Biomass briquettes for the energy poor

DIRECT ENERGY PRODUCTION / CONSUMPTION

COLLECTIVE

RURAL

Summary

The biomass briquettes ("Biobriquettes") programme was established in a disadvantaged region of Hungary where the unemployment rate is higher than the national average, and many people live below the poverty line. The target area is a Roma village whose inhabitants are a socially marginalised group in Hungary with even less access to combustible materials for heating. The project was developed by the Real Pearl Foundation and Art School. The project contributes to creating new jobs and strengthening the community, reducing the heating costs of families involved, and saving local forests from being illegally cut down.

Why is it a case of energy citizenship?

It is a unique feature that NGOs that were initially dealing with social problems tried to find a solution that combines improving quality of life with an environmental sustainability approach. The Biobriquettes program uses cheap technology to create more environmentally friendly, energy-efficient, and lower-cost living conditions.

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 101022492.

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Goals

1. Enabling people in need to heat their homes (healthily and effectively, at a decent price), thereby reducing energy poverty;
2. Eliminating pollution and raising environmental awareness by hand-making biomass briquettes, a cheap, environmentally friendly fuel;
3. Decreasing the illegal procurement of heating fuel (e.g. stealing of timber).

The story and the typology

After the project's initial ("dreamlike") start and evolution, it is no longer improving or changing. Even though the infrastructure and the raw materials are available, the NGO has struggled to motivate the local population to participate – despite offering job opportunities and a cheap or free fuel source. Thus, the case has changed regarding the level of activity it has managed to inspire. The method and the circumstances have not changed, and the NGO hopes it will be able to change local attitudes in the future.

Case history summary

For the summary methodology, click HERE!

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Phase 1: Creation and setting up, 2011 - 2018

It was a “lucky combination” of circumstances that this project emerged from scratch. A hot summer coincided with some agricultural residue and the availability of volunteers, so the case started relatively informally. First and foremost, the leader of the Real Pearl Foundation, who is inspirational due to her personality and attitude towards innovation, strives to go one step further and make the impossible possible.

The technology used for starting bio-briquette production was pioneered in the region because of the low-tech approach, using locally available agricultural waste. An expert, Nóra Feldmár, played a major role in the introduction of the technology, helping to adapt a model she had seen in other communities in connection with her master thesis.

The entire approach of the Real Pearl Foundation towards helping families break out of generational poverty is also unique and pioneering. The Biobriquettes programme was intended to be part of this overall approach by creating a longer-term solution for heating homes based on local resources and, at the same time, employing local people (who can later use the briquettes they produce).

The main social advantage of these technologies lies in their simplicity; using them makes the community more self-sufficient, independent and confident, while local residents can easily participate and learn the necessary skills and competencies.

Main type: Go ahead
Transformative outcome / Citizen-based and hybrid agency

Phase 2: Facing challenges, from 2018 -

In 2018, after the briquetting machine was introduced and took over much of the work that had been done by hand, a new phase began. The volunteers continued working with local residents, but the improved technical situation did not help avoid the gradual decline in the activity of the programme. This was because 1) it has been challenging to maintain the motivation of the locals, especially when utility costs (gas, electricity, timber) are controlled by the central government and are maintained at a relatively low price (‘to protect poor families from price fluctuations’) and also because both hand-pressed and straw briquettes have more ash and therefore requires more cleaning and attention; 2) the leaders of the host foundation do not see real long-term political will to make substantial social change; and 3) the foundation itself has energy-related problems due to the energy crisis that started in 2022.

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Further information

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References

- Information available on various aspects of the case on the case website (Accessed 30.09.2023):
  - https://igazgyongyalapitvany.hu
  - https://igazgyongyalapitvany.hu/en/our-work/job-creation
- Case study of case prepared in the ENERGISE project: http://energise-project.eu/projects (Accessed 30.04.2023)
- Rosa Luxembourg Stiftung Brussels Offices (2016). Heating project to reduce energy poverty in Told, Hungary. A Hungarian Roma village overcomes energy poverty. URL: https://energy-democracy.net/told-hungary (Accessed 30.04.2023)
- Interviews with people conceptualising and managing the programme at the Real Pearl Foundation
- Vadovics, E., Szőllőssy A., and Vadovics K. (2023). Introduction and Methodology for the EnergyPROSPECTS Detailed Case Summary Reports. EnergyPROSPECTS (PROactive Strategies and Policies for Energy Citizenship Transformation). Zenodo. https://doi.org/10.5281/zenodo.10075408

Source of images

https://igazgyongyalapitvany.hu

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