



SMART ENERGY DEMOnstration: First research results of an Austrian SMART CITY

Graz, 25/09/2013, Alois Kraussler

Overview

1. Initial situation
2. Objective to establish a SMART CITY on small-town scale
3. Approach
4. Factors of success
5. Conclusions

Initial situation

- Involvement in 6 different Austrian Smart Cities

- Inhabitants:

- | | |
|--------------------------------|--|
| 1. Güssing: 4.000 | 4. Hartberg: 11.000 |
| 2. Oberwart: 7.500 | 5. Klosterneuburg: 31.000 |
| 3. Deutschlandsberg:
10.000 | 6. Vienna (Penzing &
Alsergrund): 125.000 |

- Hartberg is an Austrian small Smart City

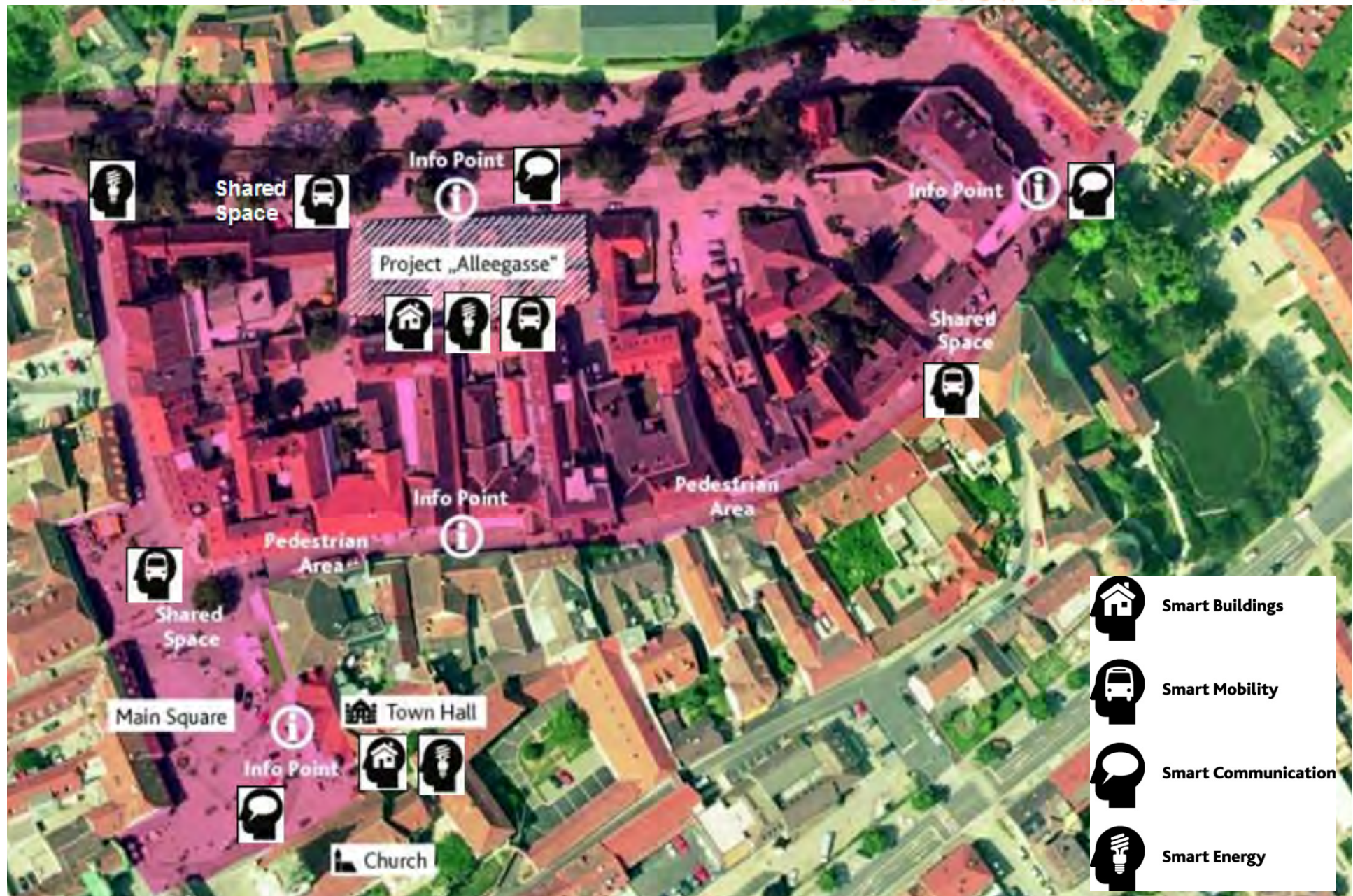
- Identification of the differences and advantages of each city

Initial situation

- Hartberg wants to become CO₂ neutral
- In opposition to major cities Hartberg has significantly different conditions to demonstrate a Smart City.
- Thus other actions are necessary to encourage demonstrations and investments.

Objective

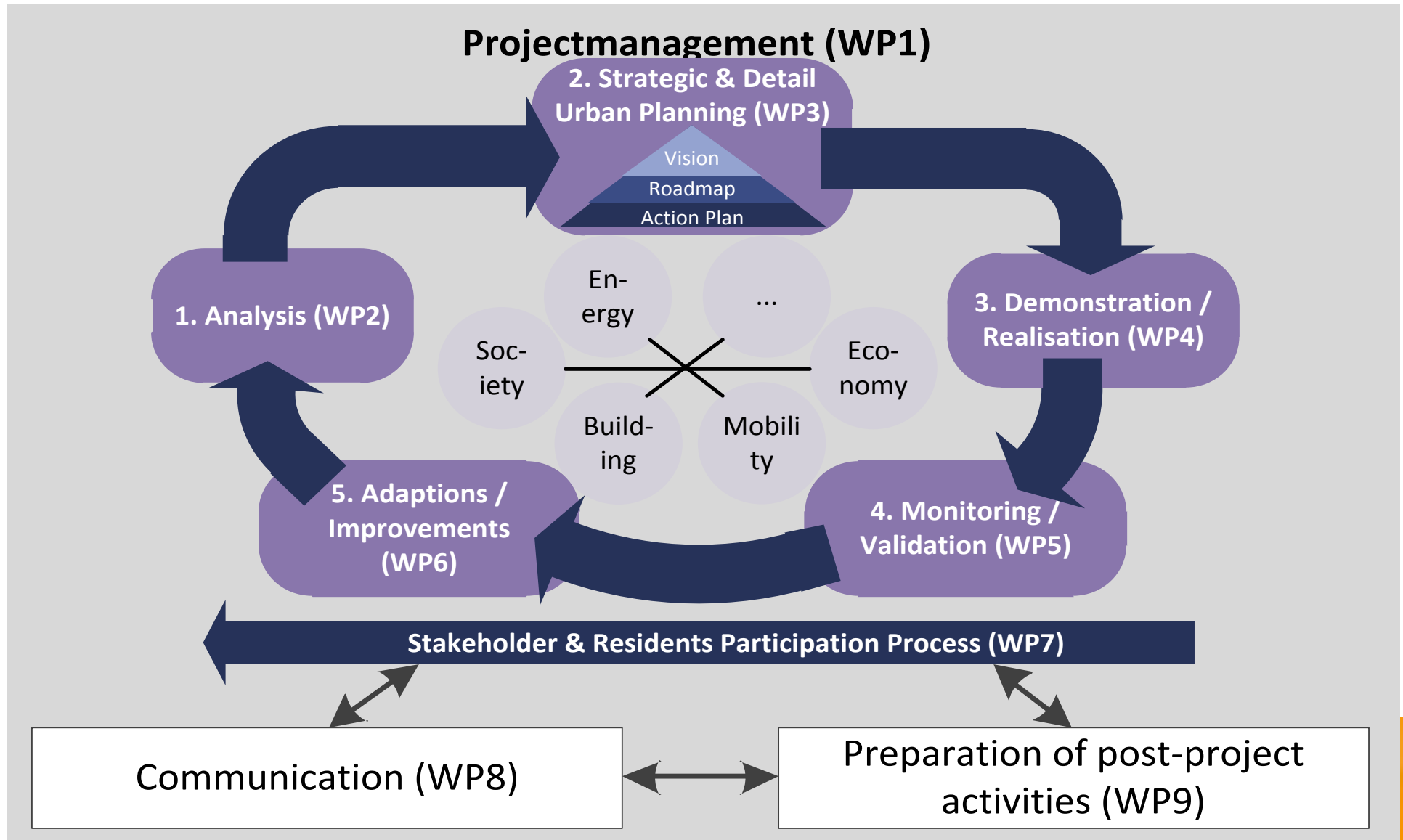
- Development and demonstration of
- a zero emission district
- at downtown of Hartberg (historic core zone)
- as highly frequented "heart" of small towns
- by outstanding showcases of "green" technologies.
- Hartberg turns the conditions of a small city into advantages to support an expansion to the surrounding.



Approach

1. Technical feasibility study (incl. roadmaps and action plans) according to Hartberg's vision
2. Implementation of **more than 10** smart city relevant and connected demonstrations (incl. business models)

Approach



Factors of success

- Project development: Creating Hartberg's vision
- The Living Lab approach of SMART CITY HARTBERG
- Convert small-town features / challenges into advantages
- Buildings as central "Smart City"-hub

Conclusions

- Identify the city's characteristics and turn them into an advantage
- Project development stage (=smart city basement) is very challenging and comprehensive
- Living lab approach via “user in the loop”, e-participation & bottom-up participatory process
- Strong commitment of the city is necessary
- Create visible nodes via flagship projects (e. g. at buildings)

Conclusions

Integrative und holistic approach advantageable



Conclusions

- City as pre-commercial procurer:
 - Several private investors could have been encouraged to spend their money in smart city relevant projects
 - Strong (financial) commitment of the city enables leverage effects
- Smaller city needs to overcome several challenges that are different to major cities.
- „SMART CITY Hartberg“ has already overcome these challenges to establish a small city of the future.

Alois Kraussler

4ward Energy Research GmbH, Tannengasse 18/6, A-1150 Wien

e: alois.kraussler@4wardenergy.at

t: +43 664 88 500 33 9



This project is financed by the AUSTRIAN CLIMATE AND ENERGY FUND and carried out within the program „SMART ENERGY DEMO – fit4set“.