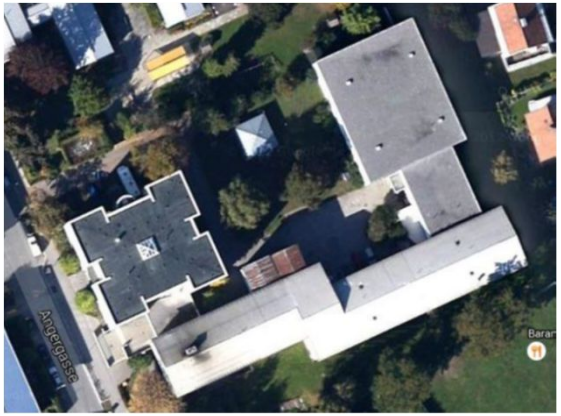
Involvement of schools

Refurbishment of three elementary schools in Innsbruck 2015-2017

VS Pradl-Ost

Year of construction	1960 (historic preservation)
Heating demand before refurbishment	154 kWh/m²a
Heating demand after refurbishment	~ 81 kWh/m²a
Building space	3 786 m²

VS Angergasse



Year of construction	1956
Heating demand before refurbishment	156 kWh/m²a
Heating demand after refurbishment	30 kWh/m²a
Building space	5 139 m²

VS Neu-Arzl

Year of construction	1956
Heating demand before refurbishment	125 kWh/m²a
Heating demand after refurbishment	32 kWh/m²a
Building space	3 185 m²

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Key measures of the refurbishment plan

- Thermal insulation and drainage of the cellar
- Insulation of the top storey ceiling
- Exchange of windows including sun protection
- Installation of a central ventilation system
- Renovation of the heating lines
- Modernization of sanitary facilities with barrier-free toilets
- Conversion to LED-lighting

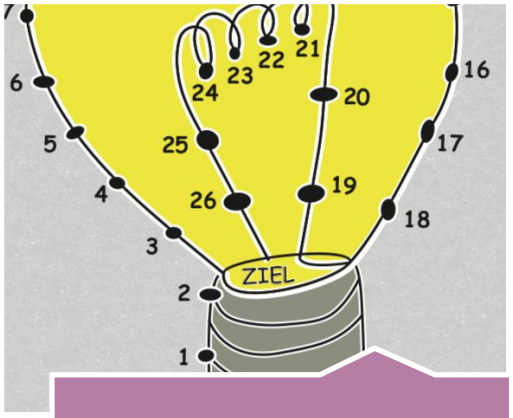
Objectives

- Users of the schools as part of SINFONIA
- Increase of acceptance for the refurbishment measures
- Raise of awareness for environmental topics
- Communication of advantages of refurbishment
  - Pleasant temperature, good air (no fatigue)
  - Humidity (voice)
  - “Nice classes"
  - Accessibility
  - Good lighting
- Multiplier effect

How we involved schools

School workshop Program: Smart Cities

Ideas competitions „SMART CITY – City of the future“



Development of a quiz game on the topic of energy saving

Schoolworkshop program „*Smart City of the Future*“

contents

- kick-off event
- one obligatory basic module by members of the SINFONIA consortium
- three elective modules on the topics of energy, mobility and aspects of the refurbishment of the school building

target group & outreach

- 3 SINFONIA schools
- 160 students (2nd and 3rd grade)
- family members via the students as multipliers

features

- age-appropriate methodology
- integration of external educational partners
- free-of-charge offer
- Coordination unit for consistency of the program sequences

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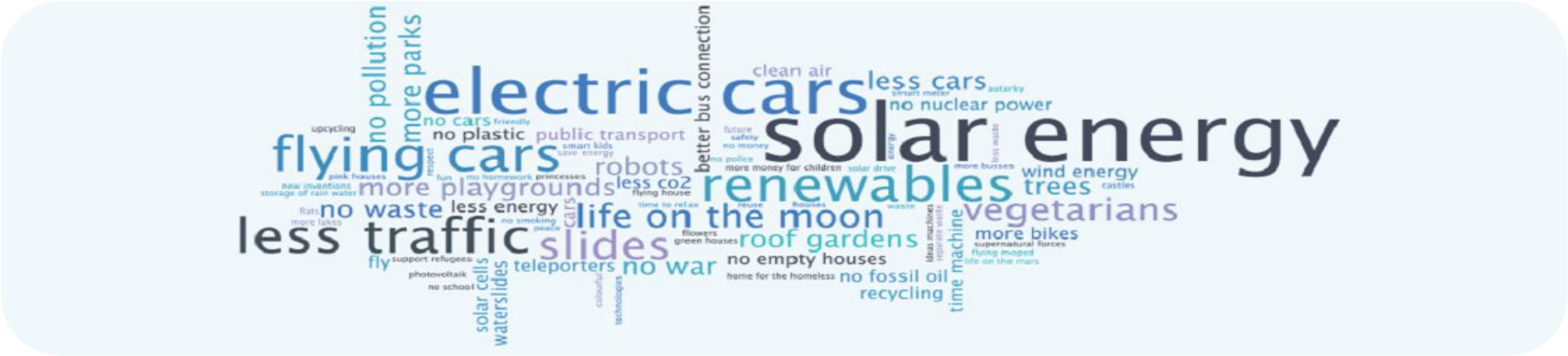
Schoolworkshop program „*Smart City of the Future*“ - Impressions

„The kick-off workshop was a really welcome diversion to the daily routine in the office.“

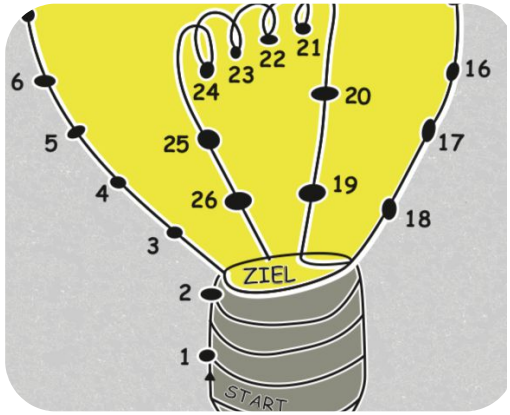
Barbara Dickbauer,
Standortagentur

Ideas competition „*Smart City of the Future*“



contents	▸ written of draw drawn ideas of the participants
target group & outreach	▸ school children and adolescents for the Province of the Tyrol ▸ more than 500 participating students between 10 & 17 years ▸ family members via the students as multipliers
features	▸ within the scope of „Young university day of action“ ▸ input about SINFONIA smart city by the local members of the consortium ▸ award ceremony with Innsbruck`s vice mayor

Development of a *quiz game* on the topic of energy saving



- board game for 6 to 10 year olds
- easy knowledge and dice game with 36 playing cards
- knowledge cards and action cards

- multiply deployable
- download the german version here and start playing!

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Involvement of schools

Mayor challenges

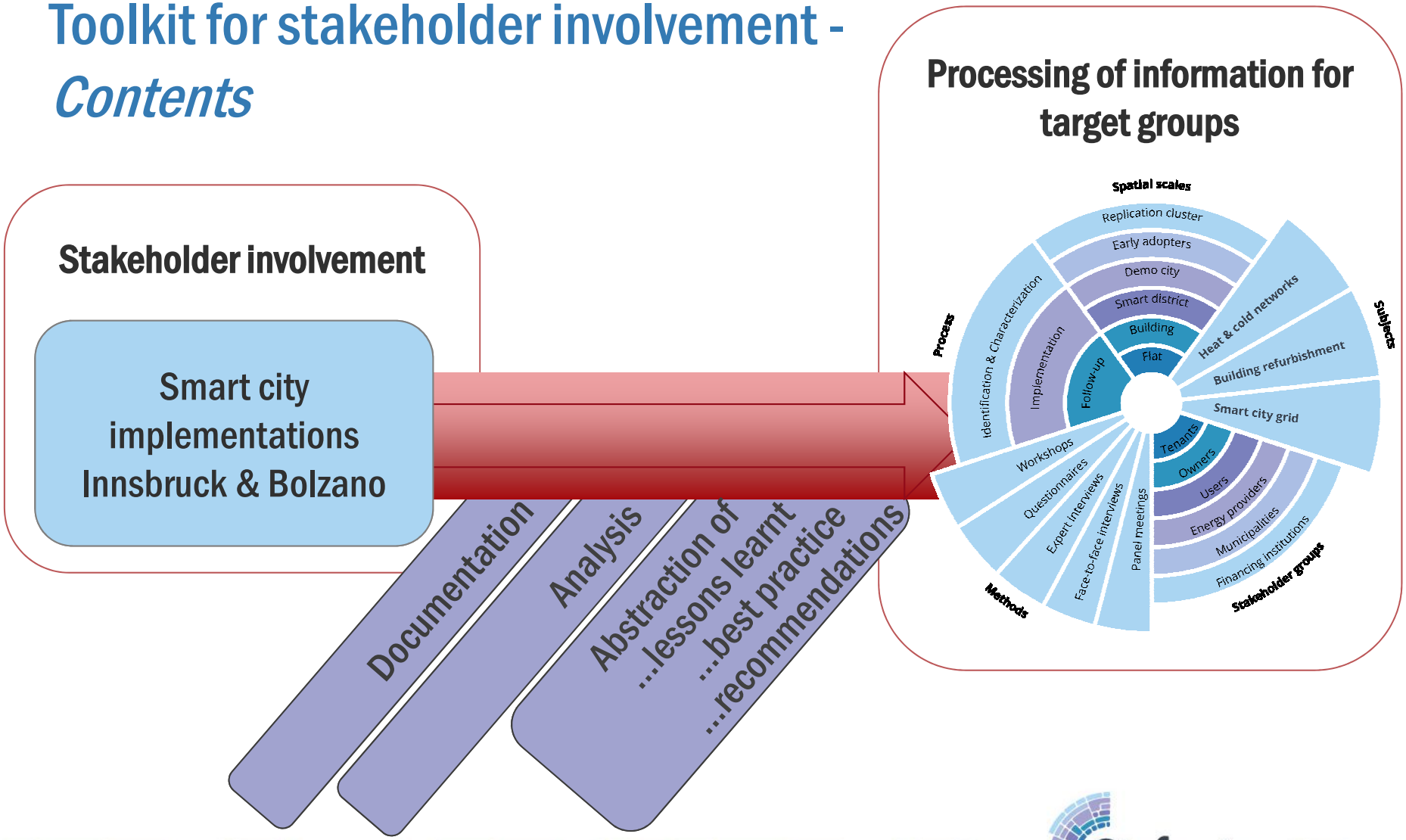
- Tight school curricula and manifold extracurricular activities offered by different institutions
- Preparation of complex topics in the context of smart cities in age-based way – playful and easy intuitive
- Limitation of budget: activities were offered for free - costs had to be covered by consortium partners or external partners involved
- Ideas competition on larger scale failed
- Limitation of time: all refurbishment measures must be carried out during fixed times - the school holidays

Involvement of schools

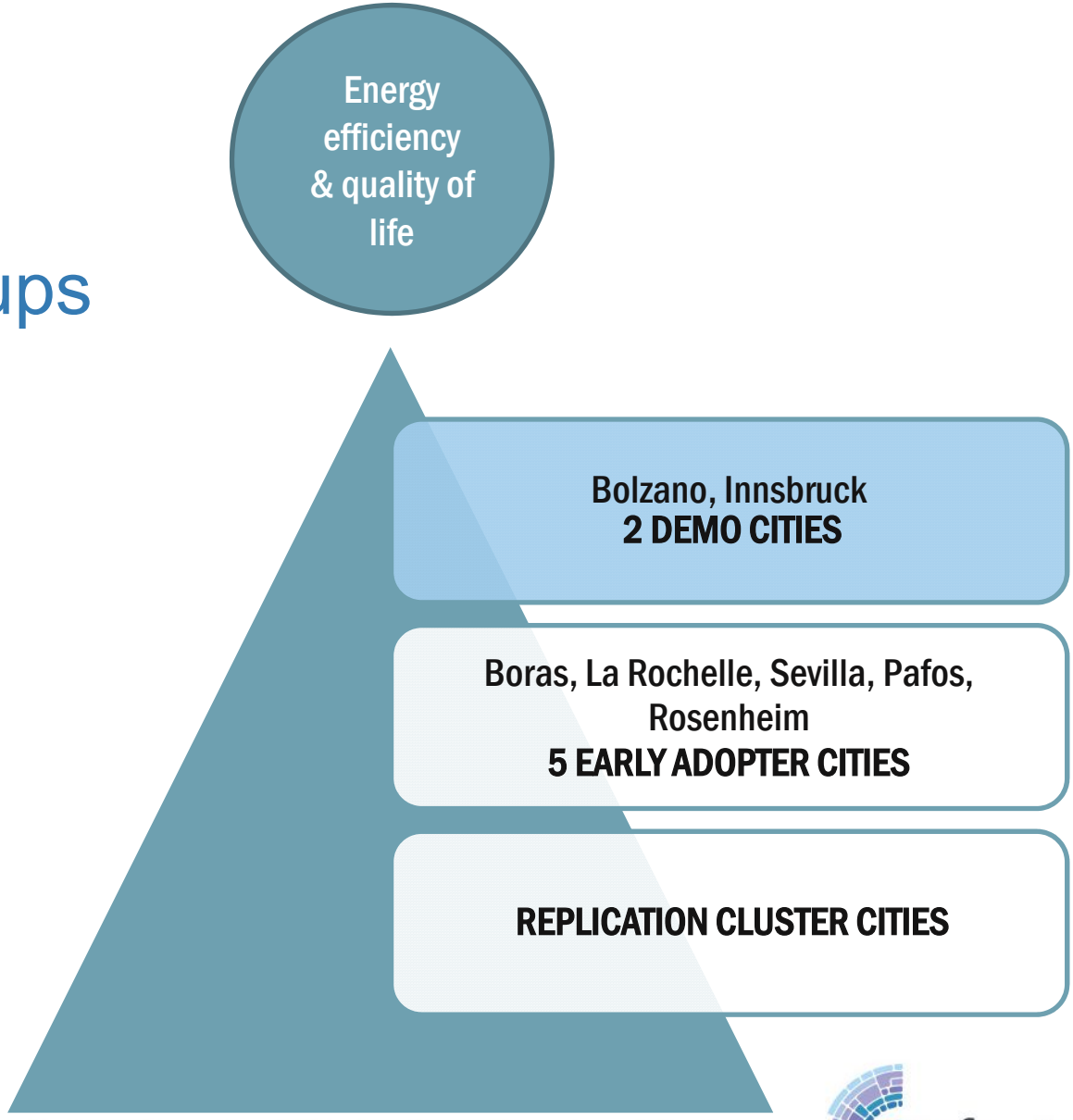
Lessons learnt & recommendations

- Focus on young people as the future citizens and adults of tomorrow!
- Pupils as multipliers can raise the level of project recognition!
- Involve local educational institutions with a focus on e.g. energy or mobility!
- Think of a funding scheme!
- Use existing framework of events for extracurricular offers

Toolkit for stakeholder involvement - *Contents*



Toolkit - target groups



Toolkit currently available under:

http://www.sinfonia-smartcities.eu/en/stakeholder-engagement-toolkit/

Info flyer in English:

http://www.sinfonia-smartcities.eu/contents/stakeholderengagementtoolkitdownload/folder-sinfonia-toolkit_en1.pdf