ZNSTD ZAANSTAD

URBAN LEARNING

30-11-2017

City Facts

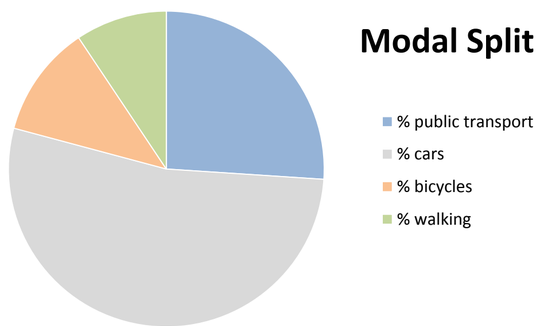
General data		
Size (km2)	-	**83,04**
% of green area	-	**0,74**
% of water (incl recreational)	-	**11,2**
Size (population)	2017	**154.442**
Density (Inh./km²)	-	**2079**
Density (houses/km2)	-	**913**
Annual population growth (%)	-	**1,01**
Purchasing Power (GDP/capita in EUR)	-	**-**

Final energy consumption 3.340 GWh

- 20 % renewables
- 9.395 kWh per capita

CO_2 emissions total 700.000 t CO_2 eq

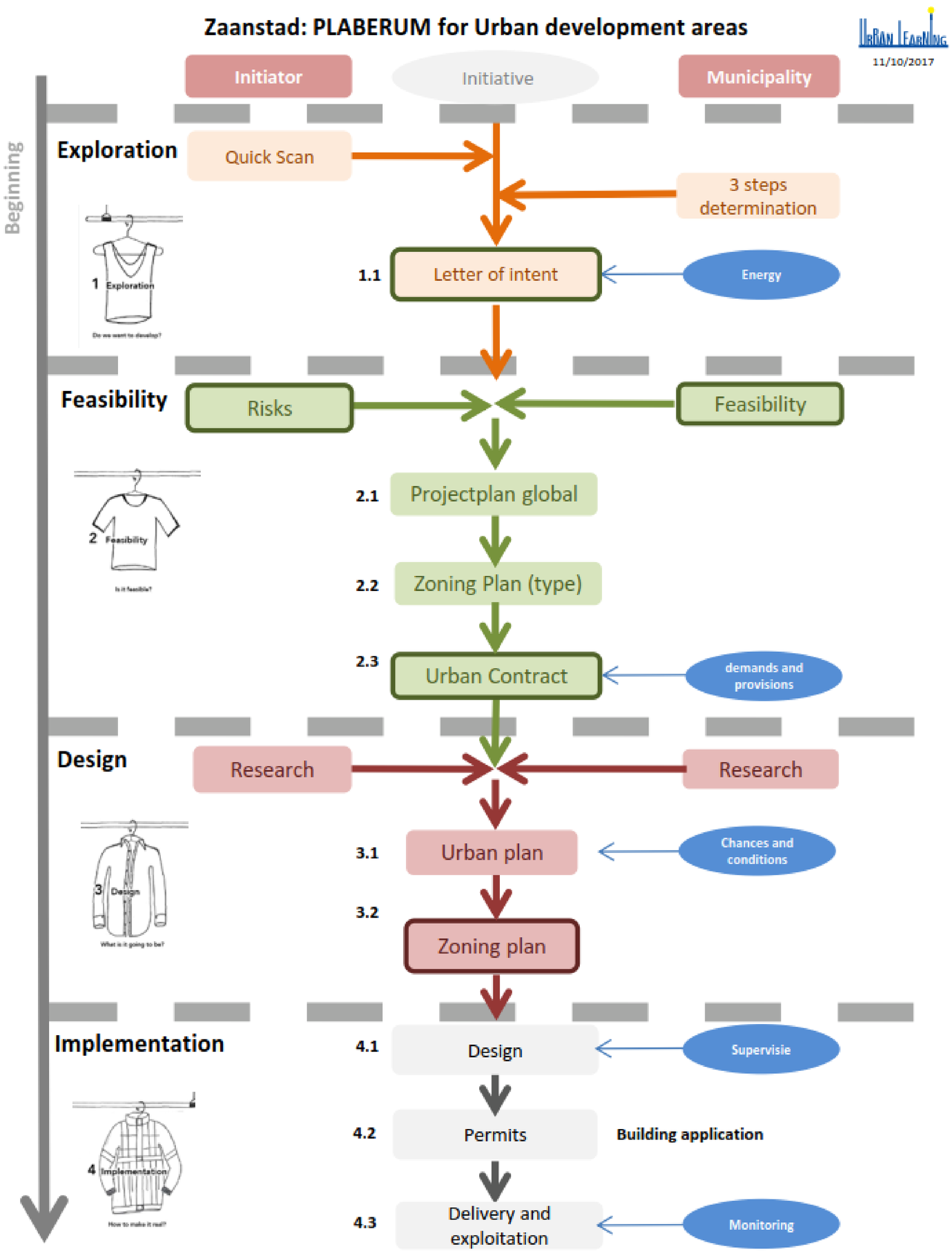
- 4,5 t CO_2 eq per capita



Cars per 100.000 inhabitants (-): 394

Approaches towards integrative energy planning

Zaanstad's urban planning process with integration of energy



Important issues towards integrating energy aspects into existing procedure

- The energy issue is too big to solve it without integrating in the planning process. Every opportunity has to be seized
- Goals of renewables need strong supplementary measures and different energy infrastructure. Therefore, close cooperation between urban and energy planners is needed
- Changing in the framework conditions are giving new opportunities (Environmental law which will substitute many other laws such as Planning Act)
- The responsibilities and the strategy about how to transform energy infrastructure and related goals weren't clear

Some recommendations for integrative energy planning

- Implementation framework is needed (for new sustainable energy/heat energy infrastructure)
- Define specific responsibilities of the involved (governmental) organizations
- Involve neighbouring municipalities
- Use legal instruments to support the transformation to a sustainable energy/heat supply (establish principles)
- Integrate energy planning from the start of the planning process
- Develop new instruments as format for heating plans etc.
- Create awareness on energy and generate expertise

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