Alfa's Sustainable Projects

Chen Shalita | Founder & CEO

Sustainable Living

Alfa
Sustainable Projects

SUSTAINABLE PLANNING
GREEN BUILDING CERTIFICATION

NATIONAL LIBRARY OF ISRAEL HERZOG & DE MEURON ARCHITECTS

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

ELECTRA REAL ESTATE
MOBILEYE
TIDHAR
TEVA
AFIGROUP
Google
HSBC
SHIKUN&BINUI ARISON GROUP
GAV YAM
Arison INVESTMENTS
Azrieli Group
IKEA
Ministry of Defense
אגף ההנדסה והבינוי
Prime Minister Office
משרד ראש הממשלה
חיל האוויר הישראלי
אמות
Amot Real Estate
FORMA
AUTODESK

The National Library of Israel

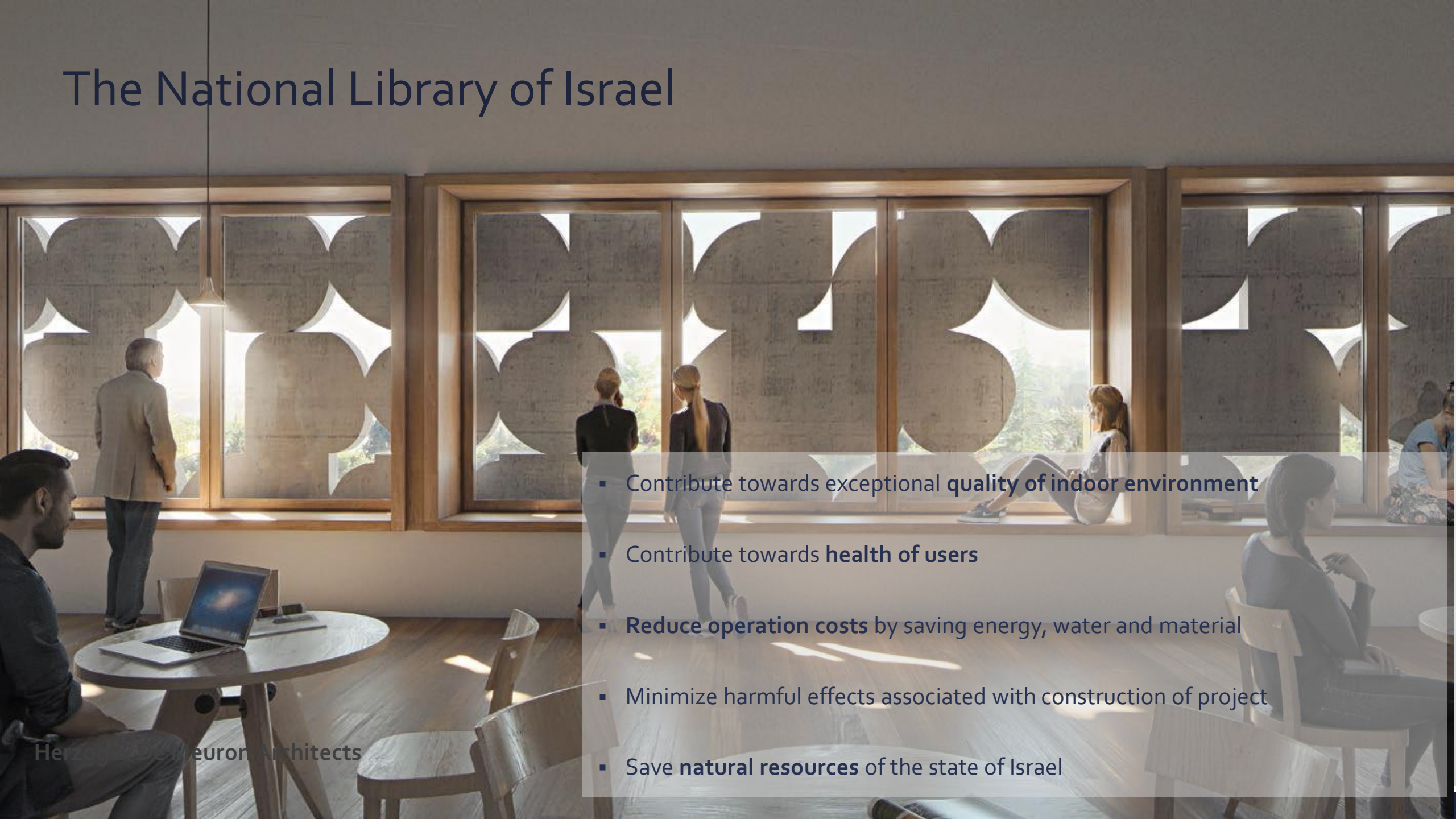
Targeting

Herzog & De Meuron Architects

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.

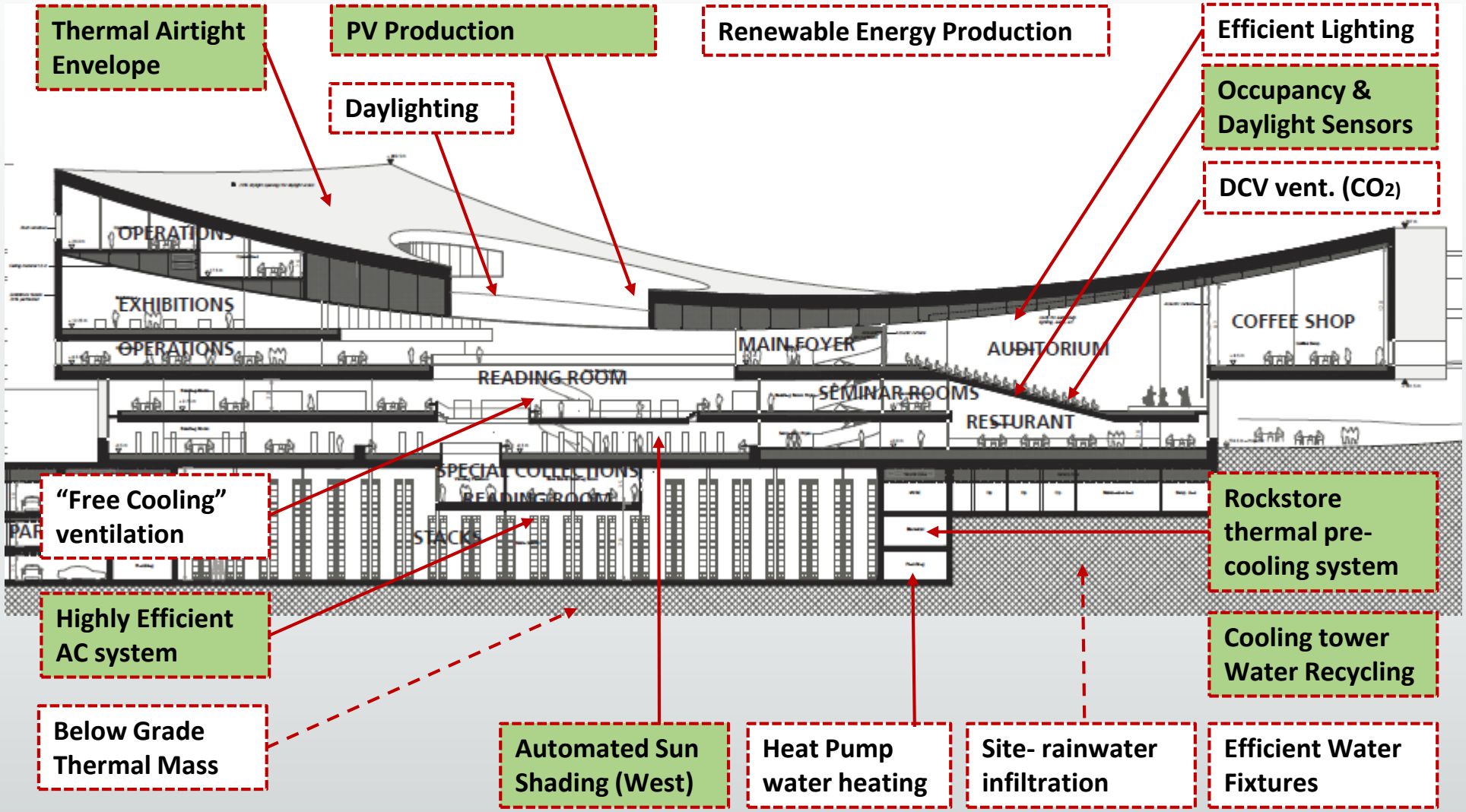
The National Library of Israel

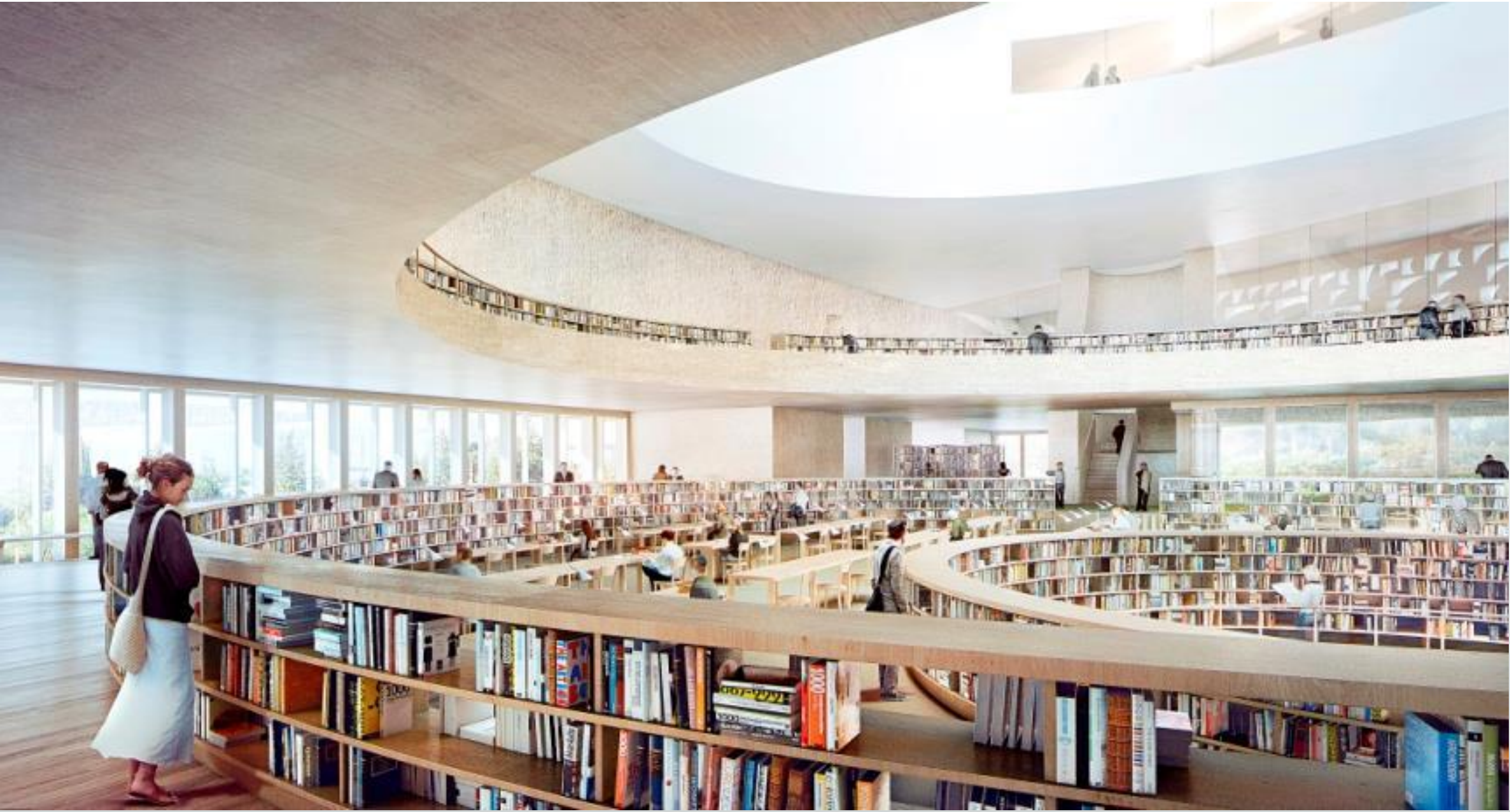


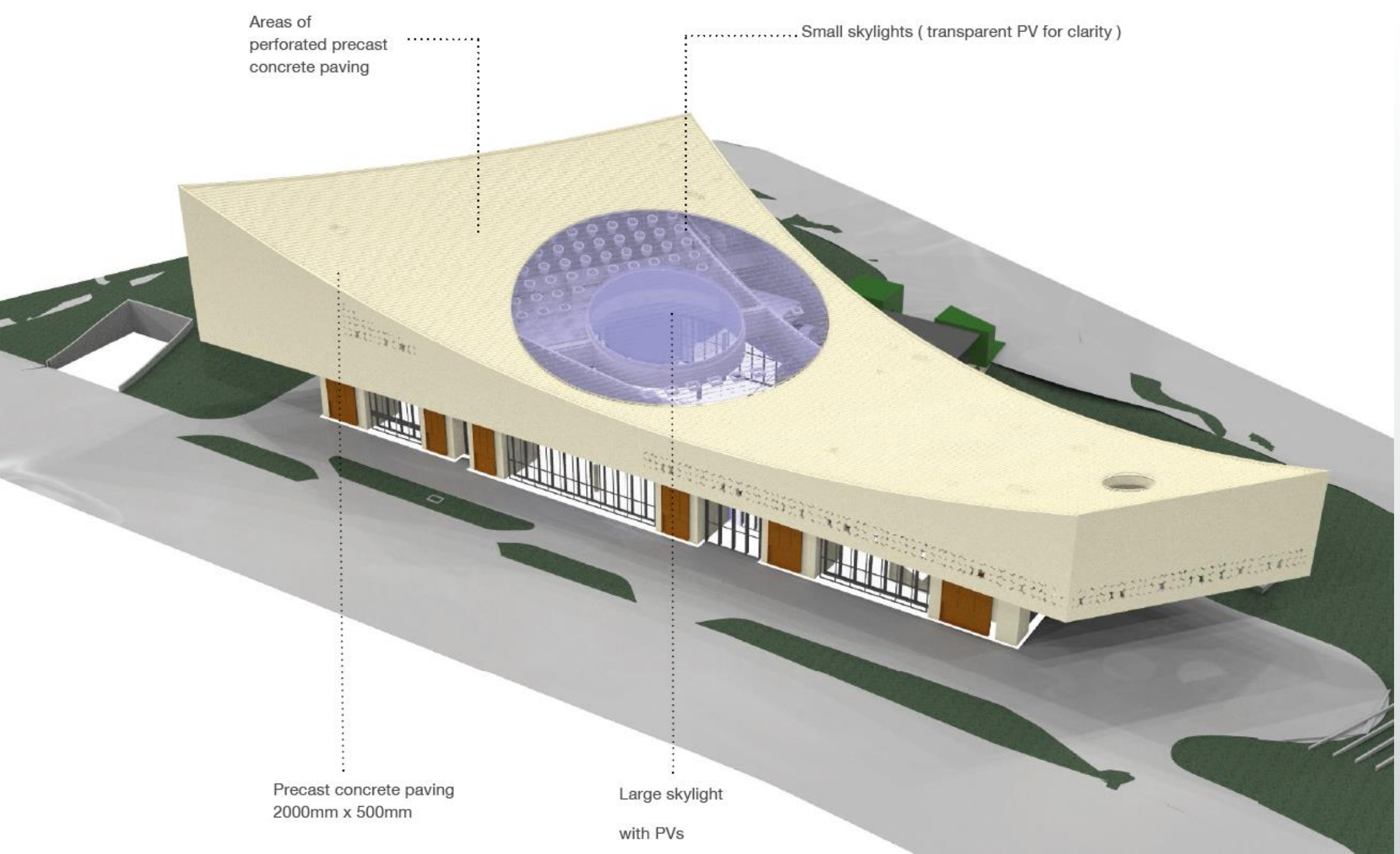
- Contribute towards exceptional **quality of indoor environment**
- Contribute towards **health of users**
- **Reduce operation costs** by saving energy, water and material
- Minimize harmful effects associated with construction of project
- Save **natural resources** of the state of Israel

Herzog & de Meuron Architects

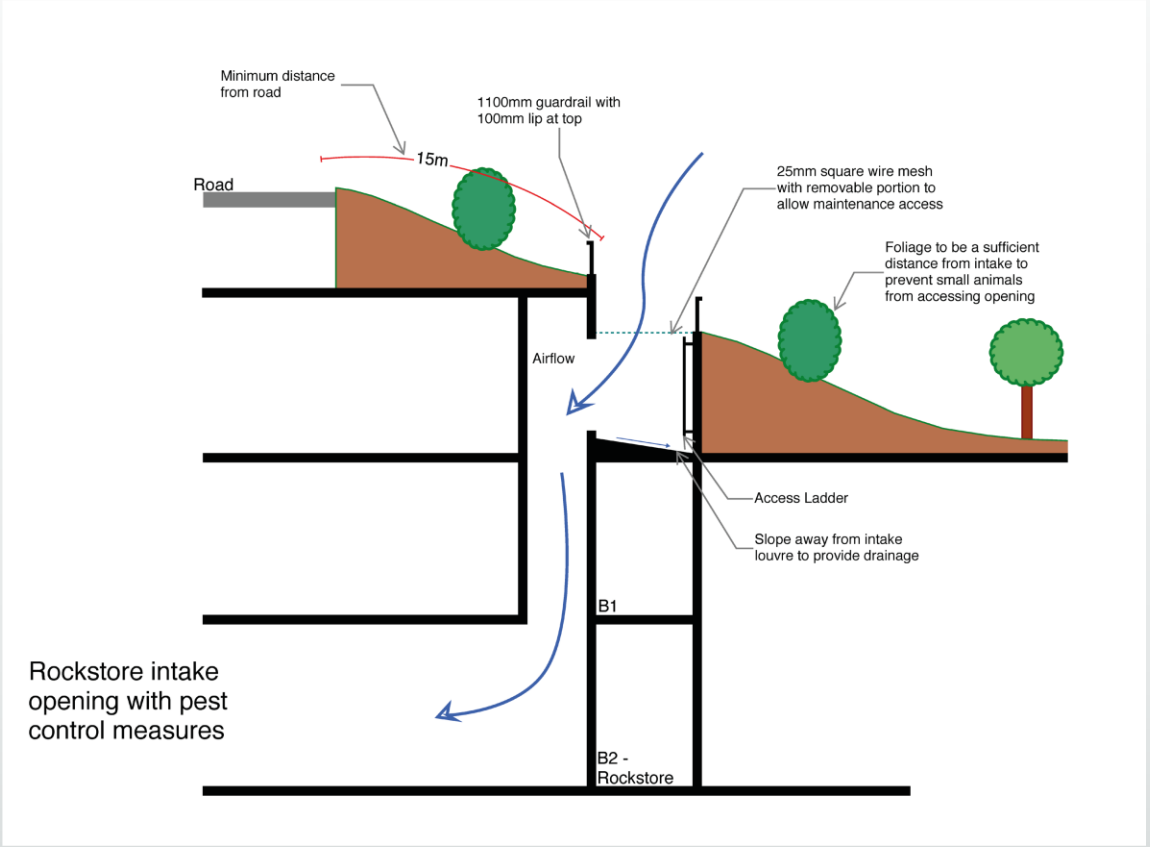
The National Library of Israel





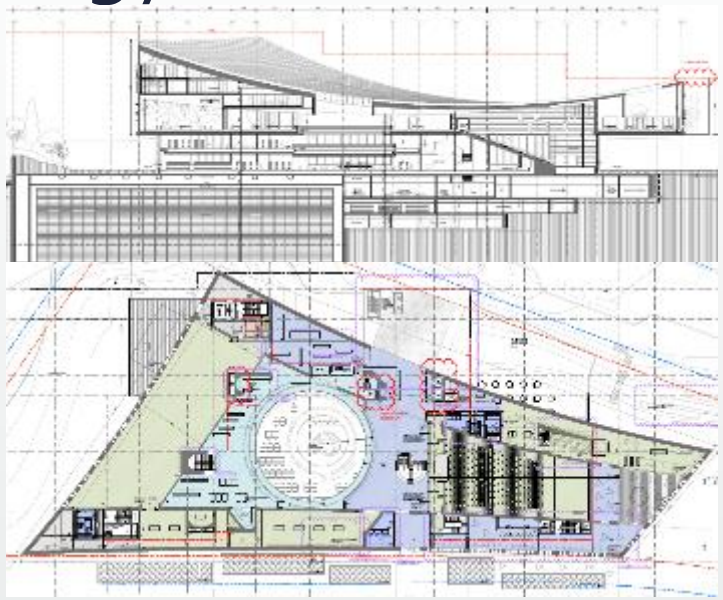

Areas of
perforated precast
concrete paving
Small skylights (transparent PV for clarity)
Precast concrete paving
2000mm x 500mm
Large skylight
with PVs

The National Library of Israel- Rockstore

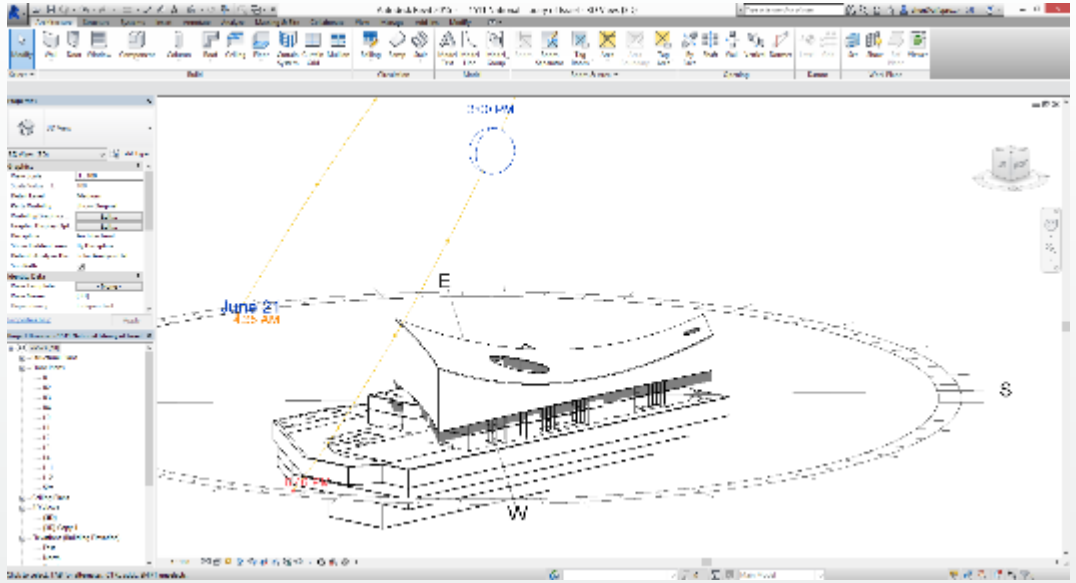


ARUP

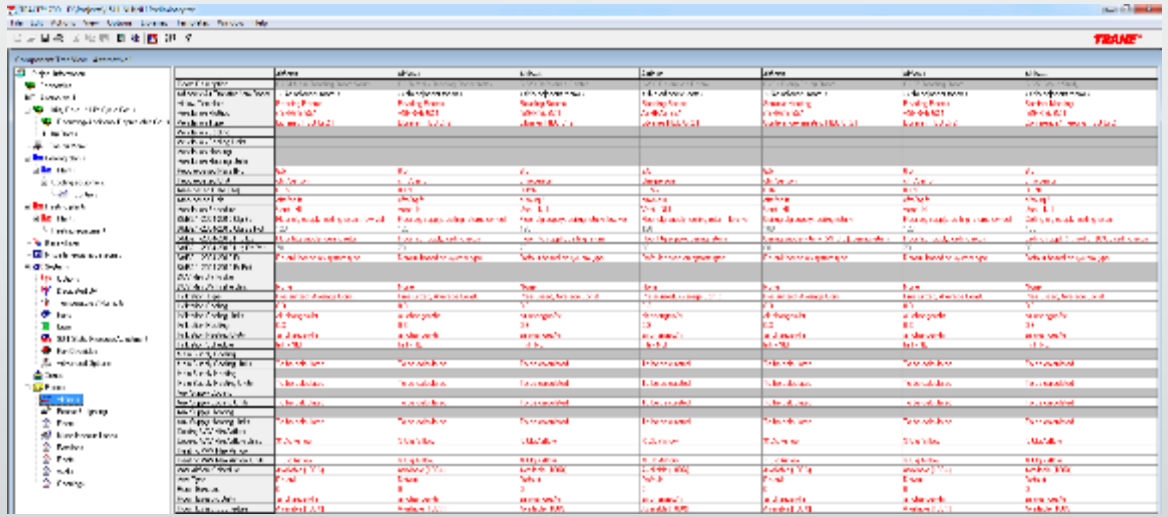
Energy Performance



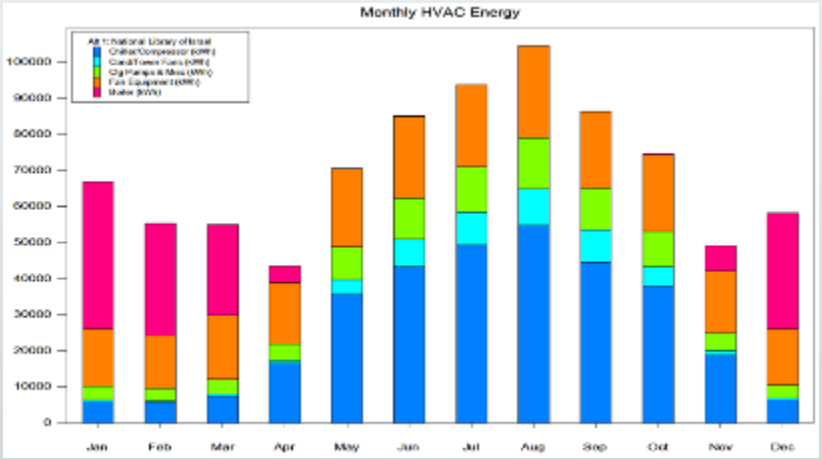
A. DD1 Progress Production architecture package



B. Simplified 3D geometry on Revit



C. Detailed energy simulation



D. Energy consumption results

Amot Atrium

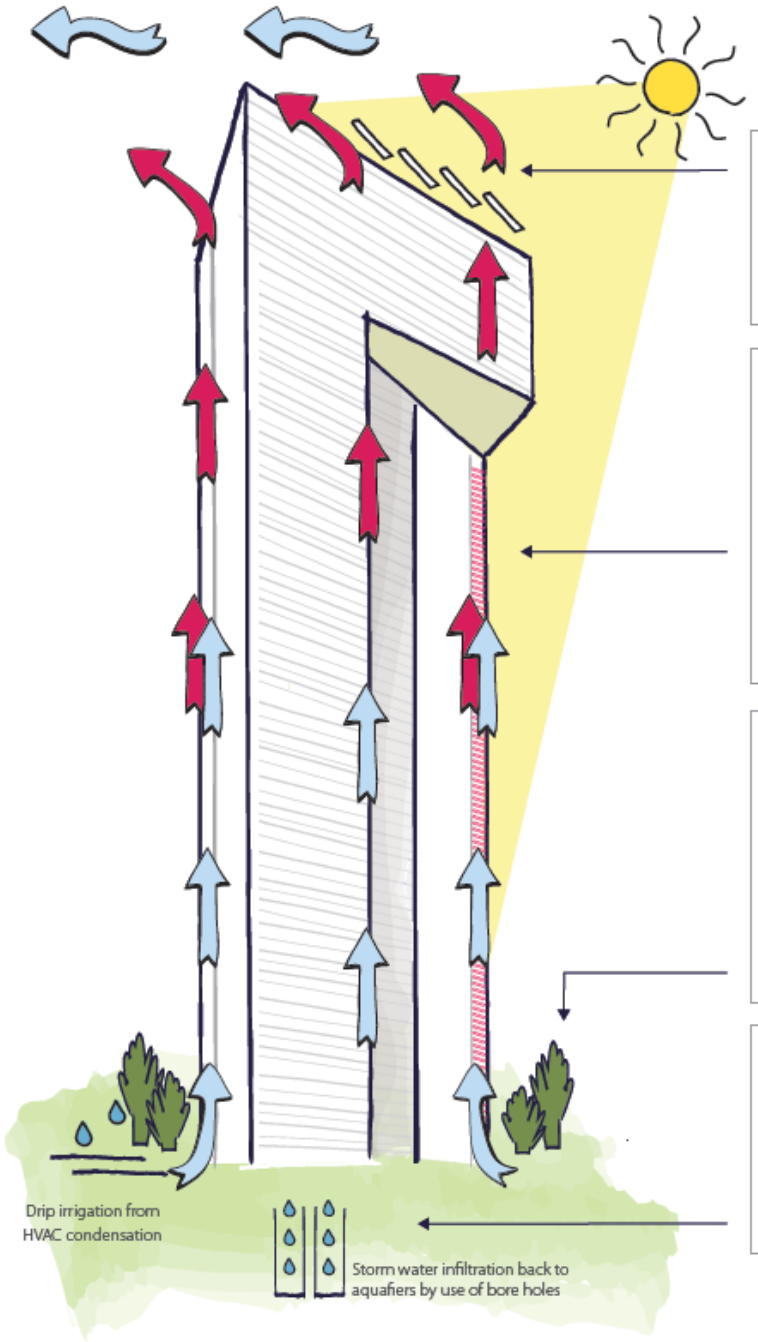
Awarded
LEED
Platinum

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%** .

Moshe Tzur Architects



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

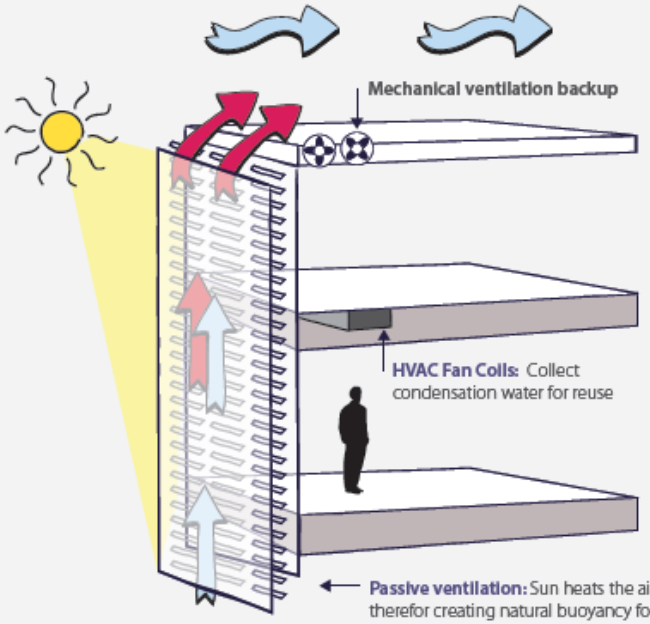
High performance double skin façade with integrated automatically controlled interior blinds. This envelope high thermal performance allows to reduce heat losses in winter as well as unwanted solar heat gains in summer. This high performance building envelope is developed and manufactured in Israel.

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

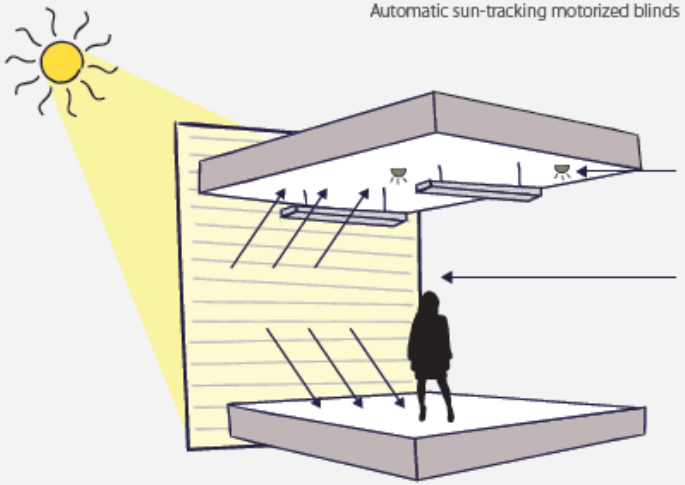
Amot Atrium implemented a storm water management plan that reduced the storm water runoff compared to pre-development volumes.



Rooftop natural air velocity creates ventury effect, and naturally ventilates the curtain wall

Passive ventilation: Sun heats the air in the cavity, therefor creating natural buoyancy forces which ventilate the curtain wall and prevent overheating

Passive shading & Responsive solar collection: Automatic sun-tracking motorized blinds



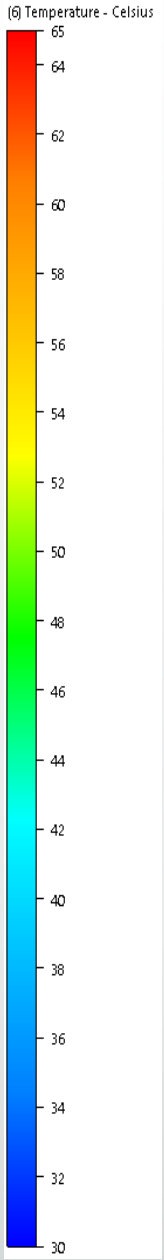
Indoor Sensors

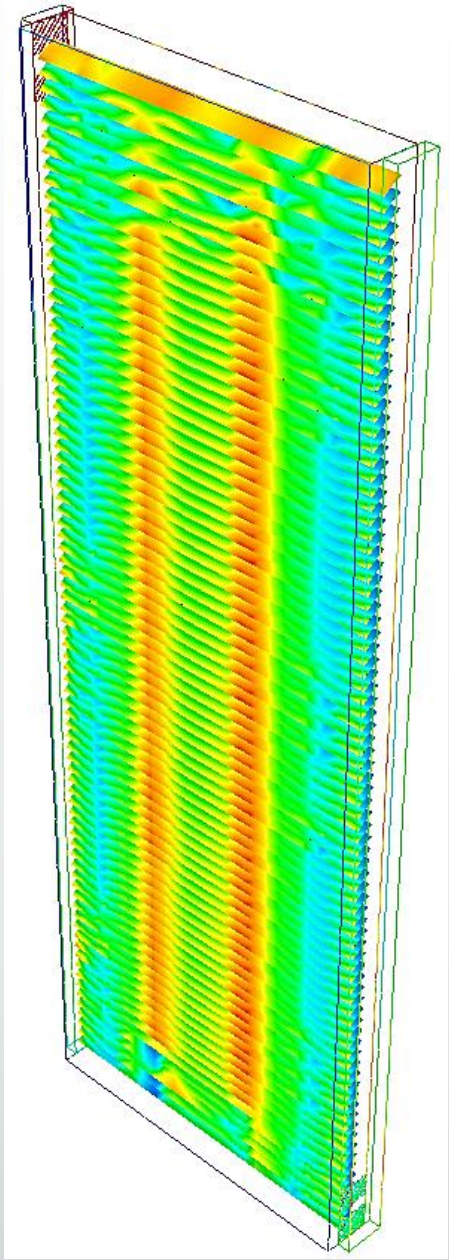
Use of high efficiency lighting fixtures (such as T5 and LED) and controls (occupancy and daylight sensors)

Facade is designed to maximize daylight with automated sun tracking louvers, while also preventing glare and overheating.

Alfa Ltd.
Sustainable Projects

Amot Atrium- CFD





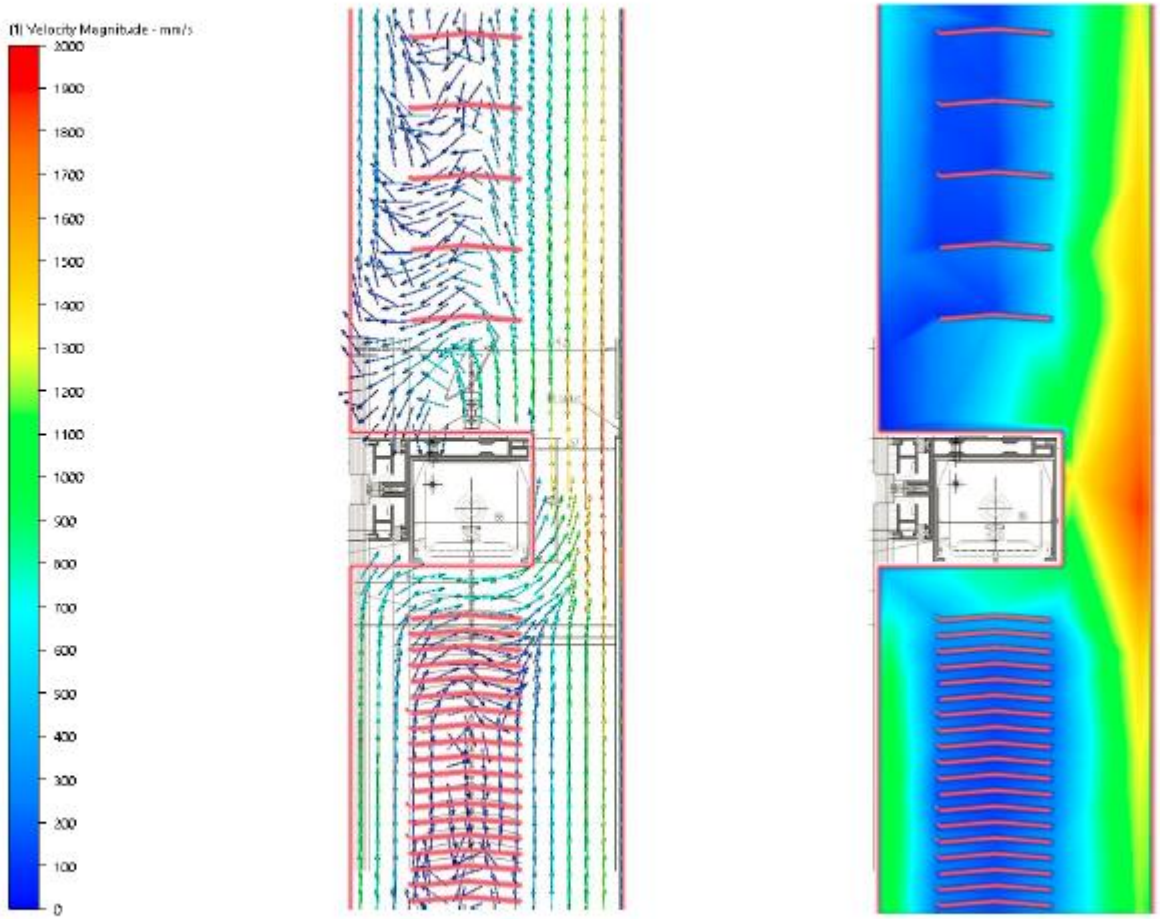
The sun shading temperature rises up to 65 °C.

Most sun energy is reflected by the interior blinds

Amot Atrium- CFD

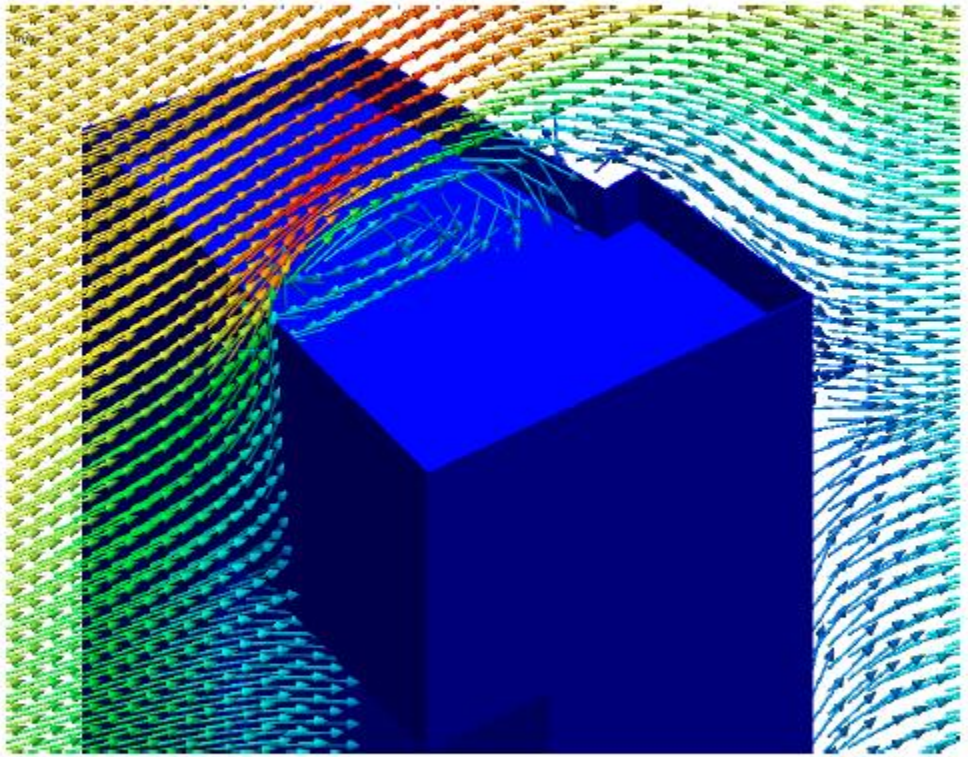
Alfa Sustainable Projects

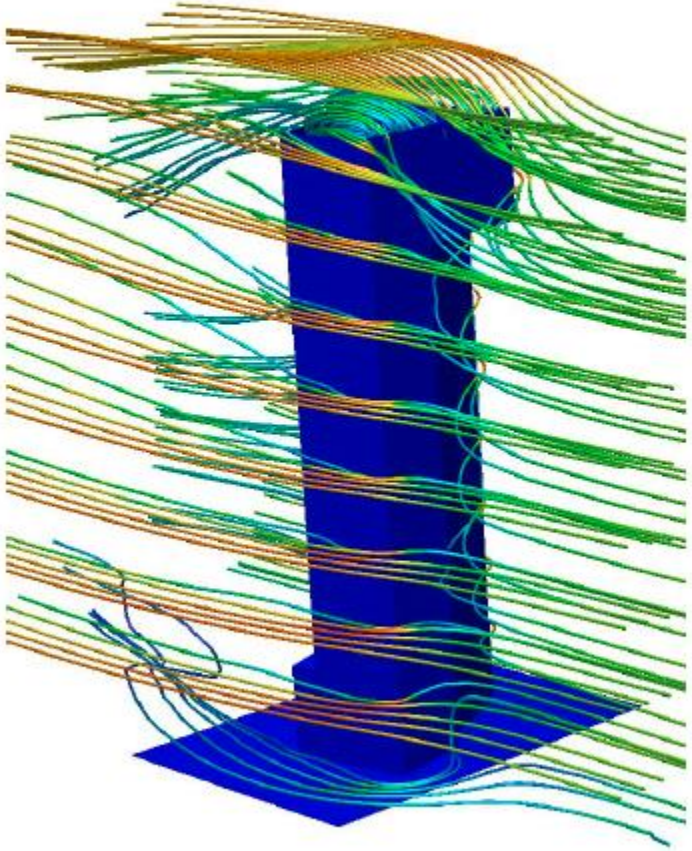
Flowrate study



Amot Atrium- CFD

Natural ventilation study – wind velocity results





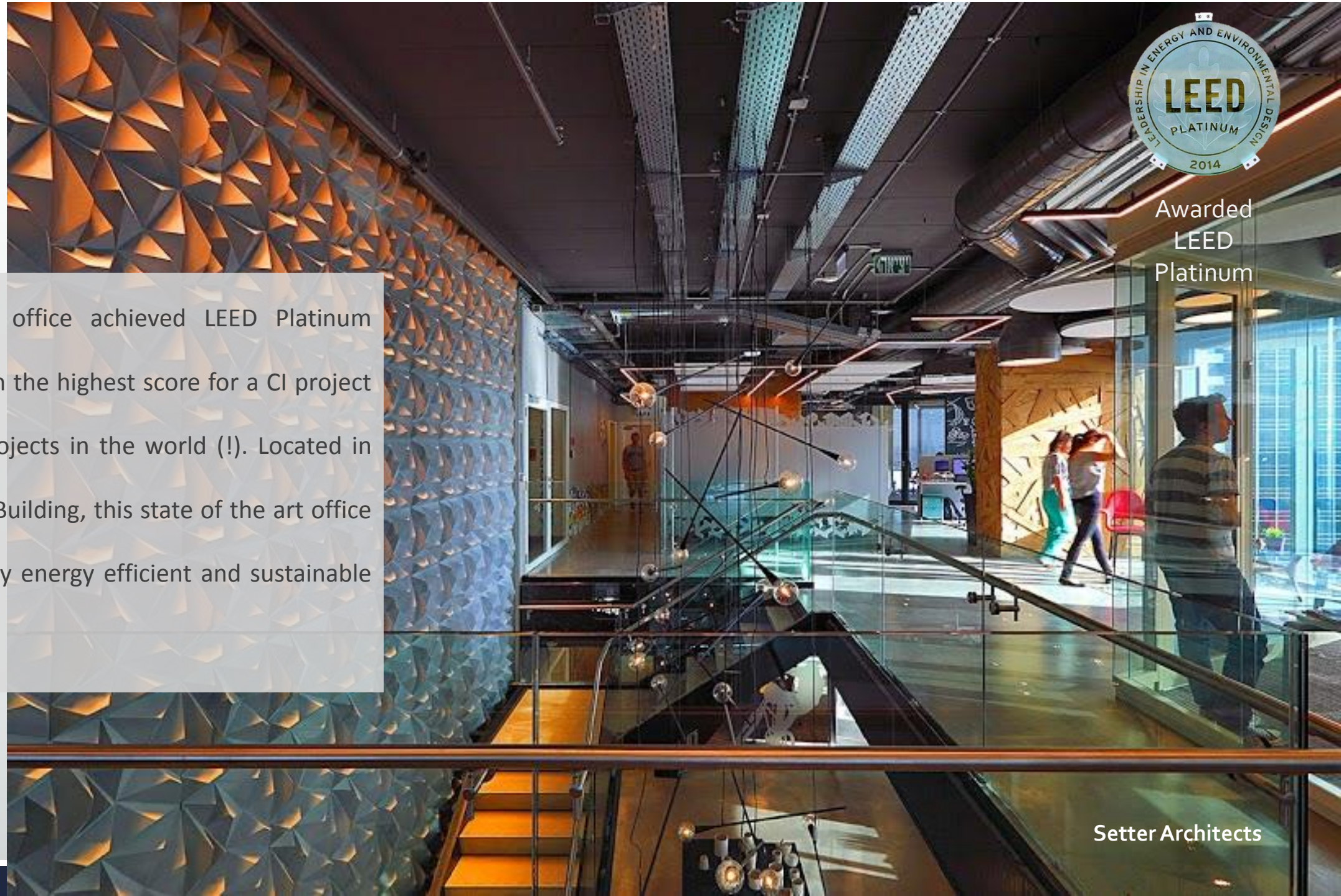
Google-Waze Tel Aviv

Awarded
LEED
Platinum

Camenzind + Setter Architects

Autodesk

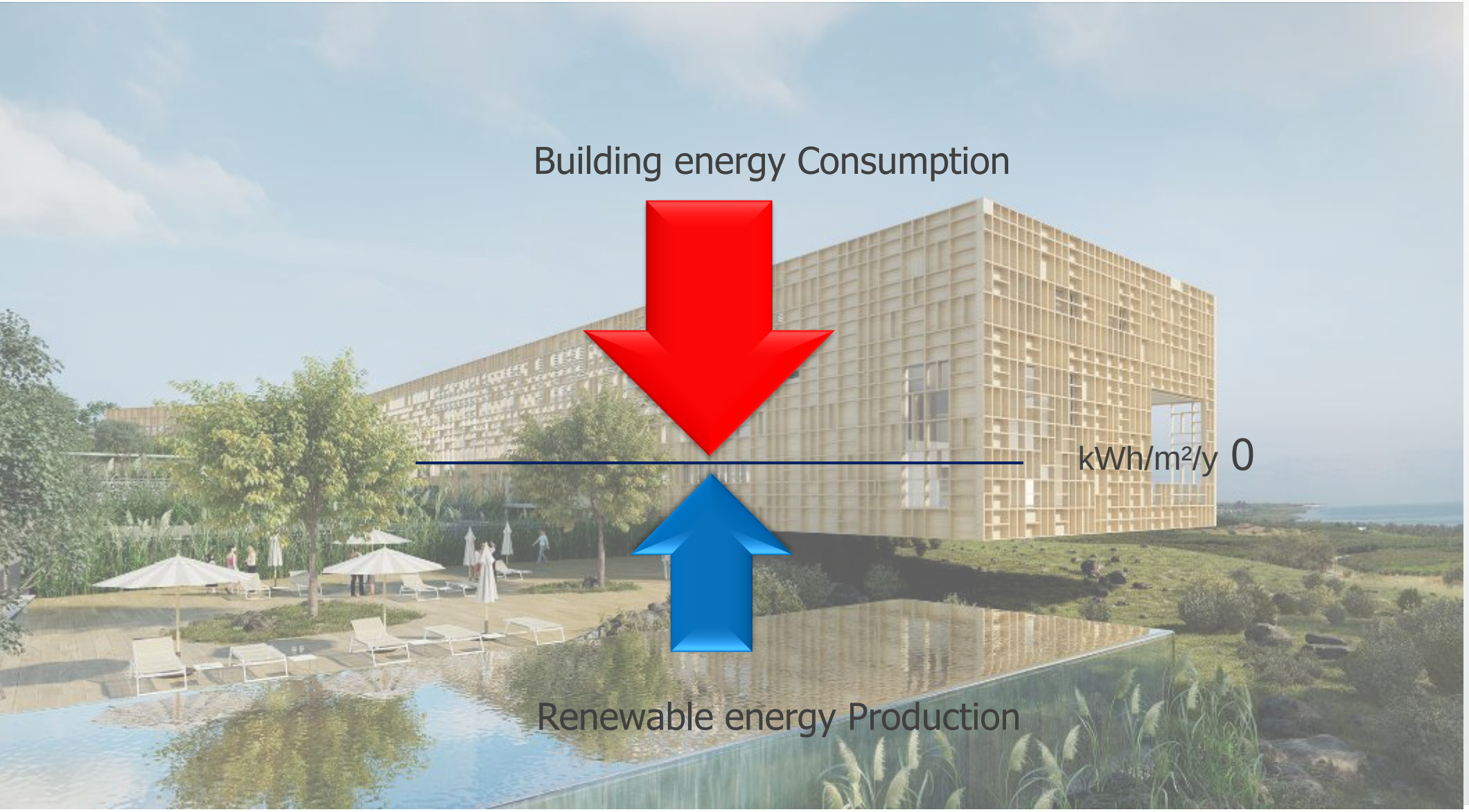
Autodesk main office achieved LEED Platinum certification with the highest score for a CI project for Autodesk projects in the world (!). Located in Aviv Beroschild Building, this state of the art office project has many energy efficient and sustainable features.



Awarded LEED Platinum

Setter Architects

Net Zero energy Buildings



NZEB- Solar Decathlon, Team Israel

We led the Israeli entry to the Solar Decathlon China 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.

NZEB- Solar Decathlon, Team Israel

Shoham Visitor Centre and Hotel

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

Neuman- Hayner Architects

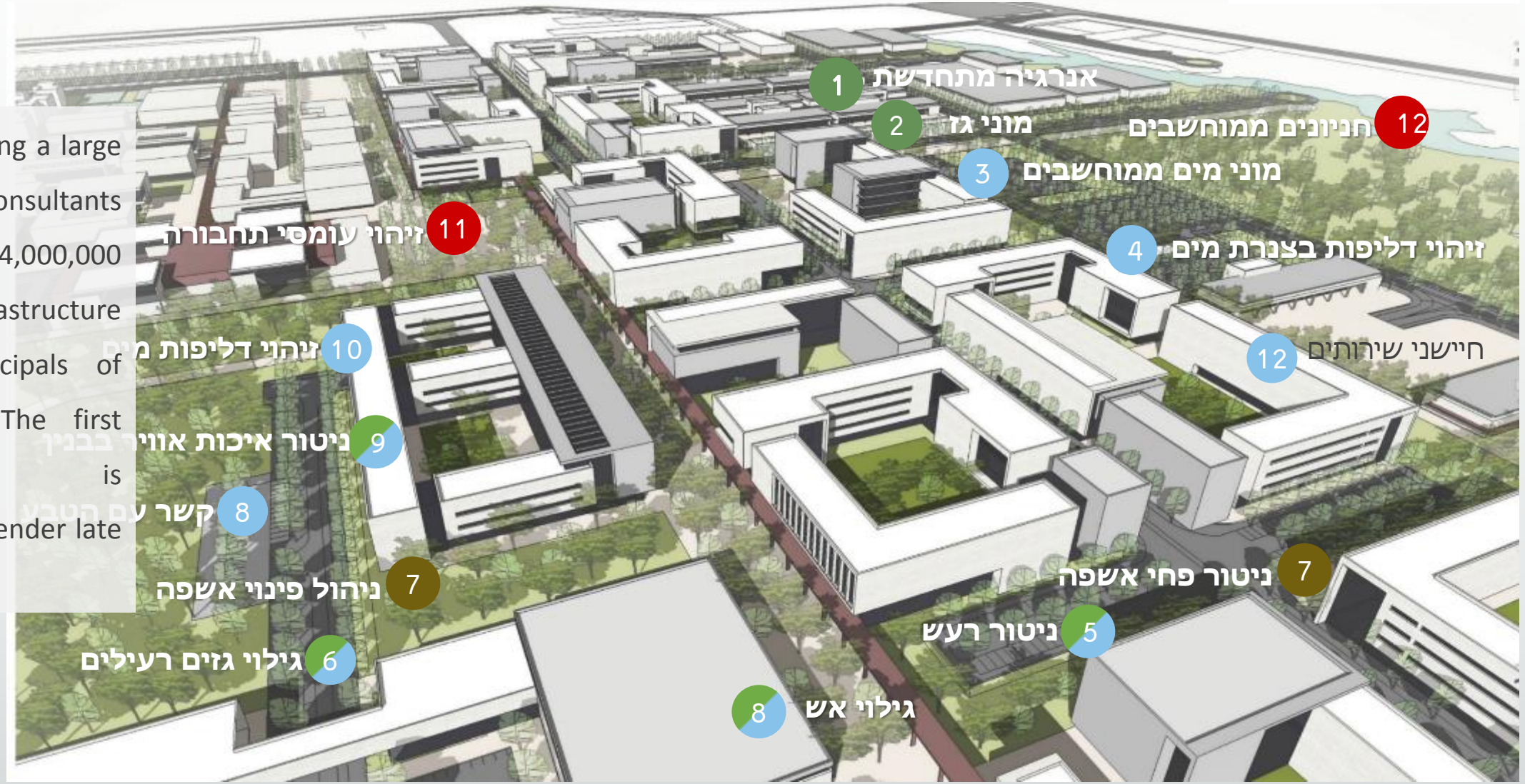
Nevatim Net Zero office building

This office building project in Nevatim Air-Force base is designed to be an operational **Net Positive Energy office building**. The 600 sq.m project is a joint venture with the ministry of Environmental Protection.

Knafo-Klimor Architects

Smart Bases

We are heading a large team of consultants designing 4,000,000 Sq.m of infrastructure to the principals of smart city. The first infrastructure is expected to tender late 2016.



נעמה מליס אדריכלים

מים אנרגיה איכות אוויר פסולת תחבורה

Hadera Net Zero Kinder gardens

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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Hadera Net Zero Kinder gardens

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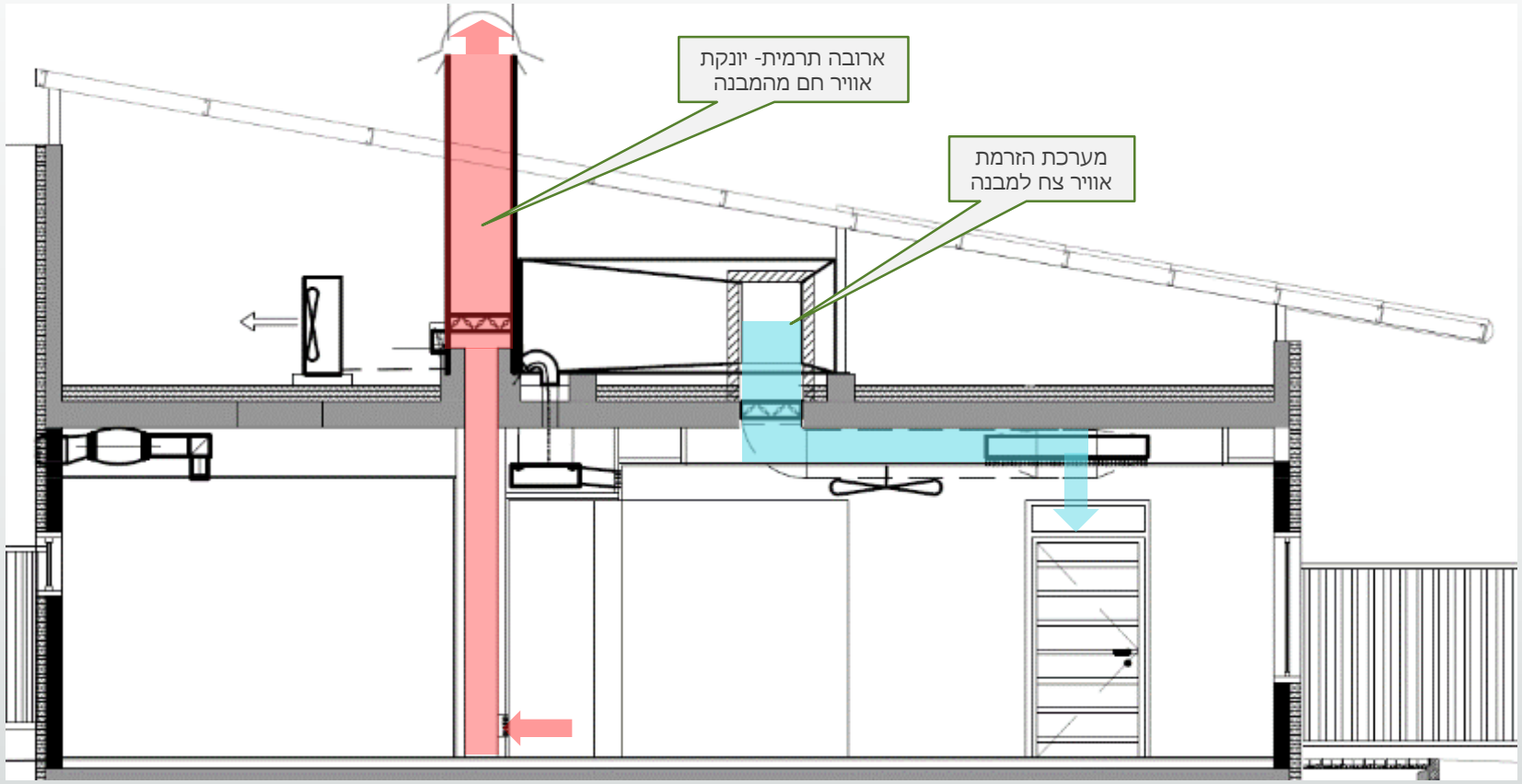
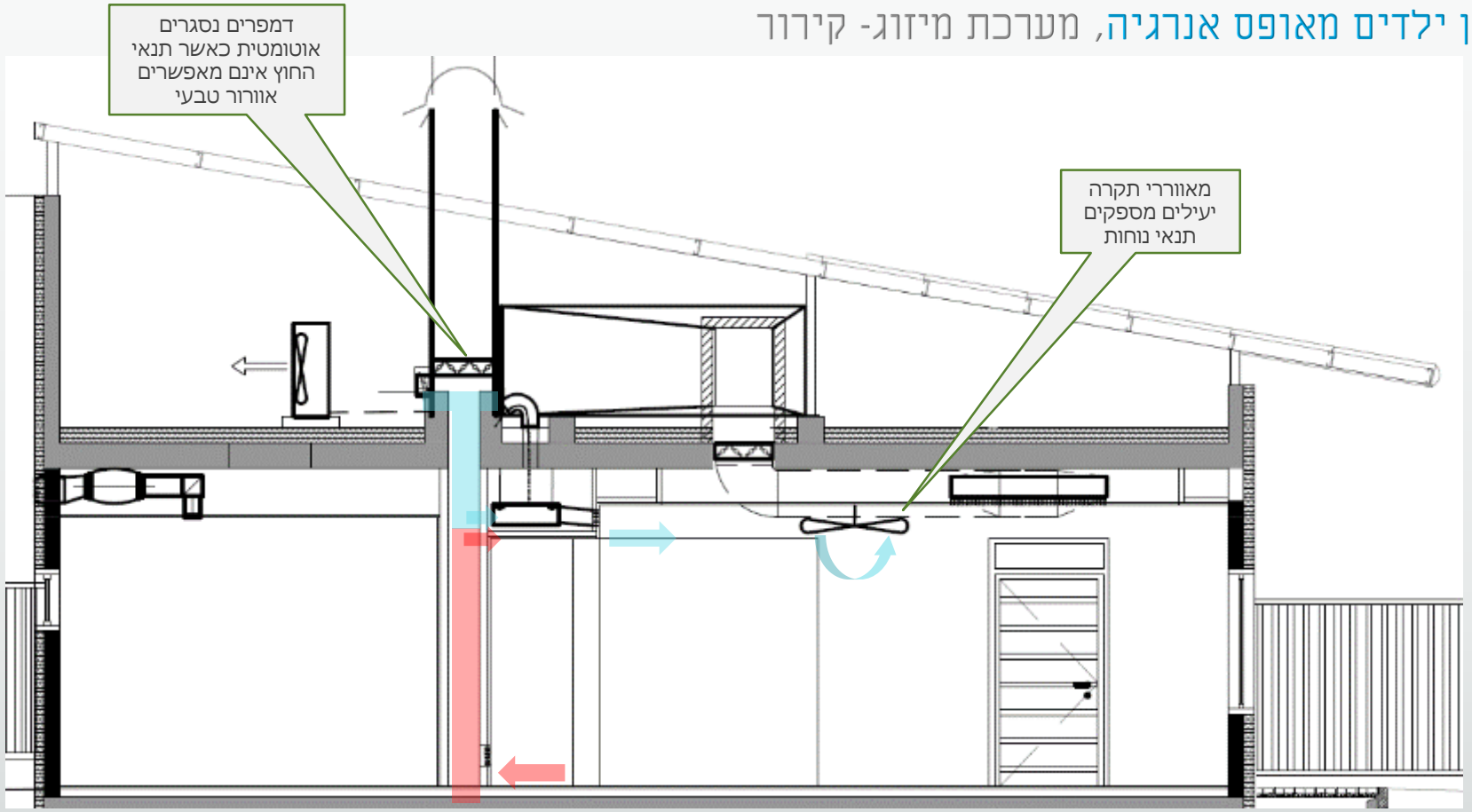
גן ילדים מאופס אנרגיה, מערכת מיזוג- אוורור טבעי



Hadera Net Zero Kinder gardens

גן ילדים מאופס אנרגיה, מערכת מיזוג- קירור



Hadera Net Zero Kinder gardens

Hadera Net Zero Kinder gardens

Hadera Net Zero Kinder gardens

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 (HQ), 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.