



WATEC Israel 2024

International Summit on Water Technologies

September 16-19, 2024, ICC, Jerusalem

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 primarily involves harnessing powerful natural elements such as solar, wind, and water. By utilizing these resources, it is possible to generate renewable energy in an environmentally friendly manner.

Israel is rapidly becoming a hub for renewable energy technologies, particularly in solar energy. In the mid-1950s, Israel was the first country in the world to widely adopt solar water heating. Today, solar water heaters are installed in most households across the country.

For the past 18 years, Israel has been recognized as a leader in solar energy. This recognition is not only due to the solar power stations established in the Negev Desert in southern Israel but also because of the development of advanced technologies at the forefront of the solar energy market. Additionally, Israel has numerous low-cost renewable energy projects that require minimal expenditure and no special infrastructure investments.

The aim of the proposed tour is to provide participants with a comprehensive understanding of Israel's energy-efficient and renewable energy ecosystem. During the tour, you will learn about a wide range of alternative energy production solutions and efficient energy practices.

We also offer a tour showcasing the achievements of Israel and the Ramat Negev Agro-Research Center in developing thriving agricultural practices.

The tour includes:

Presentation of the Largest Solar-Powered Station in Israel

- Recently established in Ashalim, Ramat HaNegev Highlands, this project comprises three solar power stations, each using a different technology and collectively generating 2-2.5% of Israel's electricity consumption. During the tour, we will learn about all three technologies, with a focus on the solar-thermal power station, which generates electricity through a solar-thermal hybrid tower over 200 meters high. Highlights include views of the towering structure and the steam boiler, discussions on the environmental challenges, and the innovative solutions implemented. The tour also includes a movie screening.

Visit to Ramat Negev Agricultural R&D Center

- Discover the marvels of desert agriculture in Israel. This tour proudly presents the remarkable achievements of Israel and the Ramat Negev Agro-Research Center in developing thriving agriculture in extreme desert conditions, utilizing brackish water in sandy soil. The tour includes:
 - An engaging movie detailing the collaboration between the development center and local farmers.
 - A breathtaking observation point.
 - Visits to various greenhouses to observe the experimental crops and special varieties developed at the R&D center.
 - Insights into the use of large earth bumblebees for pollination.
 - An overview of the work carried out by agronomists and farmers.
 - The tour concludes with a tasting session of crops produced by the R&D Center, which may include sweet cherry tomatoes, strawberries, peppers, pomegranates, grapes, herbs, and more, depending on the season.