

Name of project:	Staccato-Sofia-Oborishte	COUNTRY
		Bulgaria
City of project:	Sophia	
Size/ region affected	Local	
Type of project [theoretical / practical]:	Practical	
Targeted technique PV/Solar thermal/Solar Passive/Solar Air conditioning	Solar thermal	
Period/ starting date	2007-2012	
Contact institution with Internet links (if available)	Oborishte District www.concerto-staccato.eu/projects/oborishte-sofia.html	
Photo / drawings / overview		
General Project Description	<p>The Staccato project</p> <p>Staccato is a project carried out as part of the European Concerto initiative. Within the Staccato project , three European capital city districts, Amsterdam-Noord (Amsterdam), Óbuda (Budapest) and Oborishte (Sofia), demonstrate sustainable energy concepts in representative existing residential areas. The urban areas all face technical arrears and a lack of social cohesion.</p>	



Figure 1 Map of the Sofia-Oborishte district (centre is on the left)

In combination with research and development aimed at innovative and reproducible renovation concepts and approaches, these large-scale demonstration sites aim to accelerate the transition to a sustainable energy supply in areas of existing housing in Western and Eastern Europe.



Figure 2 Logo for the Staccato project

In combination with energy efficiency measures, all three city districts will integrate large solar thermal systems to support the energy supply. The heat distribution-based energy infrastructure will be modernised and the building envelopes drastically improved, resulting in healthy indoor climates and lower energy bills. The Staccato project started in November 2007 and will run for five years.

Initiator/project idea	Ecofys NL, Eneco
Financing Investor	European Commission National Renovation Programme Bulgaria Concerto Programme Homeowners in Sofia-Oborishte
Service Provider	Local, to be tendered in 2010
Other parties involved (eg. departments)	Ministry of Regional Development and Public Works
Partner responsible for Best Practice description	 Climate Alliance Climate Alliance

SWOT Analysis	
Strengths	<ul style="list-style-type: none"> ▪ The results will be visible to everyone – the systems will be showcases. ▪ The programme is free of additional costs for the homeowners (apart from the payments they have already made for the National Renovation Programme). ▪ The pilot building relies on the agreement of all owners; in Bulgaria where homeowners' associations are not obligatory it is usually very hard to bring homeowners together – this has been avoided in the Staccato programme in Oborishte, as the programme is run in addition to the National Renovation Programme whose approach has been to ask owners who have already come together and have agreed to the renovation work.
Weakness	<ul style="list-style-type: none"> ▪ A lack of information on the integration of solar energy with civil engineers who should approve major overhauls and the inclusion of renewable energy – especially on the structural strengths of the buildings and their roofs. ▪ Ownership associations are not obligatory according to Bulgarian legislation. One owner opposing renovation or the inclusion of renewable energies could lead to the complete loss of a potential building participating in a renovation overhaul.
Opportunities	<ul style="list-style-type: none"> ▪ Existing district heating – the system could be used for integration of the district heating system, reducing the load and producing clean energy where it is consumed. ▪ Opportunity to identify and fill gaps in the legislation, administration and the energy system. ▪ The Green Investment Scheme is a very promising funding opportunity for the next stages of the Staccato project and for the renovation of buildings in Bulgaria in general.
Threats	<ul style="list-style-type: none"> ▪ No existing procedures or obligation for the district heating companies to include renewable energy in their network. ▪ Homeowners do not fully understand the necessity of new forms of energy and how renewable energy can be integrated into daily energy consumption. ▪ The additional costs may be perceived as an additional financial burden and could easily be rejected as too expensive without any best practices already in place in Bulgarian conditions.
Improvements	<ul style="list-style-type: none"> ▪ In the Bulgarian conditions, 50-70% of the annual hot water needs of the households could be covered by this system. ▪ The buildings' roofs will be reinforced, as these are very old and need renovation anyway.

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| | <ul style="list-style-type: none">▪ Many weak points in the legislation, administration and energy system might be identified and removed through the project. |
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