

ACTIVITY A.T1.2 STATUS QUO ANALYSIS OF THE LOCAL ENERGY PLANS

D.T1.2.1

Subtitle

Version 1
MM YYYY





STATUS QUO ANALYSIS OF THE LOCAL ENERGY PLANS

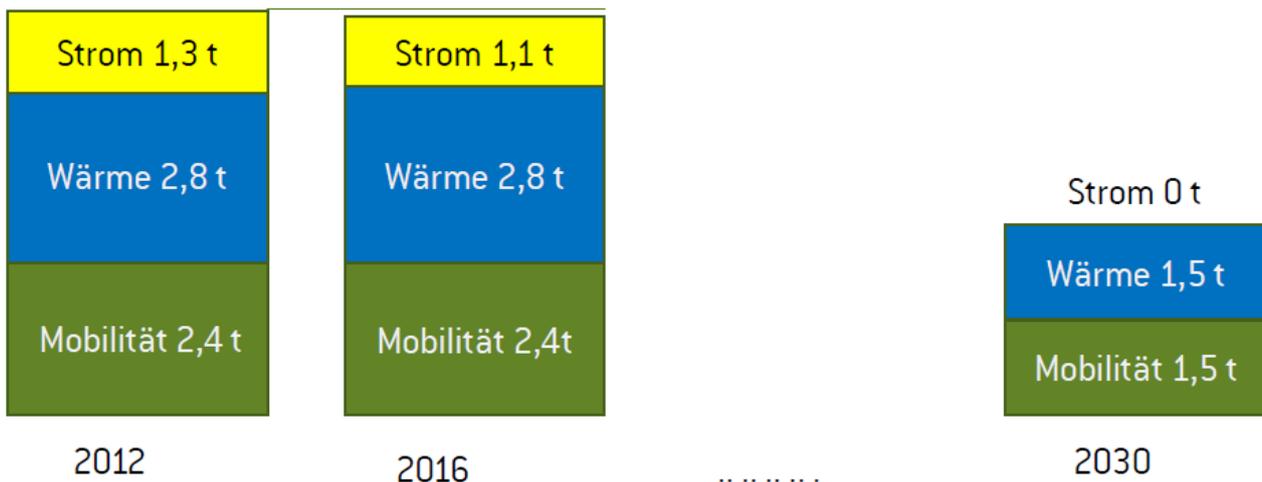
In the year 2012 a local energy plan for Pfaffenhofen was established. The energy plan gives an overview on CHG emissions and reduction potential. Besides that it defines targets and projects. Compared to other municipalities the energy plan in Pfaffenhofen is in a vital and continuous development. A lot of projects defined in this plan are today reality.

1. Data quality of the current local energy plan

The data quality of the three main parts for CHG emission - mobility, heating purposes and electricity is not continuously high. In the sector of electricity we have real measurement data gathering the locally produced and consumed energy. In the field of heating, we have seen a high quality of data for natural gas. But when it comes to wood fired or oil fired systems we have to improve our data collection.

In terms of mobility it is even more complicated to estimate the CO₂ emissions.

Picture 1 shows the development of CO₂ emissions from 2012 - 2016 done by Stadtwerke and Bürgerenergiegenossenschaft:



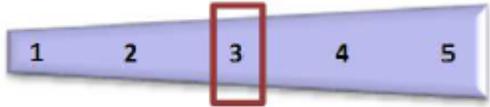
The future targets for heat and mobility is a much better estimation.

2. Proposed projects and their Economics and CHG emission savings potential

In the energy plan a lot of projects where proposed and described in a manner what should be done, who will do it, what are the CHG savings and wat are the estimated costs. There is no big difference in the planned numbers of projects and the realized ones. However not every project is realized so far.



The next picture out of the energy plan is describing a project - renovation of a old water turbine in the city centre. This picture provides high CO2 savings and a medium investment in this project.

Ziel / Strategie	Zusätzliche Erneuerbare Energie aus Wasserkraft erzeugen
Beschreibung	Nutzen des Projekts „Natur in der Stadt 2017“ zur ökologischen Sanierung und Integration der Wasserkraft
Umsetzungsschritte	<ul style="list-style-type: none"> ▪ Gespräche mit den Eigentümern ▪ Abstimmung der Planung ▪ Integration mit Natur in der Stadt ▪ Realisierung parallel zur Naturierung der Ilm
Start / Dauer	2013 /
Gesamtkosten	<p style="text-align: center;">allg. Investitionskosten</p> 
Finanzierung	Evtl. Fördermittel bzw. zinsgünstige Darlehen Darlehen bzw. Unterstützung im Rahmen des öffentlichen Interesses
Energieeinsparung	___ kW / € ___,- p.a. (oder gesamt)
CO ₂ -Vermeidung	<p style="text-align: center;">CO₂-Minderungspotential</p> 
Wertschöpfung	€ ___,- p.a. (oder gesamt)
Zuständigkeit	
Akteure	Stadt, Private Eigentümer, Wasserwirtschaftsamt Fischereiverbände-, vereine
Priorität / Umsetzung	Hoch
Anmerkung	

The project has been realized by Stadtwerke in cooperation with the city of Pfaffenhofen from 2013 till 2016. The old water turbine was rebuild and a new water wheel was build.

Picture 2 the old water turbine:



Picture 3 the new water wheel:



The CO₂ savings meet 80% of the initial calculated values however the investment was rather high.



3. Conclusion

The Pfaffenhofen energy plan which was established in 2012 has been basis for the energetic development of the municipality. A lot of projects proposed in the energy plan are brought to action so far. One keystone was the establishment of Stadtwerke Pfaffenhofen in 2013. Since then they are responsible for lowering the carbon footprint by bringing back the gas and electrical grid to the power of the people. In 2019 a new approach was started. It is called climate adaption concept. In this concept the Stadtwerke and Bürgerenergiegenossenschaft are contributing their knowledge.