

All the energies directed toward you



## The Company

Solaretz, belonging to the Exclusive Real Estate Keren Segula Fund Inc., is Israel's leader in the field of renewable energy, specifically specializing in solar energy. Since its founding in 2010, Solaretz has built systems for business and personal use throughout the country with a capacity of about 20 MW. Solaretz's customers include factories and multinationals industries.

The Solaretz team has a wealth of experience installing large-scale powerplants (8MWp-40MWp) but also low voltage solar power systems (<630kWp). The company's advanced architectural planning system makes the most of the available space, allowing for maximal power output from the system and promising optimal production.

In addition to professional installation services, Solaretz offers additional high-standard maintenance and assistance to customers, including monitoring and managing production inspections for systems of all sizes, country-wide, at competitive prices. The company is renowned for its accessibility and rapid, courteous responses. **Connecting with Solaretz guarantees a successful, long-term relationship.** 

Solaretz operations follow all Israeli safety standards. The company uses the highest quality and most advanced equipment to present its customers with a quality product without compromise, at a worthwhile price.

Solaretz provides its customers with green solutions, which can drastically cut their electric bill, rendering it nearly irrelevant, merely a few years after installing the solar power system. The objective is – **free electricity** with a clean, green gain.



# Solaretz's installation services include:

**Checking the feasibility of installing a solar power system** – Designing and selecting a suitable system for the roof while performing a computerized simulation in order to ensure that no unforeseen obstacles interfere with the system.

**Designing the right configuration** – Before each installation, Solaretz's engineers prepare a detailed and precise architectural plan, formulate sketches and designs, test and approve the compatibility of the roof with a solar power system. If the need should arise, the engineers may recommend additional structural reinforcements, will determine the placement and distribution of the various modules and other system components, and will identify potential obstacles, recommending the best ways to remove them.

Detailed analysis and plan including predicting system output.

**The highest standard of system installation** – Upon conclusion of the meticulous planning and preparation stages, Solaretz is responsible for installing and assembling the system including all equipment and electrical components. Project managers supervise all stages of the installation process from start to finish, thus ensuring a smooth and successful installation. The work and installation process is completed by Solaretz in accordance with the final submitted plans.

Complete mechanical and electrical installation of the system.

**Continuous inspection of the solar power system** - The inspection occurs with the help of a monitoring system, which determines whether the output produced matches the system's potential.

**Training** – Customers are guided to use electricity efficiently and to conserve energy in the household.

**Service** – In the event of a malfunction during the warranty period, the customer service team is activated to take care of the problem and/or provide notice to the customer.



## System connected to a "Net meter" network

#### What is "net metering"?

A net meter is a new, revolutionary arrangement of the electric network, by which electric consumers can, for the first time in Israel, install solar devices while relying on the electric grid as a backup when the device is not creating electricity. The net meter arrangement allows the consumer with a solar power system installed to connect to the electric grid via the structure to provide his electricity needs. **This enables the use of innovative technology an alternative to the power created by the electric company, thereby minimizing/eliminating the monthly electricity payments.** 

At times when the solar power system is creating more electricity than necessary (such as on weekends), the surplus power flows to the national power grid, and the consumer accumulates credit calculated via the meter's record of load and time of use. When the system is not creating electricity (such as at night), the accumulated credit is offset by the use of electricity in accordance with the price of electricity at the time of consumption. **Meaning, that it is, in fact, possible to eliminate electricity bills.** 

#### For whom is it suitable?

The new arrangement is suited for businesses looking to save on electrical expenses. However, it is not suited for buildings with unsubstantial electrical consumption. It is not possible to erect the device on a structure with physical limitations such as: excess shade, asbestos, or regulatory restrictions including irregular building or usage, which will prevent the issuing of a building permit. It is recommended to hire a professional expert to determine the compatibility of the device with the structure.

#### Forecasting electricity prices in the future

Opposing factors affect the cost of electricity. On the one hand, the need to cover the electric company's debts and the foreseeable rise in the price of inputs are likely to raise the cost. On the other hand, natural gas that will soon arrive in Israel will lower the price of fuel, therefore it's difficult to foresee the trend over the next 25 years. A conservative calculation would indicate that the price will likely rise by about 1% each year, realistically.

Very Important - A solar device allows you to determine the cost of electricity!

#### **Economic Feasibility Analysis**

The creation of clean solar power contributes to a clean, quality environment, but not just that. There are also multiple economic advantages by joining the net monitoring arrangement:

- Double-digit returns
- Energy independence
- Protection from rising electricity prices

The exact calculation is performed with the help of a business model that Solaretz's representatives will happily provide the customer.

A solar device creates electricity using a photovoltaic panel, which converts the the energy of the sun's light into electrical energy and a converter that transforms the direct current into an alternating current. For every 1kW (kilowatt) that is installed in Israel, 1,700kWh (kilowatt hours) are produced per year. Each year, the output of the device lessens by roughly 0.5% at most.

The Time of Use rate is the price per kWh. The average low voltage Time of Use rate is roughly 0.53 NIS per kWh. The rate is calculated by averaging the rates at peak, mid-peak and off-peak times during which a solar device is creating electricity.

The savings amount to over 20% at the time of returning the loan, and over 75% after its return. This amounts to an average saving of 40%.

An extra cost is that which is paid to the electric company: 0.015 NIS for availability per kWh created, 0.03 NIS per kWh stored in the grid (roughly 30% of the total production, depending on the consumer profile), such that the expected expenditure is roughly 0.025 NIS per kWh.

Accelerated depreciation for solar panel systems can be applied in 2013.

**Remember- in the field of solar energy, those who join early will benefit!** The net monitoring arrangement is limited in quantity to 200 (MW) and time (until the end of 2013). In the year 2014 there will be an additional quota, and due to high demand it is expected to run out quickly. From the time of registration, the customer will have 180 days to erect and install a low voltage device or 365 days for a high voltage device.

It is recommended to examine the opportunity, and should it seem fitting – to arrange a building permit and sign up without delay!











## Maintenance and Operational Services









Solaretz provides its customers with inclusive maintenance and operational services including:

#### **Ongoing Maintenance**

- Observing system performance through the monitoring system.
- Identifying trends and problems from afar and identifying their sources.
- Notifying the consumer regarding problems that require the arrival of a technician to the site.
- Assisting the consumer with problems that do not require technical assistance.
- Professional cleaning services for the system and panels utilizing specialized equipment and water, which are specifically geared towards extending the life of the panel.
- System performance analysis and the establishment of a cleaning schedule to suit the consumer's needs and preferences.
- Comparative system performance analysis, as well as monitoring and trend analysis based on the comparative analysis of all the systems maintained by Solaretz.

### Yearly Care Including

- A general inspection by an electrical engineer.
- Reinforcing the screws on the system and on the electrical panels.
- Inspecting the grounding system including grounding continuity and stability of grounding conductors.
- Inspecting the connection of cables to converters.
- Ensuring that system components are properly sealed down.
- Inspecting frame accessories and painting.
- Thermographic inspection of electrical panels.
- Inspecting isolation and faulty loops in the main line.
- Inspecting the stability of the construction.
- An inspection by a structural engineer (once every 3 years).
- Inspecting shadiness and growth of trees in the area.
- Maintaining surveillance systems including cameras, "Akrabotim", GMAX, etc.



### The Team and Departments

#### Departments

Each of Solaretz's departments specializes in its respective area, yet they collaborate to form a harmonious unit that functions productively with mutual cooperation.

The Maintenance Department is responsible for the upkeep of the systems, monitoring them throughout the years, washing the panels and repairing problems as necessary.

The Project Management Department is responsible for managing projects for both the mother company and for Solaretz as subcontractors. The department includes an engineering unit comprised of experienced engineers who deal with designing the systems, and sketchers who work on drawing and simulating the systems. The construction unit of the department is responsible for all of the company's construction projects, and they are comprised of teams with experience in civil engineering, erecting systems, electrical work and construction.

Additionally, both sales and financial departments function within the company.



#### The Team

Solaretz's work teams are comprised of the top experts in each field. The company is managed by a think tank with much knowledge in the field of energy, with top managerial skills and proven expertise in guiding projects. The company's managers possess first-class field-oriented academic degrees in the industry.

#### **The Team Leaders Are:**

**Michael Rabin, CEO** - Advanced Materials Engineer (B.Sc.) specialized in semiconductors with a master degree in Business and Administration (MBA).

**Moshe Manor, CFO** – account manager degree, has a wealth of more than 30 years of experience advising major Israeli companies.

**Maor Shitrit, Project Manager** – Electrical Engineer (B.Sc.), with vast experience in electrical project management in general, and in the solar field specifically, including thorough knowledge of infrastructure and extensive engineering and implementation knowledge. Former project manager at Siemens Israel Ltd for high voltage division, he has conducted many high voltage installations in the industry. He also serves actually as an expert inspector and consultant for erecting both commercial and middle-range solar power systems.

**Yonathan Marciano, CLO** - has a degree in Business Law and Logistics (B.A), has been serving for several years in Israeli police force, has a great deal of experience planning project and team logistics.

**Patrick Maarek, CCO** - responsible for the commercial strategy and development of Solaretz, has a great deal of experience over 20 years in Business commercial for major diamond companies.



#### Jerusalem Office

Tel: 02-5811515 Fax: 02-5711515 Email: desk@solaretz.com Website: www.en.solaretz.com