



# Solar heat Lithuania

#### **Responsible partners**

Lithuanian Energy Institute

## Date of last information update

25.02.2013

## Model description

Solar collectors were installed on the roofs of boiler-houses of 2 district heating companies:

- The equipment was installed in settlement of Dūkštai (JSC "Ignalinos šilumos tinklai") on 1st October 2012; and
- In Kaunas City (JSC "Kauno energija") on 15th September 2011.

JSC "Ignalinos šilumos tinklai" district heating company implemented project "Modernization of heat production and supply infrastructure in settlement of Dūkštai". This district heating company installed at its own expense.

Kaunas DH Company has installed solar collectors to produce domestic hot water for the needs of company building only.

DH "Kauno energija" implemented solar collectors at their own efforts.

The stakeholders involved in the model operation are: District heating company JSC "Ignalinos silumos tinklai". Engineering Services and Construction Company JSC "Alvora".

District heating company JSC "Ignalinos šilumos tinklai" announced tender for the project "Modernization of heat production and supply infrastructure in settlement of Dūkštai". JSC "Alvora" won this project tender and carried out the works.

District heating company JSC "Ignalinos šilumos tinklai" is contracting authority. JSC "Alvora" was the contractor, which designed and carried out the works.





#### Swot analysis

Strengths	Heat losses decreased in district heating network by 10 % after installation of solar collectors. This also led to reduction of demand for biomass.
Weaknesses	Solar collectors do not produce heat during winter season and district heating company still produces heat via burning biomass during heating season.
Opportunities	Installation of larger amount of solar collectors to meet full needs of hot water.
Threats	The companies had to invest their own funds into modernization projects which led to reduction of turnover capital.
Improvements/recommendations/lessons learned	District heating company can install weekly heat storage tank.

## **Replication potential**

The solar heat model preheats return water temperature and is linked to the specific framework conditions. Reduction of heat losses in district heating networks is the main reason. Actually all DH companies can to follow the suit and to reduce of demand of biomass or other kind fuel. Financial support from EU funds is the key requirement in order to replicate this model.

Links to web site and/or documents for more detailed information Web site of Local Authority of Ignalina: <u>http://www.ignalina.lt/lit/Bus\_modernizuotas\_Duksto\_silumos\_ukis/6677</u>

Web site of regional newspaper "Ignalinietis": <u>http://ignalinietis.balsas.lt/ignalina-naujienos/naujienos/bus-modernizuotas-duksto-silumos-ukis/</u>

Web site of JSC "Kauno energija": <u>http://www.kaunoenergija.lt/Default.aspx?tabid=36&EntryID=424</u>