

# Deliverable D8.5

## Life Cycle Cost Analysis of GSHE developed versus state of art

### WP8

**Grant Agreement number** 657982

**Project acronym** Cheap-GSHPs

**Project full title** Cheap and Efficient Application of reliable Ground Source Heat Exchangers and Pumps

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***Dissemination Level***

<b>PU</b>	Public	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	<b>X</b>
<b>CI</b>	Classified, as referred to in Commission Decision 2001/844/EC	

## **Publishable summary**

The D8.5 “Life Cycle Cost Analysis of GSHE developed versus state of art” is a confidential document delivered in the context of WP8 “Exploitation and market deployment”, Task 8.5 “Life Cycle Cost Analysis”.

This document contains a description of life cycle cost analysis methodology implemented in the decision tool developed in the project. This methodology has been defined through an exhaustive state of art review in the life cycle costing in renewable energies and heating, cooling and ventilation systems, in particular, for the shallow geothermal air conditioning systems.

In the review of the state of the art, the majority of the works are based on specific installations with certain characteristics and location, but the implemented methodology allows to calculate the life cycle cost in any project introduced in the decision support system by the user, since it is part of the calculation engine of this tool. Another novelty regarding the state of the art is that the analysis of the life cycle of the ground source heat exchangers developed in the project (coaxial and helix) has been performed.