

TTiSUN meets district heating – a big topic.

With the project *Gutleutmatten*, TiSUN was able to obtain a project that encompasses district heating input. TiSUNs solar panels are able to provide the buildings with independent solar thermal heating during summer. During months in which there is too little solar radiation, the heat supply is connected to the district heating system. This combination is a highly promising topic for the future.

Project *Gutleutmatten* in *Freiburg / Breisgau*



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On 4,1 hectares of land, approximately 500 new residential units for approximately 1.300 residents will be developed until 2018. The groundbreaking ceremony took place in October 2015. The construction project has the size of 39 multi-family houses and 10 terraced houses with a heated effective area of approximately 40.000 m².

The concept of the innovative solar thermal heat supply for the new city district *Gutleutmatten* in *Freiburg* was developed by the local energy- and environmental services provider **Badenova WÄRMEPLUS** together with the *Fraunhofer Institut für Solare Energiesysteme* (ISE). In this project, a combination of decentralized solar thermal energy and district heating from the heating power station *Staudinger Schule* is



preferred. TiSUNs solar thermal system will be able to completely provide the heat demand in summer and enables the residential area a complete self-sufficient hot water and heating supply within this period.

With a collector area of 2.287 m² realized by 36 TiSUN solar systems installed on 34 buildings, this large-scale project requires a precise organizational and logistical execution. With this amount of independent and clean solar energy, around 180.000 kg of CO₂ emissions can be saved each year. The estimated annual solar yield is around 700 MWh.

The total investment cost for the innovative project of approximately 3,5 Million Euros is subsidized by the federal ministry for environment with around 330.000 Euros. Moreover, the project will be supported and analyzed by the *Fraunhofer ISE*, within the framework of a research and development project, in order to be able to use the results and experiences for other future projects.

Alexander Ripka, project manager at **Badenova WÄRMEPLUS**, is pleased about the uncomplicated collaboration with TiSUN: „In addition to excellent product quality, a high level of expertise, and the good price-performance ratio, the main determining factor for placing the order with TiSUN GmbH was the convincing concept for the organizational and logistical execution. This is a very important factor, as 34 individual systems are involved, which have to be constructed during a period of approximately two years.“ Furthermore, Ripka explains: „The conversations about the technical clarification and the contract negotiations were very constructive, TiSUN understood which special features this project requires and what we need.“

TiSUN has been developing, producing, and distributing complete systems for solar thermal energy for more than 25 years. The solar systems provide independent, inexhaustible, and free solar energy for heating support, water heating, process heating, and cooling. TiSUN is known to be a specialist in the solar thermal industry in Europe, and exports 83% of its products. The innovation- and market leader has 71 employees at its headquarters in Tyrol/Austria and more than 70 direct and indirect sales representatives in Europe. Its products are sold in 48 countries all over the world, in the EU member states and associated countries, Switzerland, the former CIS countries, the USA, MENA, and India. All products meet the strict quality criteria of the Solar Keymark certificate.