



# ENERGIEWENDE TWINNING TOWNS

Marburg-Biedenkopf and Kościerzyna

27th – 30th September 2020



LANDKREIS



MARBURG  
BIEDENKOPF

Galway  
Dunteer

Woerden  
Steinhagen  
Alheim  
Braunsbedra  
Marburg-  
Biedenkopf

Pfaffenhofen  
a. d. Ilm

Kościerzyna

Kozani

## Kościerzyna (PL) welcomes Marburg-Biedenkopf (GER) to an on-site exchange about the energy transition

For more than 15 years, the districts Kościerzyna and Marburg-Biedenkopf have been maintaining a partnership in order to bring European issues such as the energy transition on the local agenda through the exchange of ideas and measures.<sup>1</sup> With about 24,000 inhabitants, Kościerzyna is one of the smaller cities in Poland, but it is still a popular vacation destination and home to several prominent Polish personalities - such as Józef Wybicki, author of the Polish national anthem.

The workshop was originally planned for spring 2020 in the Polish twin city as part of the Energiewende Twinning Towns project but had to be postponed due to the Covid-19 pandemic. It could finally take place on September the 28th and 29th, 2020. The workshop was coordinated by Aga Sauerwald from the district of Marburg-Biedenkopf and prepared and conducted by Erich Weber, Energy Coach from Marburg-Biedenkopf. On the part of the project partners Nicola Techel and Valentin Jahnel from the Renewable Energy Agency (AEE) accompanied the workshop days, which took place under strict hygiene measures.



The districts maintain their partnership for more than 15 years.

### Monday, September 28th

On the first day, the delegation was welcomed by the District Administrator Alicja Żurawska in the District Office of Kościerzyna. She emphasized that she was very satisfied that the exchange could now take place, as it serves the exchange of knowledge in order to promote the energy transition on both sides. Poland has now decided to phase out coal by 2049. Kościerzyna, therefore, aspires to accelerate the development of renewable energy locally. Among other things, the district bordering the Baltic Sea has great potential for wind energy, sufficient open spaces for photovoltaics and renewable raw materials for energy generation.

Educational workshops at two schools in the district Kościerzyna formed the core of the exchange. The first workshops took place at the Lubiana elementary school. In preparation for the two-hour workshop, a large hall in the attic of the building was made available in order to comply with the hygiene precautions. A total of 25 students and their class teacher participated. In the beginning, Erich Weber introduced the participants to climate change. He explained the greenhouse effect and the environmental damage it causes. The children were thus able to understand the role that renewable energy plays in protecting the climate and conserving resources.

<sup>1</sup> More information: <https://www.unendlich-viel-energie.de/features/politics/energiewende-twinning-towns-marburg-koscierzyna>

After the introduction, it was time for practical work: Under the guidance of the team from Marburg-Biedenkopf, the pupils assembled so-called "SolarCup boats" from plastic bottles. Equipped with a solar cell that drives a rotor with a wind turbine, the boats can move on the water. The students gave free rein to their creativity in the construction of the boats. They did not shy away from questions and showed their enthusiasm for the finished models. In a pool set up in the schoolyard, they finally tested the boats successfully for their fitness to sail.



The pupils from the Lubiana elementary school successfully tested their boats.

After a joint lunch, the delegation headed for their next destination. They were welcomed by representatives of "Kos-Eko", the municipal energy, heat and water supplier of Kościerzyna. The mayor of the city, Mr. Michał Majewski, was also invited. During the meeting, the group was presented the business areas of Kos-Eko and the challenges associated with climate protection. Since Poland's energy supply is currently still heavily dependent on coal-fired power generation, but the country aims to achieve the European climate targets by 2050, Kos-Eko is increasingly switching its energy production to gas and, above all, to biomass. It is also increasingly relying on combined heat and power generation. In the city, the company was able to replace about 300 coal stoves with heat exchangers connected to the local heating network (3.8 km long). Currently, the share of renewable energy in Kościerzyna is still low; Kos-Eko would like to contribute to increasing this share significantly in the coming years. According to the management, the central challenge in the conversion from fossil to renewable energy sources is above all the extensive need for financial resources.

**Tuesday, September 29th**

The second day of the workshop started at the secondary school Powiatowy Zespól Szkol Kościerzyna. One of their classes specializes in renewable energy. The students and the guests were welcomed by the Deputy District Administrator of Kościerzyna, Piotr Laska. On this day, the 25 students of the class could build solar cars and let them race on a race track that was built by the Production School Marburg. The race track was brought to Poland as a gift. Before building the cars, Erich Weber discussed theoretical information about climate change and its consequences with the students. In addition, a video tutorial explaining the construction of the cars as well as a construction manual in Polish were brought along, in order to enable other school classes in Poland to experience it. The individual work steps for the construction of the solar cars can thus be easily understood.



The SolarCup cars are being tested on the race track.

The SolarCup race of the self-constructed cars took place on the schoolyard. The principal of the school was enthusiastic and expressed the idea of organizing an own SolarCup at an upcoming school event. Also, on the part of the teachers there was a great interest to carry out the project with other class levels. Therefore, the responsible persons from the Hessian district left the remaining kits to the school.

After the competition, a tour of the school demonstrated its modern technical equipment. In addition to many new workbenches, solar power and solar thermal panels were also located in the school basement for interactive lessons.

In the afternoon, there was a meeting with the mayor of the municipality Kościerzyna, Grzegorz Piechowski. The municipality, with an independent administration to the city of the same name, has an area of 310 km<sup>2</sup> and 16,000 inhabitants.



Representatives of Marburg-Biedenkopf and Kościerzyna talk to Grzegorz Piechowski, the mayor of the municipality Kościerzyna.

During the conversation, the mayor made it clear that the financial viability of renewable energy is crucial for further expansion in the municipality. It is also particularly important that the municipal administration sets a good example. Municipal buildings and schools were renovated and the expansion of solar energy on their roofs is planned. In addition, two photovoltaic plants with 5 MW and 1.5 MW capacity each were installed in the community. Together, the city and the municipality Kościerzyna provided 40 percent of the financing, the European Union provided the remaining 60 percent.

Mayor Piechowski also reported on a conversation with young people from the community: Questions about how to develop a sustainable economy and practice sustainable consumption are increasingly becoming a concern to Polish students. The long-standing partnership with the district of Marburg-Biedenkopf and especially with the city of Cölbe was cited as a good example for the exchange of experience in the energy transition.

### Evaluation and outlook

The two municipalities and some officials from Kościerzyna evaluated the workshop days on questionnaires. The evaluation of the workshop shows that all participants are very satisfied with the practical and theoretical exchange in the schools and considered it productive. Climate education as a starting point is important for both municipalities: It makes sense to playfully encourage an understanding of climate and energy production at an early age.

With regard to the expansion of renewable energy in both regions, it was found that the Hessian district is many years ahead. Moreover, greater financial support for renewable energy projects is provided in Germany. Nevertheless, the great interest in the project on site and the commitment of officials from Kościerzyna made it clear that the mentality of Polish citizens is changing with regards to energy production and climate protection. This is precisely where the partnership of the municipalities must continue to take action in order to support this change and promote creative ideas through the exchange of experience.

### For the future cooperation the following main topics were identified:

- Climate protection education: Representatives of the Polish schools were very convinced by the construction of the solar vehicles and want to continue these projects. A student exchange between the two districts is conceivable. The technical equipment at the Polish secondary school is also very modern. The district of Marburg-Biedenkopf currently has a mobile solar plant, which is always driven to the respective schools for demonstration purposes. Stationary systems are advantageous for more flexible use.
- Heat transition: Kościerzyna's target is the abolition of the coal furnaces. To achieve this, the renewable energy sources for heat generation must be further diversified. At present, particular emphasis is being placed on energy from wood. Marburg-Biedenkopf's experience with bioenergy villages is highly relevant for this. The expansion of wind and solar energy must also be promoted in Kościerzyna.
- Cooperation between the district, the municipality and the city: On the part of the German as well as the Polish municipalities, the synergy effects of the different administrative levels should be utilized better.