition and Accreditation Working Group we are finalizing IFLA Global Education Recognition procedures to monitor LA quality education and ensure better learning outcomes since "access to quality education is an opportunity for social mobility and reducing inequalities".

-Through the Students Competition Working Group we are responsive to the full scope and challenges of Landscape Architecture based on the "Students Competition Focus Update".

e-scape transitional settlement
Bar Elias, Lebanon

the final product

AL-TAYARA INFORMAL SETTLEMENT
DATA SCHOOL

the informal settlement on coast area periphery of marginalized urban and rural community
Scattered in the land, they are forming clusters of new small informal city.

to increase the sense of community in the informal settlement
women's "gossip space" community gatherings social space shaded space women's "gossip space" community gatherings social space

this space lets children play simple games like marbles, Jack, kicking the can, jump rope
children play space re-used tires sand colors plants children play space re-used tires sand colors plants

Spring Informal Settlements in Bar Elias, Bekaa Valley, Lebanon
Country: Lebanon
University / School: AUB, AUC, ALBA, UNIRC, PENN. UN, UGUE, IFLA
Academic year: 2014/2015
Title of the project: e-scape transitional settlement

Workshop project presented for the 9th Biennial School Prize: Children playground, e-scape transitional settlement, Lebanon. Helen Yu, Ahmad Borham, Christian Costa, Tina El Moheb, Lea Zaytoun, Aya Itani, Majed Medawar. Teaching Staff: Maria Gabriella Trovato

Obtaining a quality education is the foundation to creating sustainable development. In addition to improving quality of life, access to inclusive education can help equip locals with the tools required to develop innovative solutions to the world's greatest problems.

FOLLY FOREST _ A DANCE FLOOR FOR 100 TREES - 8TH BIENNIAL - DIETMAR STRAUB, ANNA THURMAYR



Folly Forest demonstrates the immense potential of Landscape Architecture as a spatial and social transformer. "Strathcona School is in the heart of one of Manitoba's most needy neighborhoods" (J. Moore Ratray). The school in this impoverished Winnipeg district is magically transformed by perforating fifty years old asphalt. A dance floor for 100 trees, reused materials and their transformation into a new context, is key. Folly Forest proves that projects do not need to have million dollar budgets or use vast amounts of resources.

The total cost for the metamorphosis of the asphalt was \$20 per m². The concept of perforating the asphalt showcases how a simple measure can take ecological, social and aesthetic effects and turn them into the formative element of design.

The school and community experience that this project has the power to bring people together, building and enjoying community during the day and after school. The schoolyard is an important meeting point within the community and has gained steam through reorganization and redesign. It achieves beauty and learning through life and health of an urban forest.

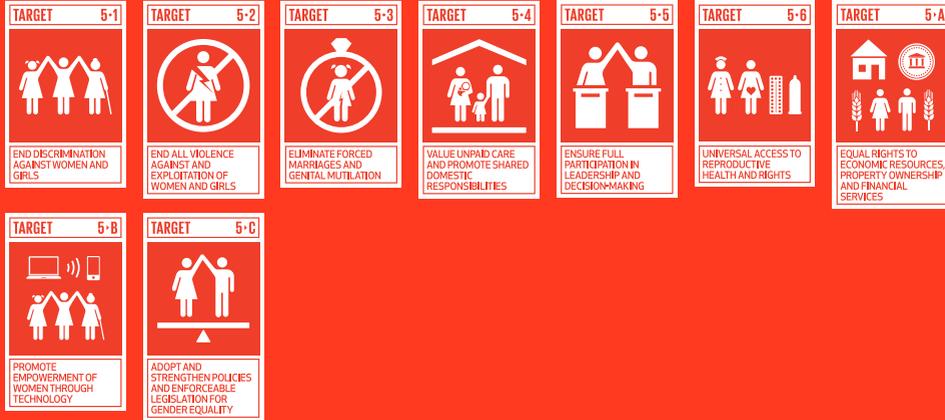


AUTHORS
DIETMAR STRAUB,
ANNA THURMAYR

LOCATION
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5 GENDER EQUALITY



Anastasia Nikologianni,
IFLA Emerging Professionals Advocate Working Group Chair

Landscape Architecture, like many other professions used to suffer from gender equality issues, either in the number of females working for the sector or in other monetary and behavioural aspects. The EPA working group is prioritising the voice of our emerging and young professionals without considering their background, their gender or country of residence. In the 4 years from its creation EPA has been an all-inclusive working group represented by passionate volunteers from all over the world. Not only we are aiming for gender equality in our core members, but in our volunteers and the current students of the profession. Our activities aim to support, engage and demonstrate that our profession requires the skills and ideas of both genders, all ages and countries. Our latest involvement with the Design Competition (at the IFLA World Congress – Oslo 2019) has also helped to demonstrate how our working group can support young professionals to attend and participate in major events giving them the opportunity to further progress their career and meet the most inspiring experts in the world.

The IFLA EPA working group operates in a good willing and open mindset allowing for all the voices to be heard and creating a mixed, multinational and multidisciplinary community, that even if it has Landscape Architecture as its core, it will always have room for other professionals and individuals with an interest in our vision and mission. EPA supports emerging professionals and aims to improve the transition from student to professional life, with equal opportunities at all genders.

5 GENDER EQUALITY



The Emerging Professionals' Advocate (EPA) working group is an international working group of young professionals and students of Landscape Architecture or relevant disciplines established to create a community and integrate the voice of young professionals within IFLA.

The EPA brings and bonds together a community of students and young professionals of Landscape Architecture by creating network opportunities across the world. Our activities aim to facilitate interaction and communication within the IFLA regions and enable the transfer of knowledge and skills between members.

The goal is for students and young professionals to have an established network where they can get guidance, find out about resources, events and news of the profession and for IFLA to support them across all its regions and build a bridge between professional assets and education.



Image from the IFLA Congress in Oslo where EPA supported the participation of students and led a session where the winning teams presented their projects. The overall goal was to give a voice to the young professionals and demonstrate what the younger generation can do for the profession.

Achieve gender equality and empower all women and girls.

While the world has achieved progress towards gender equality and women's empowerment under the Millennium Development Goals (including equal access to primary education between girls and boys), women and girls continue to suffer discrimination and violence in every part of the world.

PHASE SHIFT PARK (GATEWAY PARK)- 11TH BIENNIAL-MOSBACH PAYSAGISTES

Situated beneath the Tropic of Cancer, the climate of Taiwan is warmed by the Kuro-Shio, one of the largest marine currents in the world. The island possesses a hot and humid tropical climate that counterbalances the mountain range that has a fresher environment. The target of Central Park is to give back the outdoors to the inhabitants by creating landscapes where the excesses of the climate of Taichung are reshaped.

The park use a specific language, one of universal reach in its capacity to relate the issues at stake at different scales. The geographic scale by the transformation of an airport into an urban landscape; the urban scale by the provision of unique cultural facilities integrated into a vast public terrain; the domestic scale in the porosity between districts that allow sharing of recreational opportunities. The interlocking of these levels is a unique achievement.

The design tools explore lithosphere design -water, topography, soil- combined with atmosphere design -heat, humidity, pollution. An overlapping mapping organizes a range of landscape distributing more comfortable 'niches' where natural and artificial tools are mixed, densified and dilated to highlight eleven comfortable resorts. The atmosphere performing is emphases by the lithosphere resources running with singular path through leisure's lands, sports lands and plays lands.

The landscape pulls from North to South. Urban traffic is partially covered by infrastructures incorporated into the ground of the park. On the surface the hills establish a framework of vast horizons and continuities. Yet standing before them, they are also intimate and protective, for the staging of cultural events or regular shelter with Northern Lounge, Eastern Spiral, Middle Yard, Eastern Sky dome and Middle Clearings.

The park acts as a moderator: it proposes a variety of beaches, of gardens, of places and offer to the people of Taichung sensual experiences, partly based on the principle of senses of Rudolf Steiner, with twelve Fields -Speech, Taste, Hearing, Equilibrium, Thinking, Vision, Movement, Ego, Touch, Warmth, Smell, Life- providing visitors with places of gaming, meeting or just walk around powerful landscapes.

The leisure's lands, sport lands and play lands transform all that cross its vast, folded ground stretching. This topographic range allows residents to gain height and distance from their daily rhythms while being immersed in a living environment that is in constant formation. The ground introduces anfractuosités that protect passers-by from urban traffic while ensuring the continuity of ecological migration corridors, running 2.7km south to north, of animal, plant and human populations.

The maintenance center and the educational pavilions completed the cultural programming of the visitor center which is focused on issues concerning the planet earth.

It propose a unique public space where one can feel good, and can spend good time protected from the heat, where you can relax away from pollution, where you could have fun in the open air with your children. The park is the essential and necessary one today, of well-being, of comfort and sensual pleasures to bring to the inhabitants of big metropolitan cities.



AUTHORS

**MOSBACH PAYSAGISTES LANDSCAPER
REPRESENTATIV
PHILIPPE RAHM ARCHITECTES
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6 CLEAN WATER AND SANITATION



Armin Parizi,
IFLA Asia-Pacific PPP Committee Representative

Water plays a vital role in all aspects of social, economic and environmental development. Ensuring availability and sustainable management of water and sanitation for all are major sustainability concerns in the twenty-first century.

SDG 6 aims to include all the main aspects of freshwater in the context of sustainable development, from drinking water and basic sanitation to water, wastewater, and ecosystem resources. The eight targets for SDG 6 address access, affordability, quality, sanitation and hygiene, efficiency, cooperation, and participatory decision-making, as well as integrated water resources management. Table 1 summarizes all 8 targets of SDG 6.

As a cross-cutting issue, water influences several other SDGs. Moreover, the success of SDG 6 depends on the progress towards other SDGs. For example, advances on SDG 6 are likely to have positive impacts upon ending poverty and hunger (SDGs 1 and 2), ensuring health and well-being (SDG 3), and promoting economic growth (SDG 8). The following targets are directly linked with water:

By 2030 end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases.

By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

By 2020 achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment.

By 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

By 2020 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species.

Water management is complex and requires multi-scale, integrated, and participatory frameworks that can fairly balance different needs. Landscape architecture is uniquely positioned to holistically deal with water-related issues. Landscape architects have always worked across a broad range of projects and scales. They deal with the interactions between natural and cultural ecosystems, as the new definition of the profession of landscape architecture asserts, to address ecological sustainability, quality and health of landscapes, collective memory, heritage and culture, and territorial justice.

Around the world, there are many successful examples that represent how landscape architects are actively involved in developing water-sensitive solutions to address ecological sustainability and environmental justice on a wide range of levels and scales.

Landscape architecture is at the forefront of the fight against climate change, and actions have to start from the profession itself. To achieve target 6.4, mitigation and adaptation strategies, specifically the strategies towards the effective use of water, should be applied in all landscape architecture projects.

Small-scale domestic water management solutions, for instance, water harvesting and recycling systems, grey water reuse and wastewater treatment technologies, implemented in home and rooftop gardens can partly improve access to water and help adaptation to future impacts of climate change. The fact that 2 billion people still do not have basic sanitation facilities such as toilets or latrines, reflects the significance of adding more public facilities to development projects in both urban and rural areas to increase/improve people's access to water and sanitation. Small-scale innovations are of significance in achieving SDG 6 targets 1, 2, 3, and 4.

In the world that faces environmental crises, it is crucial to adopt nature-based innovations that reduce risks and damages of extreme drought, floods, and sea level rise. Providing integrated solutions at landscape scales is a necessity for building a resilient and productive social-ecological system. The landscape approach to conservation and restoration of water ecosystems not only secures people's access to safe water but also draws public attention to the subject and encourages them to participate in the protection of water resources. Polluted water bodies should be restored through nature-based water treatment solutions and integrated with the network of rooftop and home gardens, tree canopy, and permeable pavements to form the basis of a water sensitive landscape in which human society is protected from water-related hazards as well as both local environment and community benefit from decentralized water management practices. Such blue-green infrastructure can restore the water balance and form a basis for sustainable urban planning. The famous Sponge City can be a prominent example of how the landscape approach can be used as a template for sustainable urban planning. In this approach, the capacity of urban landscapes for absorbing water is increased and the water is later released to be used or reused in the city. Such approaches can facilitate achieving SDG 6 targets 1, 3, 4, 5, 6.a and 6.b.

Ensure access to water and sanitation for all. Clean, accessible water for all is an essential part of the world we want to live in and there is sufficient fresh water on the planet to achieve this. However, due to bad economics or poor infrastructure, millions of people including children die every year from diseases associated with inadequate water supply, sanitation and hygiene.



RIVER FOREST ISLAND - 9TH BIENNIAL - ROSA BARBA PRIZE FINALIST - SEAN O'MALLEY, XIAO ZHENG

A two-mile-long river island in the heart of a city is sculpted, shaped and forested to provide a refuge for wildlife and people. Utilizing the seasonal flooding regime of the river, River Forest Island demonstrates how these forces can become a positive form-maker for a major new central park in the heart of city. Completed in 2014, the River Forest Island takes a different direction, honors the native river hydrology and blends natural systems, local culture, and a sandbar into a successful park. Instead of concrete walls, the island utilizes natural wetland terraces as the edge condition, providing a meandering journey of discovery with commanding views and recreational spaces, educating through experience.

To stabilize the island edge, deeper rooting wetland plants are used along the erosive bank to help to slow water velocities, providing stream bank protection. Directional berms sculpted to allow rising waters to flow through and over it are planted with riparian native plants, which form the backbone of the lowland forest. The meandering landform serves as a framework for a system of trails and gardens. A hierarchy of trails and boardwalks leads the visitor along a meandering journey of discovery. Hidden surprises await in the forest while commanding views define the wetland experience. The dynamic variability and landforms of the wetland, riparian lowland and highland increase the resilience of the ecosystems and provide a tranquil escape from the city.



AUTHORS

SEAN O'MALLEY, XIAO ZHENG

COLLABORATORS

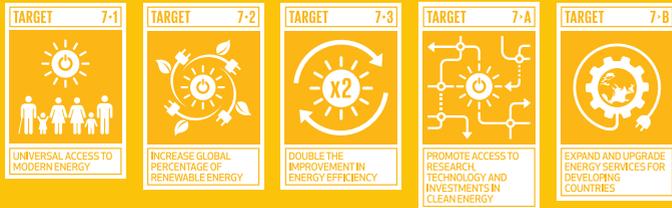
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Vincent Hsu: SWA Design Team
Mark Merkelbach: Water Engineer
Xiaobao Wang: LDI

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7 AFFORDABLE AND CLEAN ENERGY



Jeremy Dennis,
IFLA Treasurer

There is in progress making affordable and clean energy. Much has been done to secure energy in parts of the world where energy is scarce, and much is done in making energy from renewable sources such as wind, sun and thermal energy (Energy – United Nations Sustainable Development). But affordable and clean energy is perhaps also one of the most difficult targets to reach.

Wind, the easy catch

The wind industry in Denmark has come a long way in the past decades since a striking red and white wind turbine was put up at a school in 1975. The wind turbines have become larger, with the largest now being able to produce 15 MW and towering in excess of 250 meters.

In the mid-nineties the discussion in Denmark among professionals, and thus also Landscape Architects, was where and how to put up wind turbine parks. It was acknowledged that due to noise they could not be put up nearby cities and that wind turbine parks should be placed with the landscape, not just in the landscape.

Eventually, even though the seaborne parks are probably more expensive to establish, these have been the most successful in Denmark and the next generation turbine parks will be placed in the North Sea, where the government, energy companies and universities are planning the first Power-to-X plant in Denmark.

Power-to-X is the technology to harvest energy when there is a surplus in demand and change it into other types of energy - fuels to power infrastructure. It is much debated right now, as it has not been tested in large scale in Denmark before, and the idea of making the PtX plant an offshore operation has also seen criticism.

Solar, reflection from a country with little sun

Solar power is still not a big thing in Denmark but the number of solar plants is rising. It is not that we do not have enough sun - Denmark is actually quite a good setting for solar power parks. Seen from a Landscape Architects point of view, some of the same considerations regarding locating wind turbines is relevant to placing solar parks in the landscape. Both take up



space, and whilst they add value in terms of energy supply, the public actually seems to be somewhat scared of the plants. We have seen beautiful examples of energy parks from all over the world. This is one example of how Landscape Architects can contribute to this industry. We have to not only produce energy, but also make sure that generating plants fit in the landscape, and perhaps add more value in doing so. In Denmark, there is a call for more tools for planners to make solar parks more integrated in the landscape before a planning permission is granted. Most recently an on-line workshop was held addressing this issue, and my hope is that we can see a future where solar parks are integrated in perhaps orchards or as part of large industrial estates, where the large roofs can be used for solar panels.

Small to large scale, the way to go

Wind and solar energy seems to be the go-to energy source all over the world, whereas thermal energy is only a ready-made energy source in some places in the world, for example, Iceland. In Denmark, the temperatures in the sub soil levels are too low to produce power.

Small scale energy or heat production is also needed in order to reduce emissions. Not everywhere is as densely built as Denmark or parts of Europe, and in these parts a small scale unit is the right solution. We still need to see small plug-n-play energy packets as a single solar cell, a small windmill or even power from rainwater alongside the large scale operations in order to make the green transition.

As Landscape Architects we need to embrace this change as we work with the energy landscape as part of our new cultural landscape.



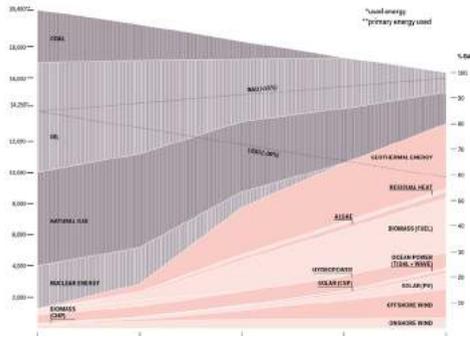
The Nature of Wind Power, a reflection on how to place Wind turbines in the landscape. Written by Landscape Architect Frode Birk Nielsen.



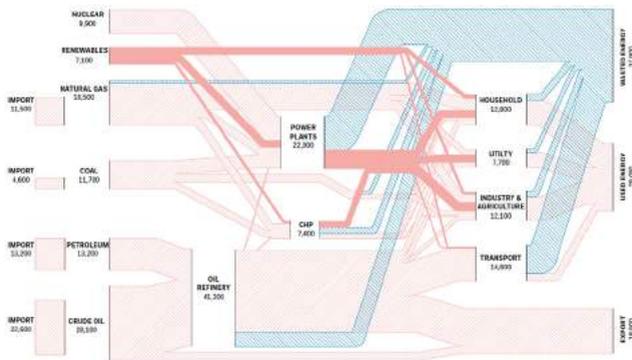
The Power-to-X Island will have ca. 200 turbines attached to its grid, producing 3-gigawatt power (equivalent of 3 million households in Europe). Is it the right way to go; only time will tell!



Solar plant in Denmark producing ca. 25 MW energy, but problematic in scale and in its adaption to its surroundings. Local residents complain about their views over the landscape is obstructed and that the panels reflect the sun. (Source: SN media, Denmark)

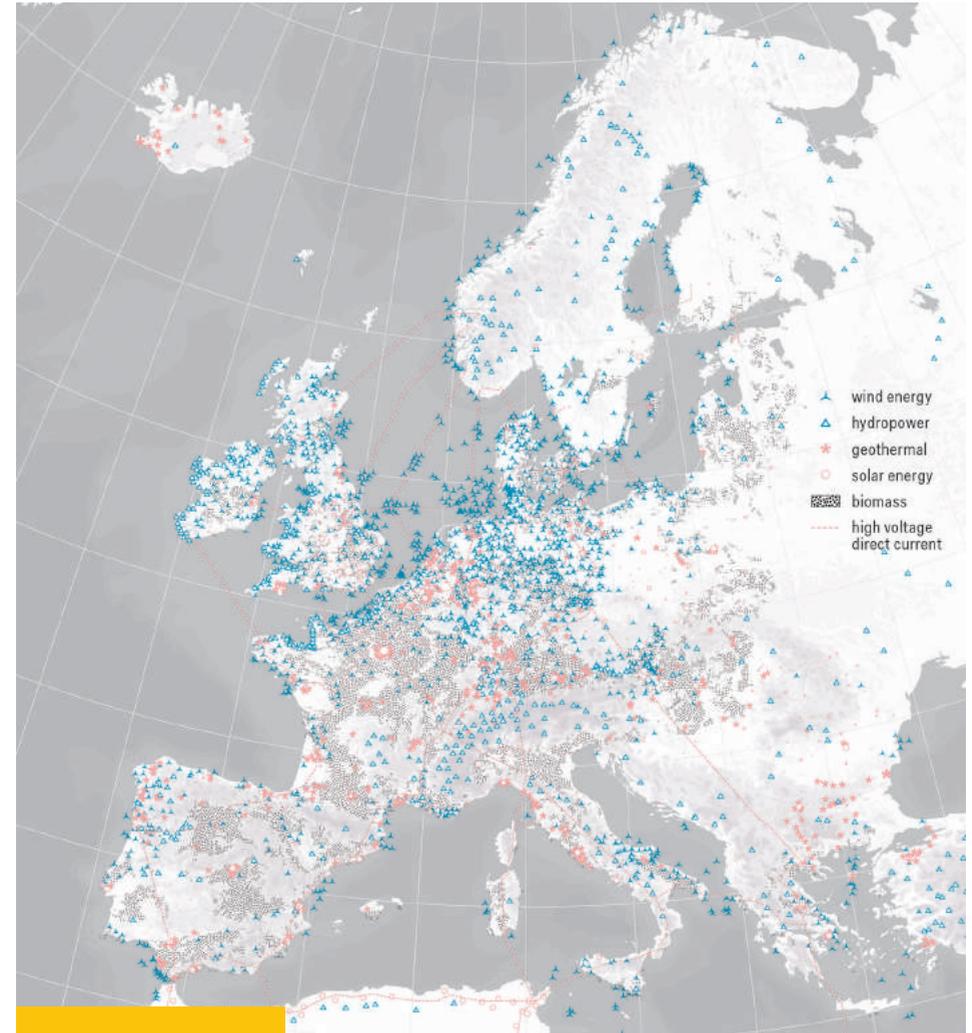


Ensure access to affordable, reliable, sustainable and modern energy. Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential. Working towards this goal is especially important as it interlinks with other Sustainable Development Goals. Focusing on universal access to energy, increased energy efficiency and the increased use of renewable energy through new economic and job opportunities is crucial to creating more sustainable and inclusive communities and resilience to environmental issues like climate change.



KWH/M2 - LANDSCAPE AND ENERGY - 8TH BIENNIAL- FRANK TALSMA

Few transformations will have such a profound impact on the appearance and functioning of our future landscapes as the coming energy transition. Gradually, in accordance with European ambitions (emit 80% less CO2 in 2050 than in 1990), we will have to switch from a fossil based society towards more sustainable renewable energy sources, which will gravely impact our daily environment. In the book 'kWh/m2' an urgent but underexposed design issue is addressed. In this book H+N+S researches, designs and visualises the spatial aspects of the energy metabolism: from energy production to use, from past to present to future, from individual households to the European continent. Four site specific regional designs (Northern Netherlands, Rotterdam, Arnhem, and the former Dutch, Belgian, and German mining area) give an overview of the manner in which energy can be integrated in spatial design and actually add quality to our everyday environments. Desk research by H+N+S shows that the potential for a varied and complete renewable energy provision is present. The opportunities are mapped and calculated up to a European scale level, and translated in a logical 'casting' of sub-areas. Together with a proposal for the expansion of a energy network, a promising perspective arises of the future sustainable energy household.



AUTHORS
FRANK TALSMA
H+N+S Landscape
Architects

LOCATION
Groningen, Drenthe,
Limburg, Rotterdam,
Arnhem, Switzerland



8 DECENT WORK AND ECONOMIC GROWTH



TARGET 8-1 SUSTAINABLE ECONOMIC GROWTH	TARGET 8-10 UNIVERSAL ACCESS TO BANKING, INSURANCE AND FINANCIAL SERVICES	TARGET 8-2 DIVERSIFY, INNOVATE AND UPGRADE FOR ECONOMIC PRODUCTIVITY	TARGET 8-3 PROMOTE POLICIES TO SUPPORT JOB CREATION AND GROWING ENTERPRISES	TARGET 8-4 IMPROVE RESOURCE EFFICIENCY IN CONSUMPTION AND PRODUCTION	TARGET 8-5 FULL EMPLOYMENT AND DECENT WORK WITH EQUAL PAY	TARGET 8-6 PROMOTE YOUTH EMPLOYMENT, EDUCATION AND TRAINING
TARGET 8-7 END MODERN SLAVERY, TRAFFICKING AND CHILD LABOUR	TARGET 8-8 PROTECT LABOUR RIGHTS AND PROMOTE SAFE WORKING ENVIRONMENTS	TARGET 8-9 PROMOTE BENEFICIAL AND SUSTAINABLE TOURISM	TARGET 8-A INCREASE AID FOR TRADE SUPPORT	TARGET 8-B DEVELOP A GLOBAL YOUTH EMPLOYMENT STRATEGY		

Fritz Auweck,
IFLA ILO Group Chair
Working Group

For the profession of Landscape Architects a sustainable economic growth, a full and productive employment and decent work for all is very important. That is not in all countries equal and the sustainable impacts of Landscape Architects are often not seen. There are countries where Landscape Architecture is an important factor of economic growth and sustainable development and, on the other hand, there are countries where the profession has to fight for recognition in politics and is in search of employment possibilities. The only worldwide definition of the profession of Landscape Architects is done by the International Labour Organisation (ILO) in the so called International Standard Classification of Occupations (ISCO).

The existing definition from 2008 does not match the actual and future oriented understanding of the profession of Landscape Architects and it does not show the ways in which Landscape Architects contribute to sustainability, economic growth, full employment and decent work for all.

IFLA set up an international working group in 2018 to work out an up-to-date definition of the profession in close cooperation with ILO representatives. The IFLA working group, with members from all IFLA regions of the world, came to a successful result in 2020. This definition will be also the core element of a new ISCO definition which will be set up in the next years. IFLA and ILO representatives are in close cooperation when setting up the new ISCO definition of Landscape Architects, which will be close to the new IFLA definition.

The new IFLA definition of Landscape Architects demonstrates that the profession contributes to a sustained, inclusive and sustainable economic growth by planning, designing and managing natural and built environments, applying aesthetic and scientific principles to address ecological sustainability, quality and health of landscapes, collective memory, heritage and culture, and territorial justice.

By leading and coordinating other disciplines, Landscape Architects deal with the interactions between natural and cultural ecosystems, such as adaptation and mitigation related to climate change and the stability of ecosystems, socio-economic improvements, and community health and welfare to create places that anticipate social and economic well-being.

The tasks of Landscape Architects include eight areas of activities, from developing and managing the landscape to managing digital technologies or public participation in decision-making related to projects that impact landscape.

The new IFLA definition of Landscape Architects in English is now translated in important languages like French, Spanish, Portuguese, Chinese, Russian, Italian, German, Chinese and others.

The new IFLA definition and its distribution worldwide to education bodies, professional associations, political organisations, administration bodies and governments will help to improve the up-to-date understanding of the role of Landscape Architects. This will increase employment and decent work for Landscape Architects and shows the importance of the profession to bring together manpower, capital and nature for a sustained and sustainable economic growth.



Pop-Up Green 10th International Landscape Biennial, visit <https://youtu.be/bjuiBHZNCS>

Promote inclusive and sustainable economic growth, employment and decent work for all. Roughly half the world's population still lives on the equivalent of about US\$2 a day with global unemployment rates of 5.7% and having a job doesn't guarantee the ability to escape from poverty in many places. This slow and uneven progress requires us to rethink and retool our economic and social policies aimed at eradicating poverty.



SAVANNAH CIRCLE_LEWA WILDLIFE CONSERVANCY -11TH BIENNIAL - MICHAEL & CHLOE HUMPHREYS

The Lewa Wildlife Conservancy, is a large savanna grassland and acacia forest ecosystem located in the Laikipia district in Northern Kenya. As an entity, the Lewa Wildlife Conservancy works as a model and catalyst for the conservation of wildlife and its habitat. In 2013 Lewa was awarded recognition as an UNESCO Heritage Site.

The core intention was to educate about the ecosystem. Any intervention needed to be sensitive to the wider landscape and ecosystem and both adults and children need to use the space for educational purposes. In addition, a grassland trial regeneration plan was proposed in order to enrich the current grassland which through grazing and non burning had reduced in biodiversity being dominated by the tussock grass *Pennisetum stramineum* and numerous *Hibiscus flavifolius*.

The soils in this section are vertisol and so in accordance with these fertile but complex soils we designed cluster pockets of a select soil improving and nectar rich plants were planted to see how the condition of the grassland could be improved. These include nitrogen fixers and flowering plants to increase fodder for insects. Success has been good in creating the healing process and we have now observed and increase in *Lintona nutans*, *Chrysopogon plumosus* and *Brachiaria lachnantha*. The observation of the grassland within the project is ongoing with annual field work trips to observe changes.

The project is built using locally hand quarried stone so the environmental impact is kept as small as possible. No concrete was used in the construction, hand cut stone bricks were placed into a compacted hardcore base and laterite hand compacted around the stone to ensure stability. Top soil collected from the stormwater runoff from road drains around the conservancy ensured we did not destroy any environment in bringing in the soil to increase the small height of the grass circle (200mm above the existing ground level). This soil was brought carefully by hand into the site to reduce damage to the surrounding grasslands. All materials, construction methods and labour were as local as possible to reduce the carbon footprint impact of the project. Drought resistant local creeping grasses were planted within the circle. These grass is maintained short but no irrigation is used on the project so the circle grass also browns and greens according to the rainy and dry seasons, adding to the sense of seasonality of the subtle changes within the grasslands.

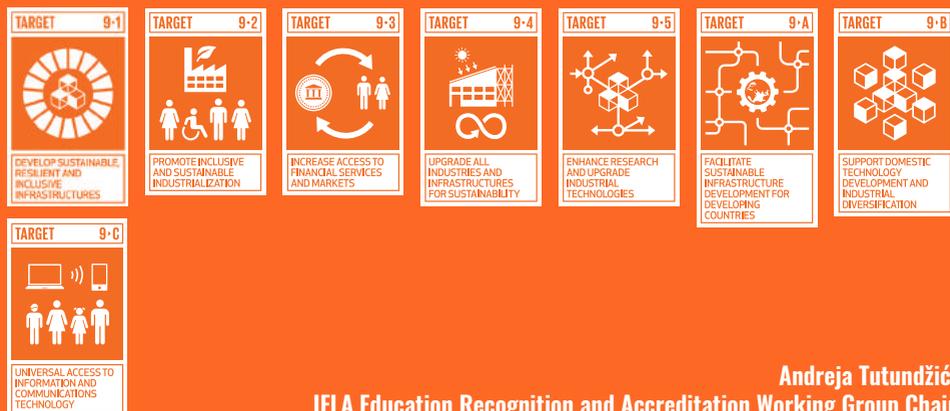


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Kenia



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Andreja Tutundžić,
IFLA Education Recognition and Accreditation Working Group Chair

Landscape Architecture, by its very nature, gives perfect response to the SDG Topic 9 through the industry which it represents. Increased demands for services that this profession provides, based on current market trends, indicate that new approaches influence the possibilities for employment by investment in new, sustainable solutions, green technologies and materials. In that way, Landscape Architecture can make a significant contribution, which can be perceived by the juxtaposition of the fields of professional engagement to the United Nation Sustainable Development Goals.

The way Landscape Architecture operates gives the answers to some of the important targets of SDG Topic 9, primarily to target 9.1 - Develop sustainable, resilient and inclusive infrastructures, target 9.5 - Enhance research and upgrade industrial technologies, target 9.a - Facilitate sustainable infrastructure development for developing countries, and, in a wider perspective to target 9.c - Universal access to information and communications technology.

New, sustainable landscape solutions and employed materials, answer many of the contemporary environmental challenges, making the switch towards new, more sustainable and ecologically friendly solutions, contributing to the industry growth. Research in the field of practices which, on one hand, create less impact on the environment and on another, influence shift from mainstream approaches towards those that contribute to the overall idea behind sustainable development goals. Some examples include the utilization of permeable pavers, local and renewable materials, as well as adaptive plants used as an answer to climate changes, requiring less maintenance and thus less energy consumption. In addition, utilization of stormwater captured on-site, construction of bioswales and rain gardens and already well-known design that goes along with natural processes and thus reduce energy consumption are only a few examples of contemporary landscaping practices that incorporate some important targets of SDG Topic 9.

Related to the SDG Topic 9, IFLA has undertaken several initiatives in the past years. One example is an ongoing project by the collaboration between IFLA Standing Committees on Professional.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Practice and Policy and Educational and Academic Affairs in the development of a comprehensive web-based database of a) Legal requirements for the professional practice of Landscape Architecture in different member countries of IFLA, and b) Information on Landscape Architecture Educational Programs and Accreditation Systems. The main intention is intended to enable universal access to information (Target 9.c of SDG Goal 9) related to the different models of the professional regulation in IFLA member countries, thus enabling easier understanding of possibilities for professional engagement and easier professional movement. Additionally, an overview of the existing programmes of Landscape Architecture on the higher levels of education may contribute to the easier academic exchange.

Within the IFLA Standing Committees Educational and Academic Affairs, IFLA is responding to the Target 9.a by a Programme of Education Capacity Building aiming to transfer existing, successful models of capacity building in Latin America to developing countries in Africa and Middle East region. This can be done by providing basic or advanced courses to strengthen existing education capacities. Another possibility is to assist in the arrangement of advanced training of the educators ('teaching the teachers') and transfer good practices to other regions in need, with necessary modifications necessary to meet local demands. In this way, IFLA is responding to Target 9.a of SDG Foal 9 in facilitating sustainable infrastructure development for developing countries.

With the planned IFLA Strategy for Mutual Recognition of Professional Qualifications, IFLA is responding to the SDG 9, Target 9.3 on access to financial services and markets. Within this programme, IFLA intends to provide a framework for IFLA members - national associations interested in establishing mutual recognition agreements with other national associations. Several ways are possible, either by assisting in bilateral mutual recognition agreements or by serving as an interim between individuals and national associations. Other possibilities include development of the general system for implementing mutual recognition for Landscape Architects, or leadership in the mutual professional recognition/accreditation process for professionals.

Build resilient infrastructure, promote sustainable industrialization and foster innovation. Investments in infrastructure – transport, irrigation, energy and information and communication technology – are crucial to achieving sustainable development and empowering communities in many countries. It has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure.

AUCKLAND WATERFRONT: NORTH WHARF PROMENADE AND SILO PARK- 8TH BIENNIAL -ROSA BARBA PRIZE WINNER - TCL

Working waterfronts are constantly in flux; crusty, utilitarian, muscular and dissolving, with temporal qualities that engage all of our senses. Contemporary waterfront redevelopments are often characterised by the removal of these qualities that attract us to these places. At Auckland’s Wynyard Point redevelopment these conventions are challenged in a development that transforms a forlorn industrial and maritime precinct into a layered, mixed-use precinct.

The first catalytic project of this redevelopment are public spaces centred on Jellicoe Harbour and Silo Park. These spaces promote an alternative design approach to the typical erasure of waterfront memory. Here, friction is encouraged, smelly fish are the attraction, rust, grit and patina are embraced and derelict artefacts are reprogrammed.

Jellicoe Harbour has an engaging diversity of use, including large industrial container shipping, ferry services and a viable fishing industry which supports wholesale and retail seafood markets. This overlay of waterfront activities, previously removed from the public gaze, is now central to the public realm experience.

The design weaves public realm experiences around these ‘as found’ conditions. The harbour edge, North Wharf Promenade, is now a site of negotiation, a pedestrian and cycle promenade from which to witness and experience the waterfront industry. New seafood based retail, café, dining and meeting places all co-exist within an around the working wharf functions. Jellicoe Street runs parallel to the harbour edge and contrasts with the exposed, hard harbour condition. This ‘boulevard’ establishes a new public realm language for Auckland, one that promotes a civic presence with an indigenous character: a grand axis with a pedestrian focus and rich, informal planting.

Silo Park is a triangular tract that links Jellicoe Harbour with marine industries to its west. It is located on a former cement depot from which a large silo – once earmarked for removal is now retained. The silo forms a multi-programmed focus of a layered public space that facilitates a range of hybrid uses; passive recreation, event space, youth precinct, water filtration and retention, industry and folly. Each program is new to the site, yet built from the pattern language, infrastructure and the mythology of place. These overlapping programs are orientated via the armature of the gantry, an evocative response to the industrial language of the site. It is designed to be part folly, play structure, lookout, arbour and event framework. It also forms the infrastructure for a proposed working dock. Bringing industry into public view and integrated into the design, reinforces an authentic, albeit glossy, waterfront experience.

Jellicoe Harbour and Silo Park demonstrate a receptiveness to investigate, embrace and interpret a narrative of place in the creation of a contemporary and authentic public realm experience.

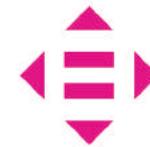
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10 REDUCED INEQUALITIES

10 REDUCED INEQUALITIES



Maria Gabriella Trovato,
IFLA Landscape Architects
Without Borders Working Group Chair

To reduce inequalities, landscape must be accessible and available to everyone. Landscape services need to be equally distributed and affordable to the most deprived members of the community.

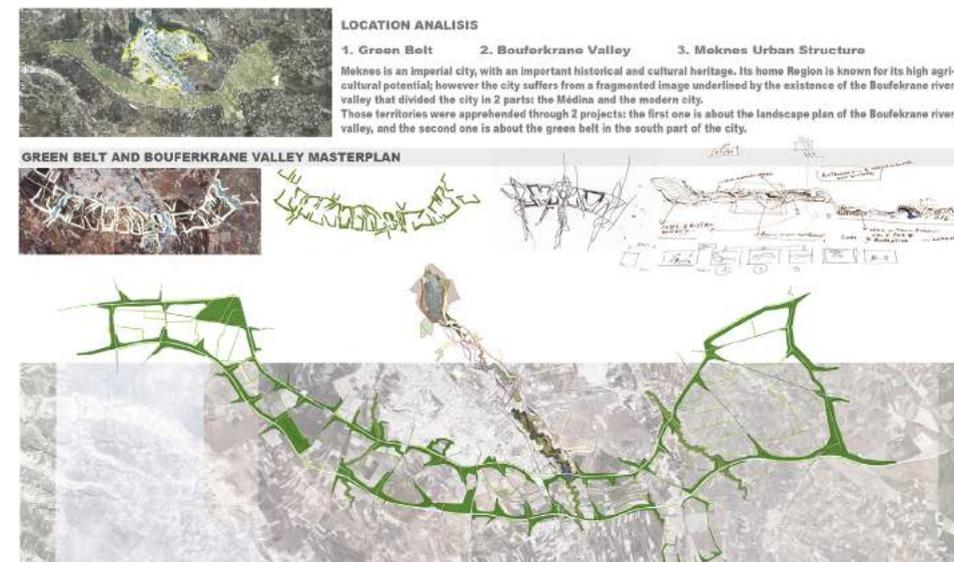
As Landscape Architects, we task ourselves with safeguarding the viability of the natural environment and work towards developing and maintaining a humane built environment in cities, towns, and villages. The world, though, is a dynamic place. Ecological, socio-political, and cultural processes result in change, whether organized or chaotic, desired or imposed. The impacts on humans and human settlements have transformative consequences for not only place but also experience.

The UN High Commission on Refugees says around 26.3 million people have been displaced by climate or weather-related events as of mid-2020. Temporary shelter camps quickly constructed away from disaster sites or on the tenuously safer side of borderlands have often shifted towards permanence. Most refugees want to go home, even when a natural disaster has destroyed it. Worldwide, lower-income residents live in inadequate conditions in the suburbs of urban centres.

The IFLA- Landscape Architects Without Borders Working Group is mobilizing Landscape Architects to offer humanitarian services to people and places worldwide. Beyond assisting the basic human needs for shelter, clean air and water, food, education, and justice, LAWB has the skills to help design resilient refugee camps, children's playgrounds in impoverished communities, and safe urban streets in marginalized areas. We can transform asphalt into oases, creating shade and shelter that alleviates urban heat islands. We can plan landscapes for their ecological, social, and economic values helping to conserve biodiversity.

The IFLA LAWB working group is committed to providing access to landscape services with no one left behind. Members of the working group have helped transform places directly affected by earthquakes, tsunamis, flooding, fire, drought, landslides, poverty, and conflict through design and planning activities in a participatory approach. They have provided advice in preparing landscape plans, designs, and project implementation for:

- Post natural-disaster recovery, particularly in marginalized communities
- Community planning for climate change adaptation or risk reduction
- Improving the quality of life in refugee camps and informal settlements for those displaced by violence, conflict, and persecution
- Capacity building and participatory planning
- Designing for social justice by working with marginalized communities (e.g. creating/improving neighborhood parks in rural villages)
- Design for local economic sustainability (ecolodges, community agriculture)
- Collaboration with national and international NGOs and Institutions working on humanitarian sectors, migration, social cohesion, protection.
- Collaborative Research (Science, Social Science, and Applied Science)
- University curriculum development



Meknes Landscape Green Strategy - 8th Biennial 2014- Valerio Morabito

Reduce inequality within and among countries. The international community has made significant strides towards lifting people out of poverty. The most vulnerable nations – the least developed countries, the land-locked developing countries and the small island developing states – continue to make inroads into poverty reduction. However, inequality persists and large disparities remain regarding access to health and education services and other assets.



SUPERKILEN - 9TH BIENNIAL - ROSA BARBA PRIZE FINALIST - LORENZ DEXLER, MARTIN REIN-CANO

Superkilen is a heterogenous site-collage in a dense, centrally located neighborhood in Copenhagen. The culturally diverse quarter is revitalized using open space as a physical framework. The Red Square, the Black Market and the Green Park create a matrix dialogue within the realities of Superkilen. An essential motif from garden-history is the translocation of an ideal, the reproduction of a far off landscape. In Superkilen this theme finds a contemporary urban form: a global, universal garden. Furthermore, the transfer of significant elements from other places and cultures reflects the multi-ethnic structure of the neighborhood and activates the design principle of multiplicity. The furnishing of Superkilen, which is developed from an international catalogue of urban design elements, projects a diversity and international personality onto the matrix of the versatile neighborhood park. Through months of workshops and civic participation the creativity and fantasy of the quarter has been mobilized. In the process of cultural transfer, the objects become ambassadors of a worldwide urban culture in times of global information and communication exchange.



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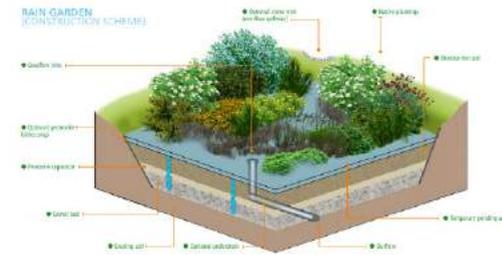
11 SUSTAINABLE CITIES AND COMMUNITIES

TARGET 11-1 SAFE AND AFFORDABLE HOUSING	TARGET 11-2 AFFORDABLE AND SUSTAINABLE TRANSPORT SYSTEMS	TARGET 11-3 INCLUSIVE AND SUSTAINABLE URBANIZATION	TARGET 11-4 PROTECT THE WORLD'S CULTURAL AND NATURAL HERITAGE	TARGET 11-5 REDUCE THE ADVERSE EFFECTS OF NATURAL DISASTERS	TARGET 11-6 REDUCE THE ENVIRONMENTAL IMPACT OF CITIES	TARGET 11-7 PROVIDE ACCESS TO SAFE AND INCLUSIVE GREEN AND PUBLIC SPACES
TARGET 11-A STRONG NATIONAL AND REGIONAL DEVELOPMENT PLANNING	TARGET 11-B IMPLEMENT POLICIES FOR INCLUSION, RESOURCE EFFICIENCY AND DISASTER RISK REDUCTION	TARGET 11-C SUPPORT LEAST DEVELOPED COUNTRIES IN SUSTAINABLE AND RESILIENT BUILDING	Karin Helms, IFLA Europe Region, IFLA EUROPE Med_net Working Group Contribution			

The media too often remind us of the fact that our cities, as they are conceived today, are mostly unprepared for extreme weather phenomena. Absorption of excess rainwater clashes with the presence of extensive impermeable surfaces, roads and buildings that prevent water from entering the ground and increases quantity and speed, and therefore the destructive potential of flowing waters. At the same time, a low percentage of green areas translates into failure to absorb rainwater, lack of a filtering effect and failure at refilling the aquifer.

Water collection systems are often inefficient and undersized compared to the current needs. Additionally, wastewater and grey water are not separated, impeding the correct purification of water. This helps to fuel the paradox for which an excess of rain does not translate into greater availability of reusable water for human use. In fact, excessive rainfall becomes an instrument of collection and concentration of pollutants; for example, residues of fuel oils and fine dust deposited by traffic on the roads which floods collect and carry to the sea, to rivers and to the surrounding lands. All this can be addressed and overcome, making our cities more livable, adaptable and safe.

Counteracting climate changes as they manifest is impossible, but we can help our cities to better adapt to current phenomena, improving everyone's safety and quality of life. There is knowledge, technology and experienced planning (best practices). Now we need to act.



Rain garden (Construction scheme) @AIAPP Italy with scientific contribution of IFLA Europe Med_Net Group

Among the most interesting Nature-based Solutions are the stormwater management and regulation systems in the city designed for the treatment of rainwater but manifesting positive effects also in other areas, such as biodiversity conservation, landscape quality and the general health of a place. Where there is no more draining soil and the ground has been made waterproof (with roads, pavements, buildings etc.) there is a problem of rainwater disposal. Floods are often due to the artificialisation of waterways and the waterproofing of soils through a process that has grown over the years and that has led to continuous emergencies and frequent calamities. The gradual disappearance of the natural rain disposal systems has caused very expensive interventions to have had to take place.

A new approach: growing number of major cities around the world have decided to tackle the problem differently, trying to prevent these events by limiting the waterproofing of soils and designing green structures that can help the natural outflow of rains. These include rain gardens and bioswales which are considered essential tools for good stormwater management in the urban environment. Green installations are based on the same principle: to create a light depression in the soil with a draining layer where mostly native (indigenous) species are planted, able to withstand both flooding and prolonged drought. While rain gardens are small green areas within public gardens or private gardens and estates placed near collection wells, bioswales are larger and are located near sources of rainwater flow, such as driveways, cycle paths, parking lots and paved surfaces.



Typical situation in many european urban centers, and the new solutions that can be done @AIAPP Italy with scientific contribution of IFLA Europe Med_Net Group

Make cities inclusive, safe, resilient and sustainable. Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically. With the number of people living within cities projected to rise to 5 billion people by 2030, it's important that efficient urban planning and management practices are in place to deal with the challenges brought by urbanization.

THE HIGH LINE - 8TH BIENNIAL - ROSA BARBA PRIZE FINALIST - JAMES CORNER

Design Intent: Our position has always been to respect the innate character of the High Line itself; to capitalize on what is already there and to “grow” something new out of something old. The intent was not to overdesign the park with elaborate interventions, but rather intensify the existing context and design it as an immersive experience, episodic walk and surreal journey in the City. The High Line’s relationship to the City is what makes it so powerful and unique. It is a consistent line through a varied city landscape. The mix of building types and how they meet the High Line, along with the intimate choreography of the pathways directed towards views of the river, neighborhood and iconic city monuments is an authentic New York experience and part of what makes it so appealing. In contrast to being envisioned primarily as an ‘escape’ from the City, the High Line design uses the City for inspiration and exchange. The High Line’s past as a working railroad and abandoned landscape inspired the design, reflected through the use of industrial materials; the selection and arrangement of grasses and perennials to further define a wild and dynamic landscape; the integration of original railroad artifacts; and the exposure of the existing structure at features and access points. When observed in the context of the park, these features allow for a fresh interpretation of the site.

Truly Sustainable: The High Line is a precedent urban park that transforms 1.5 miles of infrastructure into parkland as a new model for the ‘greening’ of the urban environment. As an ambitious urban reclamation project, the High Line’s very essence is born out of the desire to preserve and recycle with a holistic approach to sustainably. Politically as a testament to community activism, saved by two neighborhood residents; Ecologically as a 6-acre green roof in the middle of the city; Historically as a retrofit project, transforming an abandoned rail line into a new public space; Socially as both a neighborhood and world-class park, where tourists and the community come together; and Economically as an entrepreneurial effort that has demonstrated the ability of public spaces to attract businesses and stimulate local economic growth.

Recognized as an icon for innovative and sustainable design, the High Line reduces the heat island effect and creates significant habitat including over 300 plant species. Green-roof technologies and open-jointed pavement enhance water retention, drainage and aeration and minimize irrigation requirements. Recycled materials are promoted including reclaimed wood, recycled steel and local aggregate for precast concrete. The park uses energy-efficient LED lighting, promotes local and sustainably grown food and hosts a variety of free and low-cost community programs.

Impact and Inspiration: Recognized as a significant contributor in the revitalization of Manhattan’s West Side, the High Line has become a defining feature in its neighborhood, a powerful catalyst for investment and a much-loved destination. The combination of the 2005 City rezoning and the success of the park have helped to create one of the fastest growing and most vibrant neighborhoods in NYC. Since 2006, new building permits around the High Line doubled and at least 29 major development projects have been initiated accounting for more than \$2 billion in private investment. The High Line is visited and loved by millions of people each year who use and make the park their own. Total visitation has exceeded expectation with 4,454,217 visitors in 2012, making the High Line the second largest attraction in New York City, just behind the Metropolitan Museum of Art, with greater visitation than the Statue of Liberty and the Museum of Modern Art.

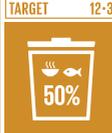


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12 RESPONSIBLE CONSUMPTION AND PRODUCTION

 <p>TARGET 12-1</p> <p>IMPLEMENT THE 10-YEAR SUSTAINABLE CONSUMPTION AND PRODUCTION FRAMEWORK</p>	 <p>TARGET 12-2</p> <p>SUSTAINABLE MANAGEMENT AND USE OF NATURAL RESOURCES</p>	 <p>TARGET 12-3</p> <p>HALVE GLOBAL PER CAPITA FOOD WASTE</p>	 <p>TARGET 12-4</p> <p>RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE</p>	 <p>TARGET 12-5</p> <p>SUBSTANTIALLY REDUCE WASTE GENERATION</p>	 <p>TARGET 12-6</p> <p>ENCOURAGE COMPANIES TO ADOPT SUSTAINABLE PRACTICES AND SUSTAINABILITY REPORTING</p>	 <p>TARGET 12-7</p> <p>PROMOTE SUSTAINABLE PUBLIC PROCUREMENT PRACTICES</p>
 <p>TARGET 12-8</p> <p>PROMOTE UNIVERSAL UNDERSTANDING OF SUSTAINABLE LIFESTYLES</p>	 <p>TARGET 12-A</p> <p>SUPPORT DEVELOPING COUNTRIES' SCIENTIFIC AND TECHNOLOGICAL CAPACITY FOR SUSTAINABLE CONSUMPTION AND PRODUCTION</p>	 <p>TARGET 12-B</p> <p>DEVELOP AND IMPLEMENT TOOLS TO MONITOR SUSTAINABLE TOURISM</p>	 <p>TARGET 12-C</p> <p>REMOVE MARKET DISTORTIONS THAT ENCOURAGE WASTEFUL CONSUMPTION</p>			

**Monica Pallares,
Chair IFLA Communication and
External Relations Committee**

Humankind depends on nature. Humankind is part of nature. But it seems that humankind has forgotten it.

Under the umbrella of development and globalisation we have devastated our natural resources, polluted our rivers, lakes and oceans, and we had endangered ecosystems and communities. Some of the consequences have been the natural disasters that cause thousands of deaths and unmeasurable damages yearly.

A world in constant movement has forgotten the basic human relations and the basic relations with nature. And the Covid-19 crisis had obligated us to make a stop and realize how important are communities and how we depend on nature.

Landscape Architects have a perspective of how a system works as a whole. The intent of each SDG goal is interrelated and we can not understand the achievement of one of them without the accomplishment of the others. We talk about "nature based solutions". That is not a novelty in our profession. Understanding nature and how to correlate with it can generate an 180° turn where local actions can have a global impact. We understand it is one of the steps to follow in design that can permeate to other disciplines and will have a direct impact improving the quality of people's life, and the quality of our landscapes.

Many of the countries with the highest ecological footprint are the developed countries where the ways of production, urban development and lifestyle generate large impacts on resources. On the contrary, less developed countries identified in a gentle manner as Global South demonstrate that local consumption, development related with nature and understanding of the landscape, causes a minimum impact and a lower ecological footprint.



Maybe as a civilization, we need to take a look some steps backwards. Maybe that is why nowadays, Kongjian Yu defines Landscape Architecture as the Art of Survival.

In the Charter of the Landscape of the Americas there is a recognition of the ancestral knowledge of the American indigenous cultures where there is a respect for nature. The elements of nature were in many groups and their deities and therefore treated with respect. In their cosmogony there has been a recognition of being part of a whole.

In September 2020 IFLA made a Declaration on Ecological and Community Health endorsed by the delegates of the 77 national associations to the IFLA World Council meeting.

Landscape Architects had been working for some time ago in the development of projects for healthy communities. That is translated in neighbourhoods that prioritize local consumption, places where green areas are close, where people do not have to spend time in transportation to their working places, where resources can be well administrated and/or recycled, where rain water is captured and used to cover the basic needs. There are many successful examples around the world. Participative design is becoming part of the design process in Landscape Architecture, working together with the communities to build better settlements, to build better places according with their needs.

Ecotourism design has this same perspective. It prioritizes what is local in order to understand it and place the values of a territory. In this way the communities are the ones responsible for their landscapes, but also are the ones that receive the economic benefits of this model of tourism. A life style based on non responsible consumption has had devastating consequences. The start for a responsible consumption should come from recovering local identity and recognizing the value of the landscapes where we belong and so respect them.

The way to communicate this design philosophy is through action! Through projects in all the spheres in which we are involved, and where we can make a real change. To achieve it the first lesson to learn for a responsible use of the resources we depend on as humankind is that the less, the better.

Ensure sustainable consumption and production patterns. Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

PERFORMATIVE & TRANSFORMATIVE: QUZHOU LUMING PARK - 10TH BIENNIAL - ROSA BARBA PRIZE FINALIST - KONGJIAN YU

Through performative and transformative design, the Landscape Architect helps to rebuild the bound between the uprooted people and the natural and cultural root, and recover the sense of belonging and identity.

Preservation of the landscape assets : the mosaic landscape pattern and its natural processes is kept unchanged at its most; The rock exposure and cliff, the bush and grass over, the natural drainage system and the fluctuation of river water, the agricultural field patches, and the trees lining the river bank. The cultural landscape elements including the village trails with the old pavilion, the irrigation ditch with pump house, are all take as cultural heritages of the site, and be preserved and fixed to keep its original character. These natural and cultural landscape, with their authentic functions and meanings make up the canvas with rich pattern and texture and meanings, which the Landscape Architect will add layers of his creation.

Draping productive vegetation over the terrain and field. While the pre-existing habitats is preserved, productive crops are introduced to cover the abandoned fields. Four crops rotate year around following the season, canola flowers in the spring, sunflowers in the summer and fall, and buckwheat in early winter. Flower meadows with mixture of species is also considered to rotate with other productive crops in some area. Patches of low maintenance perennial chrysanthmum flowers that can be harvested as Chinese herb medicine is grown to enrich the landscape spectrum. Two patches of lawn are used when needed to be programed for camping, sport filed for kids, etc. This diverse palette of vegetation creates an overall productive and/or low maintenance canvas that encourages dynamic events and celebrations to be programmed around the seasons, besides providing day-to-day use of the park.

Adapting the water process and to be water resilience: The pre-existing drainage system on the site is kept unchanged, and additional bio-swales are added into the fields and slope to catch and filtrate the storm water runoff to be used for irrigation of the crops when needed. All ground payment is made of permeable materials, and no pipes nor irrigation system were built into the park. All concrete embankment which was installed before were removed and the river and wetland were let free with the fluctuation of river water, while a boardwalk is built floating above the river creating a unique access route allowing visitors to appreciate the red stone cliff which would otherwise be un-noticed. Pavilions were built to be flood friendly.

Enframing the terrain and water by a network of paths and structures. Boardwalks, bridges, platforms, pavilions and a viewing tower is built into a experiencing network allowing visitors to have a rich experience of the mosaic landscape. This network of experiential facilities, while detached from the “canvas” that is made of the pre-existing mosaic of terrain, fields and water, over which draped over by the crops and/or low maintenance vegetation, will effectively transform the productive and/or “messy” nature into a neatly order landscape and create a pleasant experience for the visitors.

Telling the stories by an environmental interpretation. An environmental interpretation system is designed to tell the natural and cultural stories of the site in particular and the environmental awareness and responsibilities beyond the site.

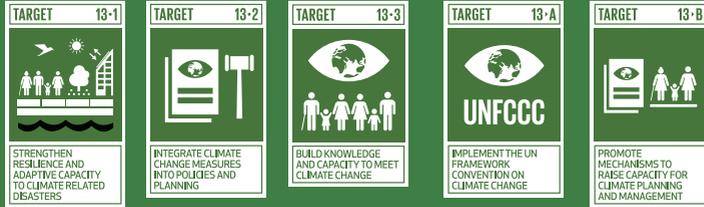


AUTHOR
KONGJIAN YU

LOCATION
Zhejiang, Quzhou, China.



13 CLIMATE ACTION



**Colleen Mercer-Clarke,
Chair IFLA Committee on Professional Practice and Policy**

In September of 2019, the IFLA World Council took two strategic and committed steps to advance action on the reduction of greenhouse gas emissions, the protection of nature and on the adoption of principles and proposed initiatives in ecosystem-based planning and design to advance resilience, transformation and sustainability in communities and environments throughout the globe. IFLA declared a Climate and Biodiversity emergency and committed its members to the principles imbedded in the United Nations Sustainable Development Goals. The IFLA Working Group on Climate Change is responding directly to UN SDG 13 through the adoption of the IFLA ClimateACTION! Plan which seeks to reduce the carbon footprint of our profession, to protect the wild, to enhance natural environments in every landscape and to seek innovative ways to improve the resiliency and sustainability of society. In the coming months Landscape Architects will seek new ways to protect existing natural environments at every scale, to advance afforestation in urban, rural and wild landscapes, and to ensure sustainability through the valuation of nature and the ecosystem services they provide to society.

IFLA agrees that climate change poses ‘an inevitable and urgent global challenge with long term implications for the sustainable development of all countries’ (RIO+20 Outcome Document). We understand that the complex problems posed by a changing society and by global pandemics will only be solved through the collaborative efforts of expert and innovative interdisciplinary teams working to address short term challenges and long-term impacts. IFLA continues to encourage and seek cooperation from its National Association Members in the development and implementation of policies and practices intended to improve education and institutional capacity, while advancing inspiration planning and design for an altered world. Working with partner organizations such as the IUCN we will seek opportunities to improve the experience of nature for all and to devise nature-based solutions to aid adaptation and resilience efforts in developed and developing nations.

13 CLIMATE ACTION



EVERY BIT COUNTS [REDUCING EMISSIONS]

Reducing our collective and individual carbon footprint is a significant challenge to Landscape Architects whose work on the land can contribute significantly to global emissions loading through their choice of building materials, maintenance methods for landscapes, and with the removal of existing vegetation. IFLA believes that if Landscape Architecture professional associations, firms and individuals are to be leaders we must first examine our own behaviour and demonstrate our commitment through our own actions.



LOVE EVERY LEAF [VALUE, CONSERVE, PROTECT AND ENHANCE NATURE]

There is no doubt that ecosystems, habitats and species throughout the world are in decline.

IFLA believes there is much to be done to value, conserve and enhance natural assets.

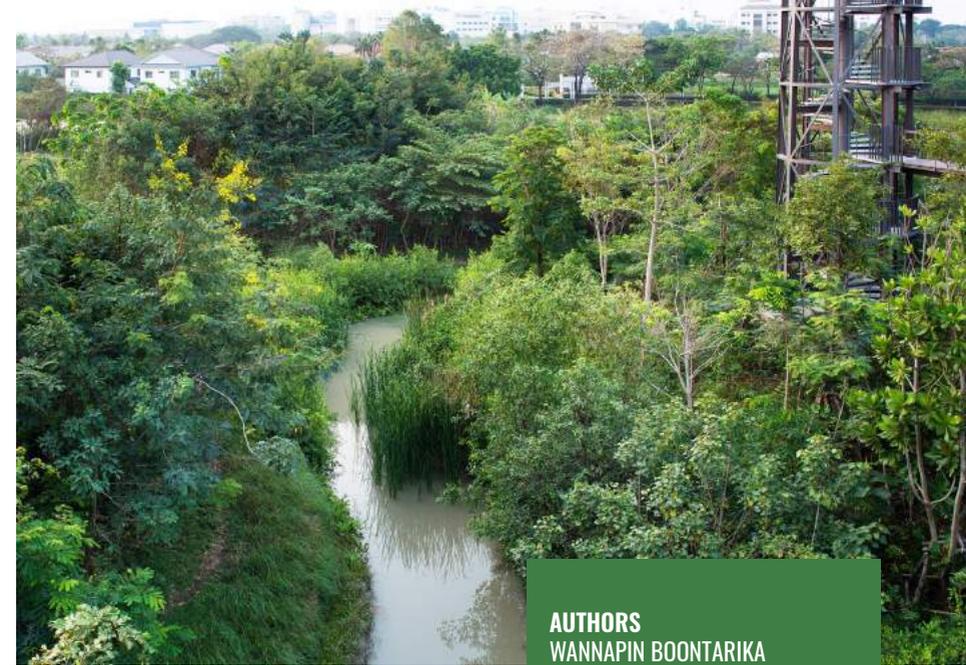
NATURE FOR ALL: Landscape Architects understand that personal experience with nature is a powerful first step towards valuing the contributions made by natural systems to human health, well-being and prosperity.



INNOVATE, TRANSFORM AND CREATE [PREPARING, TRANSITIONING, SUSTAINING]

IFLA recognizes that preparations for a changing world requires not only advance understanding and enhancement of resilience to severe weather events, it requires innovation and ingenuity to visualize and to create transformative communities for the future. IFLA will advance support for interdisciplinary approaches, recognizing the roles to be played by informed risk assessment, innovative planning and design, and insightful leadership for interdisciplinary teams.

Take urgent action to combat climate change and its impacts. Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow. Weather patterns are changing, sea levels are rising, weather events are becoming more extreme and greenhouse gas emissions are now at their highest levels in history. Without action, the world's average surface temperature is likely to surpass 3 degrees centigrade this century. The poorest and most vulnerable people are being affected the most.



AUTHORS
WANNAPIN BOONTARIKA
TAWATCHAI KOBKAIKIT
Landscape ArchitectS OF
BANGKOK

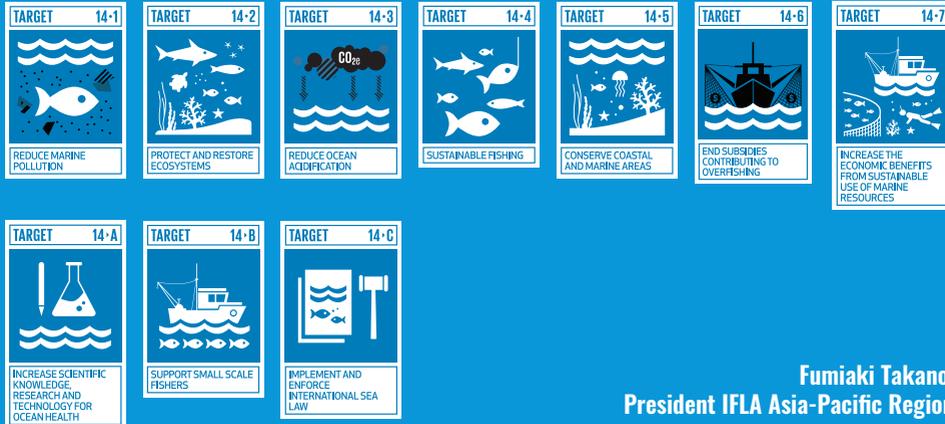
LOCATION
Sukhaphiban 2 Rd Bang-
kok, Thailand, Bangkok,
Bangkok, Thailand

THE METRO-FOREST PROJECT : BANGKOK URBAN REFORESTATION - 9TH BIENNIAL - ROSA BARBA PRIZE FINALIST - WANNAPIN BOONTARIKA, TAWATCHAI KOBKAIKIT

Located at the Eastern fringes of Bangkok, about 6 kilometers from the Suvarnabhumi Airport, lies the PTT Metro Forest. In early 2012, the Landscape Architects were commissioned by the PTT Reforestation Institute to design a space for reforestation that would take a unique approach to landscape in Bangkok by emphasizing the ecological processes rather than aesthetics. An ecological regeneration project designed as an outdoor exhibition space of approximately 60,000 trees of more than 279 unique species to cultivate environmental awareness and educate visitors about local forest ecology. The project aimed to reclaim 2-hectares of abandoned land and reverse the trends of suburban sprawl, urban heat island, and flood-prone developments through the incorporation of historically local (native and introduced) lowland tropical tree species. To create diverse forest ecology, the planting techniques of saplings by Dr. Akira Miyawaki were implemented for optimal growing environments of lowland dipterocarp by designing a terrain of engineered berms. The project, which received LEED Platinum NC, is truly a public outreach commitment by the PTT Reforestation Institute and recognizes the forest stewardship efforts by the Royal Family and Her Royal Highness, Princess Maha Chakri Sirindhorn – an ecological forest that reflects Bangkok's former landscape for public education and enjoyment and establishes a new trajectory of landscape typologies, such as natural wilderness for the future.



14 LIFE BELOW WATER



Fumiaki Takano,
President IFLA Asia-Pacific Region

The ocean surrounds most countries on Earth. Countries in Asia Pacific Region are formed with islands, and they are blessed with rich and diverse ocean resources. These are our priorities:

- Preserve and restore ecosystems
- Limit ocean acidification
- Sustain fishing
- Conserve and restore coastal and marine areas
- Prohibit subsidies that contribute to overfishing
- Increase long-term benefits of the sustainable use of marine resources
- Increase scientific knowledge, and develop research and technology for ocean health
- Support and protect small-scale fisheries
- Implement and enforce the International Law of the Sea

The marine environment is heavily impacted by what happens on land and is profoundly influenced by the economy, environmental policies, urban planning and other factors.

Here is a list of challenges to achieve in order to protect life below water.

Connecting the ocean and forest: Countries in Asia have a saying of “The sea is longing for the forest.” Forest offers so much more than maintaining land conditions. Tiny organisms grown in diverse forests travel down the river to the ocean and become the food for marine life. In fishing villages in Japan, fishermen make their way to the mountains and plant trees to protect the sea. Humans and nature had been taken care of each other and led a balanced life. It is fundamental to develop green infrastructure, especially riparian forests.

Reduce marine debris: Humans have continued their lifestyle of mass production, mass consumption, and mass disposal and as a result, a massive amount of waste has been released into the ocean. Plastic, in particular, is a significant threat to marine life, and those harmful substances are also a severe threat to human health through the food chain.

River floods and sediment discharge to the ocean: Devasting floods caused by extreme weather has led the sediment outflows to the ocean. As it straightened the river channels, the resourceful riparian woodland loses its effect. The loss of vegetated buffer zone is also the cause of river floods. Our duties as Landscape Architects are to read the strength of the land and define where it is suitable to live in and where it should be preserved as greenery.

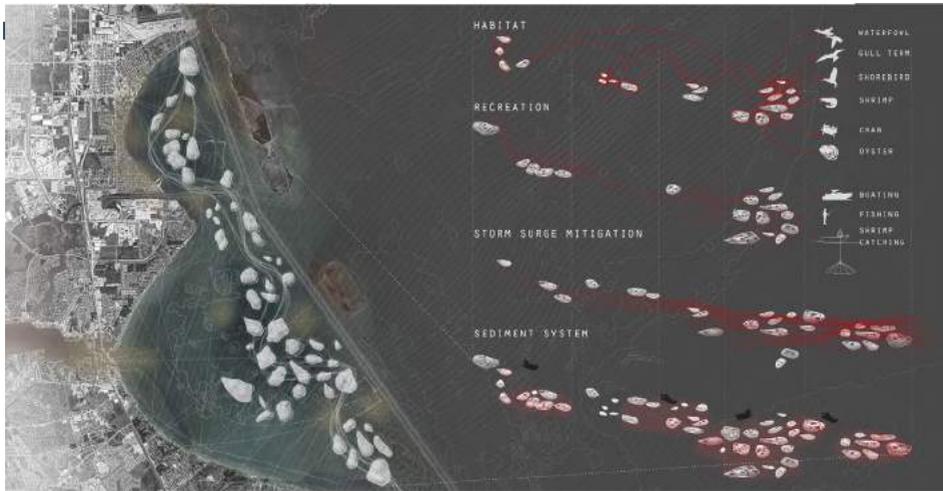
Rising sea level: Rising sea level is threatening the island countries in the South Pacific and many coastal cities as it causes severe land loss. Also, the loss of coral reefs has a profound impact on marine biodiversity. We, IFLA, are looking forward to having new country members work together to solving those issues.

Ocean preservation civic activities support: Marine conservation activities initiated by citizens have been quite popular in many countries, such as garbage collection and mangrove planting. These activities require supports to expand to a larger scale. Citizens should also be reminded that we can preserve the ocean resources by supporting the local seafood business.

Decentralizing urban: In recent decades, the population has been centralized in urban areas in many countries, leaving the rural area abandoned and losing its vitality. Sewage from the metropolis will eventually be discharged into the sea. It worsens the pressure in the marine environment in the surrounding ocean. The environmental pressure on the ocean can be moderated by spreading out the population and incorporating it with recycling. Urban and countryside are the two wheels on a bike; a nation doesn’t make progress with only one of them.

Work on land, with a loving heart for the ocean: Although we Landscape Architects create land design, we can preserve a sustainable world by taking our love for the ocean into account during our design process.

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation.



SEDIMENT SKELETONS - 10TH BIENNIAL SCHOOL PRIZE- JACOB KUHN- CORNELL UNIVERSITY (Teaching Staff: Brian Davis)

Sediment Skeletons hybridizes Landscape Architecture and infrastructure to produce a string of islands along the western coast of Galveston Bay. This artificial archipelago along the west side of the Houston Shipping Channel in Galveston Bay provides defense against storm surge before the waves even reach the shoreline, while also contributing to ecological habitat growth and increased recreational space out in the bay. While acting as breakwaters against sea level rise, the islands draw the people of Galveston out into the water to reconnect and enhance daily life.

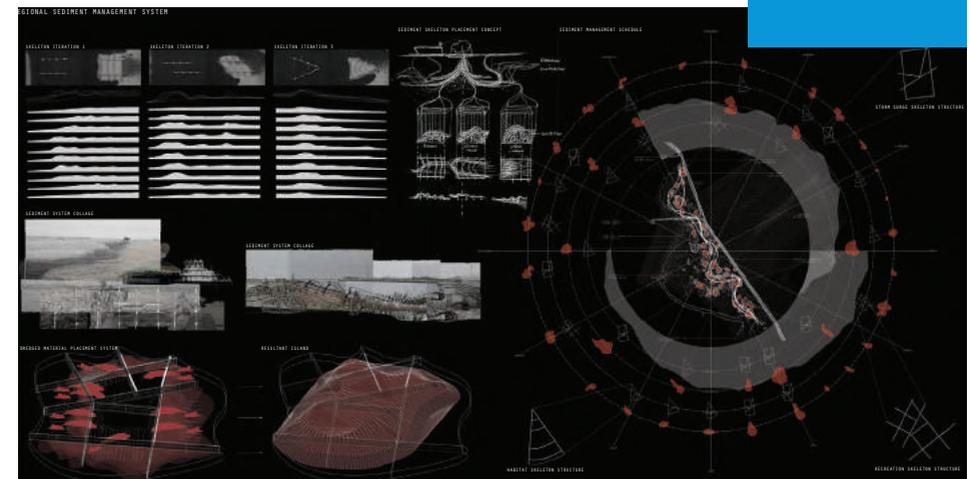
The islands themselves are constructed with a durable, grid-like structure into which dredged material can be placed. These structures mimic the dredged material placement areas (DMPA) that are scattered throughout Galveston Bay. Unlike the existing DMPAs, the Sediment Skeletons allow for new recreational opportunities for civilians and enhanced infrastructural capabilities for the Army Corps of Engineers. This project aims to take full advantage of the millions of cubic tons of dredged material removed from the Houston Shipping Channel each year.



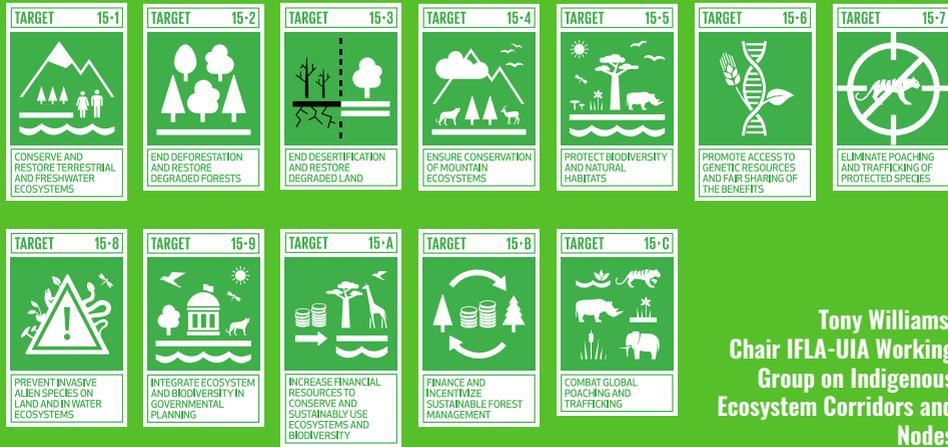
AUTHOR
Jacob Kuhn

TEACHING STAFF
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15 LIFE ON LAND



Tony Williams,
Chair IFLA-UIA Working
Group on Indigenous
Ecosystem Corridors and
Nodes

IFLA is responding to SDG 15 Life on Land as a key component of our professional life. Since first walking the planet we, as humanity, have influenced the physical landscape in many ways through our activities. A key response is our project jointly with the Union Internationale des Architectes (UIA) actively with colleagues to develop this through project collaboration. Though we may have a global focus, we are fully aware of our influences locally and so it is through activities at local level that we may have a global effect.

Over the last number of years and with increasing frequency and urgency, the UN and other global agencies have pointed to massive levels of the extinction of species and the degradation of the capacity of the global ecosystem to deliver the ecosystem services on which all life depends. The UN declaration of 2020 to 2030 as the Decade for Ecosystem Restoration provided the time-table; the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has affirmed the gravity of the situation and the urgent need for effective action. This situation presents the professions with major challenges and corresponding opportunities.

The practical context within which we face this challenge is a world experiencing extensive change at unprecedented rates. Much has already occurred and all predictions are that there is more to come. Affecting almost every aspect of these changes is the pervasive process of climate change.

In particular 'Life on Land' is changing due to climate change and our response to the changing circumstances of humanity as we adjust to these changes. Changes to the land (and sea and sky) affects us humans but also all the other organisms of the biosphere. As a result the idea of indigeneity is not what it used to be.



What was indigenous to some particular location may no longer be so in the future. This has become part of the challenge: how to identify these future environmental conditions and then facilitate the development and redevelopment of the biota of the ecosystem accordingly. This is inevitably complex but it is an essential part of sustainable futures. Our focus on the integration of ecosystems and use of land as human gatherings whether rural or urban, scattered or coalesced is informing our activities in all landscapes, regions, areas and localities and both on land and at sea. We must be aware that our 'life on land' has impacts on our seas and skies, and far beyond our boundaries and visual horizons.



This is our approach:

1. The starting point for the professions and individual professionals is to recognise this ecosystem challenge at all scales while also exploring opportunities public advocacy and practical action.
2. In doing this there will usually be a need to reach out for knowledge, expertise and opportunities.
3. In the initial context of this UIA-IFLA project the expectation is that the Architecture and Landscape Architecture professional bodies will engage constructively together through their national and regional associations to establish joint expectations and policies for the mission.
4. Establishing communications and working arrangements across professions also applies to individual professional practices and individuals.
5. From investigating and understanding the situation the opportunity for advocacy emerges. The challenge and its opportunities have to be transferred from the thinking of the profession to that of all the others involved. The professional organisations can and should become an advocate to the governance system while practitioners can and should advance the challenge and opportunities to their communities and clients.
6. While humanity is the client the health of the planet is the project. The idea that a project can contribute to a healthier environment needs to become part of the professional - client expectation.
7. Collaboration between professional and local citizens presents a real opportunity to add value.

Forests cover 30.7 per cent of the Earth's surface and, in addition to providing food security and shelter, they are key to combating climate change, protecting biodiversity and the homes of the indigenous population. By protecting forests, we will also be able to strengthen natural resource management and increase land productivity.



SAXHÓLL CRATER STAIRWAY - 10TH BIENNIAL - ROSA BARBA PRIZE WINNER - LANDSLAG EHF, PRÁINN HAUSSON

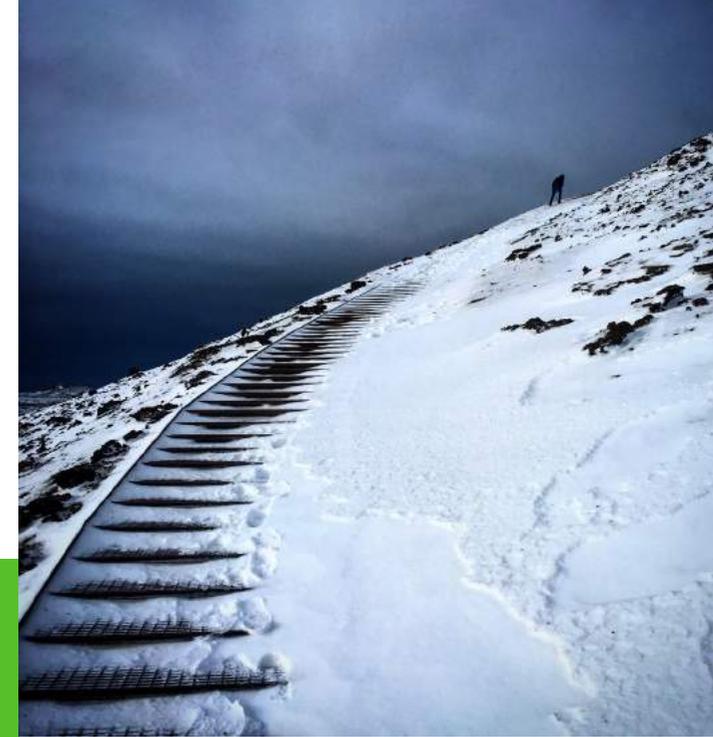
Saxhóll is a 45 meter high volcanic, oval-shaped crater. It rises up from the moss-covered lavafields in Snæfellsjökull National Park on the Snæfellsnes peninsula West Iceland. The hill is a popular goal with great views over endless lava, the Atlantic Ocean in the distance and the picturesque Snæfellsjökull-glacier. The glacier is known for its crater being the entrance to the center of the earth in Jules Verne's sci-fi novel. The climb to the top of Saxhóll is also rewarded with the opportunity to look down into its crater.

The walk to the top of Saxhóll follows a path that was formed through time by visitors climbing the easiest ramp-like way to the top. With fast growing numbers of visitors in recent years the hillside's loose and materials were beginning to deform and the way up was already splitting into parallel and deformed paths. In 2014 a decision was made to step in with an intervention to prevent further damage to the vulnerable landscape.

The path was considered too steep as a trail as the gradient is in average 1:3,5. A stepping path made of black steel was built in units to stabilize the path. The path winds its way up the old path. It consists of two curves meeting halfway uphill in a small resting spot with a little bench. The total length of the path is 160 meters and the number of steps is 396.

Each unit is 3 meters in length and the steps are attached to vertical stiff steel plates on both sides. The vertical sides are attached to each other and thereby make a continuous structure all the way up. The width of the path is 1,5 meter, enough for two people meet or walk side by side. The path was completed in 2016 and the surface of the black steel rusted quickly and blended well into the red shades of the volcanic crater and the arctic / alpine vegetation. The result is that almost every visitor now stays on track. On social media the path is often named „the stairway to heaven“ or „the orange stairway“. Craters are often metaphorically named the gateway to the burning flames of hell. That is why we call this small project: The Stairway to Heaven and Hell.

Saxhóll Crater Stairway was shortlisted for 3 awards in 2017, Nordic Architecture Fair Award in Gothenburg, Icelandic Design Awards and DV Cultural Awards Reykjavík, Iceland.



AUTHORS
LANDSLAG EHF, PRÁINN
HAUSSON

COLLABORATORS
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LOCATION
Snæfellsjökull National
Park, Snæfellsnes, Iceland



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



TARGET 16-1  REDUCE VIOLENCE EVERYWHERE	TARGET 16-10  ENSURE PUBLIC ACCESS TO INFORMATION AND PROTECT FUNDAMENTAL FREEDOMS	TARGET 16-2  PROTECT CHILDREN FROM ABUSE, EXPLOITATION, TRAFFICKING AND VIOLENCE	TARGET 16-3  PROMOTE THE RULE OF LAW AND ENSURE EQUAL ACCESS TO JUSTICE	TARGET 16-4  COMBAT ORGANIZED CRIME AND ILLICIT FINANCIAL AND ARMS FLOWS	TARGET 16-5  SUBSTANTIALLY REDUCE CORRUPTION AND BRIBERY	TARGET 16-6  DEVELOP EFFECTIVE, ACCOUNTABLE AND TRANSPARENT INSTITUTIONS
TARGET 16-7  ENSURE RESPONSIVE, INCLUSIVE AND REPRESENTATIVE DECISION-MAKING	TARGET 16-8  STRENGTHEN THE PARTICIPATION IN GLOBAL GOVERNANCE	TARGET 16-9  PROVIDE UNIVERSAL LEGAL IDENTITY	TARGET 16-A  STRENGTHEN NATIONAL INSTITUTIONS TO PREVENT VIOLENCE AND COMBAT TERRORISM AND CRIME	TARGET 16-B  PROMOTE AND ENFORCE NON-DISCRIMINATORY LAWS AND POLICIES		

**Kathryn Moore,
IFLA Past President**

IFLA will work to deliver SDG 16 by continuing to develop and build its proposal for an international Landscape Convention (ILC). Calling for spatial, environmental and social justice, this will help IFLA galvanise support and encourage political and community action to recognise the capacity and power of landscape to deal with the increasingly urgent global challenges faced by society. By empowering communities, engaging with them based on the powerful relationship they have with their territory, it will generate a sense of hope and optimism for the future and demonstrate that landscape is the key component of societies' identity and of resilient, efficient and inclusive economic growth.

The promotion of the ILC has built capacity around a new way of thinking about landscape and changed minds at the highest level. Crossing divides between nature and culture, art and science, its ethos underpins the Culture for Development Indicators Suite (CDIS), a framework to monitor the process of culture's enabling contribution to the UN 2030 SDGs and address the artificial distinction that is made between tangible and intangible heritage currently enshrined in two UN Conventions (the 1972 UN World Heritage Convention and the 2003 UN Intangible Heritage Convention), as well the traditional distinctions made between culture, economy and sustainable development in other UN tools and practices. IFLA will use the (CDIS) to further its work on the ILC to make visible and further change perceptions of landscape as well as impact on institutional cultures.

Support gathered for the ILC work was instrumental in gaining a number of formal declarations including the UNESCO Florence Declaration (2012) and the IPOGEA Matera Resolution (2012). It has support from the UNCD, FAO, GIAHS, UNCCD (the Convention on Desertification) CBD (Convention on Bio-Diversity) ITKI, ICRROM, ICOMOS, the ICOMOS IFLA International Scientific Committee on Cultural Landscapes and many other NGO's and civil institutions. In addition, IFLA has built a support through a number of regional professional charters and conventions in Asia Pacific, the Americas and Africa and is strongly connected to the European Landscape convention, now open to global part-

nership. The ongoing development of the ILC is a noted project in the World Design Summit Declaration, endorsed by UNESCO (2017). IFLA will use these well-established networks, its global community, political and institutional support to to achieve transformative change through the raising of funds to establish an international landscape convention. The ILC will help address UN strategic ambitions to bring back power to people, provide leadership and by focusing on people and the planet, persuade people to do things differently. As Achim Steiner observes, "Systems don't change systems. People change systems" (Steiner, 2020). This is the time for IFLA to flex its muscles in order to achieve real change.

INTERNATIONAL LANDSCAPE CONVENTION TEXT (presented in 2011 to the UNESCO Board)

Certain remarkable, valuable, historical and beautiful landscapes are given sanctuary, but the everyday landscape, the social, economic and physical context of our lives, has no champion. Fragmented into various components that are green, grey or blue, agricultural, historical or ecological, landscapes are often undervalued and neglected, seemingly belonging to everyone, but actually to no one.

Each week, across the world, communities are experiencing benefits, but also feeling the impacts of industrialization, urbanization, and the search for energy. Lives are endangered or affected by poor or badly planned development.

Problems are caused by demographic shifts and changing patterns of work and habitation, as well as climate change, the depletion of natural resources, de/reforestation, difficulties relating to food production, biodiversity, heritage, a host of other issues relating to aspects of land use change and development. The quality of the landscapes of daily life is constantly being eroded. A more strategic and holistic approach is desperately needed to provide support to communities in dealing with these increasing global threats and challenges.

Covid has made the problems more evident and the need to deal with them is even more urgent.

Promote just, peaceful and inclusive societies. The threats of international homicide, violence against children, human trafficking and sexual violence are important to address to promote peaceful and inclusive societies for sustainable development. They pave the way for the provision of access to justice for all and for building effective, accountable institutions at all levels.

QUEEN ELIZABETH OLYMPIC PARK - 9TH BIENNIAL - ROSA BARBA PRIZE WINNER -GEORGE HARGREAVES, MARY MARGARET JONES, GAVIN MCMILLAN



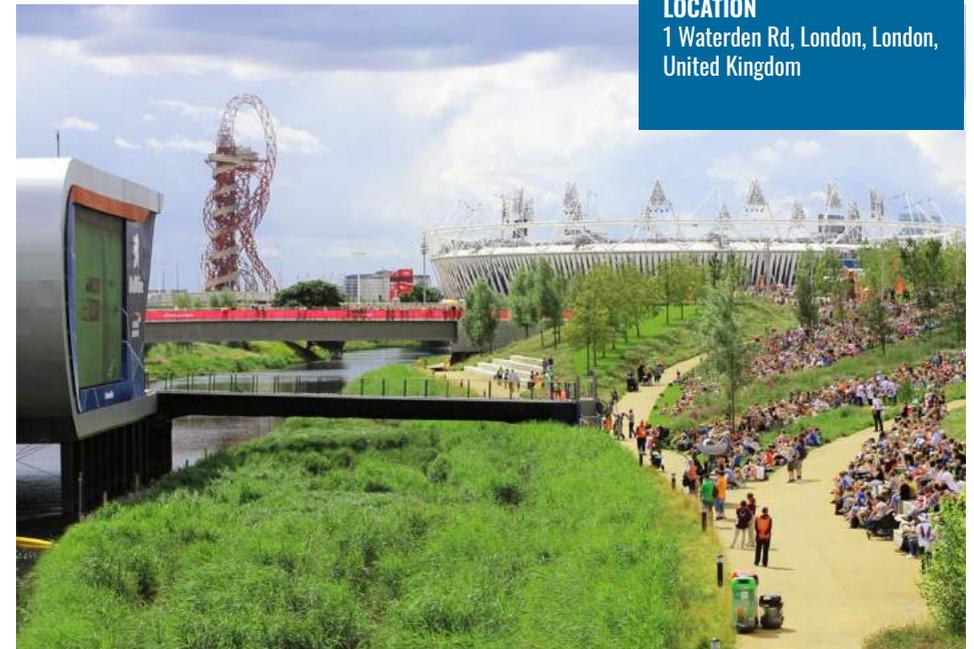
Hargreaves Associates led the design for the 274 acre parklands that formed the centerpiece for the London Games, recognized as the ‘Greenest Games’ in history, with the park declared the ‘winner of the Games’ by the Mayor of London. The largest new park created in Europe for over 150 years, the design synthesizes centuries of British park tradition, the reality of post-industrial brownfields, advances in sustainability and resilience thinking to create a new type of park for the 21st Century. Focused around the restoration of the River Lea, the park includes a northern environmental park and a southern festival park that showcases the Olympic Gardens, which are themed around the countries who participate in the Games. The environmental north park converts the channelized industrial canal into a naturalized meandering river corridor with lowland meadows and wetlands, sweeping lawns for gathering, and sculpted banks for viewing. The South Park creates gently terraced river banks and includes the themed Olympic Gardens – a rich and colorful tribute to the plants of the countries that gather for the Games. The Transformation Plan set the framework for the park post-Games, replacing paving and temporary sporting venues with park programming including a cycle track and outdoor performance area, and additional habitat landscapes. The Transformation Plan stitches the park to the surrounding neighborhoods and creates a regenerated regional landscape for this and future generations.



AUTHORS
GEORGE HARGREAVES, MARY MARGARET JONES, GAVIN MCMILLAN

COLLABORATORS
LDA Design: Master Planning and Landscape Architecture
Sarah Price: Garden Plant Design
Dr Peter Shepard: Ecologist
Dr Nigel Dunnet & James Hitchmough: Meadow Horticulture

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17 PARTNERSHIPS FOR THE GOALS



James Hayter, IFLA President

TARGET 17-1 MOBILIZE RESOURCES TO IMPROVE DOMESTIC REVENUE COLLECTION	TARGET 17-2 IMPLEMENT ALL DEVELOPMENT ASSISTANCE COMMITMENTS	TARGET 17-3 MOBILIZE FINANCIAL RESOURCES FOR DEVELOPING COUNTRIES	TARGET 17-4 ASSIST DEVELOPING COUNTRIES IN ATTAINING DEBT SUSTAINABILITY	TARGET 17-5 INVEST IN LEAST DEVELOPED COUNTRIES	TARGET 17-6 KNOWLEDGE SHARING AND COOPERATION FOR ACCESS TO SCIENCE, TECHNOLOGY AND INNOVATION	TARGET 17-7 PROMOTE SUSTAINABLE TECHNOLOGIES TO DEVELOPING COUNTRIES
TARGET 17-8 STRENGTHEN THE SCIENCE, TECHNOLOGY AND INNOVATION CAPACITY FOR LEAST DEVELOPED COUNTRIES	TARGET 17-9 ENHANCE SDG CAPACITY IN DEVELOPING COUNTRIES	TARGET 17-10 PROMOTE A UNIVERSAL TRADING SYSTEM UNDER THE WTO	TARGET 17-11 INCREASE THE EXPORTS OF DEVELOPING COUNTRIES	TARGET 17-12 REMOVE TRADE BARRIERS FOR LEAST DEVELOPED COUNTRIES	TARGET 17-13 ENHANCE GLOBAL MACROECONOMIC STABILITY	TARGET 17-14 ENHANCE POLICY COHERENCE FOR SUSTAINABLE DEVELOPMENT
TARGET 17-15 RESPECT NATIONAL LEADERSHIP TO IMPLEMENT POLICIES FOR THE SUSTAINABLE DEVELOPMENT GOALS	TARGET 17-16 ENHANCE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT	TARGET 17-17 ENCOURAGE EFFECTIVE PARTNERSHIPS	TARGET 17-18 ENHANCE AVAILABILITY OF RELIABLE DATA	TARGET 17-19 FURTHER DEVELOP MEASUREMENTS OF PROGRESS		

To talk about the Sustainable Development Goals is foreign to some simply because it sounds like the responsibility of government, or others. This is far from the reality that the SDGs are the responsibility of us all. As Landscape Architects, we have the additional responsibility that comes from our education and the skills in practice that must critically be applied to all of our projects and thinking. What can we do from our practice and our everyday tasks to contribute to achieving as many as possible of the 17 Goals proposed by the 2030 Agenda?

Talking about sustainability conjures up images of a green world with citizens taking care of the environment. But the SDGs demonstrate that a holistic approach is needed: for example, if we do not end poverty and hunger we will not be able to talk about a sustainable world. Each of the SDGs are inter-related. This changes our vision and requires us to adopt a new perspective to achieve the ambitions that the United Nations has outlined. It is our responsibility to do so and we must rise up to this challenge.

For IFLA one of the main objectives in our business plan is related to SDG 17; that is, to strengthen liaison and partnership with the many stakeholders and interested parties that are concerned with sustainable development, including other non-government organizations, representative bodies and government agencies so that we can find together the best ways to find and enhance a sustainable future. It is our commitment as the body representing the Landscape Architecture profession globally to work tirelessly to promote sustainable development and support the aims, actions and targets that are outlined clearly by the United Nations.



Revitalize the global partnership for sustainable development. A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level.



SAN MICHELE OPEN AIR MUSEUM IN GORIZIA KARST - 10TH BIENNIAL - ROSA BARBA PRIZE FINALIST - PAOLO BÜRGI

This project develops three areas of the Carso Goriziano through a network of paths punctuated by several minimal interventions aimed to stimulate and enhance the individual observation. Memory and surprise arise by a visit in this historically charged region. The area of the San Michele open air museum is a sacred space full of monuments, stone memorials, embrasures, remains of trenches, war relics and small signs left by people who still recall a relative or a friend.

This situation brought us to leave the area as it is without altering its existing condition, and to redesign its perimeter and simplify the overall context in order to highlight the individual historical elements and, at the same time, unify them in one vision. Between the two brackets of the paths the morphology of the “grey” Carso’s bare rock thus emerges, while all around the “green” Carso’s vegetation flourishes.

This evocative space has an unfailingly deep impact on its visitors. A place that speaks of the past. On one hand, the project aims to restore the feeling of the “grey karst” as it was during the first world war when there was no vegetation at all, following the paths bordering the limit of the sacred zone. On the other, it provides a surprising and contemporary area to visitors who approach it. In suggesting the existence of a future beyond memory it inspires a serene and deep attitude that is not just of remembrance, but also of hope due to the area’s expanse, its belvedere and views on the landscape and on the colours of vegetation. For the design and its implementation we have pursued an experimental approach: details like materials’ choice, handrails, pavements sandblasting, concrete thickness and finishing, grey area maintenance etc. have been specifically designed and fitted for the place in order to increase the identity-rediscovering process without exceeding a low budget public funding and a minimal intervention strategy.

The project won the first prize of the international design competition and is exposed at the 16. Mostra Internazionale di Architettura della Biennale di Venezia 2018, Padiglione Italia, Arcipelago Italia (curator Arch. Cucinella).



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SYSTEMIC LANDSCAPE AND SUSTAINABLE DEVELOPMENT GOALS: A SHORT REFLECTION

The Sustainable Development Goals claim a possible achievement of sustainability through a systemic approach. The landscape plays a crucial role in this process.

Sustainability can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations, 1987) whether in social, environmental, or economic issues. On the other hand, according to Berque (2019), the landscape is the interaction between human-nature over time guided by human intentions that shape and are influenced by the physical-spatial and social landscape. This interaction results in tangible and intangible instances called marks which collectively build a matrix. This matrix is lived and is in constant production/experience through the matrix-human interaction. This interaction is called mediance. It is the interface where the landscape occurs. In other words, Berque (2019) states that the landscape takes place in the systemic human-matrix relationship. Thus, the landscape is not outside of the human, nor is it contained only in the human mind perception, but is related to human physical, emotional, spiritual, and mental perceptions and involvement. Full human-human and human-nature interactions give sense to tangible and intangible landscape elements and processes rather than pure reasoning and abstraction.

This socio-environmental landscape system and its relationships, whether functional or spatial, shape our reality. This system has been suffering a long process of disconnection and fragmentation between humans and humans, humans and biophysical systems and their cycles, mainly due to excessive exploitation of both nature and human beings during the Anthropocene era (Capra, 2015). Conforming to Capra (2015), this process has been significantly supported by the greed economic model and the societal focus on technology, our development understanding, mainly after the industrial revolution and more intensely in urban areas.

Thinking of sustainability from this greed or technological perspective is per se an antagonism, an impossible goal. Facing the existing segmented human-made landscapes, meeting our needs or future generations needs is no longer enough if we keep acting in a fragmented way (du Plessis, 2012). We need more. We need to regenerate the damage we caused deeply and systemically while moving forward guided by a distinct perspective (du Plessis, 2012). As suggested by the regenerative development approach, a mindset change towards a more systemic approach to our realities is urgently needed. It means integrating economic, social, and environmental needs in a unique system where humans and nature must have the opportunity to evolve equally and synergically.

Understanding the systemic landscape represents a pathway to approach our landscapes and think of regenerative theoretical and practical alternatives to make a mindset change aligned with physical-spatial interventions to achieve Sustainable Development Goals. The Systemic Landscape Planning (SysLP) approach (Tardin, 2017) proposes recognizing and incorporating the systemic logics of the landscape – such as the biophysical, sociocultural, and urban – into landscape interventions through social participation. It creates new opportunities for urban transformation and gives room to an economy sensitive to landscape matters. In this reasoning, each system must work intrinsically as a system and be systemically intertwined with the other systems resulting in planning strategies and project proposals spatially and functionally related in a socio-spatial matrix (Tardin, 2017). Dealing with this complexity is not easy. I believe that acting in this direction can be the beginning of a return to ourselves and the landscape as a whole in our journey on this Earth, whether personally or through our profession as Landscape Architects committed to sustainable development.

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Medellin river park

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Latitud taller

Parques de Río Medellín emerged as a flagship project of the mayor's office of Aníbal Gaviria (2012-2015) as a response to the existing problems of the river, which crosses the city and is disconnected from urban and social dynamics by the regional avenue and southern highway, roads nationals that run through the valley parallel to the river channel. Seeking to be the element that weaves the city both longitudinally and transversely, the project proposes to re-conceptualize the use of the river's edge and revitalize it from its transformation as an environmental, cultural, educational, sports and mobility hierarchy.

URBAN PLANIFICATION

The project is an integral part of the territorial organization plan, which is materialized through strategic intervention areas that involve different sectors of the city, in the search to make the visions of the future city come true through urban and rural planning projects. For the Parques del Río Medellín project, it is important to understand the dynamics of the environment, the cores of adjacent centralities and the density projection on the edge of the river corridor, to be able to link in correspondence with the territorial model of the city. The approach towards a compact city that favours a healthy mix of uses, inward growth and integral articulation to the municipality's transport system, provides the starting point to provide a balanced solution in the programmatic proposal of the various uses or activities along the river. At the same time, this new public space would be consolidated by highlighting the unique characteristics of each sector, going from being a simple intermediate space between what was built, to settle with a new identity and quality dimension for citizens.

The Project is then, an ambitious urban and landscape development to recover not only the territorial ecological structure but also to allow new Sustainable development and the recovery of the Hydric memory of the Aburrá Valley.

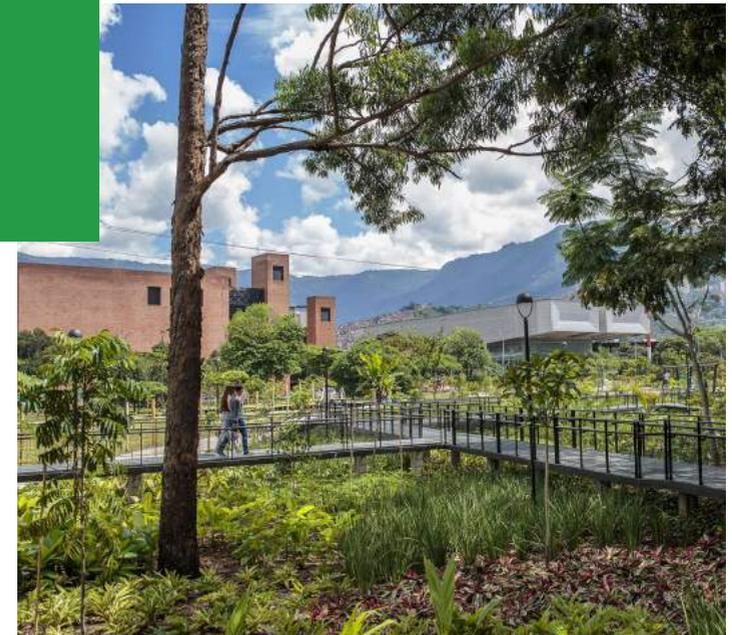
PROJECT CRITERIA

- River as a structuring axis: Take advantage of the natural hierarchy of the river to create a botanical park that articulates the natural systems of the city in an environmental circuit within the Aburrá Valley.
- Repowering of urban green voids and their link to the environmental system: Urban green voids found in the area of influence of the Medellín River and its tributaries are categorized, reused and reconnected to the biotic corridor.
- Recovery and integration of streams: Promote the recovery and protection of streams through their integration into the metropolitan biotic corridor.
- Recycling of underused structures in the area of influence of the biotic corridor: Underused structures or those of unsustainable uses on the river corridor are used to recycle them and give them uses that complement the vocation of the Medellín Botanical Park.



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Transformation of Yang Shu- pu Thermal Power Plant



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The Art Waterfront of Yang Shupu Thermal Power Plant was formerly Yang Shupu Power Plant built in 1913 by British investors. As the No.1 Thermal Power Plant in the Far East, it played a crucial role in the urban development of Shanghai. However, it also caused severe air pollution by burning coal. In 2015, accompanying the start of the project for public space alongside Huangpu River, the Power Plant was shut down for ecological repairing and artistic renovation. The project aims to transform the isolated and closed industrial waterfront to shared ecological and cultural open space, “returning the riverside to all the citizens”. It has three targets: repairing environmental damages caused coal-burning, forging the genius loci of the site and implanting the public space into the whole city.

The reuse of industrial structures serves as the starting point of forging genius loci. The site is left over with 105-meter-high chimney, huge crane-mouth hanging along the riverside, trestle works that used to carry the coal, clean water pond, damp and dry ash tanks and etc., which boasts spectacular space and impressive form. The rearranging of public space begins with comprehending the huge structures as well as the original industrial technological process. On the other hand, applying a limited intervention and low impact design strategy, we designed a restoration system of the ecological environment based on the spatial condition of the factories and the local eco system. We kept the topology and inserted a ecological wetland which collects rainwater. The plants for vegetation are mainly reeds and water-resistant arbor, which are commonly seen in the local eco system. The tectonics of passageways features a light steel structure that minimalizes impact to the environment during construction and in visual aspects places an interesting juxtaposition of industrial and natural landscape.

There is a set of installations for water storage and water cleaning, of which only two round water ponds are preserved. They are demolished but the structural foundations are left. The design intends to turn one into a rainwater garden, and to transform another into a café. The foundation that supposed to be a rainwater garden is planted with water-cleaning vegetations such as miscanthus sinensis, with cobblestones covered the bed of the foundation. It can adjust the falling water and release the pressure of the municipal water drainage. The foundation that meant to be a café works as a formal type. It is covered with round conoid arch standing on the round basement that is enlarged as a concentric circle to the foundation. The center of the arch is open to the sky, introducing natural light into the café and inviting the huge chimney into view. One can see the clear water reservoir while drinking coffee through the openings of the arch, thinking of their fading past.



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Oriente Waterfront Park



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Fitting into the Lisbon City Council strategy for 2020 promoting "Biodiversity in the city of Lisbon", the Parque Ribeirinho Oriente is the new urban waterfront park Lisbon was claiming for, seeking to regenerate a notable territory and designed to be vibrant and inclusive. Conceived by the Lisbon-based Landscape Architecture studio FIC with a multidisciplinary team, this 4 hectares park, located on the banks of the Tagus along 600 meters of riverfront, contributes to Lisbon's eastern area revitalization. Founded on the symbiosis between the river and the city in a former industrial area, the project stands out for its role in promoting biodiversity.

The memory of a past linked to port and industrial activity is crucial for the understanding of the park, whose colors, textures, pavements, and materials are among the elements of the pre-existing identity to be enhanced. To increase the biodiversity in this relevant ecotope, the planting strategy aims to recover potential habitats. To this end, most native species chosen were produced in the Lisbon area especially for the park, with the prospect that maintenance needs will be minimal in the near future. Also, both environmentally and economically, the park's sustainability is based on reducing resource consumption, hence taking advantage of local materials, selecting potential vegetation and efficient equipment. Furthermore, rainwater either flows naturally into the river or is collected and discharged into infiltration wells, thus avoiding the overloading of the city drainage infrastructure.

The large longitudinal green body prints a variable rhythm to the experience of the users, alternating moments of action, with others of rest and contemplation. There is a leisure track over the old railroad, a generous riverside promenade with wooden sun loungers, and a children's playground evocative of the river activity, but also solar sculptures that stimulate curiosity, and site-specific graphic elements such as shadow engravings of birds on the pavement or coordinates inscription of other cities over the Tagus course. Far beyond a park, a living and evolving system is founded, generating a unique experience in the city.

In the coming years, it is expected to extend to the pier at the Parque das Nações Marina, embodying an extensive linear park with more than 8 hectares and almost 1.5 km of river front.

Besides Landscape Architects, architects and engineers, the multidisciplinary team included specialists in geobotany, plastic artists and graphic designers.



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Schelde Quays in South Sint-Andries



Author
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The 'Sint-Andries en Zuid' project is an important component of the Quays masterplan of the Schelde that was developed in the 2006-2010 period by the Temporary Association of Proap-WIT-D-Recta. The Quays masterplan of the Schelde was tasked with identifying the outlines for the reconstruction of the Quays of the Schelde, from Het Eilandje in northern Antwerp to Blue Gate Antwerp in the south of the city. Over a distance of almost 7km along the banks of the Schelde, the inner city's ambition is to reconcile a new public space on the waterfront with a new, higher dyke to protect the city from this water. The project for the 'Sint-Andries en Zuid' area, one of the master plan's seven sub-areas, began in 2009. This master plan aimed to reconcile two seemingly incompatible agendas with one another. On the one hand, implementing a City on the River, whereby the quays act as a public space for the inner city that upholds the bond between river and city once more. On the other hand, following the guidelines in the Sigma Plan for protecting the city against the water flow by putting up a new uninterrupted dyke at the level of 9.25m TAW.

The dyke divides the quay area into a dry city side and a submersible river side. The dry and wet sides are distinguished from one another by their usage and materials. On the city side, a rich range of surfacings, alternating with green spaces, links in with a long list of small-scale programmes. The wet side can be identified from the extensive cobbled surface, providing ample service for temporary uses for as long as the river permits.

In the area of the 'Sint-Andries en Zuid' parts of the city, the urban structure covers a relatively extensive surface area of public spaces, thanks to the presence of the 'Gedempte Zuiderdokken', where a park of nearly 10 hectares is being implemented. This can serve to limit the supplementary range of urban public facilities on the quays themselves. This makes the 'Sint-Andries en Zuid' project area a unique component of the quay structure, where a relatively large percentage of the surface area can be released to the submersible wet side of the dam. It is this duality that also translates into the dykes bilateral nature. It was important here to develop the city-side section (the dry side) as a linear park, whereby the dyke largely stands out as a gentle green slope, with trees and informal recreational areas.

Whereas the most northerly zone lends itself to informal use and recreation in a relatively spontaneous manner, the central zone, with its more mineral, paved layout, offers opportunities for organising more intense urban programmes and activities, such as markets and exhibitions. In the most southerly section, the park provides sufficient space for a fitness zone, a playground, a dog-walking zone and a washing and transfer area for city service road sweepers serving this new public space and part of the inner city.

In contrast to the city side, the river side will only allow for temporary activities. The Quay Area here is a place to get a breath of fresh air for the city. The quay area forms a vast open space here, a unique urban landscape with explicit references to the historical harbour. A wide range of temporary uses can be scheduled here, from sporting events to concerts or open-air films. On this wet river side, the central section, in the area of the South Lock, will also be the place for hosting a large number of activities owing to its specific conditions. The quay area slopes gently towards the water here, creating one of the rare locations on the Quays of the Schelde that brings the river tangibly close to the public space. The slope provides smooth contact with the water in the form of an urban 'beach' with a southerly orientation and wonderful views over the curve of the Schelde.



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The International Geodesign Collaboration (IGC)



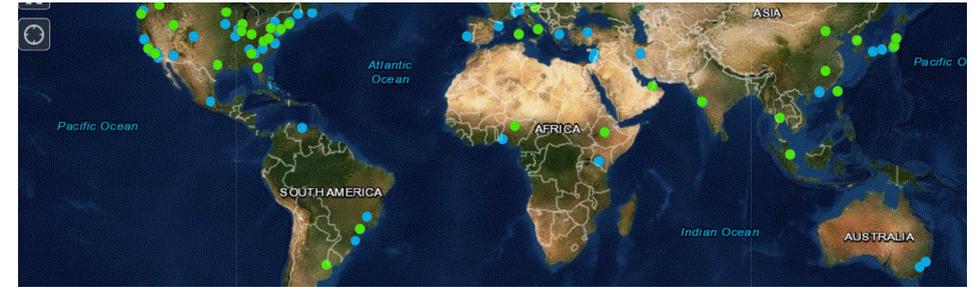
The International Geodesign in collaboration with Brian Orland, Carl Steinitz, The University of Georgia, Harvard Graduate School of Design, University College-London.

The world faces a generic but critical challenge: How do we organize and conduct the very beginning and strategic stages of designing for longer-term changes in large, multi-system, multi-client and contentious contexts? This is a severely under-recognized problem when we face crisis, risk or uncertainty—the most common conditions of our biggest societal challenges. Geodesign (design at geographic scale) represents an emerging design research and practice approach that integrates multiple disciplines and uses geographical information systems (GIS)-based analytic and design tools to help explore alternative future scenarios (GOODCHILD, 2010; GU, DEAL & LARSEN, 2018; RIVERO ET AL, 2018; STEINITZ, 2012). The focus of the International Geodesign Collaboration (IGC) is academic, to understand better how geodesign can be applied to addressing design challenges in settings that are widely dispersed, differ widely in scale and in the extent of resources (skilled people and prepared data) available to find geodesign solutions. We are driven by a specific and exceptionally complex problem: How do we identify and share the lessons and practices developed by a globally-dispersed array of experts so that the resulting knowledge can be leveraged to solve our most pressing societal needs? .

We know that the solutions will call for deep integration across the traditional expertise residing in the physical, natural and social sciences, but they will be articulated through the landscape- and city-shaping of planners, designers and engineers. We are interested in how multi-disciplinary teams in multi-institutional and multi-national groups consider and respond to the environmental, economic, and social impacts of development and change in natural and increasingly engineered systems. These include structural components such as cultural and governmental differences, but also the leadership skills of individuals, team construction, and communication. The idea for the International Geodesign Collaboration was raised by Carl Steinitz at the Geodesign Summit conferences held at Esri headquarters in Redlands, CA, in 2015 and again in 2016.

In January 2018 an agreement was made among Tom Fisher, Carl Steinitz, Brian Orland, and Ryan Perkl to organize the collaboration. By March 2018, by invitation and word-of-mouth, team-leading investigators from about 90 schools had joined the IGC. Many are Landscape Architects, but many are not. All had to form multi-disciplinary teams to accomplish the agreed tasks of the collaboration. Almost every university in the world studies these issues and is potentially in a position to propose improvements to our normal everyday social and environmental practices. Yet every university and every unit of government acts in its own set of geographies and socio-ties, and with its own content, definitions, methods, languages, color codes, and representation techniques. It is extremely difficult to compare across institutions to learn from each other. This collaboration proposes a radical increase in sharing and in the standardization of communication so that sharing, comparison and mutual learning can take place much more easily. We believe that a central aspect of effective collaboration and eventual action is and will be public understanding of complex issues, and that this can be done without professional jargon, artistic obscurity and scientific myopia.

Our goal for this endeavor was bold. We believe that there is need for a large number of people – perhaps 10,000 – in the next decade who are educated broadly about the state of the world and specifically about the analytic and synthetic methods in order to propose change for the betterment of society and the environment in the face of inevitable global change. The most efficient way is to educate today's university students in these matters and to do it in a manner that enables collaboration and mutual learning inside the university, and across institutions and nations. Project Structure Our key observation driving this project was that while the object of attending international meetings is to learn from the experiences of others, our meth-



ods of sharing obscure rather than enable that purpose. Participants use their own idiosyncratic layouts of information, the elements chosen to highlight specific items of local interest. They use graphical and cartographic conventions that are determined by either national standards or by personal preference. Project areas can be simple rectangles but are usually complex polygons, sometimes but not always including a “context” buffer of surrounding landscape influencing and influenced by the project. While the expressed intent may be to solve problems with global consequences, they rarely reveal the assumptions made about the future, nor the design innovations that address the emerging needs. In order to learn by comparison between projects it was evident that some organizing principles must be imposed so that different projects expressed the same ideas in the same ways.

The global assumptions and system innovations describe ideas that may be relevant to particular projects, but they were not relevant or required for all projects. Recommendations for specific outcomes or goals were not included; however, each assumption and innovation was written with the knowledge that individual nations and municipalities would scale and parameterize assumptions and innovations to their specific geodesign project. Participants were able to define their own projects within the constraints.

The International Geodesign Collaboration Changing Geography by Design

Edited by Thomas Fisher, Brian Orland, and Carl Steinitz

The International Geodesign Collaboration (IGC) is a collaboration by teams from among global universities to understand better how geodesign can address major global and local challenges in settings that are widely dispersed and that differ widely in geography, climate, society, and scale. How do we identify and share the lessons and practices developed by a globally dispersed array of experts so that the resulting knowledge can be leveraged to solve our most pressing societal needs?

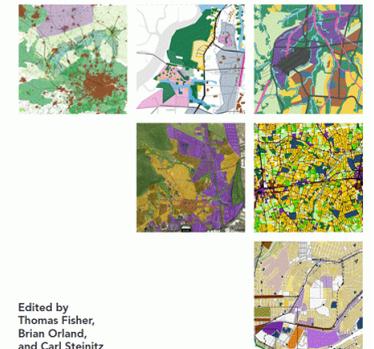
The IGC seeks to address this exceptionally complex problem while educating tomorrow's leaders in planning for future change.

esri PRESS



The International Geodesign Collaboration Changing Geography by Design

The International Geodesign Collaboration Changing Geography by Design



Edited by
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Brooklyn Bridge Park

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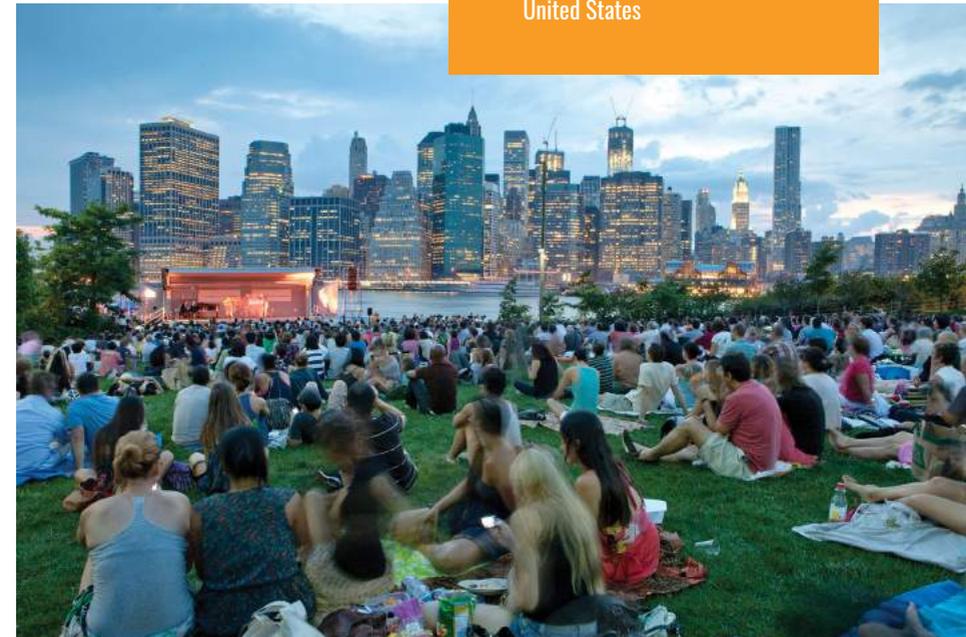
Designed and built over the past 20 years, Brooklyn Bridge Park spans 85 acres along 1.3 miles of the East River waterfront. The project has transformed the hardened industrial site of abandoned warehouses, obsolete piers, and decaying bulkheads into a vibrant public space. In 2019, five million visitors came to the park, experiencing its responsive programming, panoramic views, and resilient design and construction. Today, park elements improve public access, reanimate six piers, and restore ecological diversity, blurring the edge between the East River and the park and proposing a new model for transforming civic urban waterfronts. In the 1990s, local residents convinced authorities to turn a strip of obsolete waterfront warehouses into a park. It had extraordinary views of the Brooklyn Bridge, the Manhattan skyline, and New York Harbor. But the site was asphalted and flat, had piers in poor structural condition, and was deafeningly loud from the adjacent Brooklyn Queens Expressway.

The park's challenges drove its design. The Landscape Architects built a series of earth berms along the highway to block noise, allowing visitors to climb 9 meters above water level and creating a heavily planted backdrop for the rest of the park. This resourcefulness extends to the shoreline. Instead of undertaking expensive structural renovations, the designers demolished failing sections of the piers. This allowed the inclusion of elements that bring the East River into the park: two salt marshes, a tidal sluice, a beach, and three ramps for launching kayaks. These soft edges reintroduce marine ecologies and absorb rising tides and floodwaters.

Structural capacity determined design opportunities. Piers 2 and 5, which were weakest, facilitate sports that require only a light playing surface. The more robust Piers 1, 3, and 6 stand up to the heavy soil fill and extensive planting. Piers 1 and 6 bookend the others, which took shape as funding became available. The park is a model for transforming a post-industrial waterfront into a rich zone of interaction among humans, infrastructure, and resilient ecosystems, adapting to sea-level rise while bringing joy to residents and tourists alike.



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Chulalongkorn University Centenary



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As our constantly-fluctuating climate causes rising sea levels, storm surges, and unexpectedly heavy rainfall, low-lying cities across the globe are bracing for urban flood disaster. As concrete infrastructure multiplies, Bangkok is sinking two centimeters every year.

Bangkok is a flat city. By harnessing the power of gravity, the park is able to sustainably collect, treat and hold water to reduce flood risks in its surrounding areas. Sitting on a 3-degree gradual incline, the park is equipped with several ecological components—the green roof, wetlands, detention lawns, and retention pond—leaving not a single drop of rain wasted. The runoff is pulled down through the park’s terrain to generate a on-site water management. Taking into account a 50-year return period precipitation intensity, the park can hold up to a million gallons of water. It shows the city ways to live with water, rather than fear it.

While playing a role in confronting climate risk, the park simultaneously serves as a recreational spaces for the university community, and urban dwellers.

-Underneath the green roof lies a museum and parking space. Additionally, three underground tanks store rainwater absorbed from the green roof. The amount of water it holds can irrigate the park for up to a month, during dry seasons.

-Excessive runoff from the green roof then flows through to four constructed wetlands, two on each side of the park. A series of cascading weirs and ponds slow down the runoff and increase water aeration, aided by native water plants which help filter and clean the water.

-On good weather days, the main lawn serving as a big multi-purpose amphitheater for public events. As for stormier days, the lawn absorbs rain and runoff, gravitating it and sending it down to the retention pond by the low end of the park.

-Visitors, too, can become an active part of the park’s water treatment system by hopping onto any stationary water bikes along the pond, using their exercise to keep water aerated.

-Adjacent to the main lawn is eight “landscape outdoor classrooms”, each with different biomes and layouts.

-Following the planting concept of growing urban forests, 300 varieties of plants and trees have been grown either from seed or as young seedlings which easily adapt to the climate changes, recreate a healthy ecosystem and provide a home for local birds, pollinators and insects.



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Girona's Shores

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GIRONA'S SHORE is a collection of self-initiated network of projects and initiatives that aim to reclaim, develop and manage Girona's neglected green peri-urban spaces and convert them to a multifunctional green infrastructure. It reimagines a green-open conurbation, an extended city, where nature is a strategic asset accessible to everyone. To turn this ambition into reality, a low-cost and replicable process with various design tools has been developed over time.

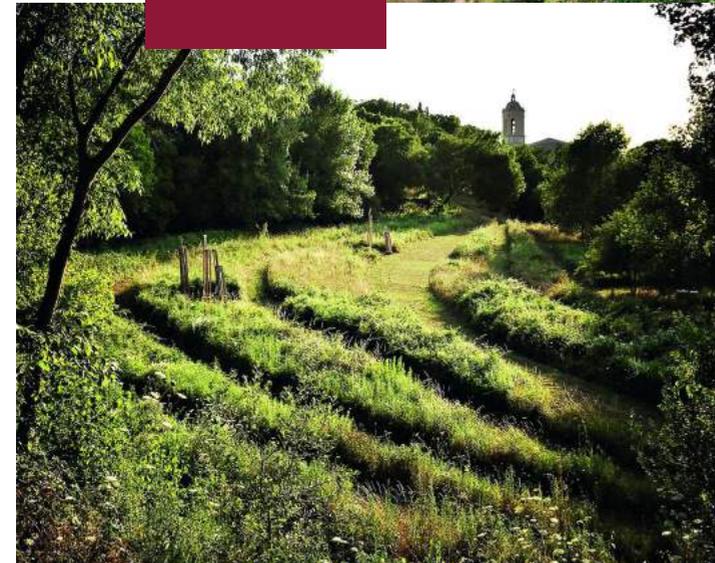
The process started with a series of pilot projects that we undertook with the municipal landscape maintenance brigade in dry-mountain and riverscape landscape conditions. With these low-tech, low-cost interventions that provided quick and tangible results, we proposed an inverted project sequence, where a large-scale infrastructural project emerges from the knowledge gained through the pilot projects. Based on the interpretation of differentiated management as a landscape design practice, a specific landscape management regime guided by the principles of ecological succession allows for an immediate diversification and appropriation of the agroforestry mosaic of the town's border, its shore. The site's special peculiarities are highlighted, creating a new naturban aesthetic. The generated transversal knowledge is summarized in a flexible protocol, that is rewritten and replicated seasonally. In this process, environmental technical services Ecologists and the landscape brigade become co-designers, executors, managers and multipliers that allow the project to self-seed. The average cost of these interventions ranges from 1 to 2€/m² per year.

A framework project, building on various citizen's workshops, serves as a road map to outline the future of Girona's multifunctional green infrastructure and consists of 13 loops, 30 naturban parks and numerous small actions to facilitate its gradual implementation, eventually growing to 600 hectares – Girona's largest public facility. It maps out a spatial strategy, but also embeds temporal tactics and upscales the local know-how gained from the pilot projects.

Altogether the combination of projects, strategies and actions that form the design method and create a malleable and frugal tool kit facilitates a responsive upgrading through successive acting. The various ingredients of this "cocktail" complement and relate to each other and, in reversed order to conventional master planning, together bring about a new shared vision of the town.



City / Place
Girona
Region
Catalonia
Country
Spain





La Mexicana Park

Authors
CDMX Resilience Office



Project Statement.

Imagine an urban site which was excavated for 50 years: an open air quarry for the extraction of sand, gravel and sandstone, resulting in an enormous hole; a void at some points 70 meters deep in an impacted area of 40 hectares.

Imagine that years later the surrounding urban community wants to convert the great cavity into a Park. Imagine that after many negotiations debates and meetings a settlement comes to fruition where 70% of the area would be dedicated to a public park and surrounding infrastructure and 30% to private apartments. The developers would be in charge to build the park and infrastructure at the cost for the developable land.

This is the framework of a social, political, and economic context that support the possibility of creating a new park of 29 hectares in Santa Fe. This is a large-scale landscape project, which aims to recycle and restore and environmental wound, transforming it into a sustainable, recreational, community and accessible space for everyone.

Design Challenge and Vision.

A collective vision was formed to have a green park, densely forested with sports activities and skate park; a series of gardens unfold sequentially with the topography through a main promenade-paseo. At the lowest part an amphitheater was adapted with two lakes. A central plaza was devised as the heart of the park connected with the Gourmet Terrace with diverse restaurants and cafes.

Sustainability and Water Harvesting.

A Hydric Axis runs longitudinally in the park, capturing rain water through a water garden bioswale, conducting the sifted water to a large cistern under the lower lake. In addition several aeration devices are incorporated in the form of a 20 meter jet and a smaller cascade in seating stairs. The collection of water provides irrigation for three months of the dry season. The additional months are provided from a water treatment plant.

Iconic Park.

The original studies of visiting were defined at 1.5 million visitors a year but the reality is it has overpassed by large that figure. On many weekends it is visited by more than 22,000 persons. Being Santa Fe a new Edge City, the park has given a unique identity to an otherwise faceless area of tall buildings. A public space of interaction and public enjoyment, freedom and beauty.



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Region

Santa Fe

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Parque Central, Valencia



Authors

Gustafson Porter + Bowman

Collaborators

Borgos Pieper, Grupotec, Nova Ingenieria

Based on the proposal to bury the railway lines and the high-speed train, Valencia Parque Central is to date one of the most important urban and infrastructure projects in the city. With a total area of 66 hectares and an investment of 73 million euros, a public space will be created that will celebrate the cultural character of the region in a contemporary way. This 23-hectare park will become the green heart of the city, linking neighbourhoods to the East and West that were previously disconnected by train lines. Eventually, it will also connect 43 hectares of new residential neighbourhoods to the South of the city.

The main objective of this contemporary park is to distil the unique historical, cultural and geographical legacy that Valencia has and also to respond to the challenges of building a sustainable urban and public space. Inspired by the poem 'Aigua plena de seny' (Water full of wisdom), by the Valencian writer Ausias March, our design recognizes the unique relationship that Valencia historically acquired as one of the most important markets in Europe and its interaction with water. Valencia is framed by different ecological habitats: The Turia River Reserve, the landscape of the Huerta Valenciana with its irrigation channels, The Albufera Natural Park and the Mediterranean Sea.

Also through the concept of the 'bowl', inspired by the local tradition of Valencian ceramics, a unifying and narrative gesture is generated throughout the park where the main design theme is water. Each one of the 'bowls' is created through sculptural reliefs in the landscape that, when completed, will house spaces with historical identity for the arts, programmed activities, spaces for the community and cultural events.

Below is a brief description of each bowl and the most important spaces within the park.

Plaza of the Arts: With the existing buildings restored and the creation of an amphitheatre, a spectacular water game is framed, generating one of the park's poles of attraction.

Orchard Garden: The planted terraces are a reflection of the agricultural tradition of the Valencia region.

Floral Garden: A series of gardens with a great diversity of flowers and colours frame the historic Alquería building.

Children's Garden: It offers a flexible space for play areas that serve different ages.

North Plaza: With a large fountain and a spectacular sculptural roof, the North access of the park is framed.

Central Plaza and North-South Walk: Palmeras and Jacarandas pedestrian promenade that leads to a central square, functioning as a central axis that connects all the main roads in the park.

South Plaza: It offers an atmosphere of movement and speed through linear lights and projections reminiscent of the historical memory of the place and the passage of the trains that once occupied the site.

Mediterranean Gardens Exhibition: A new greenhouse next to the terraced landscape of Mediterranean vegetation constitutes the second pole of attraction of the park.

Amphitheatre: A landscape sculpted in the shape of a natural amphitheatre and framed by a large lake vegetation. provides a space for picnics and recreation, as well as an area for large-scale performances and concerts.parque.



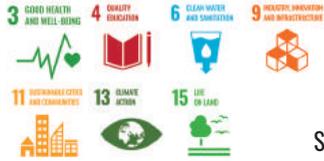
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The tropics and the built landscape

Urban Center of Medellin Colombia



Authors

Carlos Puerta, Verónica Ortiz

Collaborators

Santiago Arbelaez, Danilo Sepúlveda, Hernán Castaño, Juan Esteban Berrio

Medellín is the economic center of a 4 million inhabitants metropolitan area and every day 1.4 million people transit through its administrative and economic center (downtown). Over the last 30 years it has suffered a gradual deterioration due to the high-line railway implementation which changed the city morphology and generated vague areas and prioritized four-lane vehicular streets under its structure.

In 2012, the Medellín's Administrative Department of Planning ratified its commitment to reverse this condition by implementing the MED-Centro Plan, based on urban exercises that highlight sustainable and equitable development. In 2014, a 170,577 m² urban intervention comprised of streets and squares, was generated nearby mass transport system, Metro.

Urban sustainability is the guiding principle of the project and 6 fundamental axes are derived from it:

1. Prioritize pedestrian accessibility and mobility
2. Promote the bicycle transport system
3. Regulation and reduction of vehicular roads
4. Prioritize the natural environment
5. Articulate all mobility systems
6. Establish a clear relationship with buildings

These 6 premises allow designing a project that builds a new urban landscape, in which a relationship between inhabitants and their place of identity is clearly established. In our context, as tropical and no-seasons country, nature strongly bursts into our city, allowing us to clearly establish a more balanced relationship between the built-environment and the natural-environment, to convert vehicular prioritized places into integral, functional and balanced urban corridors, both from the sustainable mobility component and its natural, vibrant and exotic component, full meeting, daily life and the enjoyment places of its citizens.



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HOW DO IFLA WORKING GROUPS AND CHAIRS CONTRIBUTE TO THE SUSTAINABLE GLOBAL AGENDA?

James Hayter and Marina Cervera

Landscape Architects and Volunteers globally raise the profession's profile through the work of IFLA's four Standing Committees: The Education and Academic Affairs Committee (EAA); Professional Practice and Policy Committee (PPP); Communications and External Relations Committee (CER), and Financial and Business Planning Committee (FBP). Sitting under each Standing Committee are Working Groups organised with five elected members representing each Region (Africa, Americas, Asia Pacific, Europe and the Middle East) of IFLA. Either directly or indirectly, each group contributes to one or many of the 17 United Nations Sustainable Development Goals.

SDG1 NO POVERTY

IFLA Africa is strongly focused on the means by which the Landscape Architecture profession can make positive contribution towards ending poverty. Each of IFLA's Working Groups can make a contribution. For example, the Climate Change Working Group approaches SDG1 through its Indigenous Ecosystem Corridors projects (IEC project developed in collaboration with UIA). The IEC project UIA + IFLA concentrates on the opportunities in creating and maintaining the urban forest through Improved environmental comfort and reduced thermal stress; Improved air quality; Integrated meagre cost urban food production; Sustainable self-production of cooking fuels and fibres to reduce the need for monetary outlay; Production of construction materials; Reduced damage and losses from storms and flooding.

SDG2 ZERO HUNGER

To address SDG2, a new group was created: The Agricultural Landscape Working Group. The Agricultural Landscapes and food security Working Group focuses on sustainable agriculture, understanding and promoting permaculture and employing ecological techniques to sustain human life. This group cooperates with UN FAO contributing techniques and examples of design work, planning and management to innovate in productions and food security.

SDG 3 HEALTH AND WELL BEING

The Landscape Architects without borders Working Group (LAWB) focuses on refugees' health and well-being. To this purpose, the LAWB working group in Lebanon aims to be present locally and active on the ground with a series of implemented projects. The group focuses on possible areas and types of intervention. The working group's goals are to promote evidence-based design; contribute to the urban forest; communicate the value of landscape and the importance of contact with nature; promote participatory design to improve attachment to place; and encourage community health and happiness.

The commitment to health and well-being is one of the main concerns of contemporary Landscape Architecture. The profession aims to develop planning, design and management committed to sustainable development to the benefit of communities and mankind. Every project seeks to focus on improvements to physical and mental health - this has been reflected in the recently approved Ethical Principles for the Landscapes Professionals developed by IFLA and Landscape Institute of the UK.

SDG4 QUALITY EDUCATION

The Education and Academic Affairs Committee (EAA) has focuses on understanding educational opportunities globally through the PREP Survey - Survey the Professional Requirements and Educations Possibilities. This survey aims to compile an international database that argues for improved quality of education in Landscape Architecture and the raising of its profile as a profession. The Landscape Architects without borders

Working Group on-site initiatives and the Emergent Professionals Advocate Working Group also focuses on quality education, also seeking to bridge the gap between academia and professional practice.

SDG5 GENDER EQUALITY

All of the IFLA working groups are committed to gender equality – this is demonstrated in IFLA's governance. The Executive Committee drives this requirement for gender, racial and age equality. The Chair of Communication and External Relations emphasises the recognition of women in landscape and their involvement with the SDGs through social media campaigns. The Chairs of the working groups are required to have members and volunteers from both genders thereby giving a voice to all contributors.

SDG6 CLEAN WATER AND SANITATION

The Agricultural Landscape Working Group and the Indigenous Ecosystem Corridors projects sitting under the Climate Change Working Group focuses on clean water and sanitation objectives through education on formation and management of water flows; integration of rainfall, groundwater, sanitation and retention/conservation of nutrients; development of decentralised water management systems; integration of water systems with local food, fuel and fibre production; water purification through reed beds, wetland trees and associated herbaceous; plants; stabilisation of river corridors; and reduced erosion reducing silt in run-off.

SDG7 AFFORDABLE AND CLEAN ENERGY

In some way, all of IFLA's working groups touch affordable and clean energy as a driver that is linked to all SDG's. By organising IFLA's structure and operations around the SDG's, IFLA's business plan, driven by the Finance and Business Planning Committee, is directed towards achieving equitable and sustainable means that are translated through the work of all IFLA's committees.

SDG 8 DECENT WORK AND ECONOMIC GROWTH

Economic growth is one of the primary criteria considered within the IFLA ASIA-PAC LA AWARDS, a working group under the CER Chair. In addition, a number of other IFLA working groups contribute to SDG8 by highlighting opportunities for increasing individual and community productivity; active generation, regeneration and management of the urban forest; wholesome work environments and improved quality of the living environment through enhancing the urban forest.

SDG9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

The International Landscape Convention Working Group argues for a new institutional perspective for landscape. This is an innovative new way of considering landscape and the contribution it makes to sustainable urban and regional environments.

SDG10 REDUCED INEQUALITIES

All of IFLA's working groups consider ways in which we can reduce inequalities through the application of sound environment techniques and consideration of benefit to global communities. IFLA's CER Committee seeks recognition of minorities and all genders and races in recognition of multicultural diversity that is also promoted through social media campaigns. Communication through all of IFLA's social media channels is key to defining IFLA as a multicultural meeting point. IFLA runs a number of competitions and awards programs that are open to entrants globally.

SDG 11 SUSTAINABLE CITIES

IFLA Europe Med_net Working Group, participates in the Global Alliance for Urban Crises, an initiative of UNHABTAT. This initiative is a multi-disciplinary, collaborative community of practice working to prevent, prepare for and effectively respond to humanitarian crises in urban settings. The Global Alliance brings together diverse actors who commit to the principles outlined in the Urban Crisis Charter, including UNHCR, FAO, Global Shelter Cluster, Habitat for Humanity International, IOM, Harvard University, International University of Catalonia, and the Royal Institute of British Architects.

SDG12 RESPONSIBLE CONSUMPTION AND PRODUCTION

IFLA operates as an efficient and effective organisation working in partnership with many other global and regional representative groups to achieve its aims. Rather than duplicate resources, IFLA works to share responsibilities and knowledge in an open and free way. This also applies to the function of IFLA's working groups who seek to partner in the development and application of policy relating to landscape globally.

SDG13 CLIMATE CHANGE

IFLA declared in 2019 a Climate and Biodiversity Emergency in support of the UN's initiatives on Climate Change. This decision influences all of IFLA's operations and the work of IFLA's Working Groups. For example, IFLA's working group on climate change has been instrumental in promoting SDG13 and following this further with direction on positive action that IFLA member associations and regions can take.

SDG14 LIFE BELOW WATER

The Indigenous Ecosystem Corridors Working Group, for example, recognises the important of an integrated approach to blue-green infrastructure, the reduction of discharge of nutrients, pollutants, sediments and debris from the land into waterways and the sea and the management and attenuation of flooding to reduce the release of silt into watercourse and estuaries. This is also a topic being considered by IFLA regions; for example, the IFLA Asia Pacific Region.

SDG 15 LIFE ON LAND

IFLA is a member of the International Unions for Conservation of Nature (IUCN), thereby showing its commitment to life on land. In addition to this commitment to participate in the world-body representing the conservation of nature, IFLA through regional representation has been an activist for the preservation of nature and cultural heritage.

SDG16 PEACE, JUSTICE AND STRONG IN

IFLA's own internal reforms match those of our regions and member associations who promote strong governance underpinned by objectives for peace, justice and strong institutions. The IFLA's America's Region, for example, IFLA supports its member associations form professional, representative institutions that promote IFLA's objectives for stability..

SDG17 PARTNERSHIP FOR GOALS

Establishing partnerships to work collaboratively and effectively is a key objective embedded in the IFLA Business Plan. As an important step in solidifying these partnerships and collaborations, IFLA has conducted a survey of its member associations to evaluate potentials at the national, regional and global level. There are many examples where these partnerships have raised the profile of the SDG's and aided in greater exposure of issues and the promotion of practical outcomes.



The Qanat system includes underground tunnels that collect water from surrounding mountains and transfer it to the plains and foothills where human settlements and production systems are located.

Qanat systems, that might be tens of kilometers long, follow aquifers in surrounding mountain areas.

ACKNOWLEDGEMENTS

The editorial committee aims to dedicate this book to all the volunteers working for the profession and advocating for a more sustainable and resilient future through their practice.

We thank all the partners behind this publication, especially the authors of the chapters, the designers of the case study projects illustrating each chapter, and all the Delegates, Chairs, and Presidents of the National Associations guiding the profession through the challenges of the new climate regime.

Special acknowledgement to the Executive Committees and Staff of the two organizations involved in the making of the publication -IFLA and Barcelona Landscape Biennial- for their dedication and support of the initiative.

INTERNATIONAL FEDERATION OF LANDSCAPE ARCHITECTS

IFLA is an International Professional Non-Governmental organization representing Landscape Architects worldwide, with 77 Member Associations in the following geographic areas: Africa, Americas, Middle East, Asia-Pacific and Europe.

VISION.

IFLA is the leading international body promoting a globally sustainable and balanced living environment from a Landscape Architectural perspective.

MISSION STATEMENT.

IFLA will promote the Landscape Architecture profession within a collaborative partnership of the allied built-environment professions, demanding the highest standards of education, training, research and professional practice and providing leadership and stewardship in all matters.

For more information: <https://www.iflaworld.com/>

BARCELONA INTERNATIONAL BIENNIAL OF LANDSCAPE ARCHITECTURE

The Barcelona Landscape Biennial is a Professional Non-Profit Organization aiming to promote and disseminate best practices in the profession and education of Landscape Architecture through a Biennial Symposium and its two international Prizes:

The Rosa Barba International Landscape Prize

The Rosa Barba International Landscape Award is convened with the Banc de Sabadell Foundation's collaboration and joins the framework of the International Landscape Biennial of Barcelona. There is a single prize, granted with 15,000 euros delivered during the Symposium by an external International Jury. The winner and the finalists present their projects during the Biennial conferences.

The International Prize for University Projects

The International Prize for University Projects Award is convened, with the Banc de Sabadell Foundation's collaboration and joins the framework of the International Landscape Biennial of Barcelona. There is a single prize, granted with 1,500 euros delivered during the Symposium by an external International Jury. The winner and the finalists are the Universities, and they present their best projects during the Biennial symposium.

For more information: <https://landscape.coac.net/en>

Rosa Barba Prize <https://landscape.coac.net/ca/rosa-barba-list-and-finalists-2020>

International Landscape Prize <https://landscape.coac.net/en/schools-list-and-finalists-2020>



IFLA World Council comprising members of the Executive Committee and the duly appointed members of the national or multi-national associations (see below) is the governing body of IFLA.



Aerial view of volunteers working in Pop-Up Green of 9th International Landscape Biennial in Barcelona.

REFERENCES AND CREDITS

1 No Poverty

Maimuna Saleh-Bala , James McGregor and Carey Duncan, IFLA's Africa Region representatives , ©NLA/
Graham Young
Linear Park Cuernavaca Railroad, Julio Gaeta, Luby Springall

2 Zero Hunger

Carlos Jankelevich, IFLA's Agricultural Landscape Working Group Chair
Landschaftspark Belvedere Köln, Frank Lohrberg

3 Good Health and Well-Being

Ricardo Riveros, President IFLA Americas Region
Andrés Plager, Bichos de Campo, 2020
Tel Aviv's Central Promenade Renewal, Udi Kassif, Ganit Mayslits, Maor Roytman

4 Quality Education

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Folly Forest _ A Dance Floor For 100 Trees, Dietmar Straub, Anna Thurmayr

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6 Clean Water and Sanitation

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8 Decent work and Economic Growth

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Savannah Circle_ Iewa Wildlife Conservancy, Michael & Chloe Humphreys

9 Industry, Innovation and Infrastructure

Andreja Tutundžić, IFLA Education Recognition and Accreditation Working Group Chair
Auckland Waterfront: North Wharf Promenade and Silo Park, Perry Lethlean

10 Reduced Inequalities

Maria Gabriella Trovato, IFLA Landscape Architects Without Borders Working Group Chair
Meknes Landscape Green Strategy, Valerio Morabito
Superkilen, Lorenz Dexler, Martin Rein-Cano

11 Sustainable Cities and Communities

Karin Helms, IFLA Europe Region, IFLA Med_net Working Group Contribution
Rain garden (Construction scheme) @AIAPP Italy with scientific contribution of IFLA Europe Med_Net Group

The High Line - 8Th Biennial - Rosa Barba Prize Finalist - James Corner

12 Responsible Consumption and Production

Monica Pallares, Chair IFLA Communication and External Relations Committee
Performative & Transformative: Quzhou Luming Park, Kongjian Yu

13 Climate Action

Colleen Mercer-Clarke, Chair IFLA Committee on Professional Practice and Policy
The Metro-Forest Project : Bangkok Urban Reforestation, Wannapin Boontarika, Tawatchai Kobkaikit

14 Life Below Water

Fumiaki Takano, President IFLA Asia-Pacific Region
Sediment Skeletons, Jacob Kuhn, Cornell University, Brian Davis as Teaching Staff

15 Life on Land

Tony Williams,
Chair IFLA-UIA Working Group on Indigenous Ecosystem Corridors and Nodes
Saxhóll Crater Stairway, Landslag Ehf, Práinn Hauksson

16 Peace, Justice and Strong Institutions

Kathryn Moore, IFLA Past President
Queen Elizabeth Olympic Park , George Hargreaves, Mary Margaret Jones, Gavin Mcmillan

17 Partnerships for the Goals

James Hayter, IFLA President
San Michele Open Air Museum In Gorizia Karst, Paolo Bürgi

Medellin river park, Sebastian Monsalve Gomez, Juan David Hoyos taborda
Transformation of Yang Shupu Thermal Power Plant, Ming Zhang, Zi Zhang, Shu Qin, Xuefeng Li, Jialong Sun, Jingjing Li, Nina Tao, Xinxin Liu, Zheng Li, Dian Yu (Intern), Yichen Zhang (Intern), Chengzhe Zhu (Intern)
Orient Waterfront Park, Catarina Assis Pacheco, Filipa Cardoso de Menezes
Schelde Quays in South Sint-Andries, João Nunes
The International Geodesign Collaboration (IGC), The International Geodesign in collaboration with Brian Orland, Carl Steinitz, The University of Georgia, Harvard Graduate School of Design, University College-London.
Brooklyn Bridge Park, Michael Van Valkenburgh, Matthew Urbanski, Paul Seck, Gullivar Shepard
Chulalongkorn University Centenary, Kotchakorn Voraakhom
Girona's Shores, Marti Franch Batllori, Gemma Batllori, Héloïse Bouju, Mercè Pagès, Sergi Romero
La Mexicana Park, CDMX Resilience Office
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The tropics and the built landscape Urban Center of Medellin Colombia, Carlos Puerta, Verónica Ortiz

