



# YEP

## FIELD TRIP 2017

### ISRAEL



Technology Tour Itinerary



YEP – Young Engineers' Panel



5.11.2017

# DAY 1

- **Pickup (08:30 AM):** Eilat airport and north beach hotel.
- **Ramon Crater:** The world's largest erosion crater (makhtesh). A landform unique to Israel, Egypt and Sinai desert, it is a large erosion cirque, created 220 million years ago when oceans covered the area. The Ramon Crater measures 40 km in length and between 2 and 10km in width, shaped like a long heart, and forms Israel's largest national park, the **Ramon Nature Reserve**.



- **Ramon Visitors Center**, located on the edge of *Makhtesh Ramon* is overlooking the Crater. It displays the geography, geology, flora, fauna and history of the region from prehistoric to modern times. A film explains how the Makhtesh was formed and a three-dimensional interactive model helps bring home an understanding of the topography of this unique region.
- **Sde Boker** kibbutz is famous as the home of **David Ben Gurion**, Israel's first Prime Minister whose home is now a museum open to the public, and is the feature of a number of supporting exhibits in the kibbutz. Sde Boker is a community founded in 1952 by a number of pioneering families who were later joined by Ben Gurion after an interesting encounter. South of Sde Boker is Ben Gurion's burial site, which is set in an incredible location overlooking one of the most striking and impressive views in the Negev, across the Zin Valley.

- **Ashalim (Technology tour)** - Solar Energy (thermal and PV) Solar power tower and Solar field.

BrightSource Energy, General Electric (GE), and NOY Infrastructure & Energy Investment Fund are the partners of the 121 MW Ashalim Solar Thermal Power Station in Israel's Negev desert. GE is responsible for the engineering, the procurement and the construction (EPC) of the solar power station, with BrightSource providing the advanced solar field technology.

The BrightSource-GE-NOY Megalim project is one of three projects selected under Israel's Ashalim 250 megawatt total solar tender. It will be located



on Plot B and feature BrightSource's concentrating solar power (CSP) tower technology. More than 50,000 computer - controlled heliostats, or mirrors, that track the sun on two axes and reflect sunlight onto a boiler on top of a 250-meter tower. Construction is underway and the facility is scheduled to be completed in late 2017.

- **Overnight** near Kiryat Gat.



6.11.2017

## DAY 2

- **Beit Guvrin Caves**, in particular the Bell Cave are this area main attraction. There are at least 800 bell shaped caves in the park (and 2,000 in the area), some of which are linked by underground tunnels. The most famous of these caves is 28 meters high. These caves were quarried during the 4th to 9th century when the chalk was used to make roads, plaster and mortar. There is a meter wide hole in the cave ceiling where chalk was extracted.
- **Intel Kiryat Gat (Technology tour)**. Intel in Qiryat Gat began operations in 1999, manufacturing processors using 0.18-micron technology. In 2008, Intel opened it's second Kiryat Gat plant, Fab 28. F28 is a high-volume manufacturing Fab, which runs 300mm wafers on a 45nm process technology.
- **Ormat (Technology tour)** the leading Geothermal Energy company in Yavne. Ormat is today's only pure-play, vertically integrated geothermal company that designs, develops, builds, owns, manufactures and operates geothermal power plants worldwide. A leading company in sustainable and renewable geothermal energy, with over three decades of experience, Ormat has supplied clean, geothermal power to over 25 countries around the world.
- **Sorek desalination plant (Technology tour)**. Sorek desalination became operational in October 2013 with a seawater treatment capacity of 624,000m<sup>3</sup>/day, which makes it world's biggest seawater desalination plant. The desalination facility uses seawater reverse osmosis (SWRO) process providing water to Israel's national water carrier system.
- **Overnight** in Tel Aviv, free evening in the city.



7.11.2017

## DAY 3

- **Osem (Nestle)** packing site, industrial control powered by Schneider Electric.
- **Hadassah medical center (Technology tour)**, electrical and energy devices. For nearly 100 years, Hadassah Medical Center has been a leader in medicine and nursing in Israel, laying the foundation and setting the standards for the country's modern health care system. Hadassah has developed Israel's community health services, established the first modern hospital and medical and nursing schools, and set the climate for medical research in Israel.



Photo by Avram Graicerp



- **SATEC, Jerusalem (Technology tour)**. SATEC is a global leader in the research, development and manufacturing of energy management solutions. With two decades of rich experience in energy management, our team has the technological expertise to deliver flexible solutions for customer applications worldwide.
- **Jerusalem - old city tour.**
- **Overnight** near the Dead Sea.



- **Masada** is an ancient fortification in the Southern District of Israel situated on top of an isolated rock plateau, akin to a mesa. It is located on the eastern edge of the Judean Desert, overlooking the Dead Sea 20 km (12 mi) east of Arad. Herod the Great built palaces for himself on the mountain and fortified Masada between 37 and 31 BCE. According to Josephus, the siege of Masada by troops of the Roman Empire at the end of the First Jewish–Roman War ended in the mass suicide of 960 people, the Sicarii rebels and their families hiding there.



Photo by Avinoam Michaeli

- **Dead sea works (Technology tour).** Dead Sea Works is the world's fourth-largest producer and supplier of potash products. The company also produces magnesium chloride, industrial salts, de-icers, bath salts, table salt, and raw materials for the cosmetic industry. It has customers in over 60 countries. Dead Sea Works is part of the Fertilizers Division of Israel Chemicals Ltd. It is located in the southern basin of the Dead Sea and the extracted chemicals are exported around the world.



8.11.2017

## DAY 4

- **Ramon international airport (Technology tour)** is an international airport under construction in the Timna Valley in southern Israel. It will replace Eilat and Ovda Airports, and serve as a diversion airport for Israel's primary airport, Ben Gurion. The airport is located 18 km north of Eilat. It has a 3,600 m runway allowing large aircraft to land.
- Join **Electricity 2017**, accommodation in Americana hotel Eilat.  
**[www.electricity2017.com](http://www.electricity2017.com)**



**Note:** The Itinerary is subject to modifications

Visit  
**Electricity 2017**  
online



View itinerary  
*on map*

6

For more information:



YEP – Young Engineers' Panel

