## Solar heat – Our contribution to climate protection

You have recognized for sure that sustainability and environmental protection is one of the main objectives of Severin Sea Lodge. With this aim on mind we have – amongst others – invested in solar thermal energy and want to give you further information as follows:





Every one of you has already heard the term "solar thermal energy", but only a few know about the technical concept and the real sustainability of this system for warm water generation.

The sun shines on the 134 solar collectors (1) which are installed on the hotel roof. The energy of the sun heats a glycol mixture within the collectors which is then directed into two heat exchanging devices (3) via a solar temperature controller (2) with pumps. These heat exchanging devices now use the energy to heat the cold water from the water connection. In a backup storage with huge tank the warm water is buffered and – controlled by a digital regulation – delivered to the hot water pipes of the hotel. From there it reaches the hotel rooms, e.g. your shower. The used water together with the waste water is led back to the hotel own treatment plant and recycled biologically. Via fish ponds on the neighboring premises, the cleaned water is used for watering the gardens. The remaining biosolids are used

on our biological farm as natural dung for the growing of fruit and vegetables. When having really bad weather an additional electrical heating is necessary. But besides we can use 100% solar energy to heat the hotel's water due to our solar heat facility. This saving of CO<sup>2</sup> is huge! With this saving of fossil energy with the extremely negative effects on the global climate we contribute to environmental protection.

And also you can make a contribution easily because there are even ways to save water while showering. Especially taking a long shower isn't eco-friendly. With each minute that you shower up to 20 I of drinking water run through the sink. And for showering you don't need that much water so just turn off the water while soaping yourself. This will save lots of the precious water and you spend less soap and energy.

Also while waiting for warm water you can help us because sometimes it will take a little while until the water really gets warm. First you should turn on only the warm water. Not until the water is really hot you switch on the cold water as well. Why? Cold water has a bigger density and therefore supersedes the warm water from the pipe. So the bigger the share of cold water in the pipe is the longer it takes until the warm water comes through. And the longer it takes the more water is running in the sink unused.



With this we can all contribute in saving and securing the wonderful country of Kenya and its nature. We thank you for your assistance!

We will be happy to show you our solar heat facility during your stay in our hotel!