## solar energy project

Harnessing the sun's energy using Photovoltaic technology



## Dead Sea Panoramic Complex

The Dead Sea Panoramic Complex was built taking nature conservation into consideration; no animals, plants, or geological landscape have been harmed during its construction.

The stone used in building the complex is called travertine and is found naturally in Jordan. Its color is in perfect harmony with the surrounding landscape, allowing the Complex to blend into its environment.

In an effort to be more environmentally friendly, the Dead Sea Panoramic Complex is powered by clean energy systems using photovoltaic technology. The Japanese government, through the International Cooperation System (IICS), funds this project.





# The Royal Society for the Conservation of Nature (RSCN)

Is an independent, non-government organization devoted to the conservation of Jordan's wildlife and wild places. It was founded in 1966 under the patronage of His Majesty the late King Hussein and has been given responsibility by the government to establish and manage protected areas and enforce environmental laws. As such, it is one of the few voluntary organizations in the Middle East to be granted such a public service mandate.

Wild Jordan is part of RSCN and is responsible for socioeconomic programs, including all eco-tourism and handicraft enterprises, which link the protection of nature with improving the livelihoods of local communities.

#### **Working Hours:**

Dead Sea Panoramic Complex is open daily from 9:00 am to 4.00 pm winter time, 9:00 am to 5:00 pm summer time.

#### Contact us:

#### **Dead Sea Panoramic Complex**

Tel: (+962 5) 3491 133 Email: panorama@rscn.org.jo

#### Wild Jordan

Tel: (+962 6) 4616 523 Email: tourism@rscn.org.jo

We have flexible booking arrangements

for our facilities.

www.rscn.org.jo







### **Implementation**

After visiting several candidate sites for the Photovoltaic system, under the guidance of Jordan's Ministry of Planning, two locations were selected to host this initiative: El Hassan Science City (EHSC) and Dead Sea Panoramic Complex (DSPC). The eventual aim of the Solar Energy Project is to install both a 100kWp Photovoltaic system at the Dead Sea Panoramic Complex and a 280kWp Photovoltaic system in El Hassan Science City.



# Reduced Power Consumption

Currently, the Dead Sea Panoramic Complex's annual power consumption is approximately 382,000 kWh. The expected power generation of the DSPC's Photovoltaic system is 75,800 KWh, saving the Complex on average 30% to 40% of its total annual power consumption. As a result of the Solar Energy Project's Photovoltaic system, it is estimated that the total amount of carbon dioxide (CO²) to be reduced per year is as much as 90 tons. Moreover, in its role as a major touristic hub, the Dead Sea Panoramic Complex's aims to contribute to the promotion of clean, renewable energy and public awareness on climate change issues by educating the Complex's visitors on the project and Photovoltaic technology.



### PV technology in DSPC

Located north of the DSPC's main entrance, the PV system will supply all generated power to the Complex to be consumed therein. The generated power from the PV system will be supplied in the daytime, while commercial power will be supplied to the Complex when PV power is not being generated, for instance during nighttime. Controlled by an automatic mechanism, a non-reverse power system has been adopted for this system because this offers protection for the country's grid system. When the Complex's power consumption is lower than the solar-power generated, the PV system will be cut off by the non-reverse power system.



## **International Cooperation**

The Solar Energy Project at the Dead Sea Panoramic Complex has been implemented through cooperation among Japan International Cooperation System (JICS), the Ministry of Planning and International Cooperation (MOPIC), the Ministry of Tourism and Antiquities (MOTA). On board at the project's consultant is Japan's Nippon Koei, and Marubeni company has been commissioned as contractor.

### **Background**

In January 2008, the Japanese government announced their Cool Earth Partnership with Jordan, which aimed to support the country's efforts to reduce greenhouse gas emissions and tackle climate change issues. Under the Program Grant Aid for Environment & Climate Change aid for developing countries where capital to achieve greenhouse gas reduction and economic growth is insufficient — this partnership's main focus was the introduction of Photovoltaic (PV) technology to the Hashemite Kingdom.

In February 2010, the Japanese government pledged to extend a grant of 640,000,000 JPY (7,000,000 USD) to encourage the country's effort to improve efficiency of energy supply, further clean energy by solar electricity generation, and conserve energy.

The Solar Energy Project, as the PV technology project has been dubbed today, was officially launched in February 2012 under the patronage of HE the Minister of Tourism & Antiquities (MOTA) of Jordan and HE, the Ambassador of Japan to Jordan.