

# Integrative energy planning of urban areas: Collective learning for improved governance



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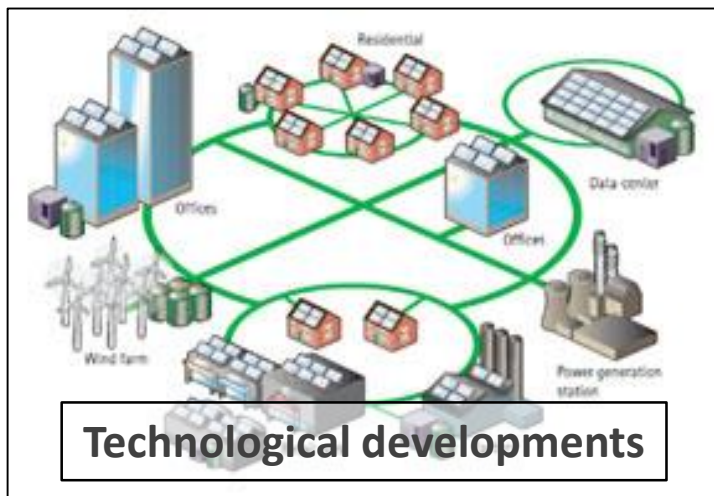
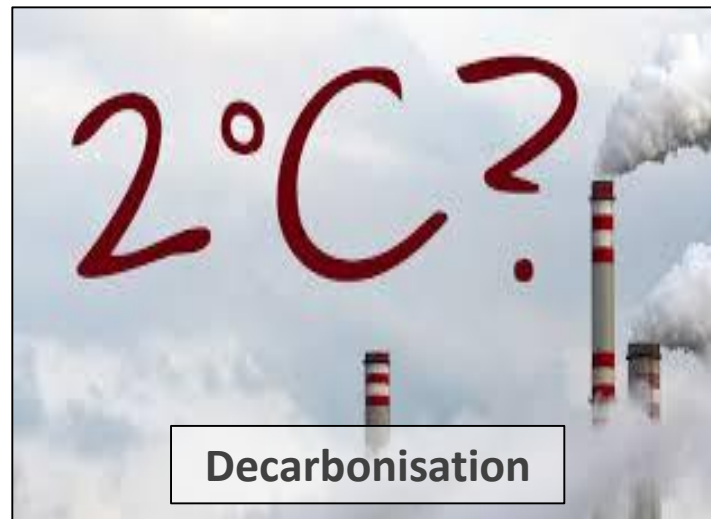
# Who are we ,URBAN LEARNERS'?

- 8 cities, mainly capitals
  - different departments
- partly with facilitating agencies
- 11 partners, 33 months, 1.8 mio €

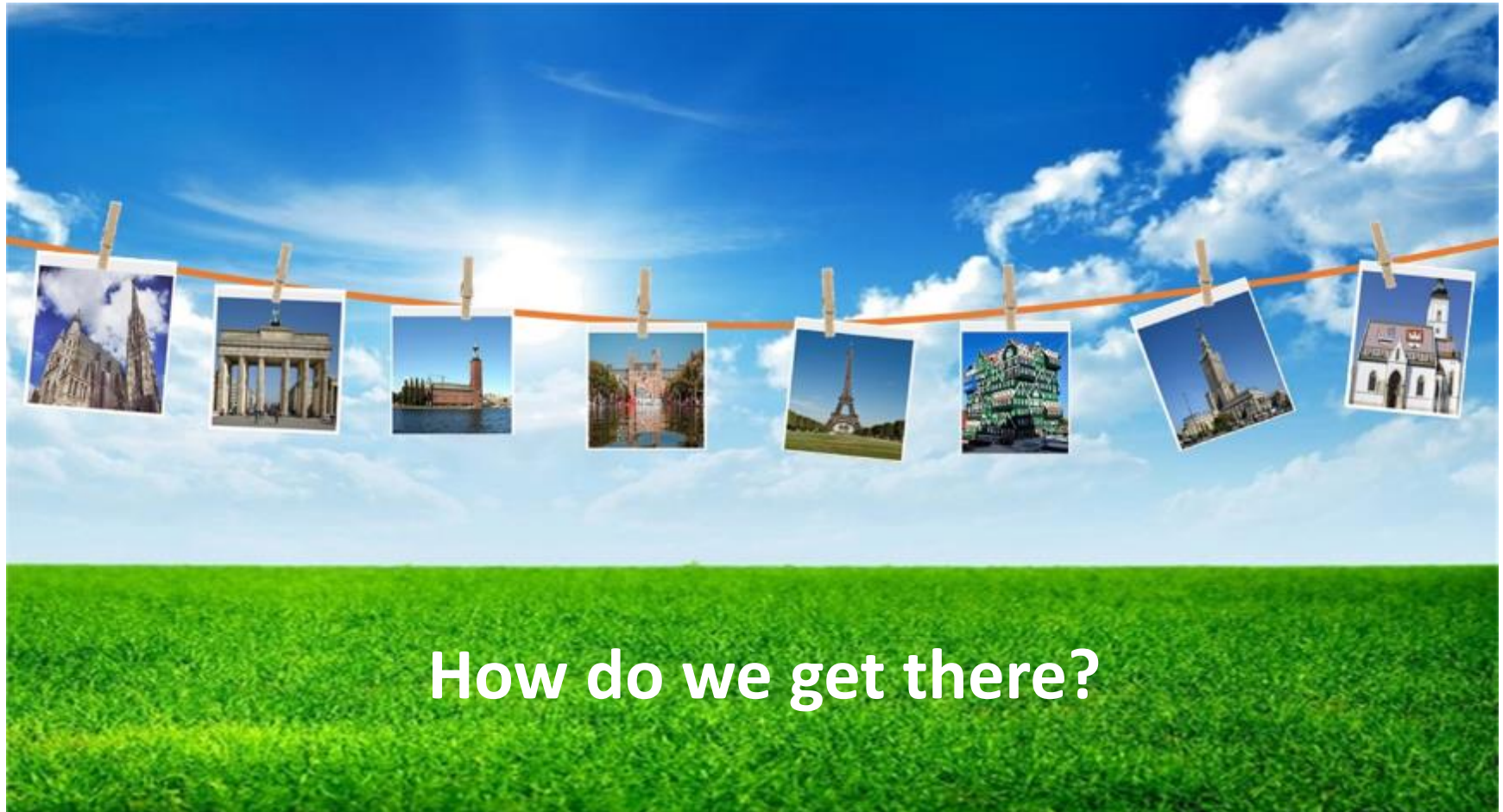




# Starting point



# Need for integration of energy and urban (spatial) planning



How do we get there?

# URBAN LEARNING: approach & elements

- A local working group for exchange and learning
  - between departments, with utilities & other stakeholders
- In-depth analysis of the current urban planning processes and related framework conditions („governance“)
  - + Instruments and tools in use
  - + Actors involved
  - + Low-carbon supply options available
- Proposals for upgrading the planning processes and frameworks to better include energy aspects
- Exchange between participating cities
- Share gained insights with other cities





# The local working groups



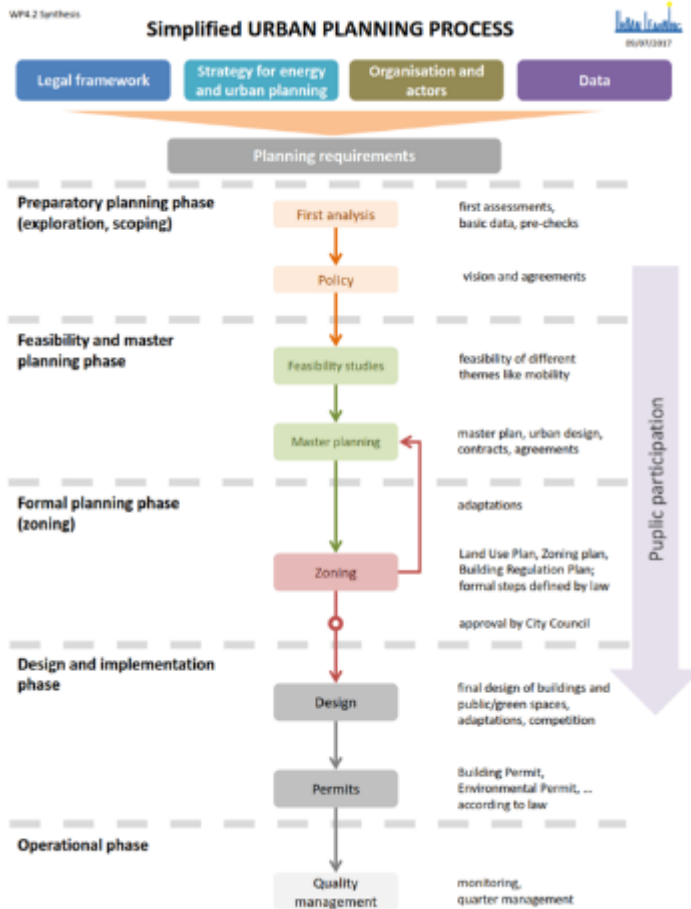
Local Working Group Vienna

on the picture: 5 Departments from 3 Administrative Groups

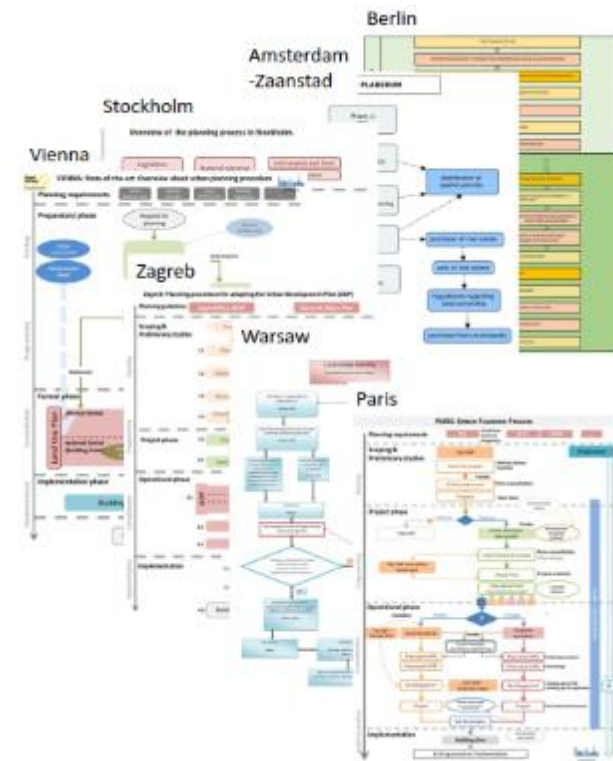


# Governance processes – steps of analysis

## Step 1: Analysis of current governance processes – focus on urban planning process

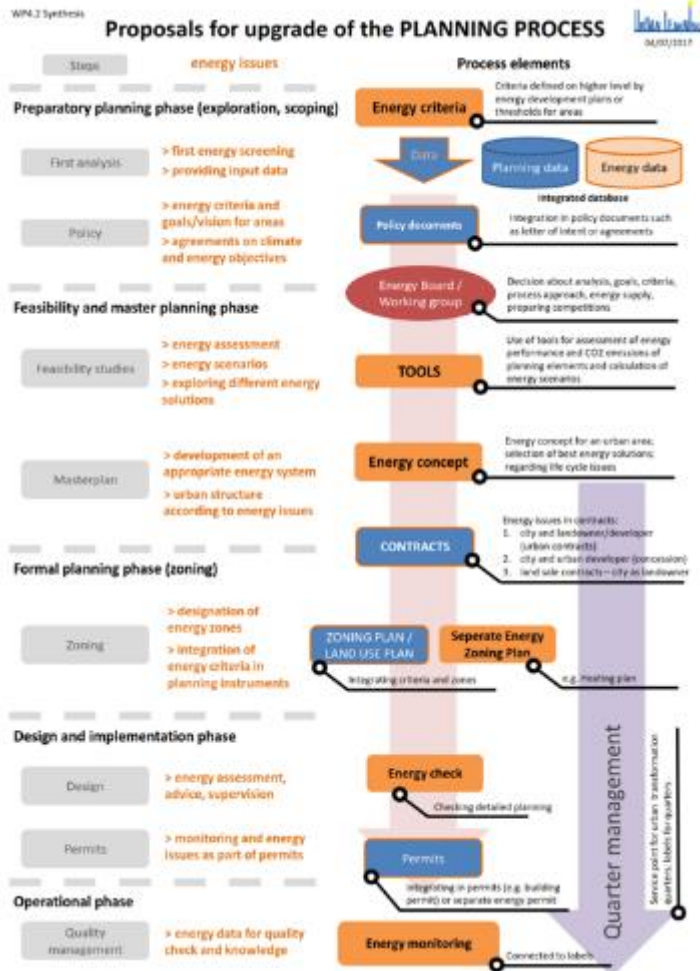


Each partner analysed their urban planning processes and related framework

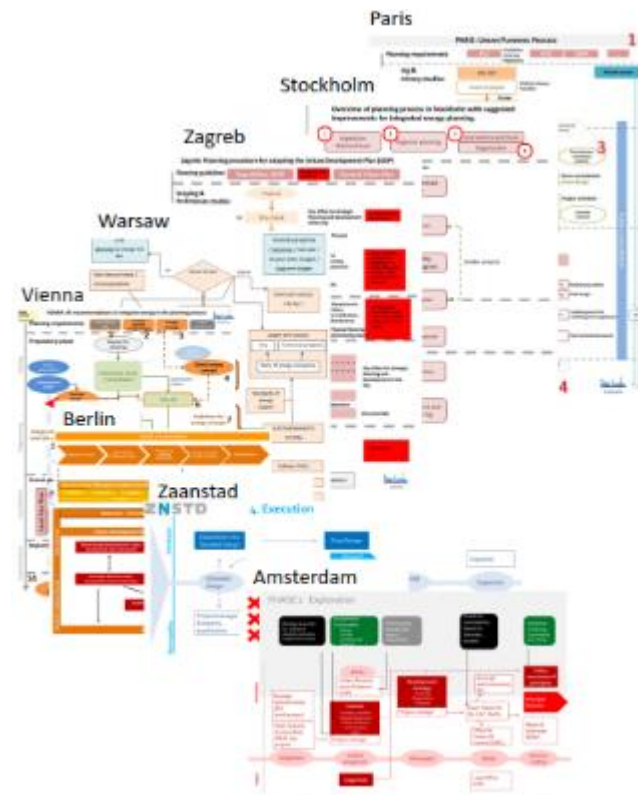


# Governance processes – steps of analysis

## Step 2: Approaches for integrating energy in governance processes



Each partner city developed an approach for integrating energy in urban planning

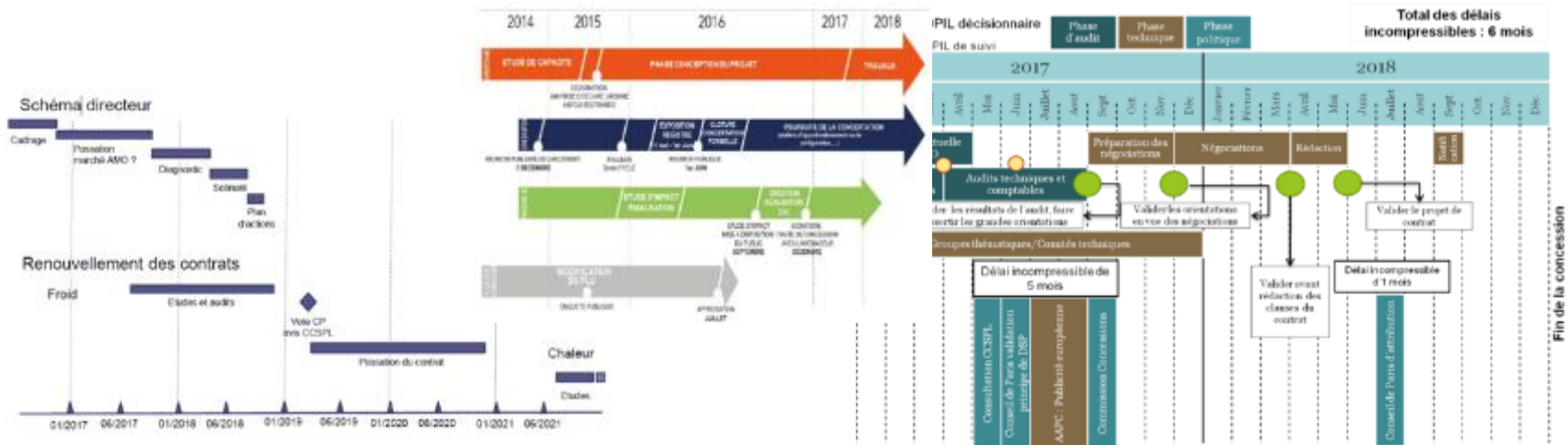
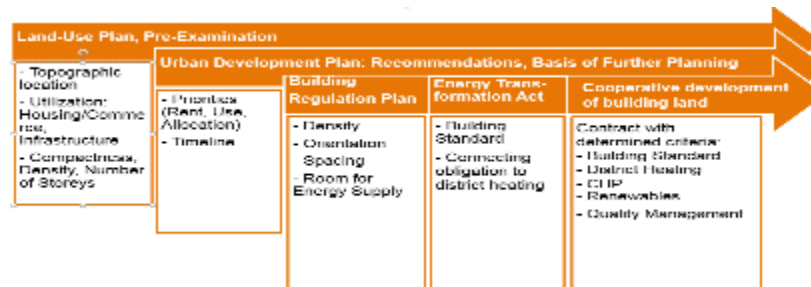




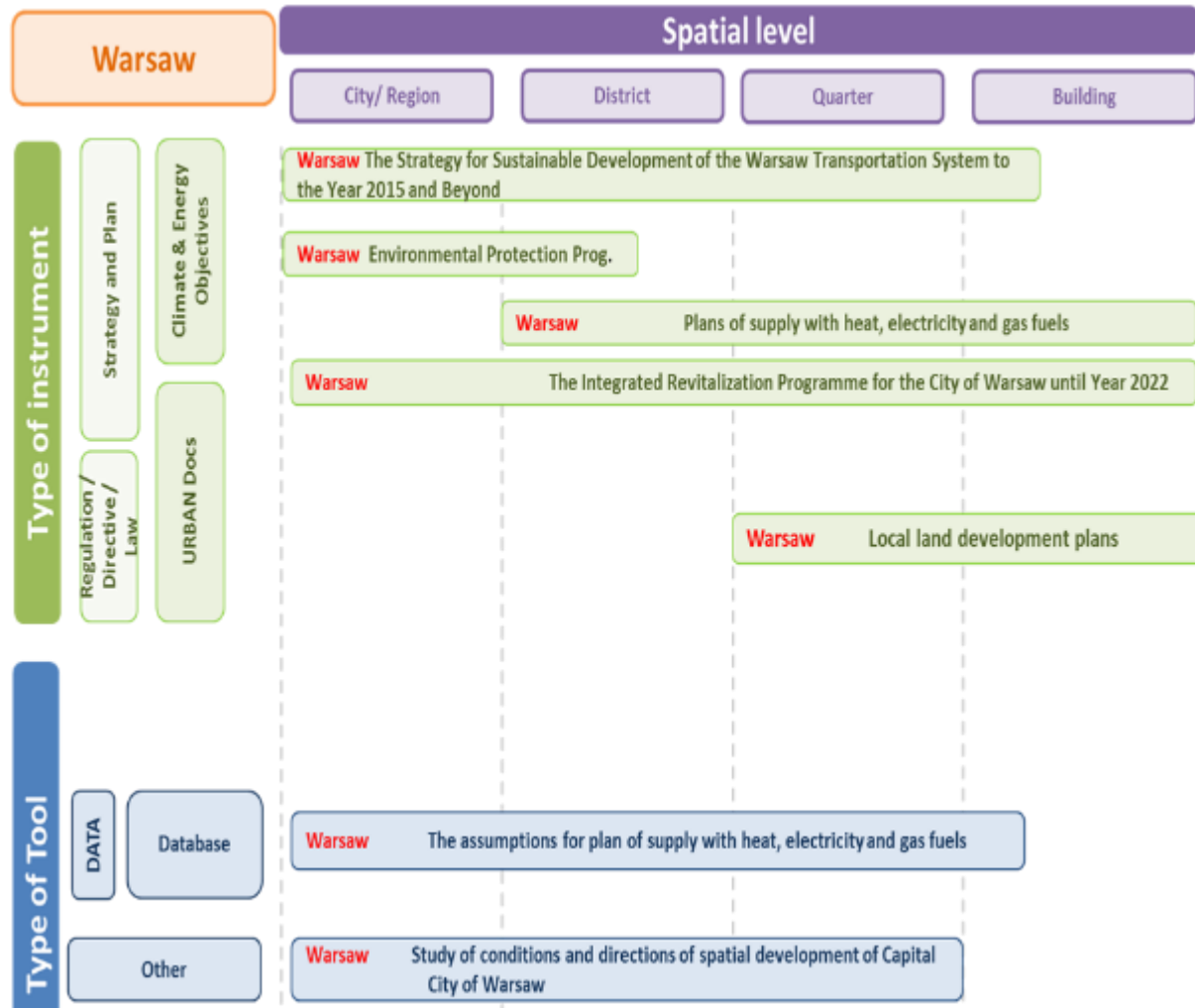
# Governance processes – steps of analysis

## Step 3: Developing implementation plans

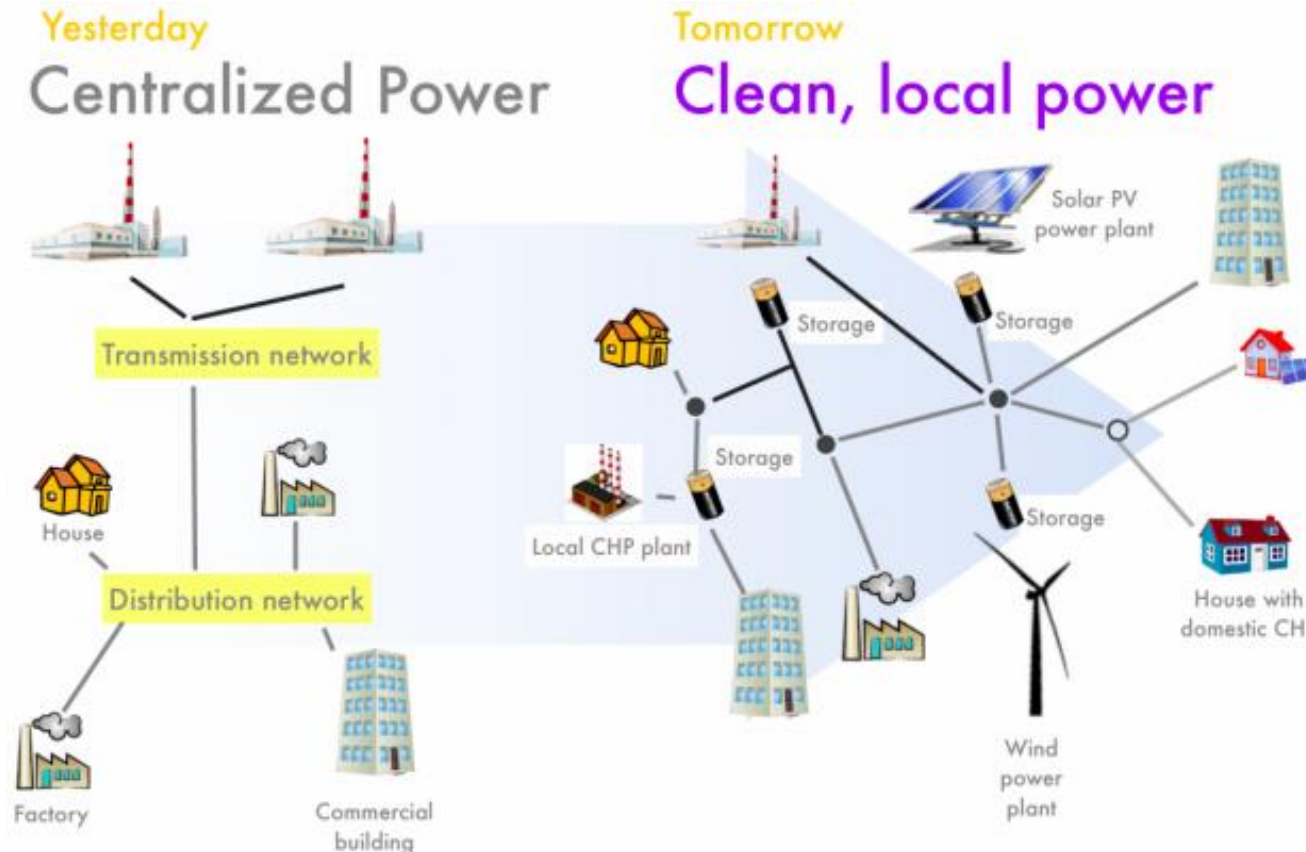
Each partner city suggested the next steps with a possible schedule



# Mapping instruments and tools



# New low-carbon supply options



**RES and waste  
heat on-site?**

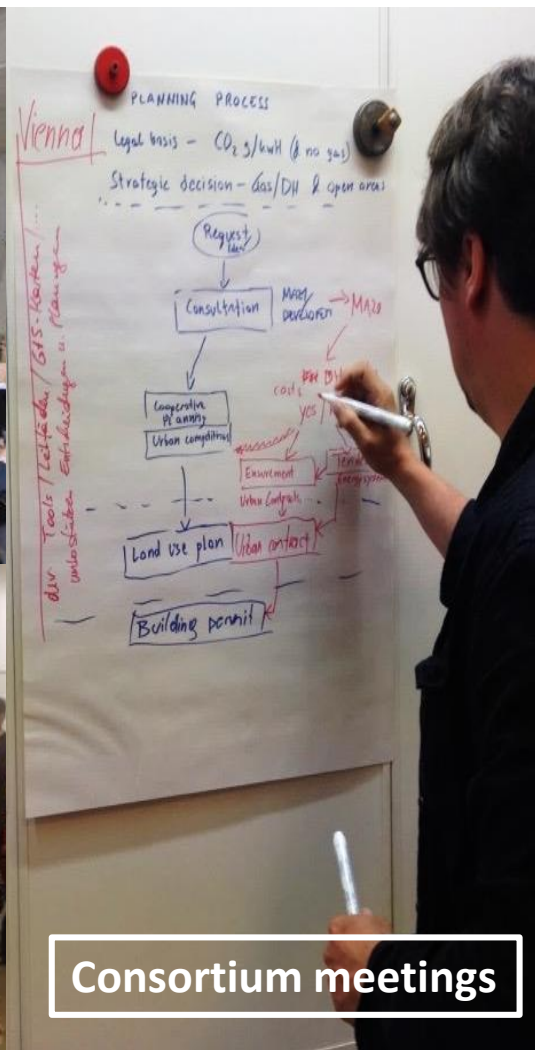
**Grid or  
No grid ?**

**↓  
Implications for  
urban planning  
?**

Picture from cleantechnica.com



# Learning from each other



Consortium meetings

# Learning from each other



Site visits  
&  
Study tours



# Key findings

1. Framework conditions count (immensely)
  - without a clear legal base for energy planning as such and as part of urban/spatial planning the integration of energy and urban planning does not work
  - a long-term decarbonisation strategy is big supporter
  - clear responsibilities + resources for energy planning are key
2. There is not single way of doing, still a tuned system is needed.
3. We need data for legal justification and for sound long-term (spatial) energy planning (GIS).
4. The early planning phase is crucial for energy (supply) planning of urban areas.
5. The quarter level lacks actors and instruments.
6. Qualities get lost throughout the planning process.
7. Monitoring is often not important but should be.



## Key findings

8. More awareness is required about need for public energy planning competences (in city administrations and beyond)
9. Good understanding of planning processes and its framework is crucial but not trivial
10. Energy as cross-sector topic needs interdepartmental collaboration within administrations
  - Local working groups as pioneers
11. Dialogue is key - between city and energy system operators, energy suppliers, developers and planners, ...
12. The “URBAN LEARNING approach” proved useful.

# Implementation started



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Discussing the findings of URBAN LEARNING with Vienna's Vice-Mayor Maria Vassilakou

# Amsterdam + Zaanstad (The Netherlands)





# Amsterdam – Zaanstad

## The Netherlands

### **Approach:**

- 4 projects (2x Amsterdam and 2x Zaanstad)
- Investigate possibilities for reducing and/or use sustainable energy in new urban areas (content – procedures – instruments)

### **Results:**

- Energy planning added in processes of urban planning and using private law
- Experience with content (decision Executive Board)
- Pilot Hembrugterrein: energy neutral and without natural gas in urban contract/tender.
- City without natural gas (Strategy, Citydeal, Greendeal)
- Havenstad: Zoningplan new style + extra energy ambition in building permits

# Highlights from Berlin

- **Focus**

- Develop strategies to promote energetic neighbourhood approaches in urban development

- **Achievements**

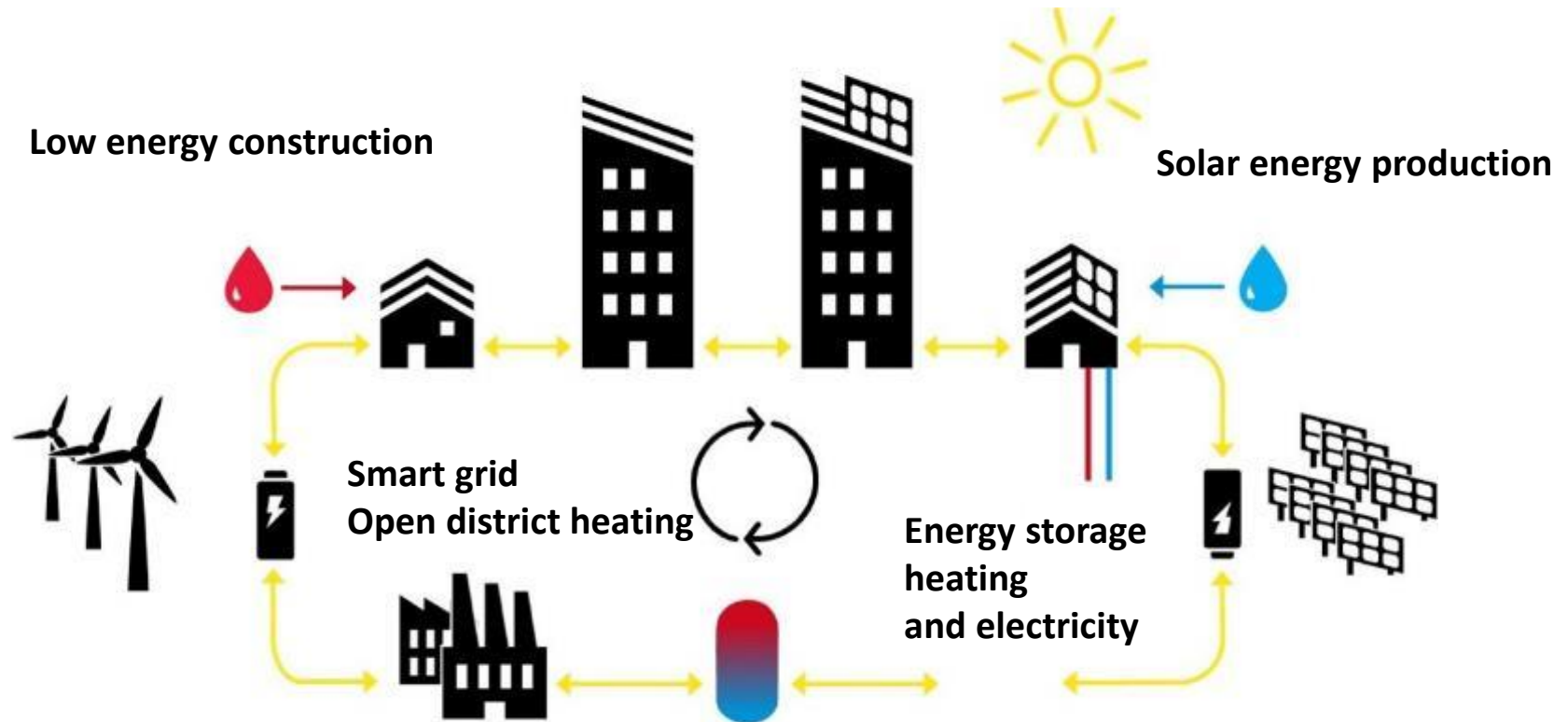
- Testing of a practice-oriented “Service Point for Energetic Neighbourhood Development”
- Support of integrative energy planning in one new development area with more than 3.000 planned apartments
- Defined ideas and approaches for the future based on exchange with partner cities

# Highlights from Paris

- Gave us time to discuss and exchange between city departments.
- Together we identified some key moments where we have to be more careful.
- UL has confirmed that we need more cooperation between city departments. To do so, we decided to create an energy committee with the members of the LWG as a basis.
- The analysis of tools and instruments has shown some lacks of efficiency on certain tools.
- Sharing experience between cities gave us the need to create a new tool and also confirms the need to create it with all stakeholders.
- Paris will now work hard to improve monitoring after implementation : energy facilitator CORDEES 5M€



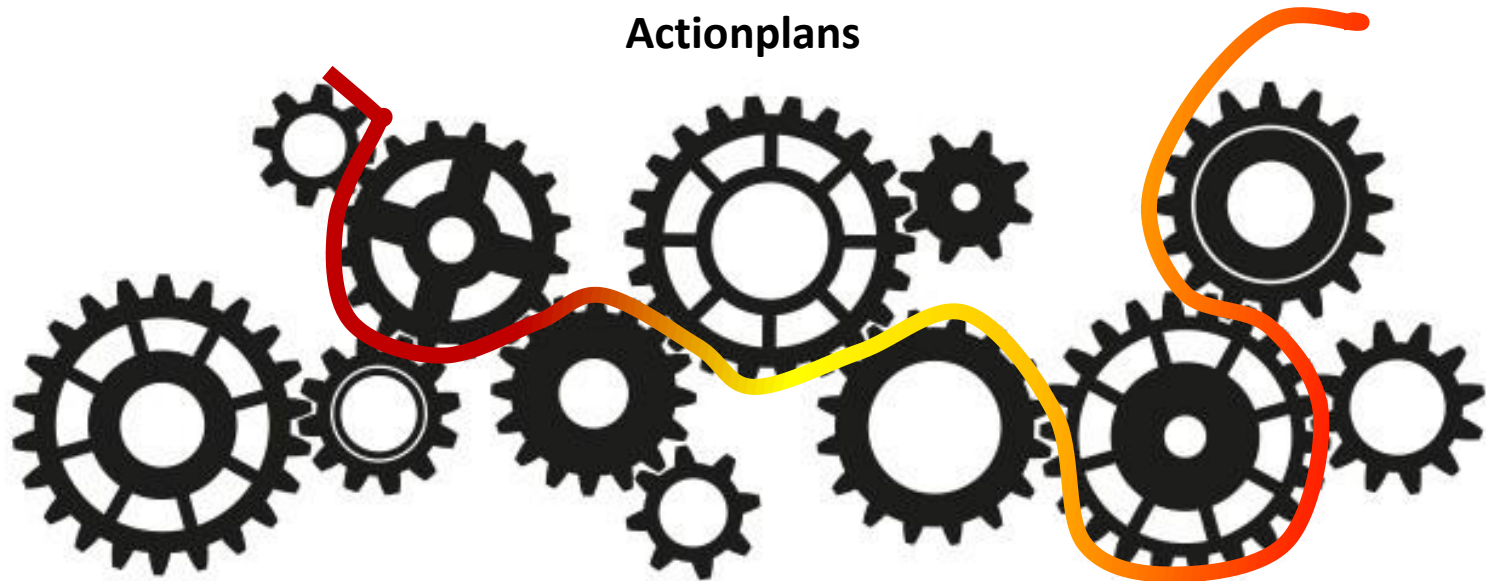




**Management by objectives**

**Monitoring**

**Actionplans**

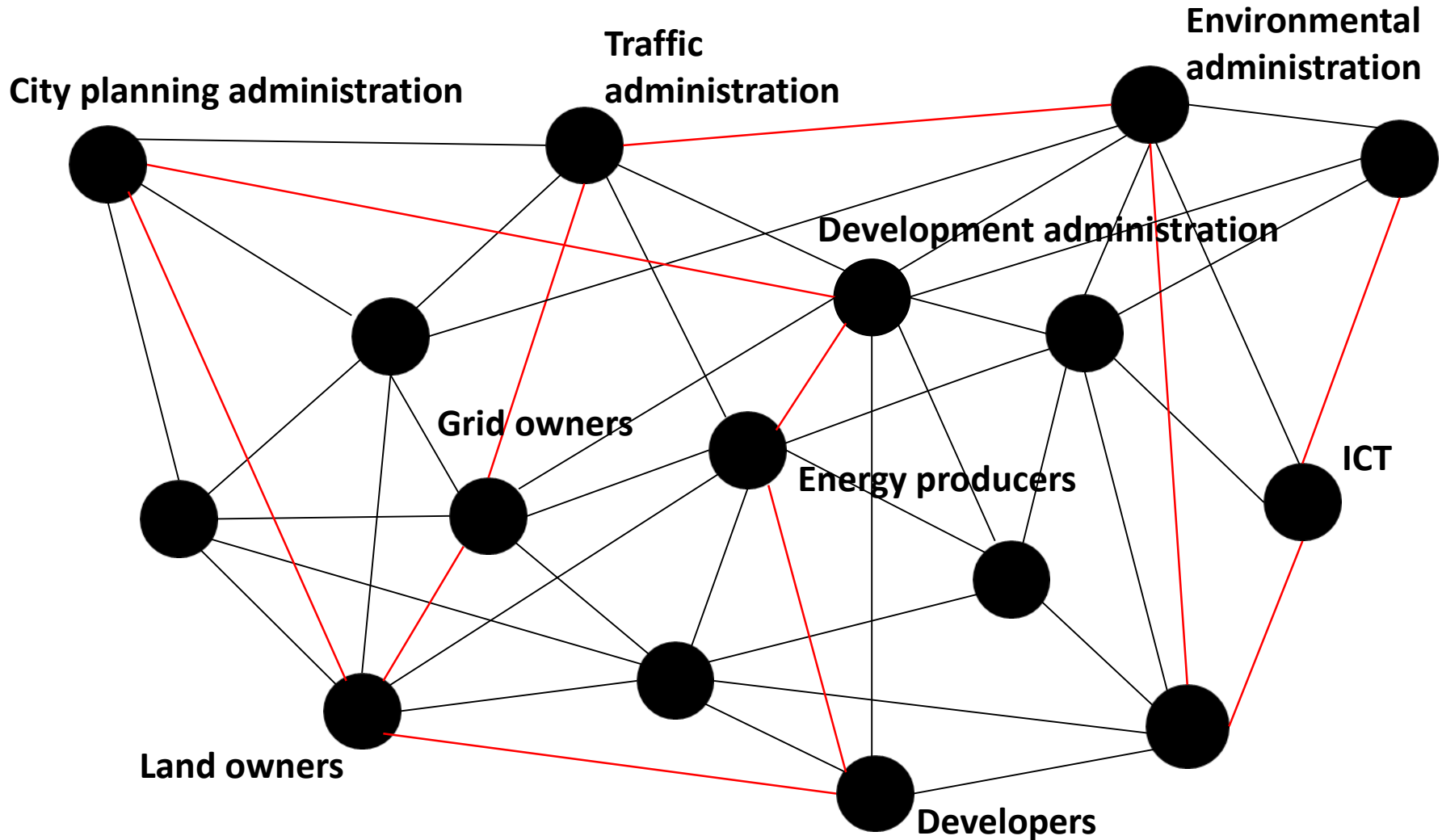


**Strategies**

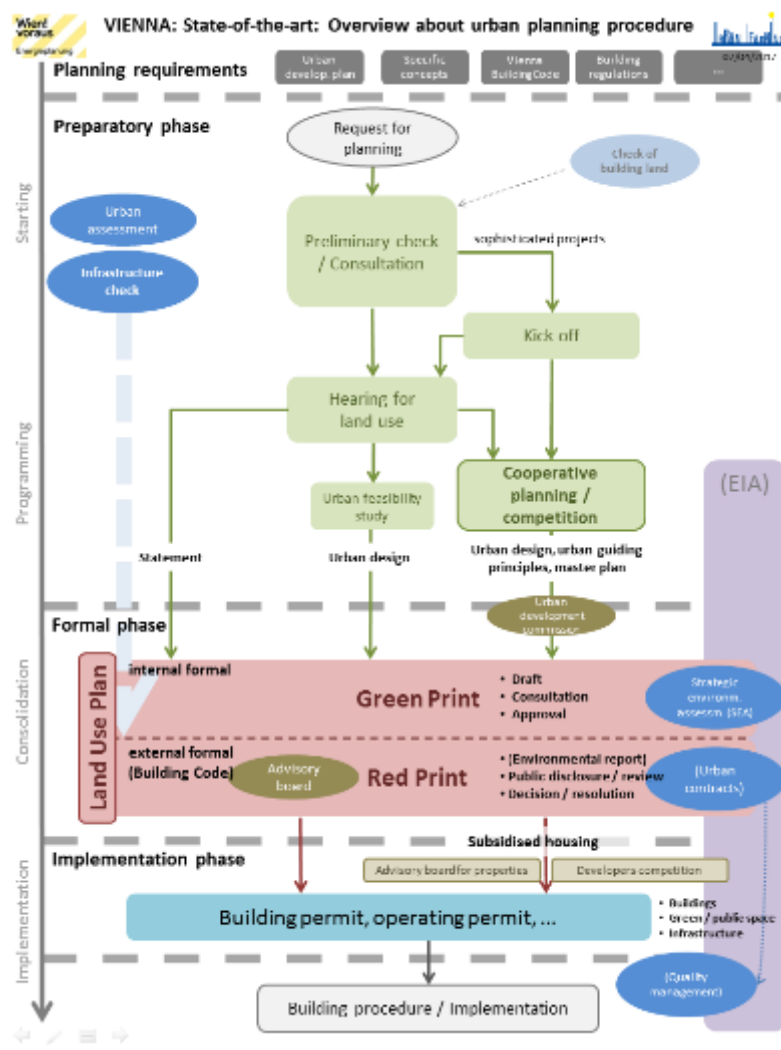
**Analysis**

**Requirements**





# Highlights from Vienna

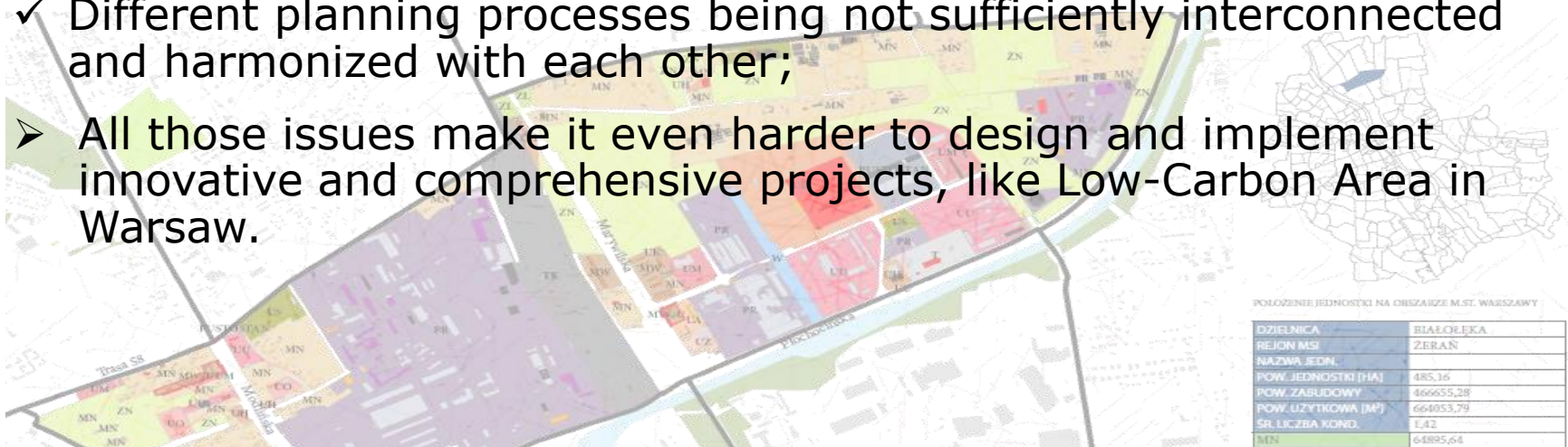


- Common picture of planning process
- New working group with members from city and Vienna's utility
- Input for Thematic Concept on Integrated Energy Planning

# Highlights from Warsaw

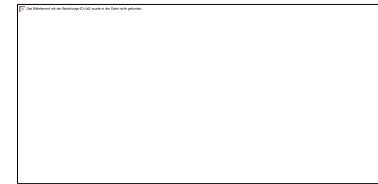
## General challenges

- ✓ Low level of climate/energy awareness among some participants of municipal planning processes;
- ✓ Great complexity and sometimes bureaucracy connected with planning and programming processes, which are very time-consuming as well;
- ✓ Very large number of actors involved, especially inside the city structure; but there are also multiple key stakeholders outside this structure;
- ✓ Different planning processes being not sufficiently interconnected and harmonized with each other;
- All those issues make it even harder to design and implement innovative and comprehensive projects, like Low-Carbon Area in Warsaw.



# Highlights from Warsaw

## Good practices



### E-map of Warsaw

E-map is an advanced electronic map system (currently being expanded) that works similarly to the Atlas of Amsterdam. This service contains many different maps of Warsaw. Each set consists of multiple layers with the ability to switch on and off individual layers.

Assisted by UL experience, we are/will be adding maps on conditions for solar renewable installations or on energy parameters/forecast for different areas.

### Energy contracts

The City plans to use some sorts of energy contracts (using examples from UL partners - Amsterdam, Vienna or Stockholm) within the project of Low-Carbon Area.

Probable location is Targówek Przemysłowy where the main source of heat will be available from the expanded waste incineration plant.





# Highlights from Zagreb

- Need of long term energy (overall strategy)-energy planning guidelines
- Need of establishing short term goals-transition period
- Need of establishing energy planning and monitoring body or department
- Need of legislation harmonisation on city and state level
- Binding goals in urban plan – result of energy and urban study



# Thank you!



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