The Solar Heat Integration NEtwork (SHINE) is a European research school in which 13 PhD students in solar thermal technologies are funded by the EU Marie-Curie program. It has five PhD course modules as well as workshops and seminars dedicated to PhD students both within the project as well as outside of it. The SHINE research activities focus on large solar heating systems and new applications: on district heating, industrial processes and new storage systems. The scope of this paper is on systems for district heating for which there are five PhD students, three at universities and two at companies. The PhD students all started during the early part of 2014 and their initial work has concentrated on literature studies and on setting up models and data collection to be used for validation purposes. The PhD students will complete their studies in 2017-18.