LOW CARBON CITIES: 45th ISOCARP CONGRESS, PORTO, PORTUGAL, 18-22 October 2009 Workshop 3

Antonia Cornaro, Chair Jeremy Dawkins, Rapporteur

[This document contains the 15 graphic slides used to illustrate the Rapporteur's final report to the Congress, and *five additional textual slides* with the content of the information and ideas presented in the Rapporteur's report.]

Summary of outcomes

Twenty-one papers were presented to the workshop, by authors from fifteen countries. The papers were essentially concerned with **strategies** in response to the climate crisis facing the planet. The papers were organised into the five sessions listed in the introductory report, which can be summarised as follows.

- Urban strategies in five cities (Lisbon, Brasilia, Port of Spain, Vienna, Naples)
- Transport strategies
- · Visions for low energy communities
- Interventions and innovations
- · Researching and modelling urban energy

Authors made compelling, interesting and well-timed presentations, allowing about 20 to 25 minutes at each session for discussion, which was lively and engaging. Workshop participants were invited to debate the 'inspiring ideas/questions' listed in the introductory report, as well as issues raised by the papers and the participants.

- How can planners best facilitate (or force?) more energy-efficient mobility, infrastructure and buildings?
- Is there agreement that, in the transition to low-carbon cities, there will continue to be high levels of mobility and abundant (renewable) energy?
- Is there agreement on the contribution to low carbon cities of higher residential densities, better accessibility, non-vehicular and public transport, zero carbon vehicles and new forms of energy infrastructure such as combined heat and power and microgeneration?
- Is the low carbon city of the later 21st century shaped by easily accessible people centred developments where all short trips can agreeably be done on foot or bicycle?
- Do we have time for many small steps towards sustainability, or can we identify interventions in cities, which can be shown to result in fast, direct and significant reductions in CO2?
- Can best practice be applied between different cities, countries and continents, or will each region find its own unique path to low carbon cities?

The five sessions and four of these challenging questions are summarised on the first two slides.



Strategies

1Five cities
2Movement
3Energy
4Innovation
5Modelling



Questions

- •How much mobility?
- •Agreement?
- •Enough time?
- •People centred?

In relation to that third question – 'Do we have time for many small steps towards sustainability, or can we identify interventions in cities which can be shown to result in fast, direct and significant reductions in CO_2 ?' – there is the example of Brasilia.

In a paper about this automobile-age city the authors wittily described Brasilia as 'a natural born high carbon city'. Of course, it is not just Brasilia. The problems seem almost as intractable and they are worldwide: the inertia of high-carbon cities embedded in all that concrete in the ground, all those cars, the inflexible land use patterns that separate home from work, and entrenched high-consumption lifestyles.

These were some of the challenges lying behind the papers presented at our workshop. The Chair, Antonia Conaro, and I warmly thank the authors for presenting their case studies, findings and ideas for consideration at the Congress, and the participants for being an attentive audience and for engaging in lively debates.

We thank the Local Organising Committee, the technicians and the students for ensuring that it all ran so smoothly, and the great team from ISOCARP head office for such excellent preparations and arrangements. And on their behalf I express the appreciation of the authors and participants for the leadership of Chris Gossop and the great conduct of the workshop by Antonia, and of course my own thanks – I think we made a good team.

These remarks were illustrated by the next two slides.

Brasilia: A natural born high carbon city



Let me answer the question as to whether many small steps towards sustainability will deliver the fast, direct and significant reductions in urban CO₂ production that are essential.

My answer is: only if heads of government, meeting in Copenhagen, take united, global action through many measures and actions, including bringing atmospheric greenhouse gas production directly into the economy, by fixing a price for carbon.

This truth was captured well in a presentation on the vision of a 2000 watt society, now widely-known in Switzerland. The achievement of a society in which each person consumes only 2000 watts - a society of low carbon cities – will require 'a broad range of solutions in the areas of *politics* and the *economy*, as well as in *society* and *scientific research*.'

Without success in Copenhagen, planners cannot reconstruct the economic and behavioural fundamentals of urban transport, cannot prescribe technologies, cannot substitute fossil fuels for renewable energy. On the other hand, strong global measures including a price on carbon will change everything: it will change travel demand, underwrite new fuels and technologies, directly influence choices about where to live and where to work, directly influence decisions about whether and what to build, and of course change awareness.

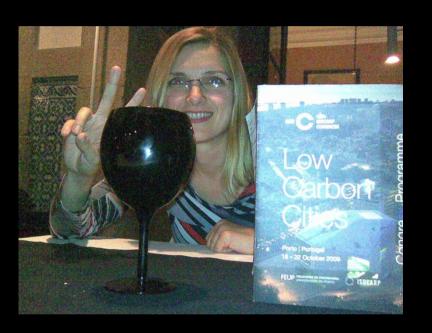
This in turn will change planning. It will determine the roles of planners in response to the climate crisis. In essence our role is this: to ensure that global action, which influences choices about travel, location and technology, has maximum effect in cities and regions. Planners need to be ready for a shift in the rules of the game, and to make the most of it.

Planners from around the world meeting in Porto – particularly the planners, researchers and educators of the future – demonstrated that they have the commitment, values and tools to do just this. Porto has been a great place for sharing our case studies and ideas, and I know that we have all enjoyed all aspects of this city and region.

These remarks were illustrated by the next three slides.

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I now briefly summarise **the clear outcomes of Workshop 3**. Of the many lessons learned and ideas shared, I think that most of the participants might agree that a number of conclusions came out strongly. Indeed, we used the time towards the end of the fourth session to discuss just such conclusions. They can be indicated under five headings.

Confirm

The workshop **confirmed** that the path we have been on for the past decade or two has been broadly correct.

The strategies and tools that planners have developed for compact and people-centred cities – mixed land uses, higher densities, high quality public transport and pedestrian spaces, conditions favouring walking and cycling – should be applied with confidence and urgency.

At the same time, there is no one template for such strategies. Cities will respond to their own circumstances, to culture, tradition, constraints and opportunities, in their own ways.

As one paper clearly showed, the structure of cities should now respond also to the local availability of renewable energy resources such as solar radiation and geothermal assets, which may significantly modify goals concerning compact structures. Similarly, as other papers showed, opportunities for urban vegetation and agriculture, ground cover and phytoremediation could modify otherwise familiar approaches.

Quantify

The workshop learned of many initiatives to **quantify**, through measurement and modelling, flows of energy and materials in cities.

Empirical investigations into how energy and resources are supplied and consumed in cities are essential if policies for low carbon cities are to be effective. In the absence of real and relevant data, policies to drive changes in land use and transport will often fail and, worse, be counterproductive and lead to unintended consequences.

The workshop agreed that the most pressing area for such research was into **behaviour**, and welcomed reports of such work. Planners need to better understand perceptions, priorities and motivations, and how people will respond to diverse policy and planning initiatives, if policies are to be effective, quickly.

Leverage

The importance of understanding and influencing **behaviour** means that we need to **leverage** social change from all planning initiatives.

The direct outcomes of strategies, plans, policies and other measures, however important in themselves, may be secondary to the power of such initiatives to change perceptions, raise consciousness, influence behaviour and/or increase understanding of the drivers of behaviour. Planners need to make the most of all of these opportunities.

Imagine

The workshop demonstrated that the greatest current weakness in planning is that we do not yet **imagine** what it will be like to live in low carbon cities and regions when global development is equitable and sustainable.

We have not developed **low-carbon visions** that can capture the imagination of politicians, economic policy makers and the public. The vision of the 2000 watt society, presented to the workshop, served to demonstrate a more general absence of big ideas for a future of rapid mitigation and urgent adaptation. For all of us as planners, this is probably one of the most pressing challenges.

Continue – urgently

In sum, the Congress allowed planners from around the world to hear about planning responses to the climate crisis and to share ideas about action. It was notable for the stimulating interactions between the urbanist elders, with their experience and wisdom, and the planners and researchers of the future, with their ideas and commendable impatience.

We look forward to the next Congress, in Nairobi. And we propose that if we gather again in two or three years to consider 'Low Carbon Cities', we will find that we are not just at the start of this crucial journey, but well along the path towards fundamental changes in research, planning practice, and behavioural change in cities and regions.

These remarks were illustrated by the next five slides.

CONFIRM

CONFIRMQUANTIFY

- CONFIRM
- QUANTIFY
- LEVERAGE

- CONFIRM
- QUANTIFY
- LEVERAGE
- IMAGINE

- CONFIRM
- QUANTIFY
- LEVERAGE
- IMAGINE
- · CONTINUE, URGENTLY

