

# INTERIM PROJECT REPORT

## ***Project No. 1002, „Solar Water Heating“, Eritrea***

Period: January 2005 – December 2005

### **Project Background:**

The project comprises the construction, installation and operation of 200 solar water heater (SWH) units at different locations in Eritrea. The aim of the project is to launch the serial production of solar water heating in Eritrea. In spite of the relative simplicity in installation and operation, solar water heating is practically unknown in the country.

The SHW units have been manufactured by the Eritrean company Tesinma Sh. Co. Tesinma is building up a new production line for solar water heaters including the solar collectors and tanks. Until 2003, two demonstration facilities with 12 solar-water-heater units in total have been successfully installed (12 \* 2m<sup>2</sup>). Subsequent serial production has been started in order to market solar water heaters at different places in Eritrea. Tesinma sells the SHW units to public and private buyers.

The project includes the production and installation of a total of 200 SWH units at different locations in Eritrea. Thereby a total collector area of 400m<sup>2</sup> is to be achieved.

In 2005, UNEP's 6<sup>th</sup> Global Civil Society Forum became carbon neutral using certificates from the "Solar Water Heating" project in Eritrea. Through this renowned partner, the project gained considerably in publicity, which will hopefully contribute to encourage the project developers in Eritrea to continue their work and to expand the solar water heating programme further in 2006 albeit difficult political circumstances.

### **Activities 2005 :**

In 2005, the last tranche of the 200 collectors has been constructed. Tesinma has been very active in marketing of the new product. Several new customers such as the Embassy of the United States or the Ministry of Foreign Affairs decided to engage in climate protection and to switch to solar water heating. In total, 85 collectors are installed now in Dekemhare and Asmara. To ensure proper monitoring of the systems, a water meter has been installed at one location. Monitoring of the existing collectors showed that all of the installed systems are operating according to the plans.

Unfortunately, difficulties have been reported with the sale of 115 collectors to Mai Nefhi Technical Boarding school. Due to the political instability of the country, the construction of this school has been delayed. As a consequence, the collectors, which have been delivered, could not be installed yet.

### **Political Situation in Eritrea:**

Political tensions between the countries of Eritrea and Ethiopia have increased in 2005. According to a press release from November 4th: „*The Chairperson of the Commission of the African Union (AU), Alpha Oumar Konare, expresses his grave concern at the reported movements of military personnel on both sides of the Temporary Security Zone (TSZ), as well as irregular activities within the TSZ. This has the potential to escalate into a military confrontation, with far-reaching implications for the two countries and the region as a whole.*“

This situation has caused consequences for the project and may continue to do so. First, Tesinma has lost several employees, who have been recruited for military service. Second, the construction of schools has been postponed, whereby several collectors are still awaiting implementation. Third, Tesinma faces troubles with importing raw materials for the construction of further collectors. As well, several potential consumers are reluctant to commit to investments in an increasingly unstable situation. It remains to be seen, whether production and installation of new collector will proceed as planned in 2006. Tesinma is however committed to monitor and maintain existing collectors as agreed.

**Technical and Financial Expenditures 2005:**

|  |                  |
|--|------------------|
| Contribution to operation and maintenance costs: | EUR 1'126        |
| Contribution to monitoring costs:                | EUR 1'937        |
| Installation of water meter                      | EUR 646          |
| <b>Total Expenditures 2005</b>                   | <b>EUR 3'709</b> |

**Total Expenditures 2004** **EUR 15'864**

**Total Expenditures 2003** **EUR 1'500**

**Responsibilities**

**Project Coordination and Operation:**

Tesinma Sh. Co.  
P.O. Box 104  
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[www.tesinma.com](http://www.tesinma.com)

**Carbon Offset Management:**

myclimate - the climate protection partnership  
Bluntschlisteig 1, P.O. Box  
CH-8027 Zürich, Switzerland  
[renat.heuberger@myclimate.org](mailto:renat.heuberger@myclimate.org)  
[www.myclimate.org](http://www.myclimate.org)

**Buyer of certificates:**

UNEP 6<sup>th</sup> Global Civil Society Forum  
Nairobi, Kenya, February 19<sup>th</sup> to 20<sup>th</sup>, 2005  
[http://hq.unep.org/DPDL/civil\\_society/GCSF/carbon-neutral.asp](http://hq.unep.org/DPDL/civil_society/GCSF/carbon-neutral.asp)



Signed: January 9<sup>th</sup>, 2006



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