

ENERGY DEMOCRACY IN HEATING AND COOLING

Jörg Dürr-Pucher, Bad Waldsee, November 24th 2021





PLATTFORM RENEWABLE ENERGIES IN THE LÄND

100 % Future Energy for Baden-Württemberg.

WHO WE ARE

The umbrella organisation







Geothermal energy



Wood energy



Solar energy



Hydro power



Wind energy

- Coalition of a wide range of parties in the Renewables Energy Sector in Baden-Württemberg, like e.g. companies, associations, foundations, research institutions and many more.
- **Voice** of the energy turnaround in Baden-Württemberg.
- **Point of contact** for upcoming complex and energy-related questions.
- **Interface** between the economy, research, politics, media and the civil society.

FOUNDING MEMBERS OF THE PLATTFORM

All Renewable Energies represented:

















WHAT DRIVES US

Our goals

We demand to implement an environmentally compatible, cost-effective and futureproof energy supply on the basis of renewable energies in the shortest possible time.

- Driving the expansion of renewable energies.
- Greater attention of the renewables in political debates.
- Intensified Communication within the sector and towards the overall energy industry.
- Higher acceptance for the energy turnaround in civil society.
- Improving the media presence of the renewable energies.
- Promoting the thermal turnaround.
- Converting the Mobility sector to a renewable industry.



WHAT WE DO

Our fields of activity

At a glance:

Political work

Press and public information

Events

Association development and networking

Member communication and administration

Technical work

Organisation and administration



WHAT WE DO

Our field of activity

Presse and public information

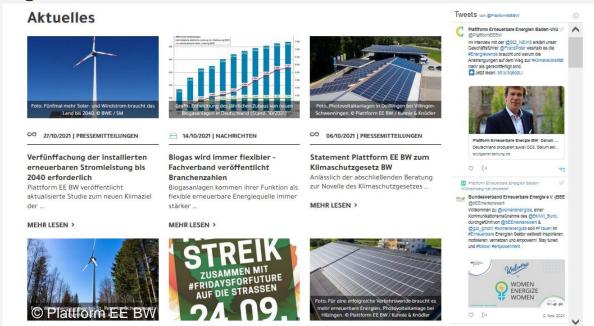
At a glance:

- Managing social media accounts.
- Dispatching newsletters.
- Managing our website.
- Communication with the press, radio, TV etc.
- Press releases.

Our achievments:

- 750 press reports
- 450 Follower on Twitter
- Media requests from press, radio and TV on a regular basis
- Almost weekly press releases

Insight:





WHAT WE DO

Our fields of activity

Events

At a glance:

- Organising a congress for the energy turnaround.
- Supporting the sector-specific conferences.
- Concluding alliances.
- Speeches on events.

Our achievments:

- Monthly webinars for specific challenges in the different renewable technologies.
- Regular exchange with several state ministries.

Insight:







Think globally – act regionally

- Climate Change is an urgent global topic.
- From G 20 over Europe to Germany, in counties, towns and villages many people and politicians have realized the need of climate protection.
- All future activities and measures have to be:
 - → Concrete
 - → Common
 - → Local und regional
 - → What means democratic



DISTRICT HEATING AND COOLING IS DEMOCRATIC

District heating and cooling systems normally adress all households and enterprises in a town or village.

- Decisions are made by the municipal council.
- District heating companies.
- Convoy heat planning for groups of towns and villages.
- These planning processes can start or enhance public discussion about district heating and cooling.



COMMUNAL HEAT PLANNING

Communal heat planning forces municipal councils to deal with district heating and cooling.

- Enforced heat planning for the towns.
- Voluntary heat planning for the villages.
- Convoy heat planning for groups of towns and villages.
- These planning processes can start or enhance public discussion about district heating and cooling.



IS DEMOCRATIC ALWAYS ECOLOGICALLY SOUND?

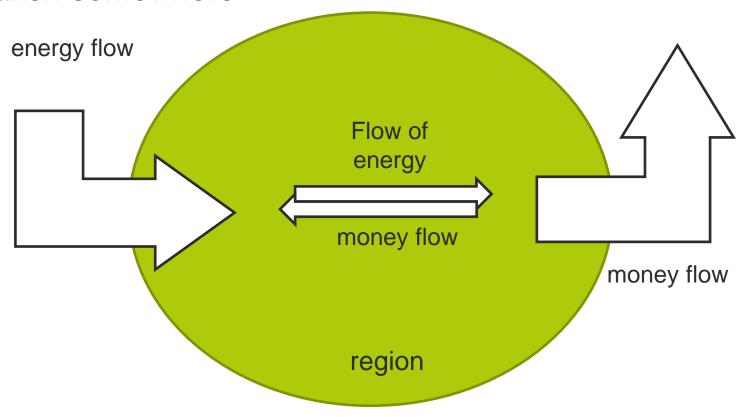
Existing district heating and cooling systems owned by municipal utilities are very often based on fossil coal and gas.

- Especially bigger district heating systems are very often leading to high greenhouse gas emissions.
- Voluntary heat planning for the villages.
- Convoy heat planning for groups of towns and villages.
- These planning processes can start or enhance public discussion about district heating and cooling.



Flow of energy and resources vs. money

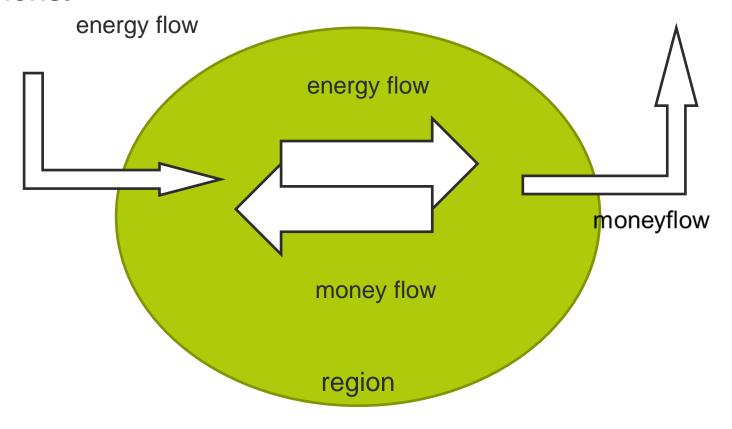
- fossil central regions
- decisions are taken somewhere



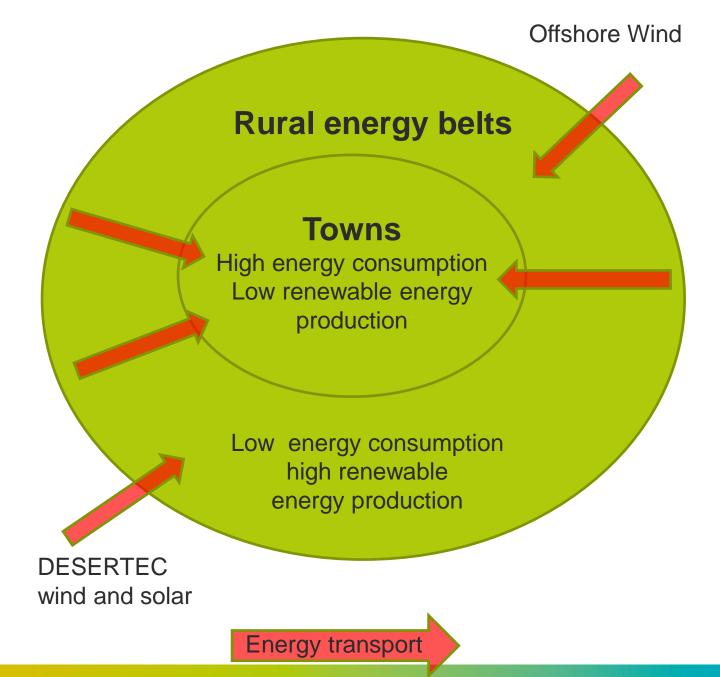


Flow of energy and resources vs. money

- decentral renewable regions
- democratic decisions.









Biogas plant in Mauenheim (Germany)





Example bioenergy village Mauenheim

- Heat supply 90 % renewable.
- District heating and cooling system owned by regional enterprise (1.200 share holders).
- Contract with the democratic representatives of the village.
- Electricity supply 950% renewable.
- 900% bioenergy, 50% solar.

→ 850% export of electricity!



ONE EXAMPLE OF A CITIZEN ENTERPRISE

solarcomplex in brief:

- Goal: conversion of the regional energy supply to renewable energies by citicens from the region.
- Founded in 2000 by 20 citizens, currently more than 1,200 shareholders.
 Private persons, companies, municipal utilities and citizen energy cooperatives.
- Founded with € 37,500, today € 24 million equity. Small annual profits.
- Moderate return expectation (4% on the share capital).
- Around 40 employees, a kind of "regenerative public utilities".





2001 - the first project: 18 kW at a school in Singen

2011 - more than 6 MW

2021- more than 60 MW

That's a factor of 3000!



2012: Solar Energy Village Büsingen

First solar district heating project



2018: district heating Randegg addition of solarthermal plant

- wood plus solar
- 2.400 qm solar field
- 300 m³ buffer
- started in August 2018
- summer heat 100%, annual contribution around 20%









HOW TO ESTABLISH DEMOCRACY IN DISTRICT HEATING

- Local and regional district heating cooperatives.
- Regional and local renewable citizen energy cooperatives.
- Communal based municipal utilities.
- Common enterprises owned by municipal utilities and citizen energy cooperatives.





Example Bioenergy Village Bittelbronn





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DEMOCRACY BASEMENT FOR THE GREAT TRANSFORMATION

- District heating and cooling is one of the central parts of the transformation.
- District heating and cooling is linked to communal level.
- District heating and cooling is more democratic than wind- and solarparks.
- There can be difficulties if enterprises are very powerful.
- Strict regulation can be an instrument to safeguard democracy in the grids.



THANK YOU VERY MUCH!

