

## Tour 9: Renewable Energy and the Secret of Desert Agriculture Thursday 19.09.2024

## **Schedule**

Departure: the bus will depart at 08:30, from ICC, Jerusalem (Conference Venue)

Lunch Break: (estimated) 13:00

Return – **18.00** (estimated) to ICC, Jerusalem (Conference Venue)

The following itinerary presents, methods and technologies at use in Israel in the field of solar and energy efficient systems and developing flourishing agriculture in extreme desert conditions.

## Aim of the tour:

The use of renewable energy resources is mostly based on exploiting powerful natural resources such as solar, wind, water energies and more. By using these natural resources, it is possible to derive potential renewable energy in a manner that does not harm the environment.

Israel is fast becoming a hub of renewable energy technologies with emphasis on solar energy harnessing. In the mid 1950's, Israel was the first country in the world to make widespread use of solar water heating. Currently, solar water heaters have been installed in most households in the country.

For the last 18 years Israel is recognized as a center of solar energy, not only in the form of solar power stations that were and are installed in southern Israel Negev Desert, but also due to the development of advanced technologies that are in the forefront of the solar energy market. In addition, Israel has numerous low cost renewable energy projects that demand relatively small expenditure and require no special infrastructure investments.

The aim of the proposed tour is to provide the group members with general perception of Israel's energy efficient and renewable energy production ecosystem.

During the tour you will learn about a wide range of alternative energy production solutions and efficient energy

We also offer a tour that presents the achievements of Israel and the Ramat Negev Agro-research Center in the development of flourishing agriculture.

## The tour includes:

\*Presentation of the largest solar powered station in Israel that recently emerged in Ashalim, Ramat ha Negev Highlands. Within the framework of the project, three solar power stations will generate 2-2.5% of Israel's electricity consumption, each of a different technology. During the tour, we will learn about all three technologies and concentrate on the solar-thermal power station, which creates electricity by solar-thermal hybrid tower technology of more than 200 meters high. We will see the sights, including the high tower and steam boiler. We will hear about the environmental challenges surrounding this massive project, and the creative solutions that have been developed.

We will see also a movie.

\*Visit of Ramat Negev Agricultural R&D Center - Discover the of Desert Agriculture in Israel

We offer a tour that proudly presents the astounding achievements of Israel and the Ramat Negev Agro-research Center in the development of flourishing agriculture, against all odds in extreme desert conditions, using brackish water in sandy ground. The tour includes:

An exciting movie that describes the cooperation between the development center and farmers, a breathtaking observation point, entrance into the different greenhouses, where we can see the different crops on which experimental work is being conducted; observe the special varieties that have been developed in the R&D center; learn about the pollinating large earth bumblebees; and gain insight into the work of the agronomist and farmer. The tour concludes with an opportunity to taste the crops produced by the R&D Center (according to the season, one or more of the following are available: sweet cherry tomatoes, strawberries, peppers, pomegranates, grapes, herbs, and more).