

## POWER OF COMMUNITY ENERGY PROJECT

The concept of "community energy" encompasses the ability of citizens within different communities to reach the energy they need through cooperation and ownership. Citizens typically get together and invest and install renewable energy installations together, while they are using the produced electricity or heat, as well as selling it to the grid.

Acting together can mean that people living in the same geographic area, where the installation is or they live in different geographic areas and own share in the installations.

Community energy is not limited to producing and sharing energy only. At the same time, it brings communities closer together, can prioritize disadvantaged groups, and raising awareness on nature and climate, and citizens learn about energy sharing and saving.

The world needs more community renewable energy, especially to combat climate change. The renewable energy transition, building cooperatives and community energy is a response to the challenges of modern civilization.

The concept of renewable energy cooperatives, which the Partners emphasized at the Çanakkale meeting on 27-28 April 2022 in Turkey, clearly demonstrated the opportunities and power of community energy. While local developments are achieved with renewable energy cooperatives, the cooperation of the municipalities, state and the citizens are often advantageous.

"The Power of Community Energy" project is a cooperation among four NGOs in Poland (SIE), Turkey (TROYA), Germany (WECF) and Denmark (INFORSE-Europe). Within the Project these partners have met and shared their experiences and good practices in the last two years.



#### **POLAND - SIE (WWW.SIE.ORG.PL)**

SIE is the project coordinator, a non-profit association founded in 1990. The organization carries out projects with various collaborations on sustainable development and protection of biological diversity. The organization is in contact with national and international public institutions and organizations, especially on the risks that may occur as a result of pesticide use in agriculture.

SIE works to promote the concept of energy cooperatives: to ensure energy independence, to prefer renewable energy sources as soon as possible instead of fossil fuels, and to improve air quality by establishing cooperation.

SIE is co-founder and member of the Polish Green Network (www.zielonasiec.pl), which unites ecological organizations acting for sustainable development, environmental and climate protection in Poland.



#### GERMANY WECF (HTTP://WWW.WECF.EU)

It is a non-governmental organization founded in 1994 after the Earth Summit in Rio de Janeiro in 1992. WECF Germany is part of the international WECF network. The organization acts with the understanding of gender equality and a healthy planet for all. With this understanding, more than 150 women's non-governmental organizations from 50 countries came together.

WECF Germany has extensive experience in management, consulting and policy support. It works for transformative gender equality in conjunction with climate justice, sustainable energy, less toxic waste, safe water and sanitation for all.

In Eastern Europe, WECF develops with local partners solar energy, insulation technologies and photovoltaic concepts focused on rural women. Energy societies and energy cooperatives are a viable instrument for the generation and consumption of renewable energy in rural areas.



#### TURKEY - TROYA (HTTP://TROYACEVRE.ORG)

Troya Environment Association was established in Çanakkale in 2009 to strengthen local communities in climate protection activities. The association fights against climate change with various projects and trainings and advocates for the dissemination of renewable energy sources against climate change.

In May 2017, eight Troya members established Turkey's one of the first energy cooperative. The cooperative is run by three women. This pioneering action paved the way for more cooperatives — more than ten cooperatives were established in different regions of Turkey in two years.

The association aims to bring the cooperatives together with the decision makers, to strengthen the communication of cooperatives with each other, and to spread the concept of renewable energy cooperatives through conferences of renewable energy cooperatives.

Troya Environment Association organizes conferences to ensure the spread of energy cooperatives in Turkey. POWER project partners, who participated in the 6 International Renewable Energy Cooperatives Conference held in Çanakkale this year, made presentations at the conference and talked about their experiences.

### DENMARK- INFORSE-EUROPE (HTTP://WWW.INFORSE.ORG/EUROPE)

THE INTERNATIONAL EUROPEAN NETWORK FOR SUSTAINABLE ENERGY (INFORSE-EUROPE) is a network of independent and not-for-profit non-governmental organisations.

Its aim is to protect the environment, reduce poverty and work for sustainable energy solutions. INFORSE-Europe has participated in many UN Climate Conferences to lobby with other global and national NGOs.

INFORSE has a long experience in citizen participation in renewable energy and energy efficiency, and also shows a strong interest in further developing local participation in 'citizens' energy.

It has played an important role in the energy transition in Denmark and the development of community energy.

INFORSE-Europe is a member of the European Community Power Coalition.

Denmark is the best example of how the energy transition took place in a short time. Citizens also contribute to this issue. Today, Denmark has more than 250 wind farms, 160 thermal solar plants for district heating, more than 340 local heating networks belonging to energy cooperatives and more than 20 eco-communities (Eco-villages), many of which have their own heating systems.





# 6TH INTERNATIONAL CONFERENCE OF RENEWABLE ENERGY COOPERATIVES

The partners who met in Çanakkale, came together at the 6th International Renewable Energy Cooperatives Conference on April 27, 2022. At the conference, we got oriented on different financial infrastructures, which can increase energy independence and local participation. Project partners talked about the power of community energy – different models how the citizens can own energy supply systems together.

#### Elzbieta Lenarczyk Priwieziencew (SIE)

The project coordinator of the Power of Community Energy explained the activities and project outputs within the scope of the Project. Elzbieta mentioned all the meetings held by the partners, and reports produced within the scope of the Project. SIE conveyed the status of Poland on energy. She noted that in Poland the coal lobby is currently very strong and civil society is weak. It was stated that Poland's priority must be to save energy and replace fossil fuels with renewable energy sources and the steps to be taken in this regard.

#### Henning Bo Madsen ve Martin Dietz (INFORSE-Europe)

The INFORSE team shared information about the history and current situation in Denmark in the field of renewable energy cooperatives including heating, wind, and solar heat and electricity. Information about technical systems and their applications was given for solar electricity. People have shown a lot of interest in investment, but there are also barriers.

Among examples mentioned were the non-profit Hvide Sande District Heating Cooperative with cooperation of the municipality, which produce 97% of energy with wind and solar: The plant has 3 windmills + electric heat pump and boiler + thermal solar system. Another example is Copenhagen Solar Cell Association. It was Denmark's first solar cell association that allowed private citizens to purchase a share in a solar cell plant, thus contributing to a greener environment.

#### Johannes Baumann (WECF)

WECF shared information about the situation of renewable energy cooperatives in Germany. It was conveyed what steps should be followed to establish a cooperative in Germany. The best examples found in Germany are described. Currently, there are 835 cooperatives in Germany with a total of 200,000 members. WECF talked about the benefits of cooperating with local governments.

It was stated that the energy sector is predominantly a maledominated sector, but it is women who are generally more sustainable and more sensitive to ecological issues.

#### Melis Yılmaz (Troya)

The roles of smart energy communities in future energy systems, their possible designs and new developments in Turkey were mentioned. In smart energy systems, local people can participate in decision-making processes. In this way, transparency and energy justice according to needs are ensured. The association aims to establish and expand smart energy communities with different projects.



After the presentations of the Project's partners, discussions were held on the studies carried out in this field in Turkey.

Çanakkale Municipality's Councilor, *M. İrfan Mutluay* and Çanakkale Kepez's *Mayor Birol Arslan* shared the projects and experiences implemented by their municipalities. They stated that they especially prioritize the participation of the public and that empowerment from the local is taken into account in all the studies.

The Mayor of Denizli, *Bozkurt, Birsen Çelik* explained how they started their renewable energy irrigation cooperatives projects and at what stage they are, and brought the audience together with experiences and good examples.

ritize the participation of the

The President of the Troya Renewable Energy Cooperative,

Lawyer Derya Nazan Ünverir stated that many energy
cooperatives in Turkey cannot produce energy due to legal
regulations. and these cooperatives will be only able to
produce energy if legal regulations are changed. This is
energy irrigation cooperatives

actually a very important point for Turkey. The changes to a

and energy justice.

cooperatives and the public.

IYI Party Parliamentary Commissioner *Ayhan Altıntaş* and *Dimitris Kitsikopoulos* from Greece attended the conference online.

supportive legal environment can ensure local development

Birsen Çelik stated that municipalities should carry out

studies for project management support, technical consultancy, financial process execution, and ensuring that

the opportunities in the legislation are used by the







### FIELD VISIT

After the conference and the Project meeting, the Partners made a field trip and the facilities around Çanakkale were visited.

The partners visited a Seed Bank, the Çanakkale botanical garden, and the wastewater treatment plant powered by solar panels, which were implemented by the municipality of Çanakkale. The seed bank is a point where the municipality brings the ancestral seeds together with the farmers and the public every year. In this way, the municipality aims to ensure the continuity and quality of agricultural products.



The partners also visited the Anemon Wind Power Plant. The power plant produces approximately 86 million kWh of electricity per year with 38 800 kW Enercon turbines at the Anemon power plant with an installed capacity of 30.4 MW. This electricity, which is produced without giving an average of 43,000 tons of CO2 to the atmosphere, meets the electricity demand of approximately 38,000 houses.

Finally, the MTN geothermal power plant (GPP) was visited at Çanakkale Tuzla.. The 7-MW Babadere GPP has the distinction of being the first "true zero emission" geothermal power plant in Turkey. Since then, there are about 70 in Turkey.

Learning about the local history and culture, partners visited the ancient archaeological site of Troya and the Troya Museum. and visited a village, where they had a homemade lunch at a family house.

This meeting in Turkey was the final event of the "The Power of the Community Energy" Project. A publication "The Power of the Community Energy" was also distributed, which is available in English, Polish and Turkish and a collection of successful stories are established, which is to be finalised by the end of the project.















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