



The answers to the Frequently Asked Questions are below;

1. How long does it take for the Solar Energy System investments to be paid back?

The payback time of the solar energy systems depends on the usage of the hot water. Normally it takes 1 to 2 years for the investment to be paid back. After then the water will be heated for free.

2. Where are the solar energy systems utilized the most?

- House
- Building (Central Systems)
- Pool
- Commercial;
 - Hotel
 - Hospital
 - Restaurant
 - Gas Station
 - Factories...

3. At which time of the year do the solar systems perform well?

The hot water can be obtained all the year with the selective absorber plate solar collectors (S series), if matt-black painted collectors are used, it is hard to have warm/hot water for four months only in winter, other times it works.

4. Are the solar energy systems utilized enough in heating the water in Istanbul?

Turkey is a country that has abundant sun light, for that reason all throughout the country, the solar collectors may be used to heat the water. In such countries like Germany, USA there are as many solar collectors as Turkey has installed.

5. Do the solar energy collector systems provide water when the weather is sunny? During daylight?

No. The systems are produced to provide hot water all the day, 24 hours. The water that's heated during daylight is stored in an insulated heat exchanger (Boiler) for that reason the hot water is ready to be used 24 hours.

6. Do the Solar Energy Systems produce electricity?

No. They are used to provide hot water only.

SOLAREKS

FREQUENTLY ASKED QUESTIONS

7. Are the solar energy systems environmentally friendly?

The raw materials other than the insulation material are % 100 recycleable. Solar energy systems are environmentally friendly systems; with the utilization of the solar energy systems, the consumption of the gas, liquid and solid fuel is decreased, thus the release of such poisonous gasses like CO₂, CO, SO₂, NO_x to the atmosphere is prevented. SO₂ is the main reason for the acid rains, the respiration of the CO may cause anemia health problems. NO_x cause physical, asphyxia health problems. The solar energy systems are real environmentally friendly systems.

8. How do you acquire the raw material?

The raw material is obtained from the domestic supplier as much as possible, thus the prices of the products are not affected from the fluctuations in the foreign exchange rate.

9. For which areas are the open loop and closed loop systems are suitable?

For the areas where there is not a risk of main water freezing and lime open loop systems can be used. Because of the circulation of the city water in the solar collector in the open loop systems, the water channels of the collector calcified, by the time calcification decreases the efficiency of the solar collectors initially. Lime, clogs the water channels of the collector and the solar collector does not operate at all. Also if the water in the collector is not removed during winter, the collector may explode due to the freezing water. In closed loop systems there are no such problems. Closed loop systems are mainly used in cold areas. If the system is drained in winter open loop systems can be used in cold areas.

10. Would you compare the solar energy and the heat pump systems?

There is an inevitable electricity expense in the heat pump systems. Although the electricity expense is much lower with regards to natural gas and electrical heating systems, there is no electricity expense in solar energy systems.

11. Does the snow and the hail harm the solar collectors?

Normally the snow that is collected on the roof will also collect on the collector. Because of the geometry and the installation angle of the collector the amount of snow that will collect on the collector will be low. In the regions where it snows very much, there is a space left between the roof and the collector system to prevent the collection of snow behind the system, the system is installed by the expert teams of installation. Tempered glass is used in the solar collectors, thus the snow and hail does not, can not harm the systems.

SOLAREKS

FREQUENTLY ASKED QUESTIONS

12. How much electricity do the pumps used in solar energy systems consume?

Generally pumps that require 30 - 90 W electricity are used in solar energy systems. If we assume that the pumps are used for 4 hours during the day, it is clear that the electricity consumption is very low.

13. Do the systems need to be faced to south?

The solar collectors must be faced to south, by under special conditions the collectors can be installed to have a 15° angle with respect to east or west, facing south.

14. What are the differences between the selective solar collectors and the matt-black painted collectors? Under which conditions the selective solar collectors are preferred?

Because the top heat losses in selective solar collectors are very low, they provide more heat to the water. The selective solar collectors are most commonly used at;

- in energy saving in the industry where there is a need for heating
- where the sunlight intensity is low
- where there is not enough space for the collector to install

15. Does a great mass occur during the installation?

No, the installation teams work very carefully.