



Energy efficient rehabilitation – improvement of buildings and energy supply infrastructure

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Siauliai City Municipality Administration

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WP4 activities, (*Siauliai*)

Activities	Status (not started yet, just started, working on, almost finished, finished)	Description
<p>1. Analysis 2. Concept preparation</p>	<p><i>Activity 1 - finished</i> <i>Activity 2 – not started yet</i></p>	<p><i>Activity 1 – the analysis of two target areas was prepared by Klaipeda University.</i></p> <p><i>Activity 2 – Tender documents were prepared for concepts. The public procurement procedures were carried out.</i></p>

Analysis

- **The analysis of the territories of residential districts revealed the following key areas that require renovation:**
- **Residential apartment houses;**
- **Urban infrastructures, public spaces (parking lots, transport and communication);**
- **Qualitatively new facilities for recreational zones and rest areas for common use, and linking of these zones with residential districts and downtown by pedestrian and bicycle routes.**

Task for concepts preparation in target areas

- public sphere, greenery and common use territories;
- ownership forms in planned territory, social composition of residents;
- social infrastructure, including adaptation of environment to the disabled people;
- parking places, other transport means and use of the alternative;
- means and measures of energy saving in buildings and territory, energy supply infrastructure networks;
- The following proposals provided: renovation of multifamily houses according to the types of building assessing their enlargement possibilities;
- use of innovations, renewable energy etc. in target areas;
- layout of the household waste sorting places and containers in separate plots or grouping.
- Constant information and communication with housing communities.

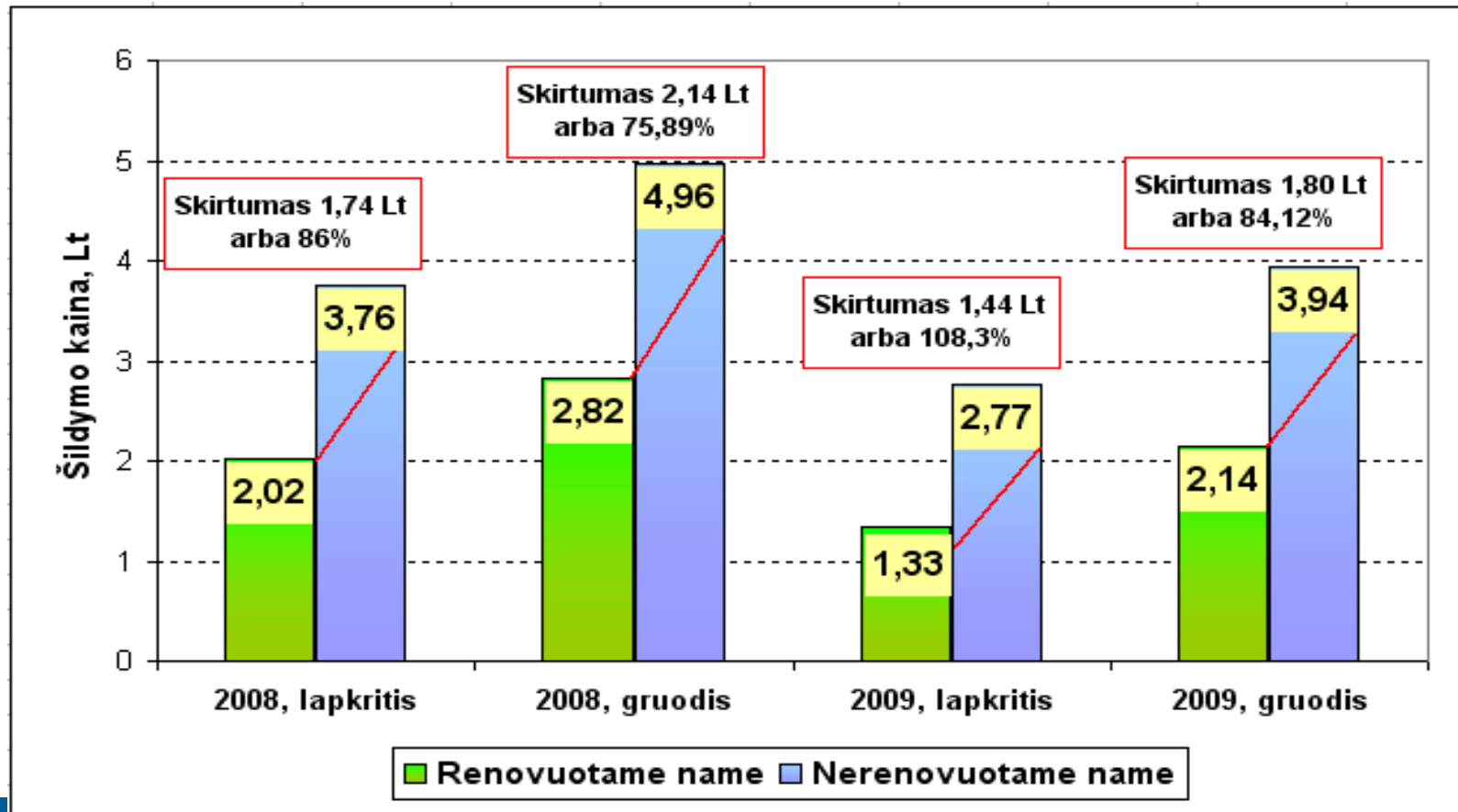
Residential buildings

<p>Number of multi-apartment buildings</p>	<p><i>TA 1 – 16 (2 renovated)</i> <i>TA – 103</i></p>
<p>Number of apartments</p>	<p><i>TA 1 – 440</i> <i>TA – 5400</i></p>

Residential buildings

- **Typical building types – constructions, materials, number of floors and apartments:**
 - *TA1:*
 - *a) brick-built houses;*
 - *b) 5 floor;*
 - *c) 30 apartments*
 - *TA2:*
 - *Mainly prefabricated houses;*
 - *5 floor (there are 3 of 12 floors and 7 of nine floors);*
 - *From 45 up to 120 apartments.*

Comparison of average heating price per sq. meter in renovated and non-renovated houses





Public buildings



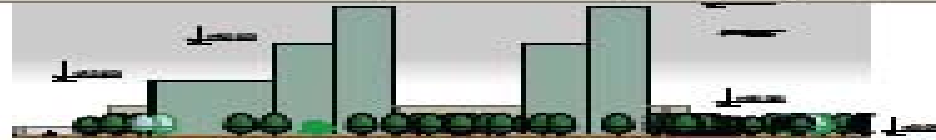
ESAMAS UŽSTATYMAS M 1:1000

SUTARTINIAI ŽENKLAI:

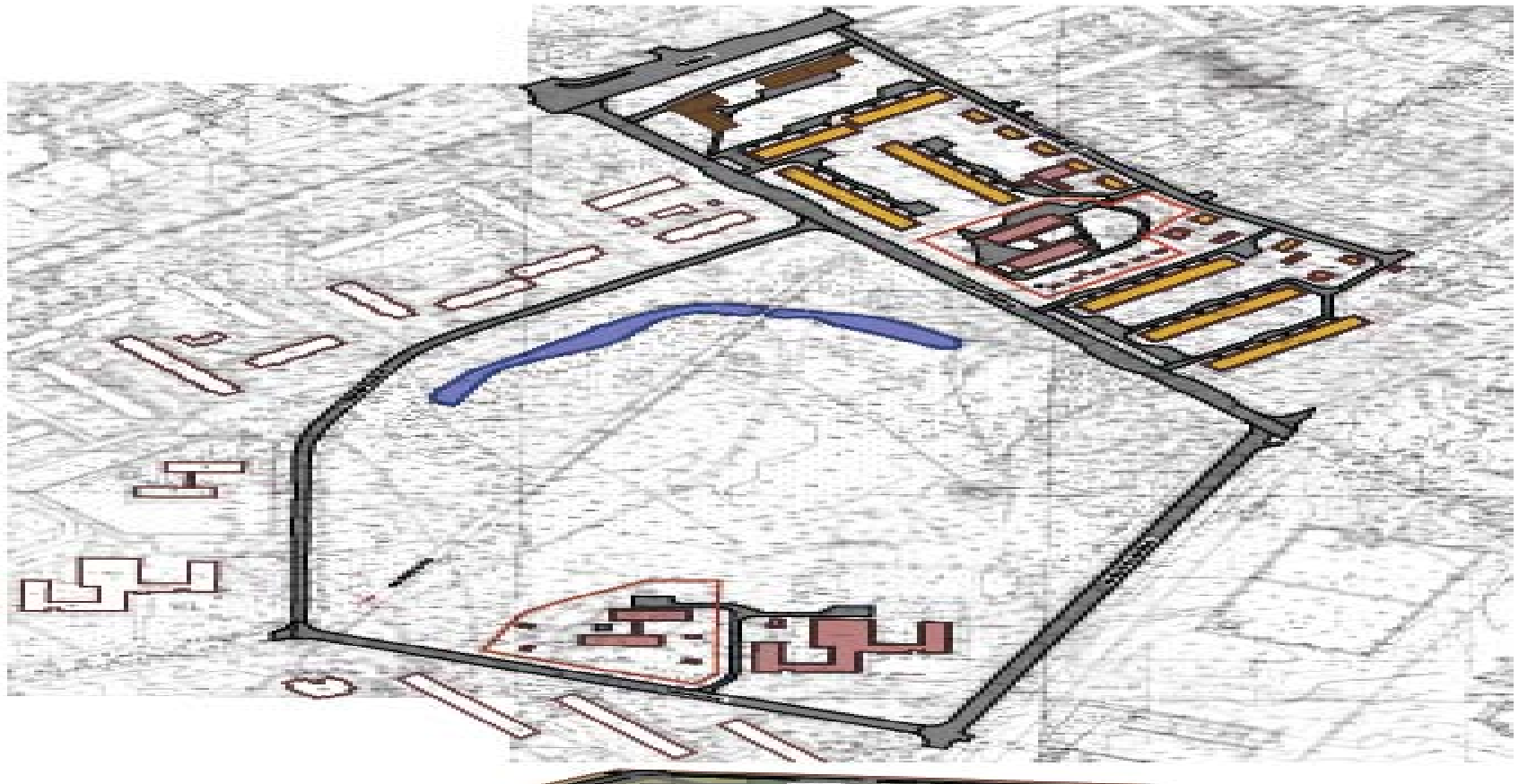
-  GYVENAMIEJI PASTATAI
-  KITI PASTATAI

KLAIPĖDŲ UNIVERSITETO
PROJEKTO PLĀKŪMŲ CENTRS

Projektas finansuojamas Europos Sąjungos
Struktūrinių fondų lėšomis pagal Europos Sąjungos
Regioninės plėtros programą Nr. 3902/VN-1-1-01-0001-0001



TYTUŁ S. C. ISKLOTNIE M 1:1000



Pre-school establishment	Address and telephone	E-mail and website	Identification number (code)
<i>Gintarėlis</i> Kindergarten	Saulės takas 5, Šiauliai LT-78301 8 41 552562 8 41 552 562	gintarelis@splus.lt http://www.gintarelis.mir.lt/	1905 28240
<i>Kūlverstukas</i> Kindergarten	Krymo g.3, Šiauliai LT-78254 8 41 553021 8 41 553 021	kulverstukas@splus.lt <a href="http://siauliai.mok.lt/kulverstu
kas">http://siauliai.mok.lt/kulverstu kas	1905 28393
Speech Therapy Kindergarten of Šiauliai	Lieporių g.4, Šiauliai LT-78244 8 41 552744 8 41 552 744	logopedinisdarzelis@splus.lt www.logopedinis.mir.lt	1905 28774
<i>Voveraitė</i> Kindergarten	Saulės takas 7, Šiauliai LT-78302 8 41 552591 8 41 552 591	voveraite@splus.lt http://voveraite.mir.lt	1905 28055
<i>Klevelis</i> Kindergarten of Šiauliai	Miglovaros g. 26, Šiauliai	klevelis@splus.lt http://www.klevelis.mir.lt/	190528393
<i>Trys nykštukai</i> Kindergarten of Šiauliai	Tilžės g. 41, Šiauliai	klevelis@splus.lt http://www.klevelis.mir.lt/	190530088
<i>Žirniukas</i> Kindergarten of Šiauliai	M. Valančiaus g. 31A, Šiauliai	zirniukas@splus.lt http://www.zirniukas.mir.lt	190527715

Establishment	Address and telephone	E-mail and website	Identification number (code)	Number of students on 1 September 2008 (incl. the preparatory grade)	School reorganisation
GYMNASIUMS					
<i>Saulėtekio</i> gymnasium of Šiauliai	Lieporių g.2, Šiauliai LT-78244 8 41 552748 8 41 552 748	sauletekis@splus.lt http://www.sauletekis.lt	2905 32510	738	N/A
<i>Lieporių</i> gymnasium of Šiauliai	V. Grinkevičiaus g.22, Šiauliai LT-78254 8 41 450214 8 41 450 214	lieporiai@splus.lt http://www.lieporiai.lt	1905 32324	801	N/A
SECONDARY SCHOOLS					
<i>Gegužių</i> secondary school of Šiauliai	Dariaus ir Girėno 22, Šiauliai LT-78302 8 41 552560 8 41 552 560	rastine@geguziai.lt http://www.geguziai.lt	1905 32281	771	Expected to be reorganised into a basic school
PRIMARY SCHOOL					
<i>Lieporių</i> primary school of Šiauliai	Krymo g.1, Šiauliai LT-78254 8 41 553017 8 41 553 017	lieporiu_pradine_mokykla@splus.lt	1905 28436	291	N/A

Energy supply

- **The heat producers and suppliers:**
 - „*Siauliai Energy*” ;
- **The energy supply infrastructure:**
 - Thermal energy required for district buildings for heating, ventilation and preparation of hot water is supplied from the municipal centralised supply system, which consists of large heat sources (boiler-rooms) and a wide network of main and district underground heat pipelines operating according to 120 – 70 Co temperature schedule.
 - Natural gas supply and networks. Natural gas is used in residential buildings only for the purpose of cooking.
 - *Modernization of energy supply system and energy losses.*

Energy supply

- **Energy sources:**
 - *Gas;*
- **Cogeneration:**
 - *„Siauliai Energy” got financial support for building a cogeneration;*
- **Renewable Energy Sources**
 - *None.*

Stakeholders

- The stakeholders involved in Urb.Energy project:
 - *Housing communities*
- The special demand:
- Complains about narrow streets which are blocked up by cars;
- Bad condition of yards and sidewalks;
- Necessary to solve the problems concerning property, without special documents (detailed plans) the process of houses rehabilitation can not be started.
- Trees are required along Tilze street in order to reduce the level of noise and pollution which is caused by cars;
- Suggestions to use free land plots for establishment of playing grounds;
- Suggestions to establish small recreation islands with benches, small tables and trees;
- Suggestions to forbid the chaotic restoration of balconies and house facades;
- Complains about car owners who park their cars on the grass;
- Requests to prepare typical technical projects for rehabilitation.

THANK YOU FOR YOUR ATTENTION!