

1st EUKI SURF Renovation Lunch

ONE STOP SHOP

An effective financing model for renovation projects in municipalities?

The example of the Rhodoshop project

June 28, 2023 | 12 - 1 pm | Online

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1. **EUKI SURF project**
2. **The Rhodoshop project**
3. **Q&A**
4. **Exchange**

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European Climate Initiative (EUKI) Sustainable Building Renovation – Forming the Future” (SURF)

Deutsche Umwelthilfe e.V., ENERGIACLUB & Ae3R Ploiesti-Prahova

The challenge:

Long-term goal: climate neutral building stock in the EU

EU aims at annual 3% renovation rate for public buildings

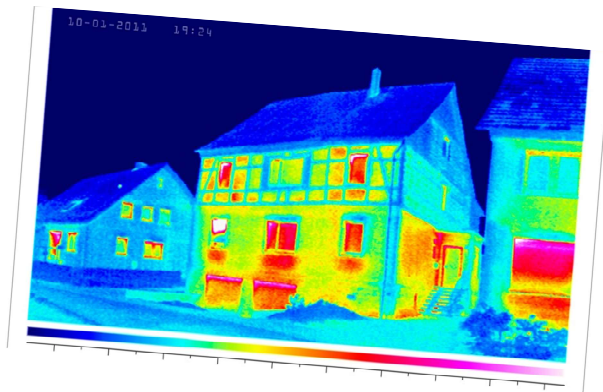
- BUT renovation rate is roughly at 1%
- Renovation standards are often not sustainable
- Lack of capacity, know-how and funding
in public authorities



How does EUKI SURF contribute to the transformation process?

EUKI SURF...

- **...stimulates deep and sustainable building renovation**
- **...supports in building up know-how and in best-practice exchange**
- **...focuses on municipal professionals and local decision-makers, since most renovation activities take place at the local level**



How does EUKI SURF support municipalities in reaching their sustainable renovation goals?



Opportunity to share knowledge and learn from other municipalities



Trainings on green public procurement and sustainable renovation



Participation in a transnational network

Participating municipalities are supported through interactive transnational workshops and trainings. Moreover, EUKI Surf provides targeted knowledge in factsheets on best practices, a guideline for green public procurement, a sustainability checklist for renovations and an online platform.

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One-stop shop is a collective term for services offering integrated renovation solutions with the main intention of simplifying the renovation process for asset owners.

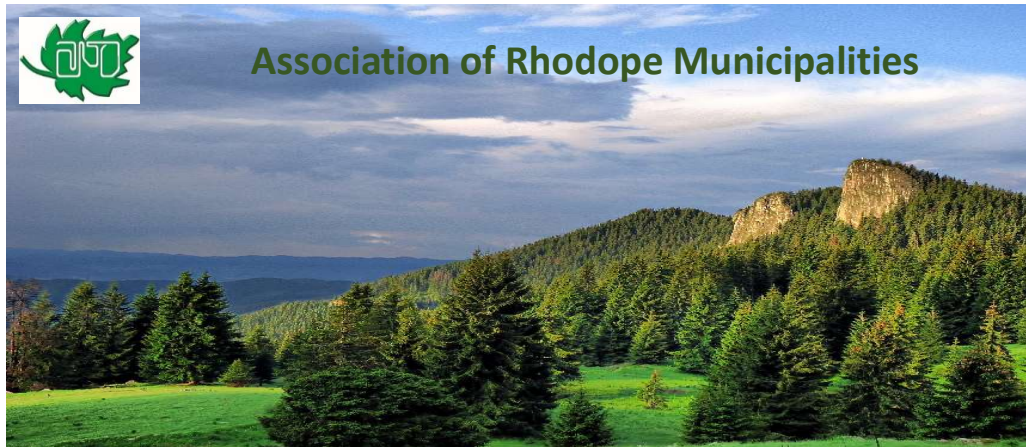
One-stop shops

- are **local**
- accelerate building refurbishments by **informing, motivating, as well as by assisting** building owners to follow through energy efficiency investments, by **standing beside them from the start to the end** -> it walks the full renovation route
- **can facilitate interested, but not yet committed asset owners** to actually implement an energy saving project;
- **can ease access to financing** and occasionally offer better rates;
- can also **improve the average renovation depth** in terms of energy performance

An Effective Financing Model for Renovation Projects in Municipalities? The Example of Rhodoshop Project



Association of Rhodope Municipalities



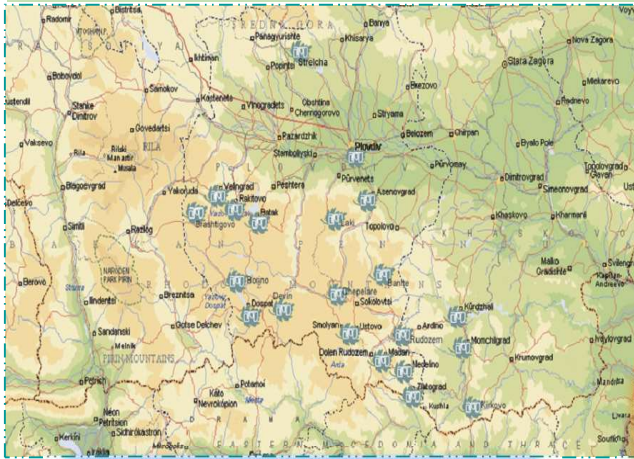
Sofia Energy Centre
Independent consulting company
Clean Energy for a Sustainable World



1st EUKI SURF Renovation Lunch, 28 June 2023



ARM's 11 Member Municipalities:



**Smolyan, Banite, Borino
Bratsigovo, Chepelare, Devin
Dospat, Kardzhali, Madan
Nedelino, Rodopi**

ARM was established in 1992





ARM's Member Municipalities:



ARM total population:
192 271 inhabitants
Total area: **4205,23 km²**





ARM's Mission:

Active contribution towards:

- Improving the local self-governance;
- Increasing efficiency and transparency of the municipalities;
- Creating opportunities for wider citizens' participation in the process of self-governance;
- Strengthening the cooperation with partners from EU countries



EU-supported ARM projects in the last 20 years

- EU Intelligent Energy Europe Programme:
 - Green ProcA,
 - 50000and1SEAPs,
 - RES H/C Spread,
 - Green Twinning, etc.;
- EU H2020 programme: RHODOSHOP;UP-STAIRS
- **Joint projects with Greek partners within the framework of:**
 - Phare CBC Bulgaria-Greece (2001-2006):
 - ‘Get to know your neighbor’,
 - ‘Without border tomorrow’ ,
 - ‘Following the steps of Orpheus & Demokritus’,
 - ‘Business activities in the Rhodope Mountain and Aegean Sea’, etc
 - European Territorial Cooperation Programme GR-BG (2007-2013):
 - Evros-Smolyan Road of Culture
 - Interreg V-A Greece-Bulgaria (2014-2020): The Healthy Municipality





Sofia Energy Centre
Independent consulting company
Clean Energy for a Sustainable World



- ❑ Independent consulting company in the area of energy efficiency and renewable energy sources;
- ❑ Est. 1994 as EC Energy Centre Sofia, since then more than 50 successfully completed relevant projects and actions;
- ❑ Active in the development, management and implementation of energy projects and programs, market studies and assessments, training, information and promotion campaigns, energy management, policy and planning;
- ❑ Provides services to the European Commission, international organizations, national, regional and local authorities and organizations;

More information at www.sec.bg



Rhodoshop Project

01.09.2017-31.08.2022

<http://rhodoshop.eu>





THE PROJECT AT A GLANCE



- ❑ **Main aim** – assist municipalities in their efforts to **invest in energy efficiency and reach CO2 emissions reduction** through the **creation of One-Stop-Shop (OSS)** as an enabler and facilitator of energy retrofiting investments;
- ❑ **A joint undertaking of six pioneering municipalities** - Smolyan, Banite, Chepelare, Devin, Nedelino and Zlatograd;
- ❑ Funded under **H2020 Project Development Assistance (PDA)**
- ❑ **Key actors:**
 - Association of Rhodope Municipalities (ARM) – Rhodoshop host organization;
 - Sofia Energy Centre – providing management and coordination to Rhodoshop;
- ❑ **Key activity** - development and implementation of **investment project pipelines in:**
 - Public municipal buildings;
 - Street lighting systems.

This project has received funding from the European Union Programme of research and innovation Horizon 2020





RHODOSHOP OSS



- ❑ 3 full time employees, 4 part time;
- ❑ Extensively trained in legal, economic and technical aspects;
- ❑ External support for performing building energy audits and technical and economic assessments through subcontracting;
- ❑ Operating services:
 - ❖ Marketing and communication: to inform the beneficiaries of the types of offerings available to them.
 - ❖ Facilitation and client support:
 - Plays as a knowledge centre, gathers competences and resources in one place about technical, economic, financial, organisational aspects of energy efficiency investments - energy audits, feasibility assessments, financial planning;
 - Helps identify financing solutions applicable to different municipalities/clients;
 - Assists in finding and negotiates the terms and conditions with ESCOs and other financiers;
 - Monitors project results
 - Bundles projects across different municipalities which allows to diversify the risks, get better financing mechanisms, makes synergies across the retrofit projects and attracts professional companies.

**This project has received funding from the European Union
Programme of research and innovation Horizon 2020**





RHODOSHOP RESULTS (1)



- ❑ Summarized in D4.1 “Summary of Results”- a **presentation of the whole path undertaken by Rhodoshop project activities** including main actions performed, results achieved, barriers and failures encountered, influential factors observed, can be found at <https://rhodoshop.eu/en/download/>;
- ❑ Draw conclusions about what worked and what didn't, and why. It is important to outline the main lessons learnt by the **Rhodoshop OSS** team as it is a pilot project for Bulgaria and no previous examples were available in the national context, and **it was one of the first such structures within the EU as well.**
- ❑ Rhodoshop action gives merit in two main directions:
 - ❖ Quantitative **results** that have been achieved in terms of hard **figures** such as **investment** in sustainable energy projects, **primary energy saved and CO2 emission reductions**, and
 - ❖ Qualitative results - **knowledge and experience gained** in the course of activities that can be a valuable asset for the future similar undertakings

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RHODOSHOP RESULTS (2)



Total **energy efficiency investment in buildings** amounts to **8 942 587 EUR**, of which:

- **2 625 166 Euro** signed till 31 August 2022;
- **6 317 421 EUR long-term impacts** within three years after project end (of which 750 280 EUR already signed)



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RHODOSHOP RESULTS (3)



- ❑ The **primary energy savings** by 31 August 2022 are **8 670 MWh/y**, of which **7 044 MWh/y – buildings** and 1 626 MWh/y – street lighting systems.
Long term impacts (within three years after the project end) – the primary energy savings amount to 11 791 MWh/year;
- ❑ The **GHG emission reduction** by 31 August 2022: **4 414 tCO₂e/y** (**2 043 tCO₂e/year in buildings** and 2371 tCO₂e/y in street lighting)
Long term impacts (until August 2025) – CO₂ emissions reduction amount to 5 440 tCO₂e/y



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RHODOSHOP RESULTS (4)



FUNDING INSTITUTIONS:

- Beautiful Bulgaria project
- OP 'Regions in growth' (regional and social infrastructure)
- Interreg V-A Greece –Bulgaria 2014-2020
- Rural Development Programme
- Financial mechanism of EEA and Norway Grants
- Own resources of the municipalities
- Bulgarian Recovery and Resilience Plan (street lighting systems)
- ESCO funding (a street lighting system in Nedelino Municipality)



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RHODOSHOP RESULTS (5)



15 energy audits have been performed, **feasibility studies** for Planetarium Smolyan building done, and **all projects** in the pipelines have been prepared to **ready-to-finance stage**.

- Significant part of these projects have been already realized with investment launched while the others are in the process of searching for funding and conclusion of funding agreements and will be launched within the next three years.
- Prepared **two pipelines with investment projects**:
 - **45 municipal buildings (schools, kindergartens, cultural sites like the Planetarium, administrative buildings, hospitals, etc)**
 - **40 street lighting systems**



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SIGNED ENERGY EFFICIENCY CONTRACTS - BUILDINGS



#	Municipality	Building	Investment in EUR	CO2 savings t/y	Primary energy savings MWh/year
1	Banite	Healthcare Center, Banite	48 931		
2	Banite	Administrative building , Galabovo	44 098		
3	Banite	Administrative building, Vishnevo	68 916		
4	Banite	Administrative building , Banite	219 321		
5	Devin	Municipal Administration Devin	99211		
6	Smolyan	Planetarium	818 978		
7	Smolyan	Day Center Smolyan	219533		
8	Smolyan	Secondary School 'St. St. Cyril and Methodius', Smolyan	161 771		
9	Smolyan	5 th Primary School 'Yurii Gagarin'	81554		
10	Smolyan	Radost Kindergarten , Smolyan	163 850		
11	Smolyan	Kindergarten 'Rodopchanche', Smolyan	102 680		
12	Smolyan	'Journalist' building , Smolyan	96 215		
13	Smolyan	Rhodopean Dramatic Theater 'Nikolay Haytov' , Smolyan	145577		
14, 15	Zlatograd	Hospital 'Prof d-r Asen Shopov', Zlatograd	117 968		
16	Zlatograd	Primary School 'St. St. Cyril and Methodius', Dolen village	54231		
17	Zlatograd	Community Center 'Prosveta -1908', Zlatograd	182 335		
TOTAL:			2 625 169	2043,17	7044,115

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SIGNED ENERGY EFFICIENCY CONTRACTS AFTER THE END OF PROJECT - BUILDINGS



#	Municipality	Buildings	Investment in EUR	CO2 savings t/y	Primary energy savings MWh/year
	Devin	Hospital Devin	123 090		
	Zlatograd	Healthcare Center, Zlatograd	60 743		
	Zlatograd	Secondary School 'St. Knyaz Boris I' Startsevo village	566 446		
TOTAL:			750 280		

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PERFORMED ENERGY AUDITS IN BUILDINGS



#	Municipality	Building	INVESTMENT (EUR)	Savings CO2 t/ y	Primary Energy Savings MWh/y
1	Banite	Banite 'Prosveta-1947' Community Center	86 436		
2	Devin	Administrative building Trigrad	€ 16 335		
3	Devin	Hospital Devin	586 242,85		
4	Zlatograd	'Nikola Vaptsarov' Boarding School, Zlatograd	213 542		
5	Zlatograd	St. Knyaz Boris I Secondary School, Startsevo village	217 579		
6	Zlatograd	'Detski Svyat' Kindergarten, Dolen village	142 690		
7	Zlatograd	'Vasil Levski' Secondary School, Erma reka village	191 973		
8	Nedelino	'Vasil Levski' Secondary School, Sredets village	119 508		
9	Nedelino	Kindergarten N:2, Nedelino town	22 919		
10	Smolyan	'Stoyu Shishkov' Museum of History, Smolyan	738 989		
11	Smolyan	'Buratino' Kindergarten (Spartak street), Smolyan town	115 645		
12	Smolyan	'Izvorche' Kindergarten, Momchilovtsi village	119 051		
13	Smolyan	I'Stoyu Shishkov' Primary School, Smolyan	176 516		
14	Chepelare	Kindergarten-Pavelsko village	€ 69 167		
15	Chepelare	Family Care Center, Pavelsko village	€ 39 159		
TOTAL:			2 855 752	2028	4339

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FACTORS FOR SUCCESS (1)



- ❑ **Long-lasting and continuous work of the Consortium members ARM and SEC with the municipalities** in Rhodope Region for policy and project promotion and dissemination through various activities starting from 2012, e.g. CoM initiative promotion, assisting creation of SEAPs/SECAPs, assisting project selection and development, etc.;
- ❑ The constant communication and collaborative work with municipalities and listening to their needs and priorities that changed during action implementation due to external political and economic factors; **The municipalities were assisted in the whole project development cycle (from the performance of energy audits, feasibility study)** through development of pipelines of ready-to-finance projects and the launch of tender procedures

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FACTORS FOR SUCCESS (2)

- ❑ **Building local capacity** is critical for successful project implementation. At the very beginning of the action careful selection of staff for the Rhodoshop OSS was done through an open recruitment procedure.
- ❑ The recruited staff was **extensively trained** in the relevant aspects (technical, economic, legal and organizational) of EE projects through a 5-day training delivered by qualified experts, at the end of which an exam was held.

Within H2020 UP-STAIRS project, Rhodoshop OSS will extend the services to the residential sector by provision of advices to citizens on energy renovation of their homes .



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LESSONS LEARNED (1)



- ❑ The **commitment of the local authorities** to PDA actions is a necessary **prerequisite** for the successful sustainable energy investment launch but it is **not enough** to ensure the promised result;
- ❑ **Political situation and stability** are of **critical importance** for the operation and results of PDA actions as it leads to organisational, legal and financial consequences beyond the scope of influence of project owners (municipalities) and project facilitators (Rhodoshop OSS);
- ❑ **Barrier:** The overall political instability in Bulgaria since Summer 2020 until June 2023, resulted in **delays in the launch of the Bulgarian Recovery and Resilience Plan as well as other energy related programmes - expected to be launched in the beginning of 2019 but started from the middle of 2021** leading to inability of the municipalities to secure funding and launch the investments foreseen in the Rhodoshop pipelines

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LESSONS LEARNED (2)



- ❑ **Three years is not enough for PDA actions** because of their complexity depending on many various factors, therefore longer project duration should be envisaged by PDA portfolio owners in order **to have enough time to cope with any unforeseen circumstances** influencing negatively the promised projects' results.
- ❑ **The investment pipelines are not a constant set of projects; they are dynamic and change throughout the action** depending on the priorities of the municipalities, on the results from energy audits and technical and economic assessments, and on the specific requirements of funding bodies.
- ❑ **It is not possible to have precise figures about the quantitative parameters (investments, energy savings, etc.) at the beginning of the action** because the data the municipalities have, is usually an approximation.



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LESSONS LEARNED (3)



- ❑ **ESCO/TPF market** in Bulgaria is underdeveloped, mainly due to:
 - ❖ Availability of grant schemes;
 - ❖ Specifics of the energy efficiency projects in public buildings underheated before the reconstruction and thus the result of the reconstruction is increase of comfort with the same energy bills rather than lowering the energy bills. This hampers the ability of the ESCO to receive the money savings resulting from the energy savings and thus to pay back the investment, and has negative impact on the ESCO market development in the country.
- ❑ Gradual **phasing out of public grants** and **introduction of financial engineering schemes** expected to contribute to ESCO market development;
- ❑ Possible **solution for increasing ESCO share**: separation of the measures on the building shell from those on the utility systems and involving an ESCO only for the latter set of measures. This will improve the economic performance of the separated set of measures and will decrease the risk for the ESCO, and increase the attractiveness of the project for TPF. There are positive examples of PDA projects in other countries applying this approach with good results. However, this approach may require changes of current legislation and therefore the involvement of national governmental institutions.

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LESSONS LEARNED (4)



- ❑ **Project bundling is mostly applicable to street lighting systems as they are more uniform** in the technical sense and the technical solutions to be implemented can be easily combined. **Public municipal buildings are more diverse as technical characteristics which makes it difficult to bundle several buildings in the same municipality although there are such cases, e.g. :**
 - Smolyan Municipality **bundled educational buildings** which shared similar characteristics and design; a kindergarten was bundled with a nursery.
 - The investment in the renovation of **Zlatograd municipal hospital is divided between two different projects** because some measures are eligible for one funding body and others – for another one.



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LESSONS LEARNED (5)



- ❑ The Rhodoshop OSS is an initiative undertaken by **mostly small, rural municipalities** with low economic activity and decreasing population
- ❑ **Insufficient resources** hamper the capacity of Rhodope municipalities to finance an OSS for energy renovation of public infrastructure.
- ❑ However, **the Mayors and Municipal Councils from the region are doing their best to attract as much investments as possible** in their efforts to improve local conditions and to fight depopulation, and thus Rhodoshop OSS is of utmost importance for them.



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LESSONS LEARNED (6)



- ❑ In order to achieve the climate goals of the EU, more efforts of incorporation of RE in building energy refurbishment projects should be made, and coordination between the different support measures to be ensured making it compulsory to include RE measures or at least to be assigned much bigger weight of such measure in the overall score of the project



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THANK YOU!

БЛАГОДАРИМ ЗА ВНИМАНИЕТО



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Questions? 😊

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**Do you have experiences
with One-Stop-Shops?**

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Which challenges and problems do you face regarding renovations?

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**Thank you and see you
next time 😊**