

TAKING
COOPERATION
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 Pfaffenhofen 17.01.2020

 D.T2.1.2: Methodology for a support toolbox to citizens integrated energy planning and financing

 Stadtwerke Pfaffenhofen (PP8) & Bürgerenergiegenossenschaft Pfaffenhofen e.G. (PP9)

D.T2.1.2 Methodology for a support toolbox to citizens integrated energy planning and financing

Acronyms

- City of Pfaffenhofen: PAF
- Bürgerenergiegenossenschaft e.G., located in Pfaffenhofen: BEG
 - (Citizens' energy cooperative)
- Energie- und Solarverein Pfaffenhofen: esv
 - (Energy- and solar association)
- “Leader, Peers and Pioneers©“: LPP
- Stadtwerke Pfaffenhofen: SWP
 - (Municipal utility of Pfaffenhofen)

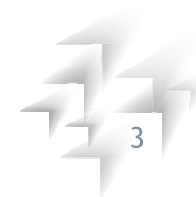


D.T2.1.2 Methodology for a support toolbox to citizens integrated energy planning and financing



Historical background

- Around the year 2000 a strong youth movement formed in PAF, which then also established a youth parliament. The parliament sets politically a
 - - BMX bike park,
 - - several scater halls through
 - - and declared a climate emergency.
- A number of these young people became further involved in associations, organisations, institutions, authorities and politics.
- These and other highly committed citizens of PAF who joined later on and we call them "Leaders, Peers and Pioneers[©]" (LPP) in the following.



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Energie- und Solarverein Pfaffenhofen e.V. (esv)

- Over the years there has been also developed a strong networking of committed citizens.
 - Among others, the esv (2008) was founded. The association gathered knowledge, project experience in the field of renewable energies and also developed a number of Excel-based tools, which can now be used online on the Internet (see later slides).
- ⇒ We also recommend our EU project partners to found such associations.
- ⇒ Please note: A robust statute is an important element when founding an association.



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Bürgergenossenschaft Pfaffenhofen e.G. (BEG)

- In order to actually be able to develop, finance and implement larger projects, the BEG was founded in 2012.
 - Individual LPPs from the esv, other organisations or as new experts came together here and carried out the foundation professionally.
 - As a result, a large number of projects could be realized (see also later slides).
- => We also recommend our EU project partners to found such associations.
- => Please note: A robust statute is an important element when founding an association.



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Common value base of the active people

- The associations and civic organisations have found a common basis of values as an important foundation and live these values.
 - They are united by a very strong sense of home.
 - It is important for them that, for example, electricity is generated locally and is also used locally. The citizens have the goal of being "prosumers" themselves and initially accepted higher electricity prices.
- => By professionalizing these associations and organizations, the projects and thus the electricity prices are in line with the market.



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Citizen-oriented authorities and political leaders (administration, city councils and mayors)

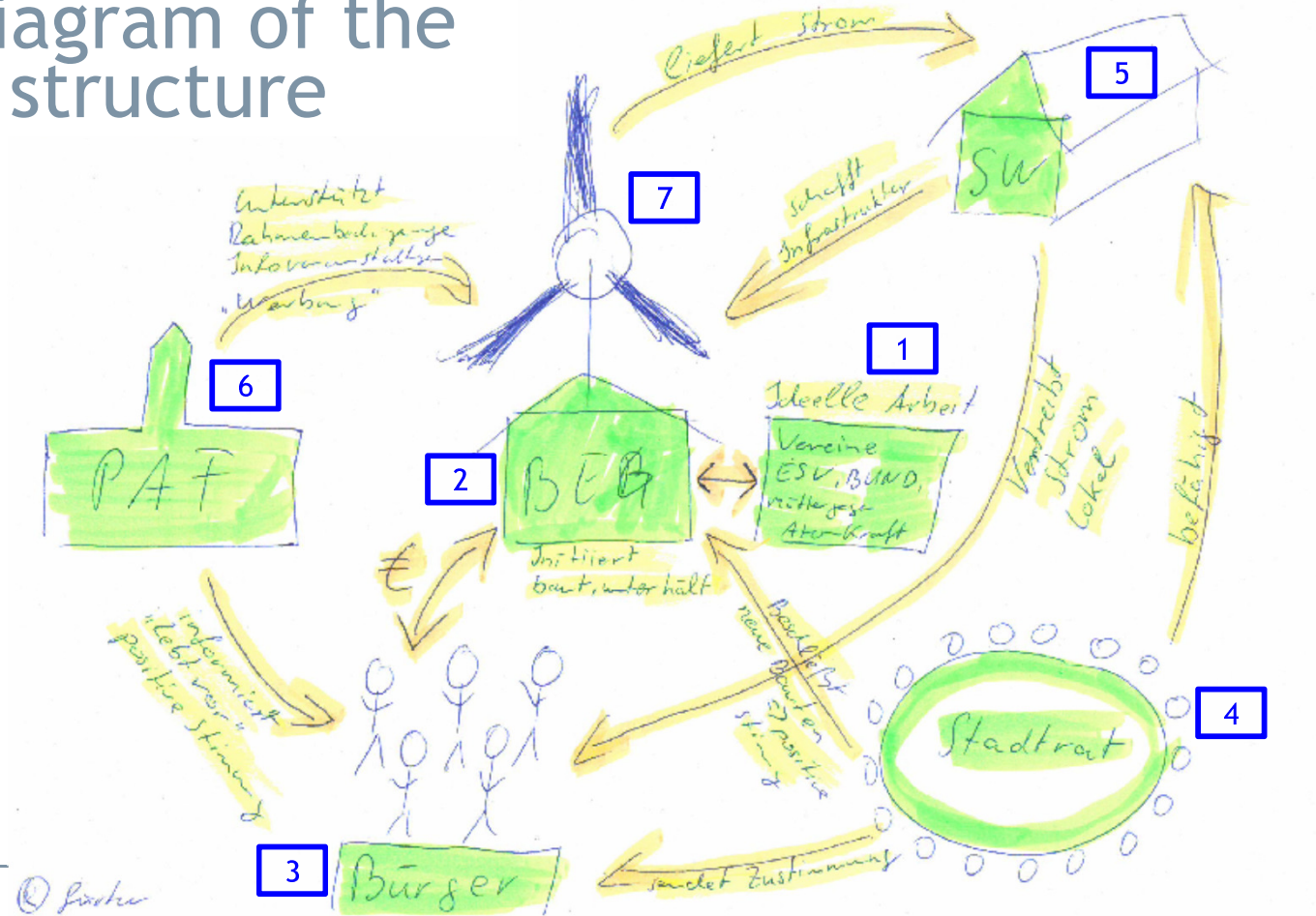
- The normal and responsible employees in public authorities, administrations and politics have a citizen-oriented and citizen-friendly basic attitude. Seen from the outside, this results in a future-oriented, progressive and positive way of acting.
 - ⇒ As one of many results: The city of Pfaffenhofen founded an a new municipal utility of our own.
 - ⇒ The municipal utilities (SWP) themselves are very close to the citizens and support a large number of renewable projects.



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Overview diagram of the networking structure

Diagramm: Raimund Gürtner©



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Key Aspects to the overview diagram of the networking structure

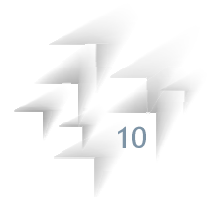
- 1 The esv (and other associations like “BUND”, “Mütter gegen Atomkraft”) does idealistic work.
- 2 The BEG initiates, builds and operates projects.
- 3 The citizens of PAF participate in projects, but also give money for the project.
- 4 The city council decides on new buildings and => sets a positive mood. It empowers the municipal utilities and sends approval to the citizens.
- 5 The municipal utilities create the infrastructure and sell the locally generated electricity back to the citizens at reasonable conditions.



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Key Aspects to the overview diagram of the networking structure

- 6 The PAF-LPP actively support the project framework conditions, for example through information events and advertising.
- 7 The professionally developed, financed and managed renewable energy projects supply the generated regional electricity to the public utilities. And the public utilities deliver the "home generated" electricity back to the citizens.



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Key success factors

- In the years 2000-2008 "Leader, Peers and Pioneers®"(LPP) came together in PAF.
- These LPPs had and have very strong common values, a common vision.
- Subsequently, concrete goals were formulated and concrete projects were implemented.
- The LPPs have been active, among others in the public space.
- For their work the LPP developed and used tools (Tool1, Tool 2, ..., ToolX).



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Key success factors

- The tools can be divided into several tools, tool types/categories.
- The LPP, the citizen experts, events, institutions, organisations, city bodies, etc. as well as our energy and solar association (esv), for example, we* also see ourselves as "tools".
*the citizens of the city of Pfaffenhofen
- As a method, we have specifically chosen** tools and had them work together (or even "created" them) to achieve concrete goals and results.
**or created new tools if necessary.
- One result of these "tools" working together was the finalized Energy Plan in 2012.



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Key success factors

- Another result was the foundation of the BEG in 2012.
- The esv (Energie- und Solarverein e.V.) was founded in 2008, the BEG (Bürgerenergiegenossenschaft e.G.) was founded in 2012 with very good and effective statutes.
- Looking back, the esv and the BEG itself, as legal entities as well as the statutes, each represents an excellent tool in its own right; that is, 4 tools.



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Key success factors

- The BEG has developed, **financed** and implemented 64 energy projects from 2012 until 2019.
- The **ENERGY PLAN 2012** was the basis for the 64 energy projects.
- All energy projects were **financed** by the BEG itself.
- All tools listed below, our **SUPPORT TOOLBOX**, were used PROJECTIVELY in the successful implementation of our 64 energy projects:



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Tools for citizens to inform themselves

*Tool categorie 1:
- Software tools
- Public
- Always available*

Source:

<https://esv-paf.de/energieberater-online>

Name	Description
WaterCheck / WasserCheck: Tool	Hot water consumption and comparison with average values Saving recommendations and contact details of craftsmen in your area
HeatCheck / WärmeCheck: Tool	Check for saving heat in homes and houses
HeatingCheck / HeizCheck: Tool	Qualitative and quantitative checks for apartments and houses
PumpCheck / PumpenCheck: Tool	Check the heating pump for electricity consumption and whether it is worth replacing it with a modern high-efficiency pump.
CoolingAggregateCheck / KühlCheck: Tool	Check the devices for cooling, their electricity consumption and whether it is worth replacing it with a modern device.
Electrical powerCheck / StromCheck: Tool	General check for checking your own electricity consumption.
PhotovoltaicSystemCheck / SolardachCheck: Tool	Assessment of whether a photovoltaic system on the roof of your building is economically viable.
ThermstatCheck / ThermostatCheck: Tool	Technical check for thermostats on radiators.



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Tool: The citizen-expert

- A lot of highly motivated and well qualified or talented citizens has been come together in the esv.
- Intensive exchange and consultation took place among each other and with citizen of Pfaffenhofen.
- **Smaller private projects** were defined, developed and implemented.
 - - own
 - - common (with few esv members)
 - - joint bigger privat projects with citizens of Pfaffenhofen:

Tool categorie 2:
- Engaged citizens
- Do consulting
- Privat projects



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Tool: The citizen-expert



Tool categorie 2:
- Engaged citizens
- Do consulting
- Privat projects



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Tool: Workshops and public events

- Public events in rooms (Workshops, e.g. Thinkathon; schools) and public areas
- supports the ideas and involves the public / citizen of PAF in the bigger projects of e.g. the BEG.
- **Bigger projects** were defined, developed and implemented.
 - - Solar-Projects,
 - - joint bigger projects with citizens of Pfaffenhofen.

Tool categorie 2:
- Engaged citizens
- Do consulting
- Privat projects



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Tool: Political events and political committee work

- Citizen and politicians work together with political event and political committee work.
- **Big or very projects** were defined, developed and implemented.
 - - Solar-Projects, -Wind,
 - - joint big projects with citizens of Pfaffenhofen.

In 2012 politics, citizen, legal entities like BEG and many institutes and organizations work together in order to establish the **ENERGIEPLAN 2012**. The **financing** of the later projects was largely supported by the BEG later on.

*Tool categorie 3:
- Bigger political
events and good
political
committee work*



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Tool: Political events and political committee work



Tool categorie 3:
- Bigger political events and good political committee work



Photovoltaic plant: Fire brigade, ~39 kWp => ~10 households in PAF

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Tool: Political events and political committee work



Tool categorie 3:
- Bigger political events and good political committee work



Photovoltaic plant: Solar car port, 284 kWp, => ~75 households in PAF



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Tool: Political events and political committee work



Tool categorie 3:
- Bigger political events and good political committee work

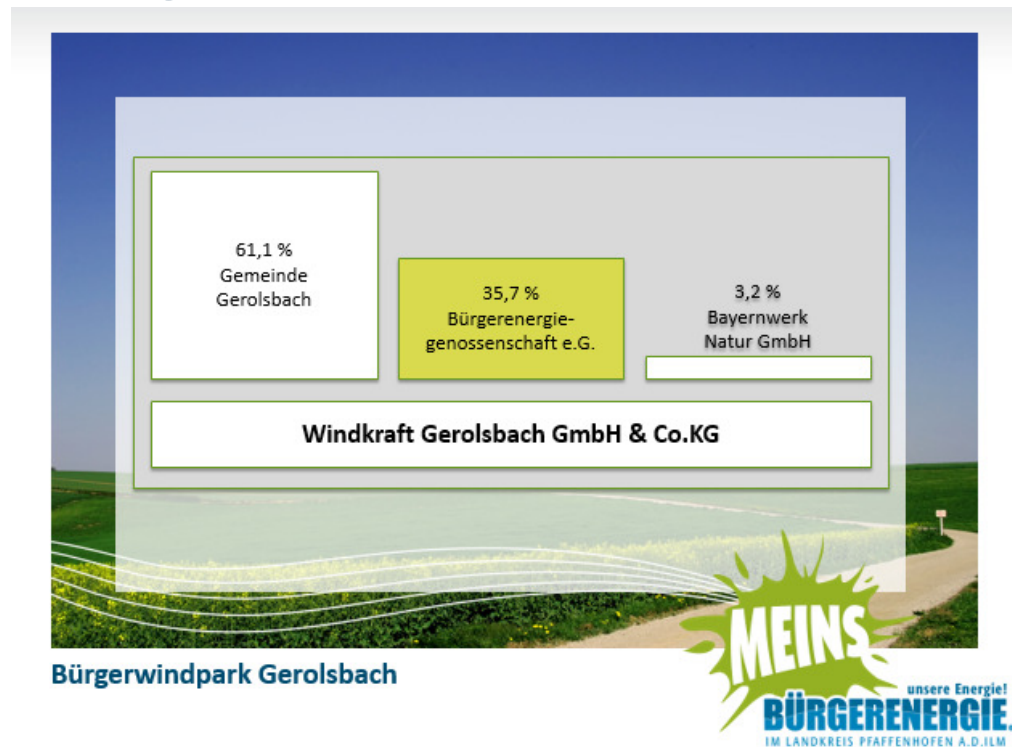


Wind park Gerolsbach: ~16.100.000 kWh/a



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Tool: Financing; involvement of the citizens



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Support toolbox consists of at least 3 Tool categories

Tool category 1: Software tools, public and always available

Tool category 2: Engaged citizens, consult themselves and other citizens private projects

Tool category 3: Bigger political events and good political committee work

Depending on the project, we use various tools with varying degrees. The most important tools are our highly committed citizens, citizen-experts and LPP.

