

Sheet No: 3

Country: Austria

End User: Verein Studentenheim



General Presentation

The Friedrich Schiller dormitory has been renovated and enlarged with an extension in autumn 2001. The target was to reduce energy costs and costs of operation with the installation of a solar plant with 116 m² collector area. The solar plant prepares the domestic hot water with support of the district heating net. In sum 103 dormitory rooms (20 new built and 83 renovated rooms) with 72 washrooms are connected to a central domestic hot water system.

Technical Aspects

Measures:

- Renovation and extension of the dormitory
- Third party financing model
- Design and installation of the solar plant
- Installation of the thermo technical equipment incl. domestic hot water system
- Operation management
- Implementation of an energy controlling system

Results:

- Guaranteed annual solar yield: 301 kWh/m² with an annual domestic hot water use of 819 m³ (with 55 C°).
- Investment costs: 93430 Euro
- Annual contracting rate: 2538 Euro excl. VAT
- Inception of contract: 01.09.2001
- Expiration of contract: 31.08.2016
- Duration of contract: 15 years
- Reduction of CO₂ emissions per year: 9 t
- Fixed hot water price: 1,438 Euro/m³ (excl. VAT)

Contractual aspects

The ESCO assumes operation management, service and maintenance of the plant parts inserted by the ESCO. The financing of the solar plant has been carried out by the management of the dormitory, the contractor did not pre-finance the plant. The solar yield is guaranteed and a measurement concept for account and providing evidence of the solar yield was arranged. The annual base price is the payment for the following benefits of the contractor: technical operation management, implementation and operation of an energy controlling system, guarantee etc.

The energy price includes the consumption-bound costs (district heat and electricity).

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