GREEN KNESSET THE ISRAELI PARLIAMENT IN AN ERA OF SUSTAINABILITY

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There is no doubt that the world is going into an era of sustainability. However, only few parliaments have taken this seriously and relatively little has been done in the field of sustainability in parliaments throughout the world.

On January 1st, 2014, the Knesset, the Israeli Parliament, inaugurated the Green Knesset project. This project is the first part of a holistic plan which will take the Knesset into an era of sustainability. During the next two years, i.e.2014-2015 the Knesset will implement 13 different projects, mainly dealing with energy and water conservations. The Knesset will invest in these projects 7 million NIS. The approximate annual saving will be 1.5 million NIS and the average return will occur after 5 years. These projects include:

- -Installation of software that shuts down approximately 1,200 computers at the end of the work day.
- -Installation of sensors in every building of the Knesset which automatically turn off the heating, air conditioning, and lighting in unoccupied rooms.
- -Changing the lighting in the parking facility replacing the T8 fluorescent lamps with LED lighting.
- -Changing bulbs throughout the building replacing dichroic halogen bulbs with LEDs, and replacing T8 fluorescent lamps with T5 lamps.
- -Installation of a 4,650 square meter photo-voltaic solar array the biggest ever installed in parliaments.
 - -Replacement of old toilet tanks with water saving dual-flush tanks.
 - -Reuse of air conditioning condensation water some 4,000 cubic meters for irrigation.
- -A survey to examine the Knesset's existing irrigation system and develop a new irrigation plan, with the goal of saving 20% of the 20,000 cubic meters used per year the amount used by the Knesset for irrigation today.
- -Looking into the use of air from outside to help regulate the temperature of the server room, and installing variable refrigerant flow air conditioners which adjust according to the heat.
- -Replacing some 50 old air conditioners with new units that are more energy efficient (Inverter technology)
- -Setting the desired temperature dynamically for the cold water system, and changing the control software of the air conditioning system so that there will be a link between the temperature outside and the desired temperature inside.
- A survey to examine the efficiency of the heat pumps and the feasibility of replacing them with more efficient pumps.
- -Installation of a unit in the energy center to supply cold water to the air conditioning system; the energy center produces the majority of energy required to heat and cool the Knesset.
 - -Using the heat emissions of the water cooling unit to heat the water for everyday use.

In addition to these projects, further targets were established for this phase. These include waste reduction, combining the bird research station of the Society for the Protection of Nature in Israel with the paths for touring the Knesset, and more. One of the main goals of the Green Knesset project is to change the organizational culture of the Knesset workers so that they become more familiar with the philosophy of sustainability.

Since January the Knesset has advanced various programs and has taken action to increase awareness and plan the next stages of the venture. Following is an overview of the activities:

- 1. A series of sustainability training sessions for Knesset staff.
- 2. Charging stations for electric cars have been installed.
- 3. The tender for the solar photovoltaic field has been launched.
- 4. Serving water in pitchers at committee hearings. The Knesset has changed over to serving

water in pitchers during committee hearings and at events. The serving of water in pitchers is set to replace the distribution of bottles of mineral water which has taken place until now at committee hearings. The Knesset has consumed 60,000 bottles of mineral water a year for use in committees, at a cost of NIS 500,000. Serving water in pitchers will therefore save the Knesset NIS 500,000 a year and also reduce the volume of plastic waste by 30 cubic meters.

- 5. Knesset Trail. The new Knesset Trail a walking trail combining urban nature and history was inaugurated.
- 6. Dual-flush toilets in bathroom stalls. Forty-eight old toilets located in Knesset members' offices have been replaced. The new toilets are dual-flush, conserving water (3 liters for a half-flush and 6 liters for a full flush).
- 7. Replacing air conditioners. We have begun the process of replacing less energy-efficient air conditioners with more energy-efficient units; to begin with, old units are being replaced with new "inverter" air conditioners.
- 8. Recycled paper. At the beginning of the forthcoming Summer Session, 80% of the paper used in the Knesset will be recycled paper.
- 9. Energy efficiency projects. a. A planning process has been initiated to install a cold water supply unit in the energy center the goal being to heat water for consumption in the building by way of the heat emissions; b. A process has been initiated for planning the installation of sensors to automatically turn off lights and air conditioners; c. Replacement of PL lighting for LED the lights of the Government floor of the Knesset have all been replaced. d. A pilot of automatic turn-off of computers has been launched.
- 10. Detailed gardening program. Renowned architectural landscapist Anat Sadeh has been chosen to lead the planning of the Knesset gardens, and she will integrate sustainable thinking into her work. The planning of the garden will also involve an irrigation consultant who will adapt the irrigation to the vegetation and thus save more water. In this process the Knesset hopes to cut some 20% of its water consumption.
- 12. Visitors Center launching a green tour. The Visitors Center has launched a "green tour" for various groups of visitors.
- 13. Advocacy and media. The Knesset's Communications and Public Relations Division has invested significant effort in exposing the public to the Green Knesset program through various media.
- 14. Knesset Secretary promotes saving paper. Various documents will no longer be printed and rather will be sent by email thus saving the Knesset between 40 and 50 thousand pages every year.

At present, the Green Forum of the Knesset, a voluntary body of Knesset Workers who are experts in various fields of sustainability, is planning the next stage of the Green Knesset project which will include additional fields of environmental sustainability such as: waste treatment, environmental management, transportation, green building and retrofit etc.

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