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URBAN DEVELOPMENT AND PLANNING IN THE AGE OF MEGACITIES
AN OVERVIEW OF GLOBAL TRENDS AND CURRENT PRACTICES

MOSCOW URBAN FORUM 2016
AND
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2. INTRODUCTION

- Dec 2015 MUF and ISOCARP reached agreement: A series of case studies will be produced and then synthesised into a report
- Purpose: global overview of key issues, trends & practices in 'megacities'
- Megacities: mega-problems + mega-impact + mega-investment
- Urban Infrastructure = ‘project of the century’ (trillions of dollars…)
- Focus: mobility and mega-projects
- Mega-projects: public (infrastructure) and private (real estate)
- Moscow: Moscow-City IBC
Московский Международный Деловой Центр
TOD project in Shenzhen (2016, by Woods-Bagot, Australia)
Business as usual...

Will the future tolerate that? Or surprise us with....

Disruptive events!

In two areas:

- **Technology** (innovation - IT, CT, ET, TT, BT)
- **Ecology** (global environment)
<table>
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<tr>
<th>Electric cars racing around the world for 80 days</th>
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<td>An international electric car race around the world started on 16 June</td>
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<th>New world record set for thin-film solar cells</th>
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<td>The performance of thin-filmed solar cells has been further improved to 22.6 per cent</td>
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World’s first electric road opens in Sweden

Sweden just opened on the E16 in Sandviken a test electric road of two kilometres, which allows electric vehicles to connect to an overhead system similar to light rail.

The country is one of the first in the world to test electric power for heavy transports on public roads, and this initiative will help reach Sweden’s target of operating a fossil-free fleet.

Trucks will run on electric power while they are on the electric road – working in a similar way to a light rail system with a pantograph connecting the truck to the power lines overhead, and operate as hybrid vehicles while on regular roads.
ecology! (climate change)
ecology! (climate change)
We are 16 years now into the 21\textsuperscript{st} century, and there is still too much 20\textsuperscript{th} century thinking in our urban projects!
3. CASE STUDIES

- Paris
- Mumbai
- Hong Kong
- Wuhan
- New York
- Dubai
- London
- Johannesburg
- Gdansk/Gdynia
- Buenos Aires
- Auckland
4. METHODOLOGY

- Global sample (11 big cities)
- Case study
- Desk research
- Key informants
- Personal experience
5. FINDINGS

- GROWTH (demographic + economic + physical)
- MEGA-PROJECTS (site-specific + city-wide)
- MOBILITY & URBAN FORM (transport shapes cities!)
- INFRASTRUCTURE (more is better!)
GROWTH (demographic + economic + physical)

- Economic growth dominates the agenda. Environmental and social development agendas are declared as equally important, but in reality, most often are ignored, or given marginal importance.

MEGA-PROJECTS (site-specific + city-wide)

- They are more successful – both for the developer and the wider society – when they are integrated into, or coordinated with, an overall urban development strategy (such as polycentric development). Strategic master planning is crucial; context matters.

MOBLITY & URBAN FORM (transport shapes cities!)

- Polycentric development and compactness/density continue to be the city authorities’ preferred spatial pattern and urban fabric. But, urban sprawl actually dominates the reality.

INFRASTRUCTURE (more is better!)

- Whether it only supports private investment and props up economic growth, or improves the environment and quality of life, it always increases the city’s ecological footprint.
GOOD PRACTICE?
‘MATURE MEGACITIES’:

• prefer intensification and polycentric development, over expansion and monocentric development;

• prefer strategic over ad-hoc planning, and long-term vision over short-term gain;

• are seriously concerned about the environmental impacts of urban growth;

• are using the ‘smart city’ concept to achieve the ‘green?clean’ City
Is this relevant?
6. RECOMMENDATIONS

REGIONAL APPROACH

URBAN FORM

REGENERATION

SUSTAINABILITY

RESILIENCE
REGIONAL APPROACH

Megacities are not just ‘cities’ – they are also regions. They are ‘city-regions’. The full extent of their territorial influence is the only way to maximize benefits and minimize cost and impacts.

URBAN FORM

Compact urban fabric and polycentric structure are the key, and complementary, spatial concepts. They will never eliminate urban sprawl, but they do have the power to ameliorate its worst excesses (while letting the sprawl do well what it does well – lifestyle, self-sufficiency…). New configurations and technology of infrastructure are part of this urban transformation.

REGENEATION

Mobilizing poorly used land inside the existing city is the best way to reduce the demand for urban expansion. But these in-the-city opportunities are fraught with obstacles and require rigorous analysis and innovative solutions before qualifying for redevelopment.

SUSTAINABILITY

Climate change is a serious and present threat. Cities have a triple role in this global drama: they are the main cause; they will be the main victim, and the main potential solution. Megacities have a mega-metabolism – they must make a mega-effort to reduce their consumption.

RESILIENCE

Some climate change is inevitable. Thus mitigation is no more the only agenda - adaptation is necessary too. Cities must improve their resource efficiency, as well as their sufficiency. The concept of resilience may soon become more important than sustainability, with considerable consequence for the planning of urban form and planning and engineering of urban infrastructure.
7. CONCLUSION

The future of MEGACITIES will be determined by technological innovation and our ecological situation, not by sheer desire for more growth and ever bigger projects. The cities have been the engines of ecological destruction – now they have to become our engines of ecological restoration.

Only the MEGA-PROJECTS which use Smart Technology and Green Technology for the ecological restoration agenda will be successful in the long term. The future of the urban knowledge economy is in ‘greennovation – innovation for Urban Ecological Solutions.'