

# Press Release

**Roth SolarGeo Energy System is 33% more efficient compare to regular heat pumps.**



Manfred Roth, the owner addressing the forum

**On November 12th, Roth Werke held a forum with the title „Middle-class and energy efficient energy technology with renewable energies“. Around 230 people from all around Germany attended.**

**For the first time, the scientific results of the Roth Hybrid System SolarGeo were presented. This Energy system, which combines a solar system with a heat pump, allows for a 33% increase in efficiency compare to traditional heat pumps.**

The meeting to discuss energy efficient technologies with renewable energies took place beginning of November 2008 in Buchenau, Germany, with around 230 attendees. Many professors and industry experts attended and presented

scientific findings and studies. The purpose for this forum, **Manfred Roth**, the owner, explained, was to offer some solutions to the energy, resources and climate crisis. „The building industry needs to, besides the transportation industry, come up with innovative systems to help save resources and the environment“, Manfred Roth stated. **Professor Wilfried Zörner** of the University of Ingolstadt explained that it is very important to develop highly efficient systems to protect current resources. The combination of Solar and Heat pumps, as found in the Roth SolarGeo System, is a highly efficient solution and increases efficiency up to 33% compare to regular heat pumps. This was proven not only by the scientific documentation but also by the field results of the actual installation. The Roth Solar Collector HelioStar and the heat pump are connected through a register that is buried. That register has “arms “made out of PEX tubing which are aligned horizontally. Those are the storage and extract elements, which hold the heat of the solar collector as well as the heat from the earth. Due to the construction of the register, no deep drilling or wide excavating is necessary. **Professor Stefan Dierkes** of the Philipps-University of Marburg presented the example of a household of 4 people with 150 square meters. He estimated that the SolarGeo System payback period is around 8 years with a life expectancy of 20 years. According to part owner, **Christin Roth-Jäger**, Roth has been investing into renewable energies and has its marketing program tailored to that. Under the phrase“Live full of energy“energy storage, energy creation and energy distribution are the categories that Roth products fall into. All of those groups combined offer the full system for the innovative building technology. Roth does not only want to protect the environment but, by combining technologies, offer better efficiencies. In this case, the energy creator heat pumps and solar were combined with the energy distributor radiant heating and cooling. An up to 15% additional energy savings can be attributed to this. The president of the Association of all German heating and plumbing contractors (around 40,000 members) **Michael von Bock und Polach** explained that there are roughly 30 million buildings, most between 60 and 100 years old, which will let one assume the amount of work it will take to reach the goals of the environment and resource conservation. There will be more and more complex systems and an increase need for knowledge and support. The creation of cooperation’s between architects and planners will be very important. According to **Professor Gilbert Gornig** the question is not if we switch to new renewable energies, the question is how fast. **Manfred Roth** is optimistic and thinks that the future is in Solar, Heat pumps and Biofuels. In the US, Roth is currently working on introducing heat pumps. The next project after that will be the Solargeo System.