



Semriach in Styria - Southern Austria

e5 community since 2006

eeee (4e) since 2014



by Michaela Ziegler – e5 team management



Inhabitants: 3.328

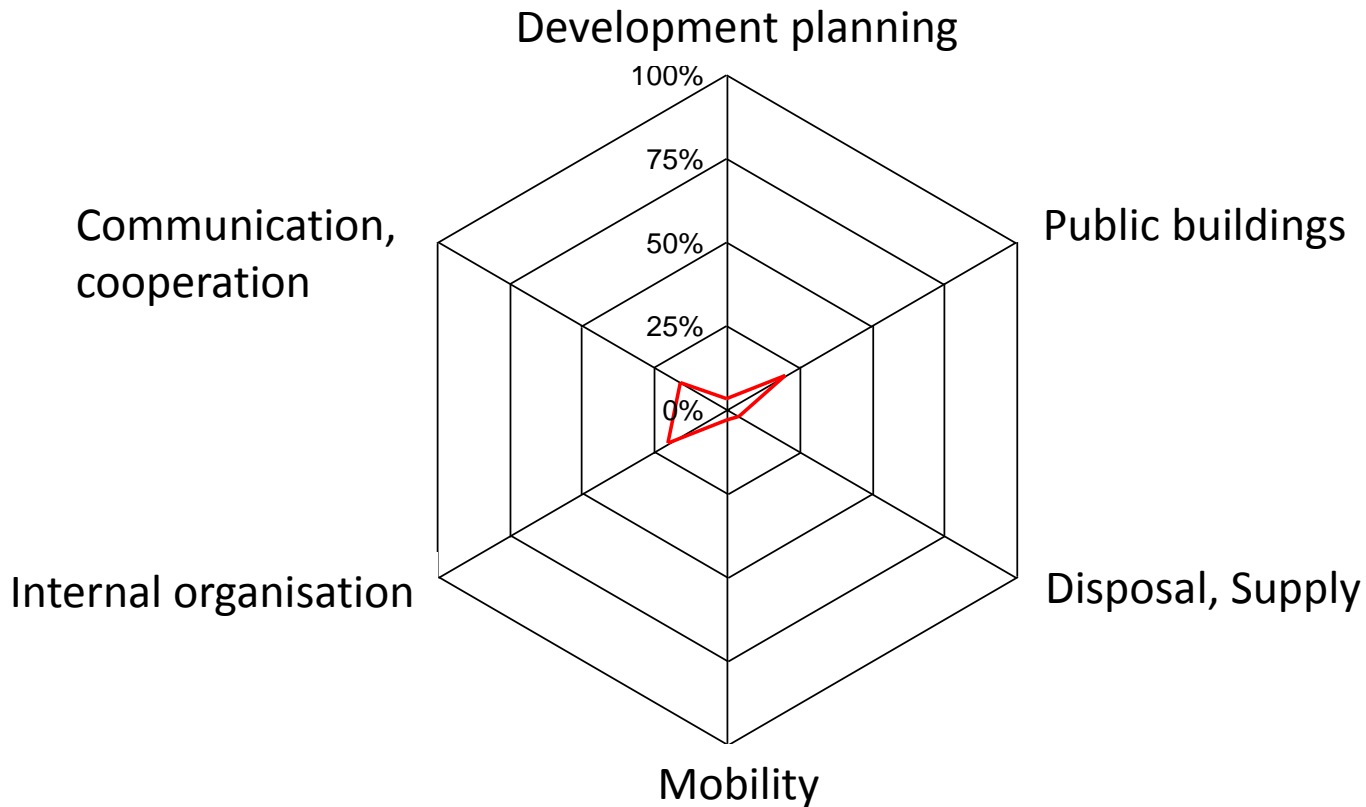
Height: 430 - 1445 m

Area: 60,33 km²

- located 35 km north of Graz
- one of the largest communities (area) around Graz
- one of the first e5-communities in Styria
- Energy policy headline: „Semriach Energy – attractive live conditions for future generations“



Start conditions



Degree of implementation: 11 % (2006)

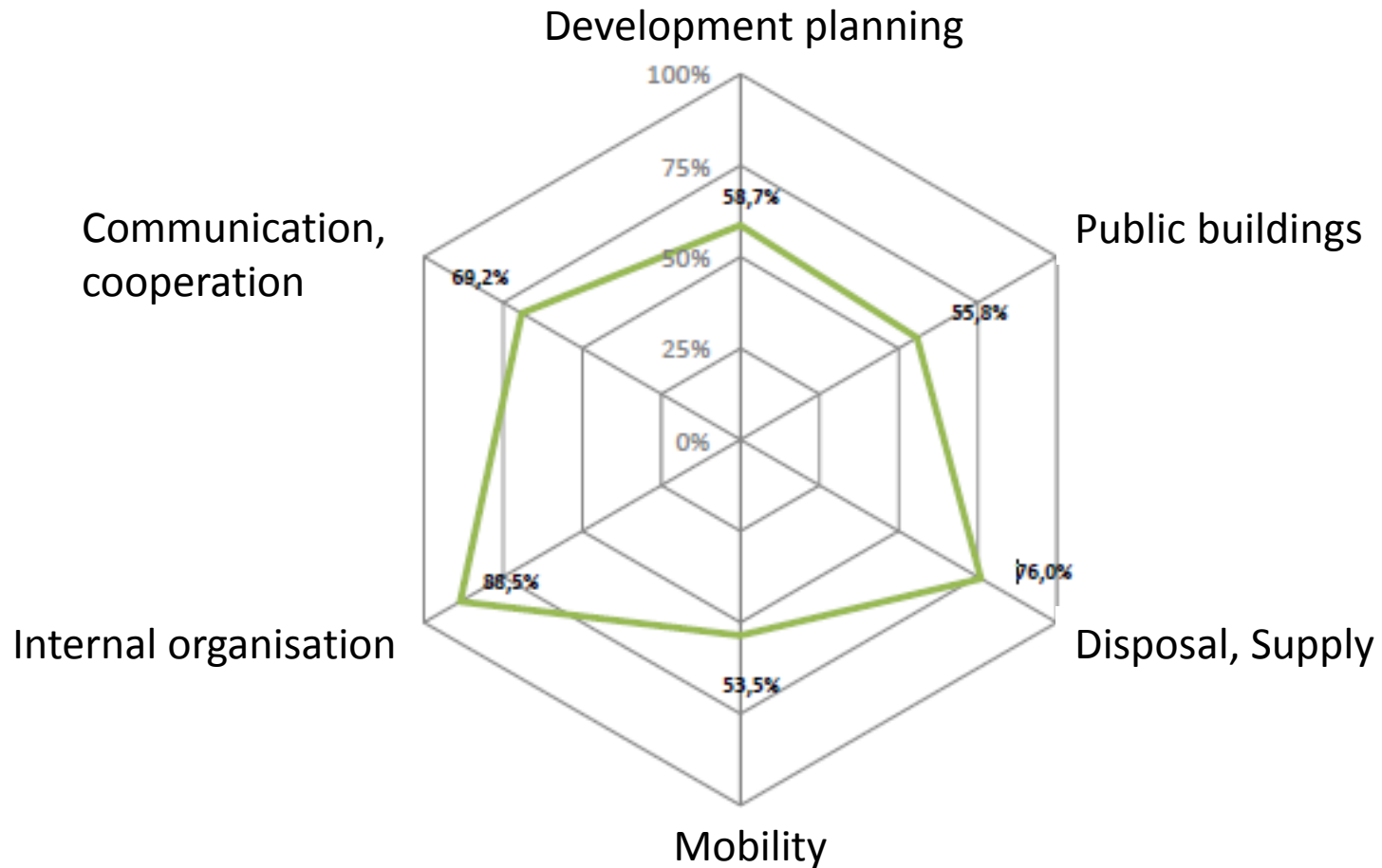


Development

- Certification 2008: degree of implementation **39 %- ee**
- Certification 2011: degree of implementation **54% - eee**
- Certification 2014: degree of implementation **65% - eeee**
- Certification 2018: degree of implementation **more than 75% ??? – eeeee ???**



e5 „spider“ 2014



Degree of implementation: 65 %



What happened from 2006 to 2014 (1)

- Implementation of energy policy goals within the local development concept (construction of freestanding photovoltaic system)



900 kWp

- Conversion of street lighting (LED)
- Conversion of heating systems (2 primary schools and 1 kindergarten)



What happened from 2006 to 2014 (2)

- 200,- € for private households by conversion of heating systems
- Start of e-carsharing
- Public building renovation concepts
- Proof of energy for all public buildings
- Photovoltaic system on the roof of NMS primary school



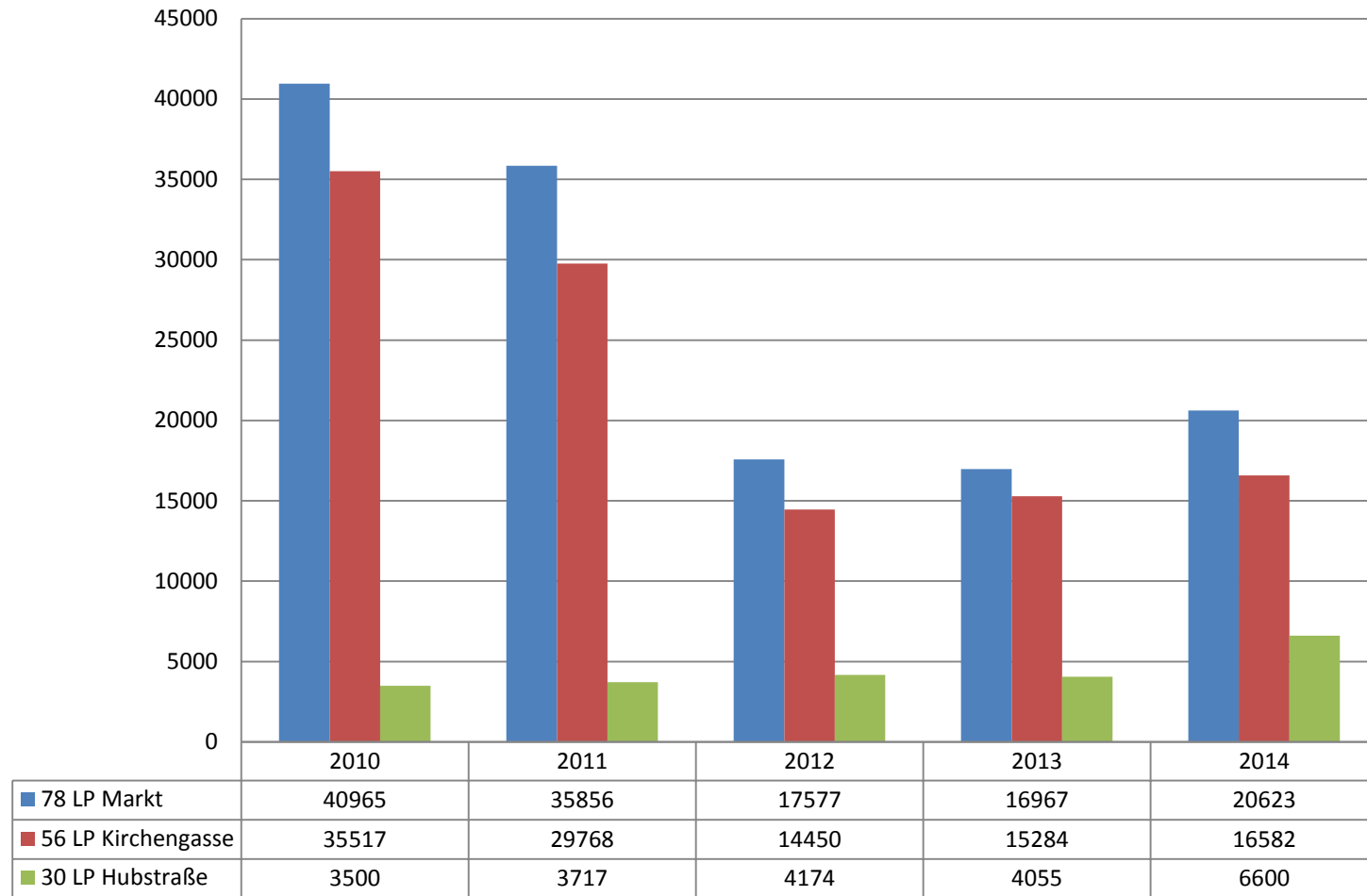
Primary school and Kindergarten

VS-Augraben



- Heating Changeover 2009 from electricity to woodchips
- Saving about 50.000 KWh/year – ca. € 9.000,--/year = ca. € 54.000,-- for 6 years
- Acquisition costs: € 43.000,--
- Additional costs: € 450,--/year – woodships 4.500,--/year

Street lightning



- Start with LED technology: november 2011
- about 40.000 KWH saving/year



Photovoltaic system NMS (primary school)

- completion october 2008
- total energy yield: 47.218 kWh (2014)
- total costs: € 20.527,70
- total income from electricity sales (2014): € 21.720,-- (46 Cent/kWh)



Main problems

- Improvements in the field of mobility (large area, long distances, farm buildings distributed over the whole area)
- Public building renovation is partly missing (primary schools VS Semriach and VS Augraben)
- How to raise awareness for e5?



What happend after 2014? (1)

- Town council decision: compulsory use of e-car for business trips
- Mobility workshop with young people
- Improvement of e-carsharing
- Construction of e-car charging station
- Participation in GUST mobil (call collection taxi)
- Installation of kintergarten bus system



What happen after 2014? (2)

- Planning of photovoltaic systems on all public buildings with citizens' participation
- Heating changeover in primary school VS Semriach, fire department, community office
- Green electricity for all public buildings
- Start of energy land-use planning



What happen after 2014? (3)

- Procurement monitoring
- Changeover of cleaning agents
- Events to raise awareness
- Public gifts from the region









E-carsharing

- Renault ZOE Intense Q90
- 400 km ???
- Start 2017, including new booking system





What remains to do?

- Renovation of primary school VS Semriach
- Further change of procurement
- Thinking of climate change adaptation
- More effort in public awareness



e5-team

Team manager and member of town council:
Michaela Ziegler (environmental system scientist)

Team members:

- Gottfried Rieger – mayor (organic farmer)
- Marina Sobitsch – energy commissioner / administration
- Maria Enzinger – chairman of environmental committee
- Jürgen Wieland – electrician
- Harald Stütz – developer of e-car batteries
- Wilma Kuchler – saleswoman
- Lukas Marousek – student
- Helmut Hinterreiter – retired school headmaster



Contact

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