



SOLAR THERMAL ENERGY IN GENEVA | 2010

Thanks to technology transferred from CERN (the European Organization for Nuclear Research), Dr Cristoforo Benvenuti has developed an ultra high vacuum flat thermal solar panel with exceptional thermal yields reaching as high as 50% in full sun, with an operating temperature of 180°C.

For the first time anywhere in the world, industry is using this technology: Colas Suisse installed a solar heater of this type at its Geneva site to maintain its six 80,000 liter tanks of bitumen at the appropriate temperature. With its maximum peak power of 38 kW, this 80 m² pilot installation should provide approximately 26 MWh per year, i.e. the equivalent obtained by burning 2.2 tonnes of fuel oil, or in other terms, 7.1 tonnes of CO₂ avoided.

At this experimental stage, there is no guarantee that it will breakeven financially and it should be set in the context of an approach promoting the acquisition of knowledge about new technologies, pending eventual widespread use; this is the framework in which the project will be very carefully monitored to measure its actual efficiency. The project could not have been financed without the support of several Swiss institutions:

- ScanE, Geneva energy department - DSPE, Department for Security, Police and the Environment,
- OFEN, the federal energy department,
- SIG, Services Industriels de Genève,
- Fonds SIG COGENER, Geneva committee for new renewable energy sources.

Colas Suisse also places this project in the context of its commitments for responsible development for a reduction of over 40% in its CO₂ emissions by the end of 2010 by reinforcing its relationship with environmentally-conscious customers.

