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## ISOCARP considerations for greening cities and regions

This article presents some of the recent activities of the International Society of City and Regional Planners (ISOCARP) aimed at creating and sharing knowledge on the greening of cities and regions, and making the urban environment livable and sustainable. The presentation includes a summary of the key issues ISOCARP has been addressing, including assessment of potentials that cit-

ies and regions may have for shifting toward green solutions, and presents a series of good examples with international applicability.

**Keywords:** ISOCARP, green development, cities, urban planning, international collaboration

### 1 ISOCARP and its role in the urbanizing world

The International Society of City and Regional Planners (ISOCARP) is a global association of experienced professional planners. It was founded in 1965 in a bid to bring together recognized and highly-qualified planners in an international network. The ISOCARP network gathers individual and institutional members from more than eighty countries worldwide. As a nongovernmental organization, ISOCARP is recognized by the UN, UN-HABITAT, and Council of Europe. The society also has a formal consultative status with UNESCO.

Even though ISOCARP members work in many different fields, they share a common interest in spatial and environmental dimensions of urbanization. They advise key decision-makers, proposing and supporting projects for intervention in a spatial context through general or specific actions.

The objectives of ISOCARP include improving planning practice through the creation of a global and active network of practitioners. ISOCARP encourages the exchange of professional knowledge between planners, promotes the planning profession in all its forms, stimulates and improves planning research, training, and education, and enhances public awareness and understanding of major planning issues at a global level. These objectives are being implemented through the ISOCARP annual world congresses, the YPP Program designed for young professionals, the Urban Planning Advisory Team (UPAT), and others. All ISOCARP activities are covered in publications such as the *ISOCARP Review*, the *International*

*Manual of Planning Practice* (IMPP), congress proceedings, and special project reports. ISOCARP recognizes excellence through the society's award program.

### 2 ISOCARP world and focus on cities

The urban world is in the focus of every ISOCARP activity. Although the complex nature of urban development and the inherent relationship between cities and regions are recognized as the point of departure in every urban endeavor, focusing on cities is a rational choice justified by the very understanding of the urban world today and perspectives on urban expansion and growth globally.

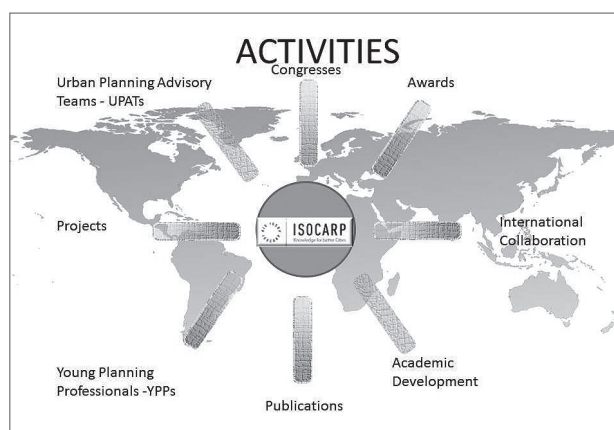


Figure 1: ISOCARP events (source: ISOCARP official presentation).

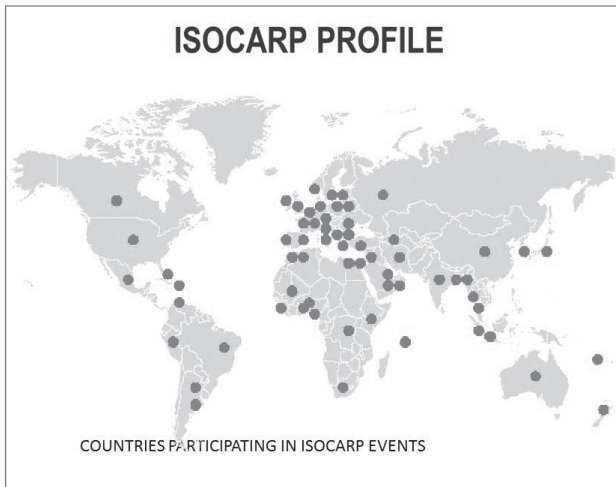


Figure 2: Countries participating in ISOCARP events.

In 1950 there were barely eighty cities with more than one million inhabitants, whereas in 2000 there were already 385, and by 2007 this number had risen to 468. This trend is continuing as the share of urban population steadily grows worldwide, and is expected to encompass 60% of the total world population.

Cities have always been in the focus of planners' attention. Today both professionals and the general public are giving urban issues even more attention than before. This is taking place globally and is not only a reflection of the striking figures on cities' growth and expansion, but also a reaction to the growing awareness of their role and complexity, as well as the understanding of responsibilities that planners, urban managers, and various stakeholders have in making the cities livable and sustainable.

ISOCARP is at the forefront of creating and sharing knowledge about cities and for cities. Numerous congresses, seminars, UPATs, YPPs, and other projects have been carried out with the decisive goal of making knowledge available to all, be they public administrators, fellow colleagues, students, professionals in other fields, or the general public.

### 3 The greening of cities and regions

The issues of greening cities and regions have been explored in several different formats: as a general congress theme, a subject integrated into UPAT or YPP projects, and a thematic framework for ISOCARP publications. In each one, a set of questions was explored in a coherent and systematic way. Thus, at the forty-fifth ISOCARP world congress (2009), the focus was on energy-efficient programs and development of low-carbon cities, followed by in-depth exploration of sustainability in less-developed countries in 2010. At the forty-eighty congress in 2012, urban livability was explored within the context of the

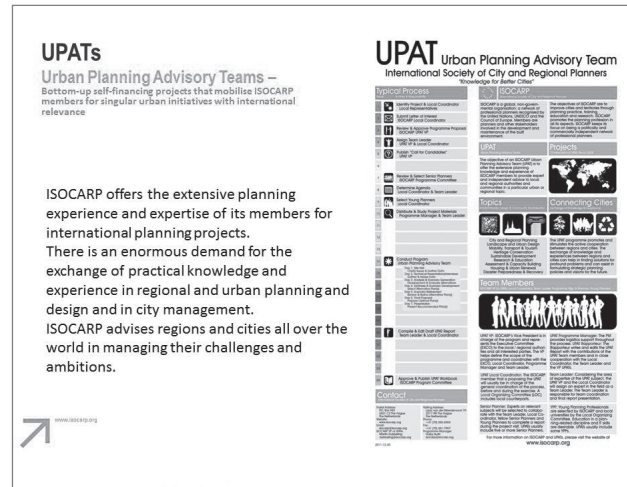


Figure 3: ISOCARP program on solving urban problems: Urban Planning Advisory Teams.

fast-forward approach to spatial development, and the forty-ninth (2014) is focusing on the relationship between land and water, beyond the limits of conventional land use and development planning, by introducing climate change issues as the key determinants of urban growth in coastal regions.

The issues explored revolve around the following themes:

- Low-carbon societies;
- Developing and implementing low-carbon cities/environments;
- Building sustainable urban green networks;
- Developing transportation systems with eco-sensitive and carbon-responsible mobility and accessibility;
- Making regions and urban hinterlands low-carbon and livable;
- Delivering smarter growth;
- Energy planning at the community level;
- Small-scale energy development, renewable energy sources, and decentralizing power production;
- Planning and design for low-carbon development in sensitive areas and landscapes;
- Administrative and legal aspects of making places green.

Cities and regions approach these issues in different ways and employ a range of instruments in their search for green and sustainable solutions. Policies, planning responses, regulations, or administrative frameworks differ as they are tailored to meet national or local needs, perceptions, or objectives. Nonetheless, there are general messages that can be turned into pragmatic solutions and be implemented regardless of geography, landscape, or level of development, such as:

- The roadmap to low-carbon cities depends not only on environmental and energy policies but also on responsiveness of spatial and urban development policies and spatial and urban planning;
- Building low-carbon urban environments depends not only on energy performance of the new and the existing building stock, but also, and to a significant extent, on

- energy performance of urban services and infrastructure;
- There is a need to establish a productive relationship between low-carbon development, mobility, accessibility, affordability, and social justice as a basic precondition toward green solutions;
- There are many cities and towns in emerging and transitional economies that can hardly cope with carbon pressure in the same way more developed countries do. Their strategies, policies, and plans should be tailored to their capacities but also reflect the key objectives of creating an affordable and sustainable world together;
- Cities should explore their green options and set up their own standards on limiting emissions, such as introducing a carbon tax or starting a carbon market;
- Cities should develop a carbon-responsive framework for their spatial and urban development, specifically focusing on transportation and industrial development;
- Green solutions should be accompanied by green standards and green monitoring systems;
- There is an array of proactive measures available for local planning, tailored to meet local resources, needs, and circumstances.

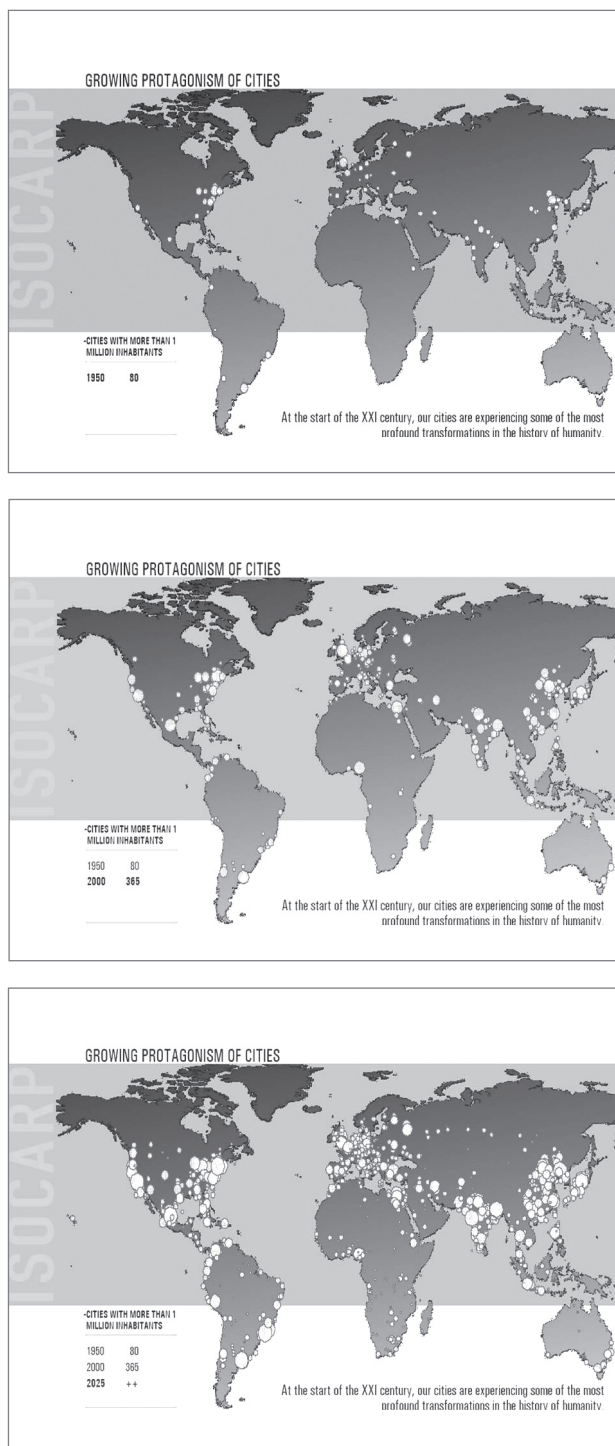
#### 4 Case studies

ISOCARP activities have gathered professionals from various disciplines worldwide. Their experience and the case studies they have been working on or presenting at conferences provide state-of-the-art evidence in the profession around the world. There are many excellent examples of national strategies and action plans, and also of cities and local communities beginning to take action by changing their policies, development plans, or local regulation. Encouragingly, increasingly often initiatives are launched bottom-up by citizens and their local partners. These initiatives indicate rising public awareness of green issues, and they also reveal what people can do for themselves and their communities.

##### 4.1 Example 1: Cultural heritage and energy production can work together

Energy production is usually considered a major threat to cultural heritage, and there are many examples where cultural heritage has been sacrificed to energy production and distribution. However, there are also successful examples illustrating that the two can remain side by side and that energy production does not necessarily result in heritage deprivation or destruction.

This good-practice example was first published in Sretović, Brković, and Cvetinović (2011). It comes from Serbia and is among the most extreme, both in terms of the location and



**Figure 4:** Growing protagonism of cities 1950–2000–2026 (source: Vegara, Alfonso: ISOCARP President 2003–2006 ISOCARP Strategy Development Presentation).

the key participants in its implementation. The location is the surroundings of the Studenica Monastery and the project is a small-scale hydroelectric plant, planned for construction on the small nearby Studenica River.

The monastery, built in the 12<sup>th</sup> century and famous for its fresco paintings, is part of the UNESCO world heritage and is also a reg-

istered national monument of the first rank by the National Act on Cultural Heritage. The estate is located in the Golija Biosphere reserve, which is the first national resort listed on the Man and the Biosphere (MAB) programme of UNESCO. As the monastery is located on the outskirts of the region with a limited access to the national energy network, the idea to look for alternatives was born as early as the mid-60s of the last century. It was at that time that the nearby Studenica river was recognized as a potential location for establishing a small scale energy production facility, aimed to provide energy supply for the Studenica monastery. The first attempts failed for different administrative reasons, while a renewed application was approved and the construction started in 2007. The plant is now in use and the monastery complex is entirely energy self-sufficient [sic]. (Bajić-Brković, 2013)

Naturally, because the location itself is very specific, many different factors were taken into account and various national and local institutions were involved throughout the process, including the National Planning Agency, National Agency for Cultural Heritage Protection, Natural Agency for Environmental Protection, Ministry of Culture, and so on. The Studenica hydroelectric plant was officially opened in 2011.

#### 4.2 Example 2: Delivering smarter growth

This good-practice example, taken from Human (2009), comes from Northstowe, a small town in the Cambridge area of the UK, and is part of the larger project on making Cambridge grow smart. Northstowe is to be a complete new town with approximately 10,000 homes created

as a sustainable and vibrant community embracing the projects that are exemplars in sustainability. Northstowe will include a town centre with shops, services and cultural facilities, and 20 ha of land for mixed employment uses. Features addressing energy and carbon agenda include: a) Housing built to the contemporary standard of the Code for Sustainable homes and pushing the boundaries of the proven technology available at the time of the development, b) Mixed development aimed at reducing the need to travel to other service and employment centres, c) Local centres easily accessible by walking 400–600 m, d) High quality dedicated and segregated walking and cycling routes, e) Encouragement of car pooling and car sharing, f) The Cambridgeshire Guided Busway bounds the site with a local loop through the town, g) High quality public transport stops within 400 m of all development, h) Subsidised public transport travel for early occupants of the town, i) Technical support for incorporating renewable energy sources, including photovoltaic energy, thermal, biomass and wind, and j) Planned development of infrastructure such as heat grids and private wire electrical networks needed to provide energy independently of the National Grid [sic]. (Human 2009: 122).



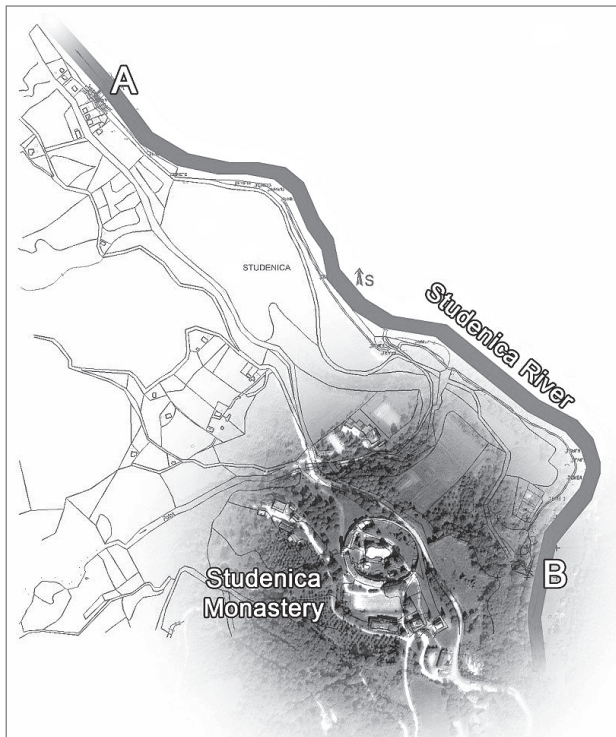
Figure 5: The Studenica Monastery and the Studenica hydroelectric plant near the monastery.

#### 4.3 Example 3: Mobility in action

This example was first published in Navarro (2011) and comes from the Metropolitan Area of Mexico City (MAMC). The MAMC, known worldwide for its transportation challenges and difficulties regarding mobility and accessibility, made a decision to introduce cycling as a complement part of the transportation metropolitan system. A new rent-a-bike system (ECOBICI) was first introduced and tested in part of the capital. The system was simple and affordable: for a small membership fee of only US\$22, a bike could be taken from one of the many stations in the area and left at a station near the desired destination. The government has spent almost \$6.5 million on this system, which started with eighty-five stations and over 1,100 vehicles. The road infrastructure had to be changed accordingly and adapted to the new system. In a very short period of time, more than 24,000 subscribers joined the system and this number is continually increasing. Due to the high demand and success of the program, two additional phases are planned: one expanding the network with 110 additional stations and an expected 30,000 new users, and the other with seventy-five stations and 20,000 users. The ECOBICI system is integrated into the metropolitan transportation system and is directly connected to the Metrobús bus system and Metro subway system.

#### 4.4 Example 4: Harvesting ICT for greening places

The city of Pančevo has embarked on a unique project, the first of its kind in Serbia. This example was first published in Brković and Sretović (2012). The EcoBus project is a result of cooperation between Telekom Srbija, Ericsson, and the city of



**Figure 6:** Location map, source: Based on photographs taken from Google Earth and the Jaroslav Černi Institute for the Development of Water Resources (JCI), 2006; MHE Studenica main reconstruction project, Belgrade.

Pančevo, and is funded by the EU under its Future Internet Research and Experimentation (FIRE) program.

The technology is simple and user friendly. EcoBus uses instruments mounted onto the existing public transportation vehicles in order to monitor a set of environmental parameters over a broad city area. Sixty public transportation vehicles are equipped with these devices, detecting and measuring six parameters: temperature, relative humidity, carbon monoxide, carbon dioxide, nitrogen dioxide, as well as a vehicle location. Constant readings of these parameters are performed whenever the vehicle is in motion and, in this way, data are collected from various locations. These data are then delivered to the central server via the wireless network for further analysis and database storage. The real-time information about the air quality, atmospheric measurements data and location of the vehicles is freely available on the interactive map, accessible to virtually anyone with an internet connection or mobile phone [sic]. (Brković & Sretović 2012)

## 5 Concluding remarks: The way forward

It has already been recognized that the greening of places involves the built environment, services and urban activities, and transportation as the key factors for making the shift. Pro-

fessional knowledge and a large number of good case studies are already available for sharing and learning from each other. Nonetheless, change is taking place slowly. There are many examples in which local initiatives have failed, or the national policies have proven to be too inefficient.

The ISOCARP experience combines many positive and successful examples that have not failed due to an approach built on partnership and involvement of multiple stakeholders. A comprehensive and integrated approach promises a win-win situation and also emphasizes the importance of building local governance and management capacities, raising public awareness, and making local and national agencies and stakeholders part of the initiatives.

The urban and spatial planning profession has much to contribute to these efforts. As one of the focal points and a place where all those participating in “making places” gather together, ISOCARP will contribute its share by continuing its mission in knowledge creation and sharing, as well as in making cities and other places better for all.

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## Notes

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