

**Interreg
Europe**



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Introduction of the BEG

(Bürgerenergiegenossenschaft im Landkreis Pfaffenhofen an der Ilm eG, citizen cooperation of Pfaffenhofen a.d.Ilm)

Dr. Holger Klos and Andreas Herschmann

Project manager and CEO of the BEG

11 May 2023 | Ferrara

Climate Protection Activities I

- 2001: biomass power plant – Kyoto protocol fulfilled
- 2002: first civic solar power plant in Bavaria
- 2008: energy and solar association (ESV) est.
- 2010: annual energy congress started
- 2011: sustainable building area – EcoQuartier
- 2012: citizen energy cooperative (BEG) est.
- 2013: integrated climate protection concept (SECAP)
- 2013: climate protection day (every year)
- 2014: full-time climate protection manager

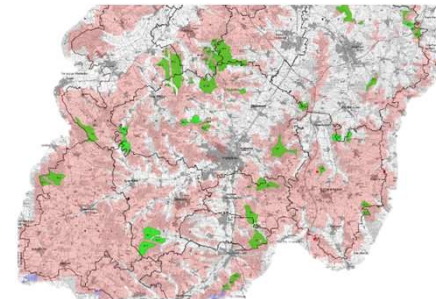


Integriertes
Klimaschutzkonzept
Stadt Pfaffenhofen



Climate Protection Activities II

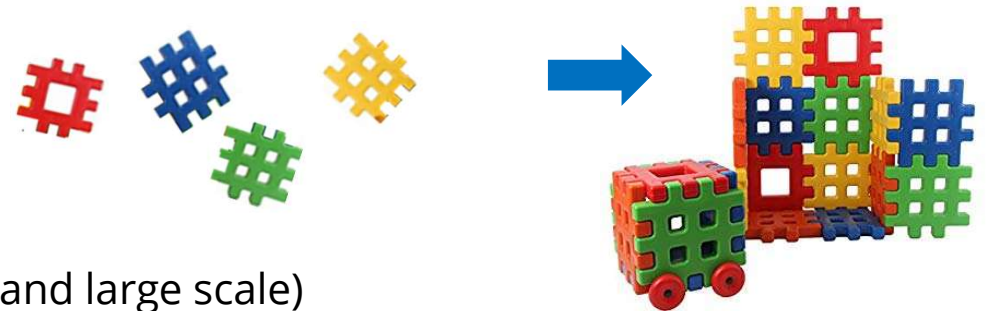
- 2015: first citizen wind turbine
- 2015: climate protection award
- 2016: transfer of local electricity and gas grid to SWP
- 2016: wind power use zoning plan
- 2016: public decision for wind farm
- 2017: sustainable development goals adopted
- 2017: start of plastic free Pfaffenhofen
- 2018: start of organic farming project
- 2019: free city bus
- 2020: Citizens' workshop on climate change adaptation
- 2021: climate plan 2035 (SECAP*) adopted
- 2022: Input into REC-Projects / Wind, ...



Key success factors for civic involvement

From our Pfaffenhofen experience over the last two decades, we consider the following aspects to be important for a successful civic involvement (and we have developed single building blocks that need to be up-dated and crosslinked)

- awareness-raising
- public involvement from the very beginning
- stringent target definition
- planning support by software tools (domestic and large scale)
- investment opportunities for the public / acceptance of projects by civic co-financing possibilities
- Project / pilot development of project like an PowerToGas-project or wind projects
- consistent communication strategy throughout all phases



Awareness-raising activities

- In order to define targets and to involve people in decision making, one has to start from where the people usually are



- And sometimes one even has to shock them



Public involvement

and...and...and...and





Cooperative - a win for all





Bürgerenergie im Landkreis Pfaffenhofen is...

- flexible:** Members can easily resign after a 5-year period,
- safe:** liability is limited to the shares,
- responsible:** as an ethical and sustainable investment,
- expandable:** to many different energy projects,
- economical:** through project participation and distributions on profits,
- forward-looking:** for a sustainable energy industry in the hands of citizens,
- regional:** the added value remains local.

Cooperative - a win for all





Our goals:

- **Democratisation of the energy industry**
- **Decentralisation of energy production**
- **A rapid phase-out of nuclear energy**
- **Expansion of the renewable energy landscape**
- **Promotion of energy saving and energy efficiency**
- **Honest prices and clear structures**
- **Involving local citizens in the energy transition**

Cooperative - a win for all



Bürgerenergie im Landkreis Pfaffenhofen ist...

founded in 2012 from the Pfaffenhofen Energy and Solar Association, the cooperative has about **1300 members** from the entire district and is managed and controlled by the following persons:

Andreas Herschmann: Chairman of the Board Dipl.-Ing. (FH)

Fabian Stahl: Board of Directors Managing Director - Stahl Computertechnik GmbH

Thomas Lönner: Chief Executive Officer Banker

Oliver Eifertinger: Chairman of the Supervisory Board Lawyer / Tax Consultant

Christiane Ametsberger: Supervisory Board Member Architect

Cornelius Herb: Supervisory Board Dipl. Kaufmann / Project Development Biogas

Walter Lamsfuß-Seifert: Supervisory Board Business economist

Georg Höhn: Supervisory Board Dipl.-Ing. Holztechnik

Dr. Helmut Muthig: Supervisory Board Physicist

Cooperative - a win for all





You can't invest your money better than this!



Participation principle

1. Buy at least one cooperative share (from 100€)
2. Participation with subordinated loan (from 1,000€)

<p>GENOSSENSCHAFTSANTEIL 1 bis max. 50 Anteile á 100,- EUR mittel-, bzw. langfristige Geldanlage durch Gewinnbeteiligung an der BEG Ihre Einlage ist mind. 5 Jahre gebunden</p>	<p>Mitgliedschaft ist Voraussetzung für Projektbeteiligung Sie sind Miteigentümer der BEG mit einer Stimme (unabhängig von der Anzahl der Anteile) Sie fördern die Energiewende im Landkreis Pfaffenhofen</p>			
<p>PROJEKT BETEILIGUNG projektabhängig z.B. ab 1.000,- EUR nachhaltige Geldanlage (Partiarisches Darlehen) mit jährlicher ausgewiesener Rendite</p>	<p>BEISPIEL WINDRAD 3-5% jährl. Rendite</p> 	<p>BEISPIEL BIOGAS-ANLAGE 6% jährl. Rendite</p> 	<p>BEISPIEL PV-Anlage FFW PAF 4% jährl. Rendite</p> 	<p>BEISPIEL SOLAR-CARPORT 3% jährl. Rendite</p> 



Citizens' wind turbine Pfaffenhofen in the "Lustholz"

Manufacturer and Type:	Enercon E115 (3 MW Output)
Commissioning:	March 2016
Average annual wind speed:	6 m/s
Wind yield:	6,200,000 kWh (around 1,500 households)
Rotor diameter:	115.7 m
Hub height:	149 m
Total height:	206.83 m
Turbine concept:	Gearless generator with variable speed

Citizens' wind turbine Pfaffenhofen



Citizens' wind turbine Pfaffenhofen in the "Lustholz"

Investment: 5,350,000 €
Interest rate: 3 %
Term: 20 years, annual repayment of 1/19 of the loan
Financing: 9% Enercon
34% Citizens' loan
57% bank loan
Land leased for 30 years

Citizens' wind turbine Pfaffenhofen





International exchange within the framework of
ENES-CE in 2021





STEFAN HIPP
HIPPI BABYNAHRUNG

JA!
#PAFSCHAFFTS

well-known citizens show their YES

MEINS
unsere Energie!
BÜRGERENERGIE
IM LANDKREIS PFAFFENHOFEN A.D.ILM

Result referendum

Ja 56,9 %

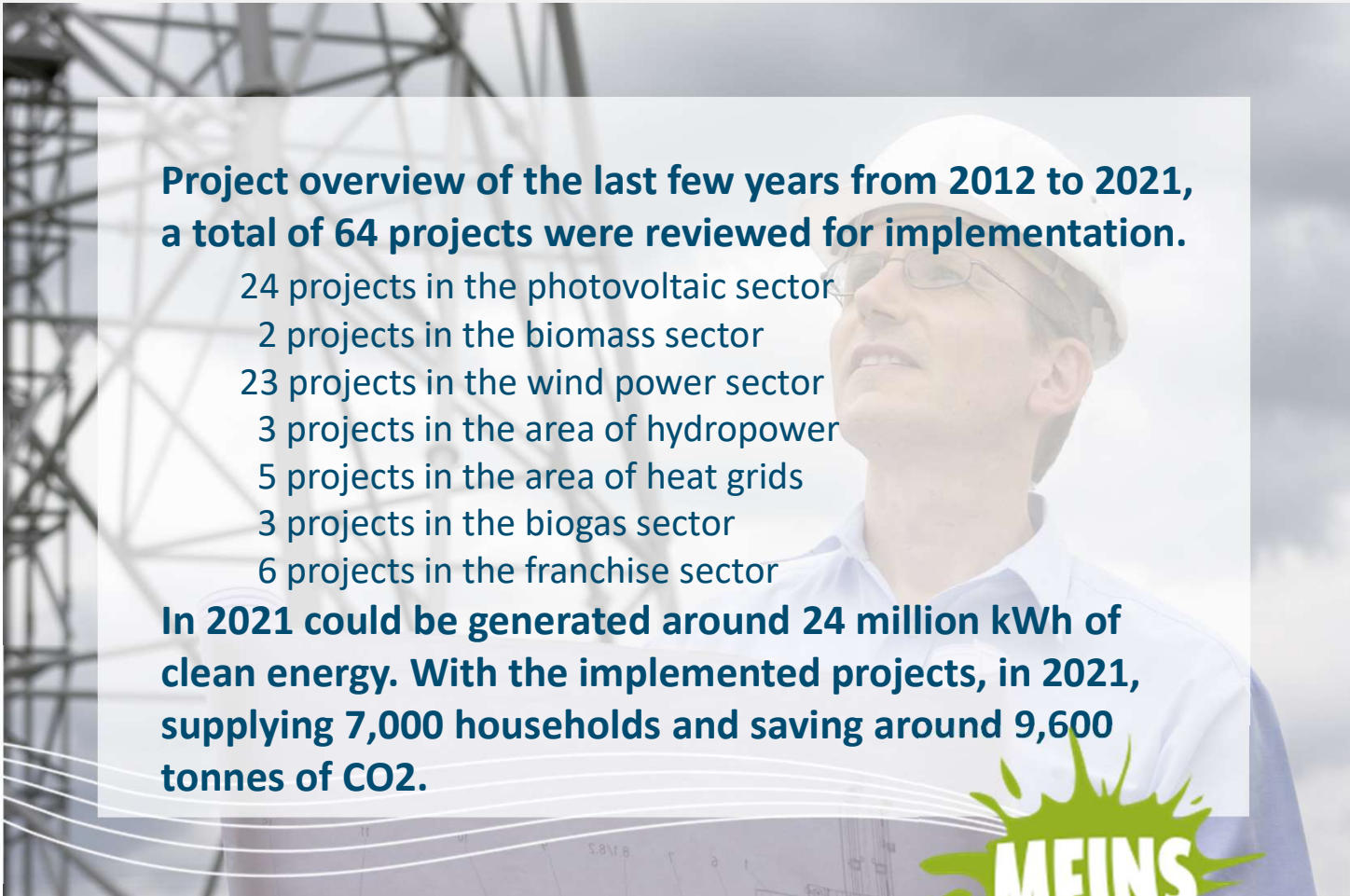
Ja (Niedersch.: C 01 insg.)	<div style="width: 56.9%; background-color: green; height: 10px;"></div>	56,9 %
Nein (Niedersch.: C 02 insg.)	<div style="width: 43.1%; background-color: red; height: 10px;"></div>	43,1 %

Wahlberechtigte: 19.766
Wahlbeteiligung: 59,6%

Nr.	Stimmbezirk	Wahlberechtigte	Wähler /-Innen	Ja (Niedersch.: C 01 insg.)	Nein (Niedersch.: C 02 insg.)
1	Rathaus	19.766	478	271 57,1%	204 42,9%
B11	Joseph-Maria-Lutz-Grundschule	-	1.145	584 51,2%	556 48,8%
B12	Joseph-Maria-Lutz-Grundschule	-	1.139	599 52,7%	537 47,3%
B13	Joseph-Maria-Lutz-Grundschule	-	1.122	589 52,7%	528 47,3%
B14	Joseph-Maria-Lutz-Grundschule	-	1.145	580 51,1%	554 48,9%
B15	Joseph-Maria-Lutz-Grundschule	-	1.185	614 52,2%	562 47,8%
B16	Joseph-Maria-Lutz-Grundschule	-	1.027	550 53,8%	472 46,2%
B17	Joseph-Maria-Lutz-Grundschule	-	1.149	743 64,9%	402 35,1%
B18	Joseph-Maria-Lutz-Grundschule	-	1.077	706 66,0%	363 34,0%
B19	Joseph-Maria-Lutz-Grundschule	-	1.204	699 58,5%	495 41,5%
B20	Joseph-Maria-Lutz-Grundschule	-	104	72 66,2%	370 33,8%

Success for the Wind Alliance





Project overview of the last few years from 2012 to 2021, a total of 64 projects were reviewed for implementation.

- 24 projects in the photovoltaic sector
- 2 projects in the biomass sector
- 23 projects in the wind power sector
- 3 projects in the area of hydropower
- 5 projects in the area of heat grids
- 3 projects in the biogas sector
- 6 projects in the franchise sector

In 2021 could be generated around 24 million kWh of clean energy. With the implemented projects, in 2021, supplying 7,000 households and saving around 9,600 tonnes of CO₂.

Project overview



bavariastrom.

g'radaus bayrisch. unabhängig. regional.



Regional electricity tariff for Bavaria and Pfaffenhofen



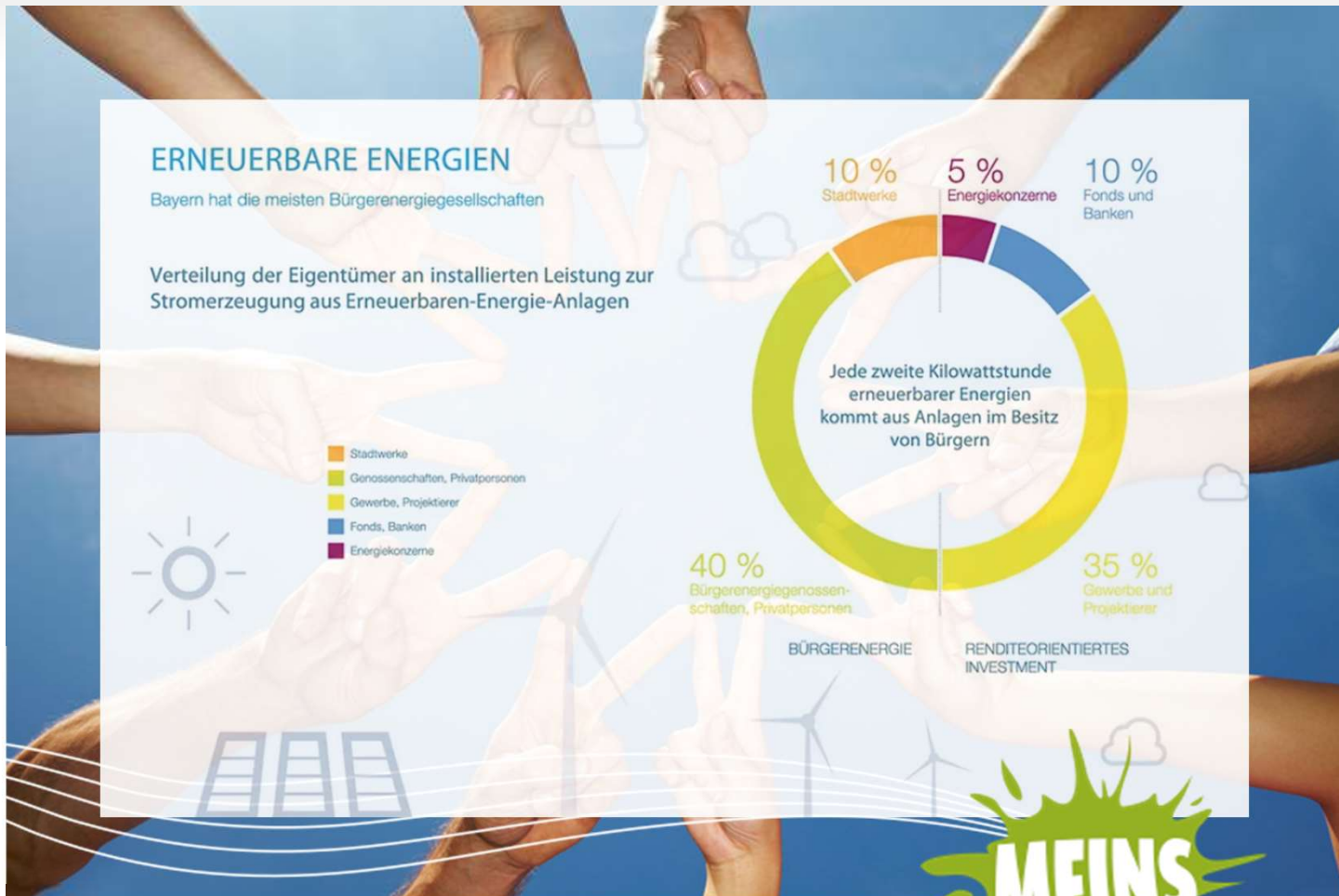
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Regional electricity tariff for Bavaria and Pfaffenhofen

unsere Energie!
BÜRGERENERGIE
IM LANDKREIS PFAFFENHOFEN A.D.ILM



Citizen participation in Bavaria





Citizen participation in Bavaria

- Every second kWh of renewable energy in Bavaria and Germany comes from citizen plants.
- Around a quarter of all citizen energy companies in Germany are located in Bavaria (around 250).
- Around 550,000 PV systems currently generate around 12 million kWh of electricity for around 3.7 million households.
- 3,900 biomass plants currently generate 7,334 million kWh, supplying 2 million households.
- There are currently around 30,000 wind turbines in Germany with installed capacity of 55 gigawatts. Bavaria currently has around 1170 wind turbines.
- All of Bavaria's approximately 4,200 hydroelectric power plants generate electricity for 3.5 million average households.

Citizen participation in Bavaria





BÜRGER ENERGIE BAYERN e.V.

In 2014, we founded this association, which collects the common economic and political interests of the Bavarian citizen-owned energy industry.

This includes around 250 Bavarian citizen-owned energy cooperatives (around a quarter of all German BEGs), but also municipal and public utilities, the majority of which are publicly owned, and all other companies that operate regenerative citizen-owned energy plant.

Citizen participation in Bavaria

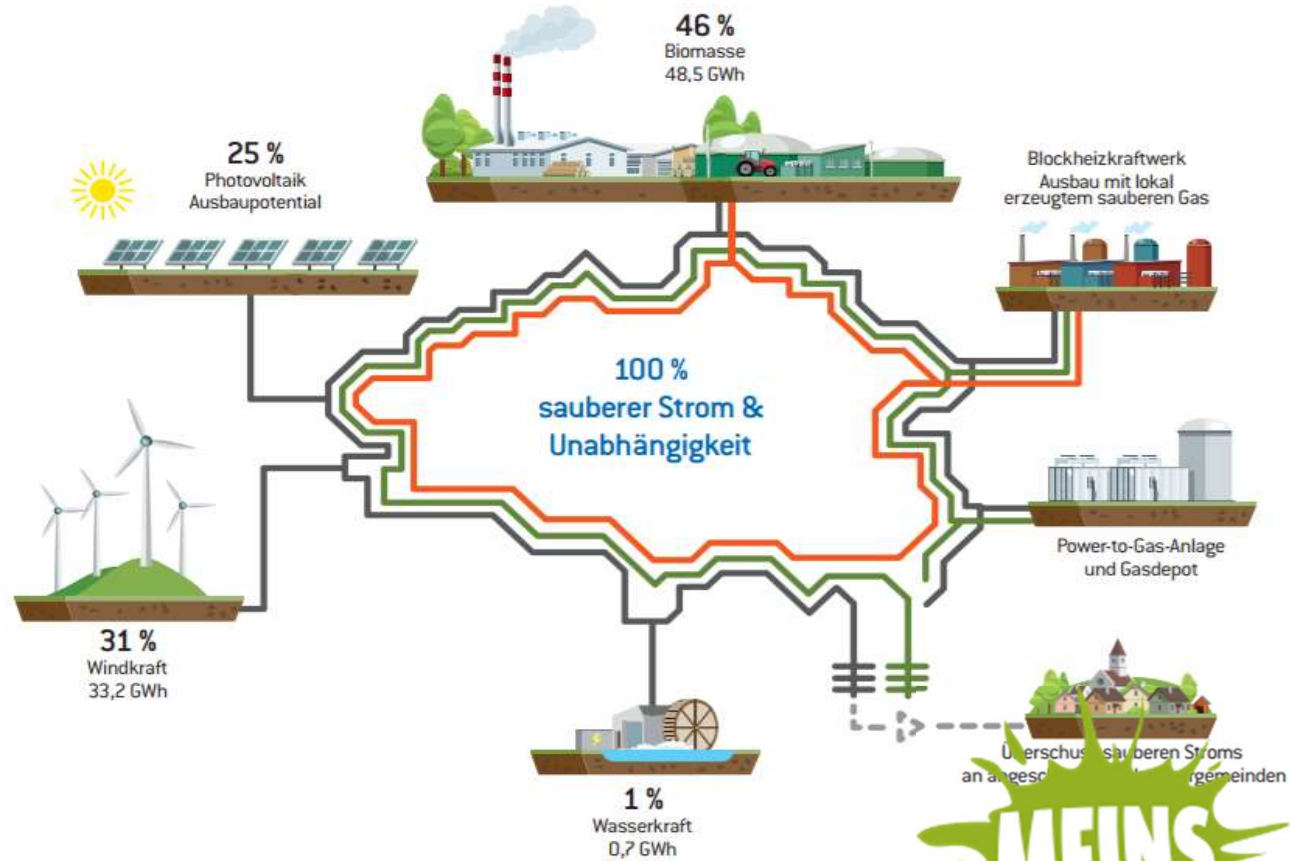




Important part of the success story!
Remunicipalisation of the grid for electricity and gas



Stromerzeugung in Pfaffenhofen 2021



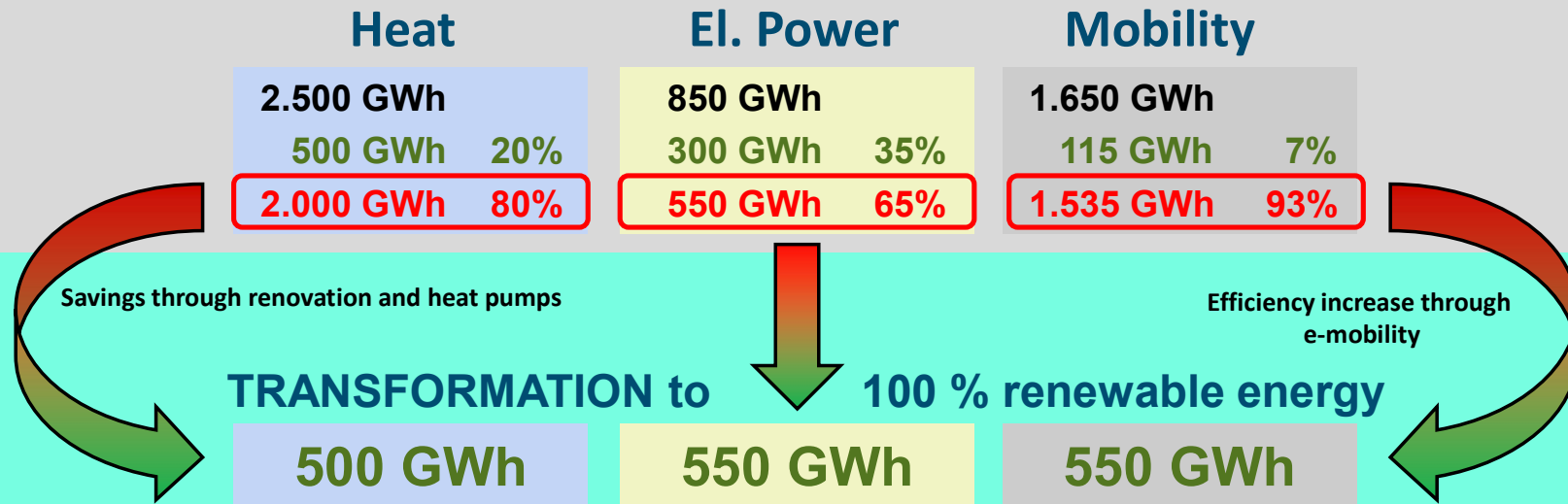
renewable electricity
2017 - 70%
2023 - 100%



STADTWERKE
PFAFFENHOFEN A. D. ILM



Energy demand 2021 in the DISTRICT of Pfaffenhofen approx. 5.000 GWh



Additional demand for renewable electricity through an "all electric" strategy

1.600 GWh

Necessary transformation in the district of Pfaffenhofen





Thanks for listening!





Andreas Herschmann, Chairman of the Board
Dr. Holger Klos, Project manager

Bürgerenergiegenossenschaft
im Landkreis Pfaffenhofen an der Ilm eG

