

# Alfa's Sustainable Projects

Chen Shalita | Founder & CEO





#### SUSTAINABLE PLANNING GREEN BUILDING CERTIFICATION









AMOT ATRIUM MOSHE ZUR ARCHITECTS



**AUTODESK TEL AVIV SETTER ARCHITECTS** 



**BROSHIM DORMITORY ILAN LEKNER ARCHITECTS** 



**SARONA TOWER MOSHE ZUR ARCHITECTS** 



GOOGLE TEL AVIV CAMENZIND ARCHITECTS

















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Ministry of Defense

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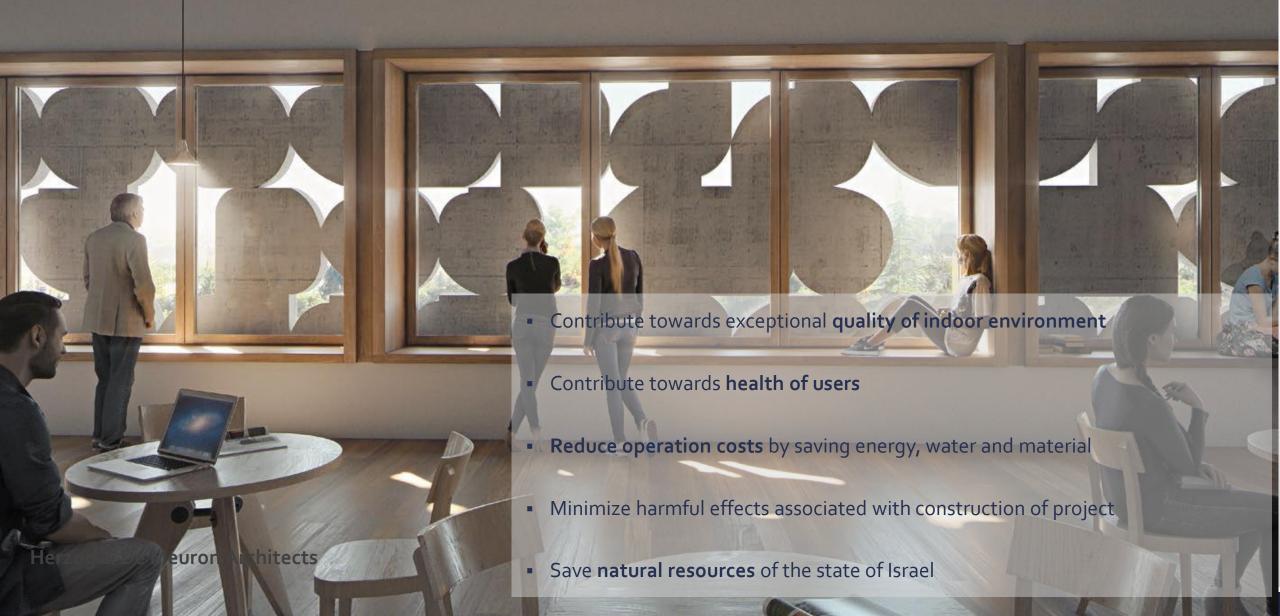




## The National Library of Israel

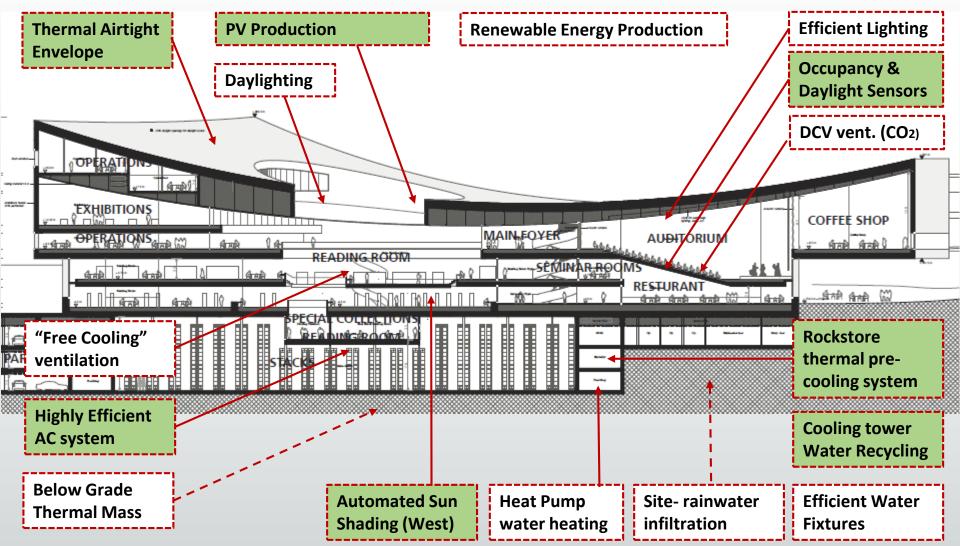
The National Library project aspires to be a cultural and a sustainable landmark, and seeks **LEED Platinum** certification. Alfa are part of the international consultant team, which were chosen for this high profile project, and leads the sustainable design of the project.

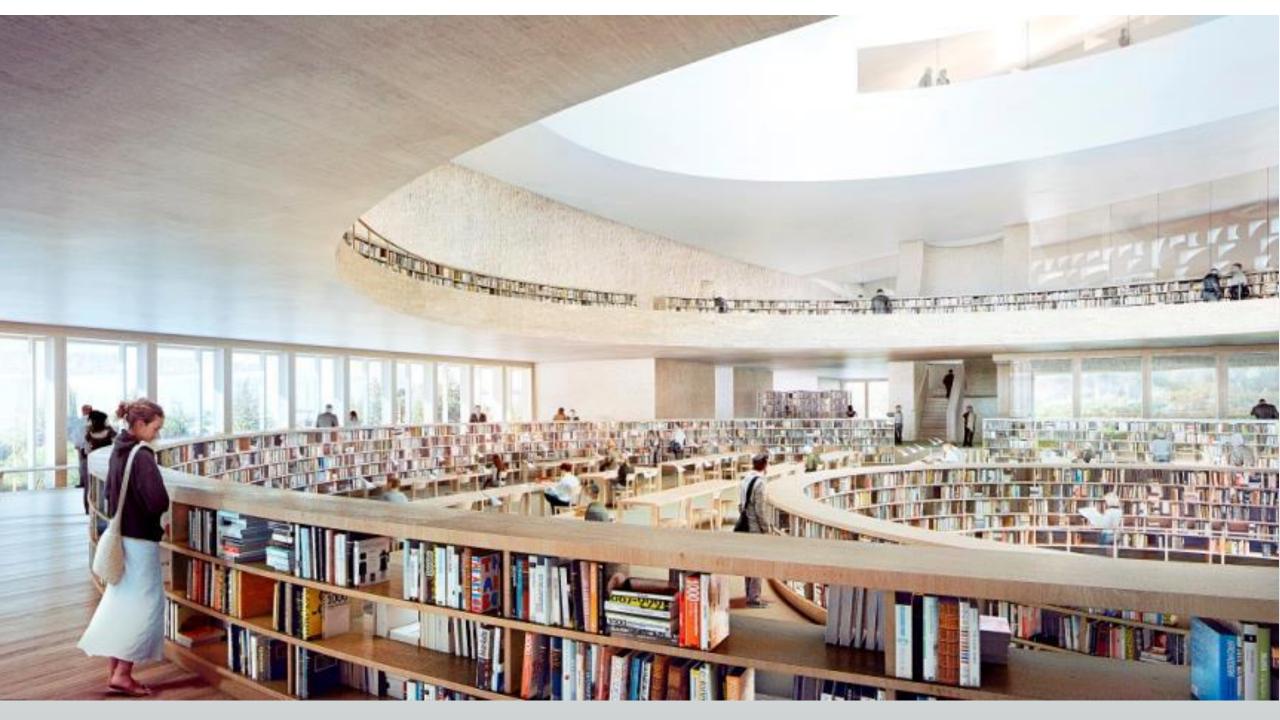
### The National Library of Israel



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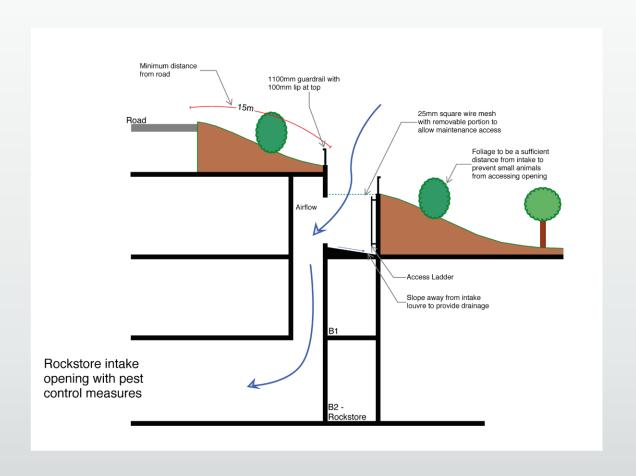




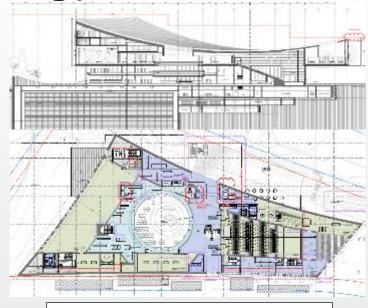
### The National Library of Israel- Rockstore



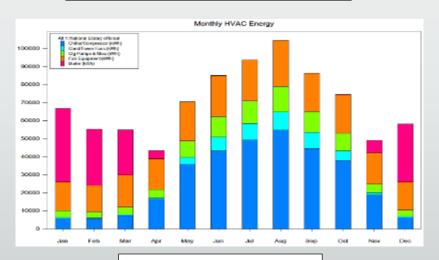




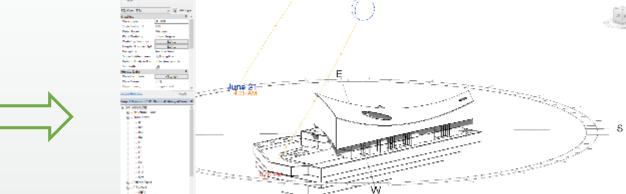
# **Energy Performance**



A. DD1 Progress Production architecture package



D. Energy consumption results



B. Simplified 3D geometry on Revit

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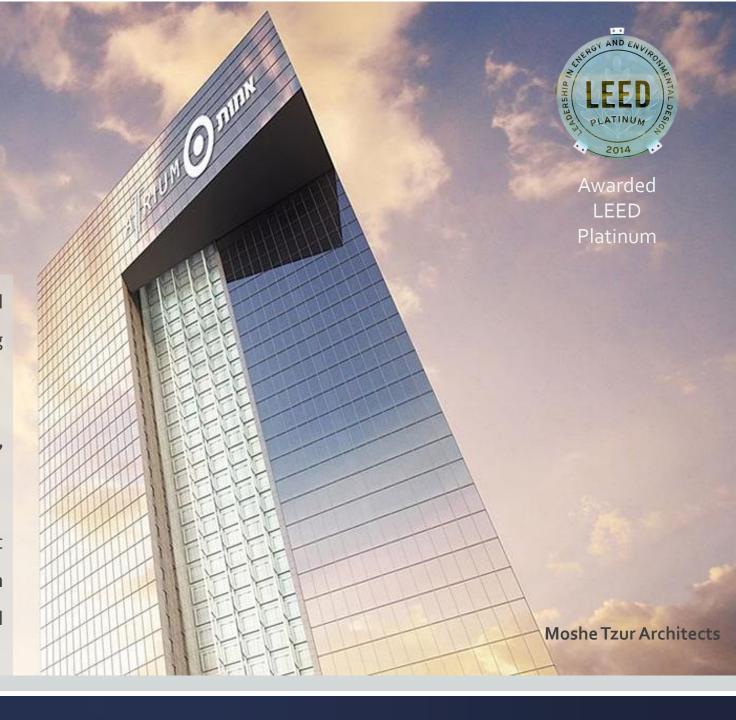
C. Detailed energy simulation

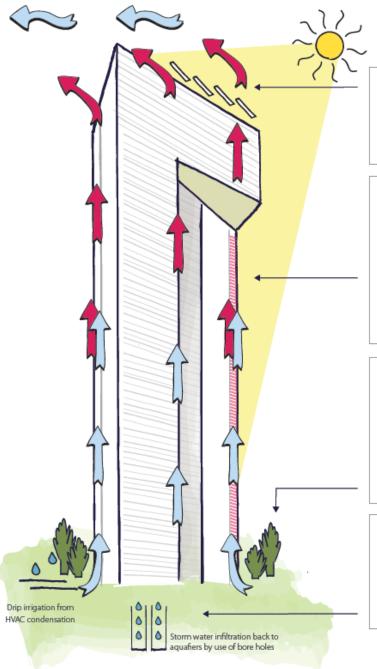
#### Amot Atrium

Our office is responsible for the sustainable design and LEED certification for this state of the art office building in Ramat Gan.

The project achieved **LEED Platinum Core & Shell,** and some tenants are targeting LEED as well.

Amongst very special sustainable features, the project incorporates a unique thermally improved **Double-Skin Envelope** which contributes significant to the overall energy savings of 36%.





#### Rooftop PV system

The rooftop photovoltaic (PV) system converts sun to energy, providing over 1% of the total energy of the building from renewable sources.

#### Double-skin envelope

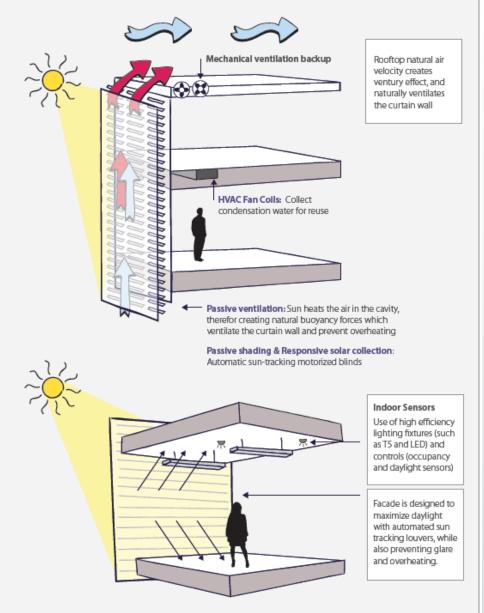
High performance double skin façade with integrated automatically controlled interior blinds. This envelope high thermal performance allows to reduce heat losses in winter as well as unwanted solar heat gains in summer. This high performance building envelope is developed and manufactured in Israel.

#### Efficient landscaping

Use of local plants considered as 'water-saving' by the Israel Ministry of Agriculture. Project also provides efficient drip irrigation and collects and reuses the HVAC system's condensation water for irrigation. No potable water is used for irrigation in the project.

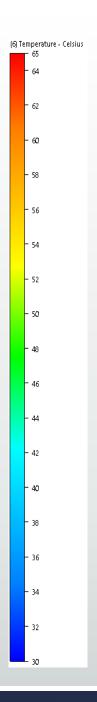
#### Storm-water management system

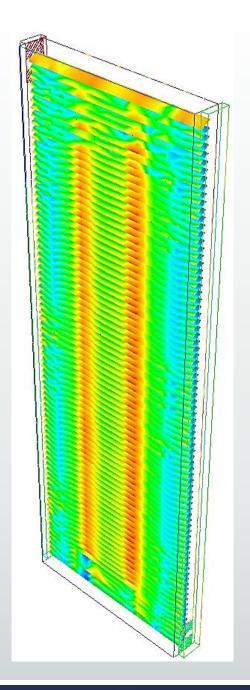
Amot Atrium implemented a storm water management plan that reduced the storm water runoff compared to pre-development volumes.





#### Amot Atrium-CFD







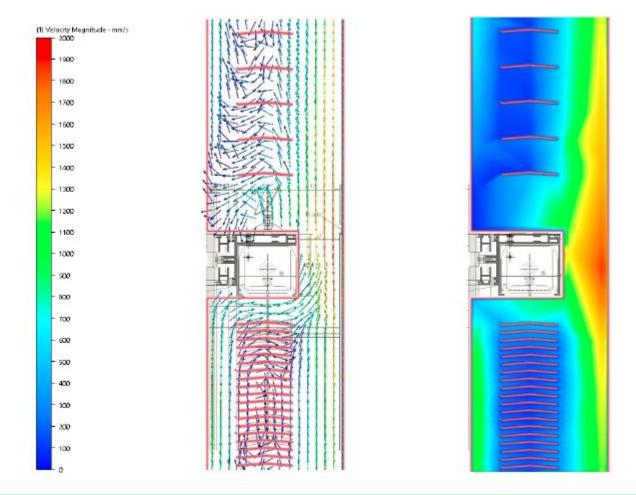
The sun shading temperature rises up to 65 °C.

Most sun energy is reflected by the interior blinds

#### Amot Atrium-CFD



#### Flowrate study



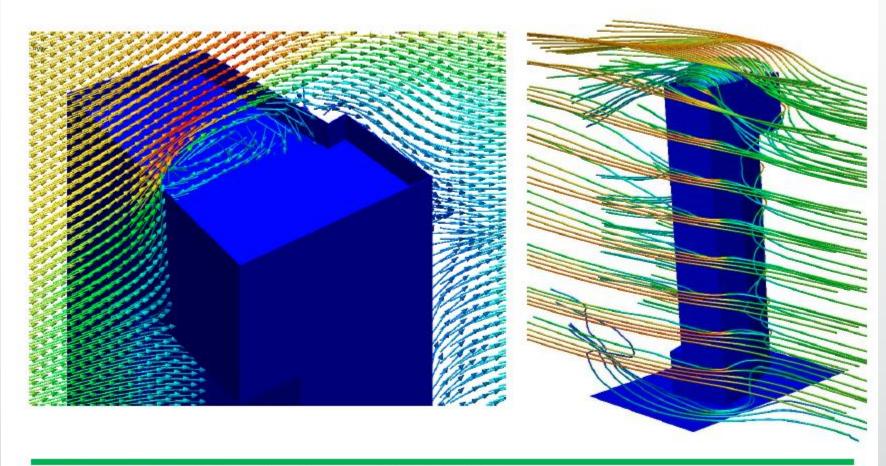
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#### Amot Atrium-CFD

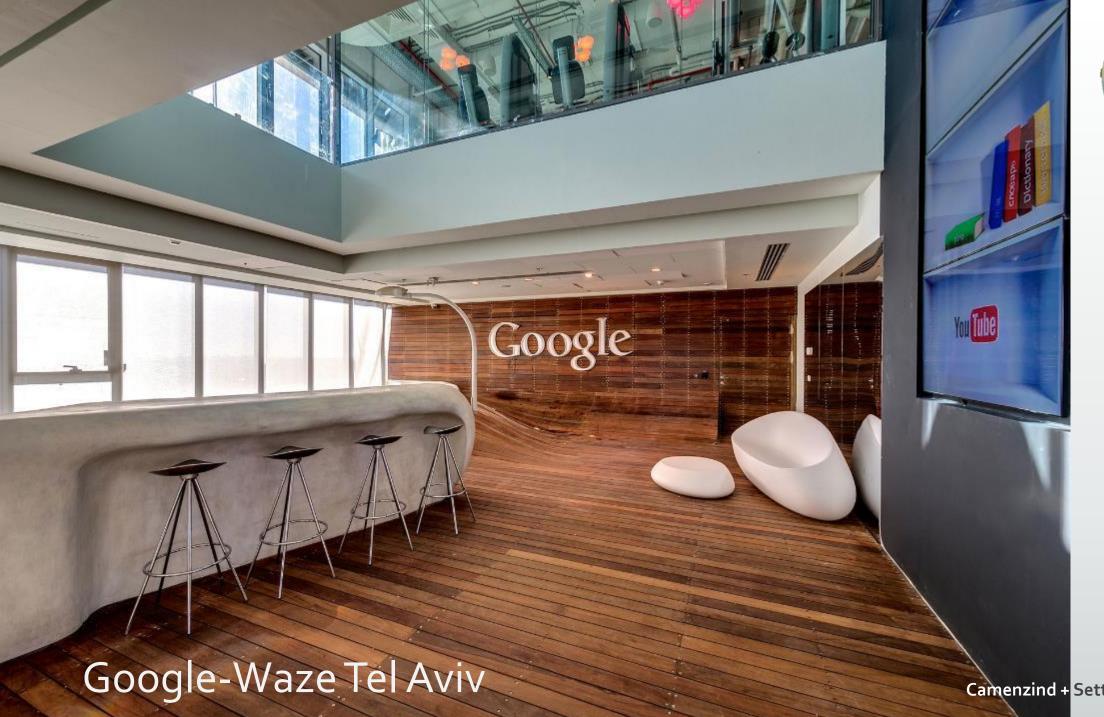


#### Natural ventilation study - wind velocity results



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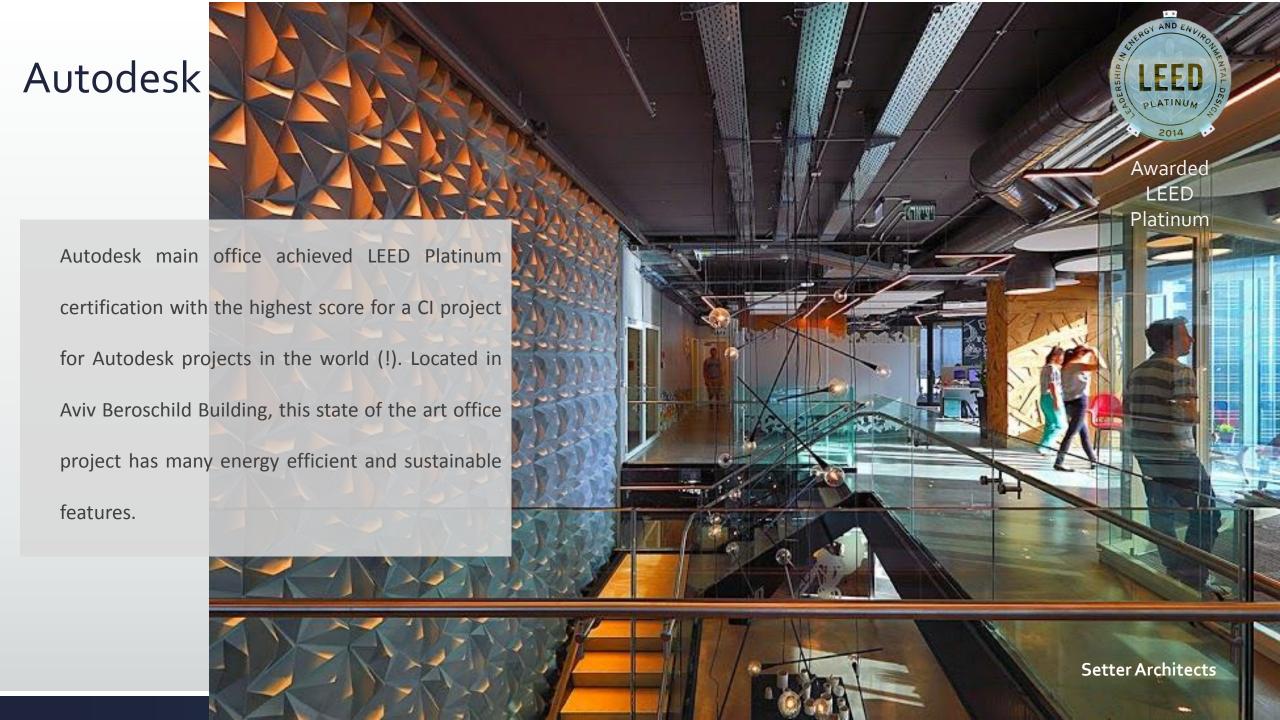




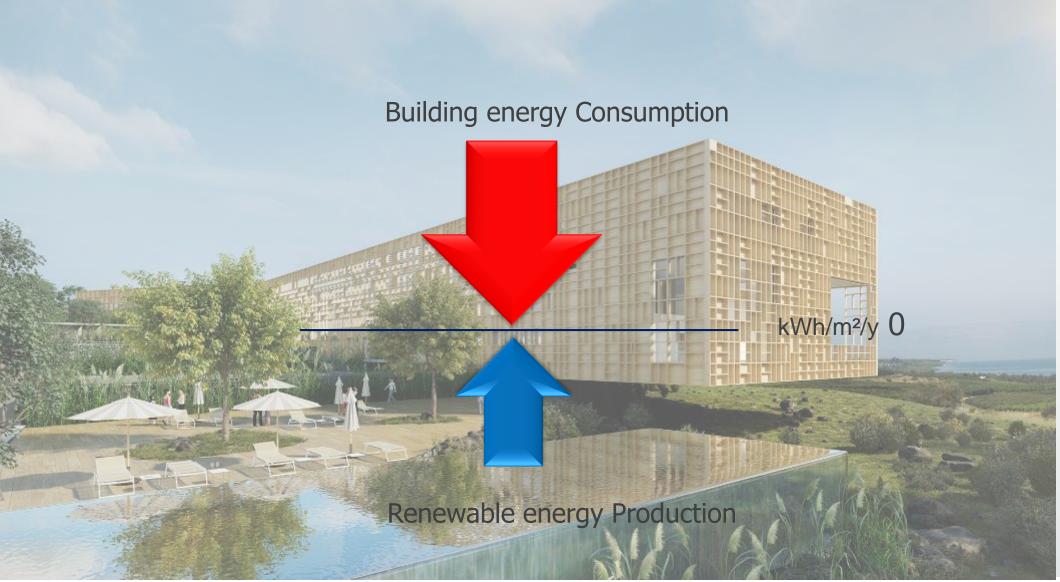


Awarded LEED Platinum

Camenzind + Setter Architects



### Net Zero energy Buildings





### NZEB- Solar Decathlon, Team Israel





We led the Israeli entry to the Decathlon China Solar competition. The Israeli team achieved 4 place overall, and first place in Energy balance. This is the first proven successful attempt in Israel to build a Net Positive Energy Building, and is a showcase of Israeli Cleantech Technology.



#### Shoham Visitor Centre and Hotel



Alfa are design managers of this cutting edge visitor center designed as a **Net Positive Neuman-Hayner Architects Energy Building**. The 3,800 sq.m project will also consist of a 40 room boutique hotel and resturant.

### Nevatim Net Zero office building





#### **Smart Bases**

חניונים ממוחשבים We are heading a large מוני מים ממוחשבים team of consultants 11 מירוי עומפי תחבורו<del>ר</del> זיהוי דליפות בצנרת מים 4 4,000,000 designing Sq.m of infrastructure to the principals of זיהוי דליפות מ חיישני שירותים smart city. The first ניטור איכות אווי infrastructure expected to tender late ניטור פחי אשפה 2016. ניהול פינוי אשפה ניטור רעש גילוי גזים רעילים גילוי אש נעמה מליס אדריכלים איכות אוויר אנרגיה מים פסולת תחבורה





With the support of the ministry of Education this

Net Zero Energy Kinder

Garden is aiming at being the new standard for kinder gardens in Israel.





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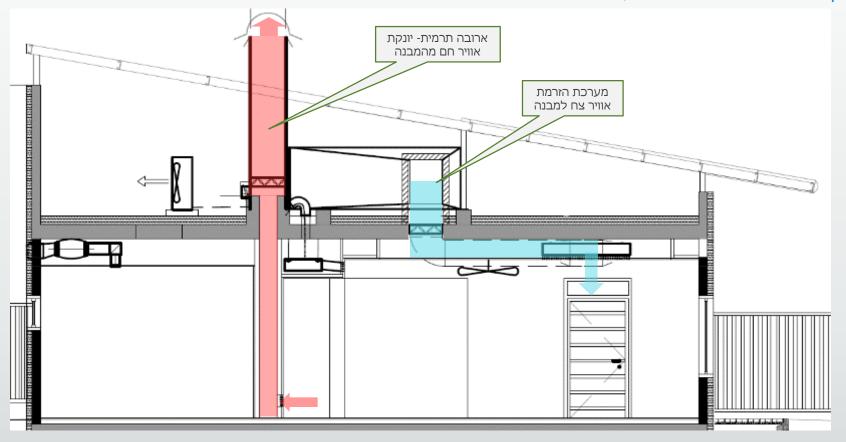




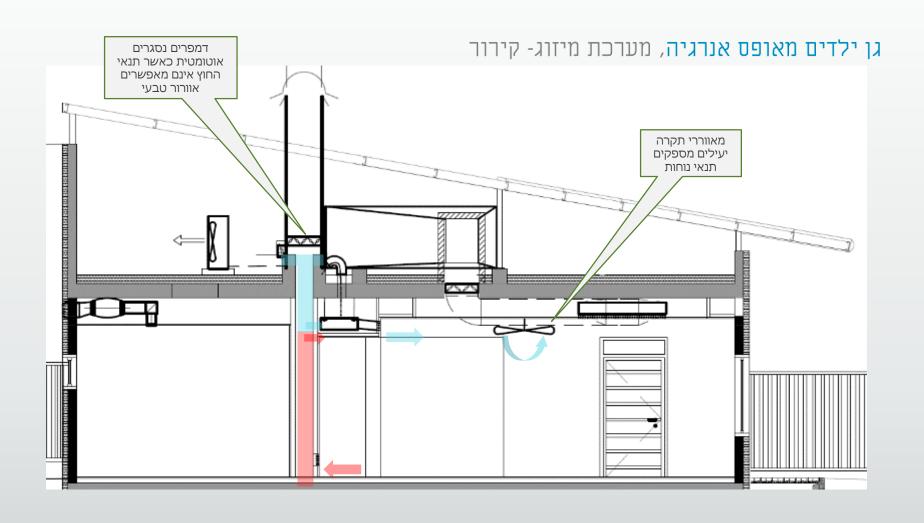




גן ילדים מאופס אנרגיה, מערכת מיזוג- אוורור טבעי

















#### **Our Team**



#### Architect Chen Shalita, LEED AP BD+C, CEO

Graduated with excellence B.A. degree from the Architectural department at the "Technion". Chen worked as an Architect at "Diamond and Schmitt Architects" in Toronto which is one of the leading Architectural firms in North America, there he belonged to a select group of LEED Architects. Chen was certified for planning per LEED rating system, and was trained for leading sustainable projects (IDP) planning teams, by the Canadian Green Building Council, and was certified by the CGC- the Canadian Geothermal Coalition. Chen was a member of the Israeli Standard Institute professional committee which developed the Israeli Geothermal Standard.

Chen lectures at conferences and at academic Institutions such as the "Technion"s Department of Continuing Education" and "Shenkar", on advanced technologies of sustainable construction.

Chen led the Israeli team to Participation and winning a number of prizes at the "Solar Decathelon China 2013" Competition. Chen sits on the board of several projects such a s the Israeli Aviation and Space Museum and others.



#### David Kadyshewich CPHC® ,LEED AP CI, Associate

David is in charge of certifying Commercial Interiors based on LEED, in addition to several projects based on the Israeli standard 5281. David led a pilot project in collaboration with the Israeli Standards Institute for submitting projects via an online system. David is currently involved with LEED V4 projects.



#### Engineer Jerome Sebbag LEED AP BD+C

Jerome is a civil engineer MA that graduated INSA Lyon France. Jerome preformed prominent sustainable projects at countries such as France, China, Russia and Korea. Jerome performs simulations using a wide variety of programs such as eQuest, Autodesk CFD, Ecotect, Dialux, and Revit. Jerome was responsible for the Energy integration at the Chinese leading project Pearl River Tower and for many other prominent projects.



#### Aviva Yasner, LEED AP O+M

Aviva completed her undergraduate degree as an Andrew Carnegie Scholar at Carnegie Mellon University with an interdisciplinary BA in Energy and the Environment and Middle Eastern Studies. Aviva served, with honors, as a Project Manager (Sgt. Res.) in the "Blue Builds Green" Department within the Infrastructure Engineering Division of the Israeli Air Force (HO), where she lead and managed large-scale renewable energy, energy and water efficiency, and Green Building projects and initiatives for Air Force bases throughout Israel. Aviva is currently a MSc. Urban and Regional Planning candidate at the Technion- Israel Institute of Technology. Aviva is involved with LEED Existing Buildings Operations and Maintenance (EBOM) as well as LEED Commercial Interior projects at Alfa.



#### Laurel Dorfman, LEED Green Associate

Laurel is a graduate of the Environmental Studies Masters from the Porter School at Tel-Aviv University. She holds a Bachelor's in Architectural Science with a Building Science specialization from Ryerson University in Toronto, Canada. Laurel performs energy modelling using a wide variety of programs such as Sefaira, THERM, and Revit Insight. Laurel is involved with the certification of LEED v4 projects.



#### Yaniv Yehezkel- B.Sc, Environmental engineer

Technion faculty of civil and environmental engineering. Yaniv precipitated and led a variety of environmental and water design and turnkey projects, WWTP, contaminated soils and environmental surveys, and is responsible for water, waste and environmental aspects at Alfa.