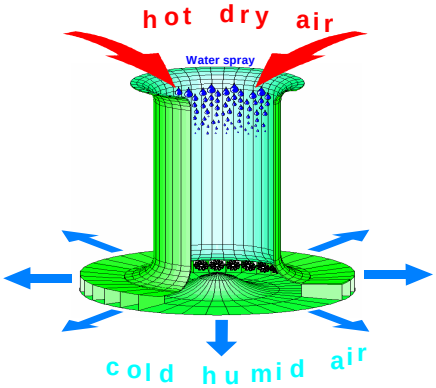


Investment opportunity

Energy Towers

a revolutionary technology for 24/7 production of electricity from a renewable source and supply of fresh water at the less than half the cost

Seeking an investment of about 12 million dollars.

Our main achievements
Our technology has the potential to produce over 16 times the whole electricity consumption today, at a lowest cost of production known today- 2-6 cents per kWh.
In addition, the technology provides 13 tangible byproducts, most of which are profitable.

World-wide application
The technology can be applied in over 40 countries in 2 belts, one north of the equator and one south of it. Application can be extended to every country around the globe.

Economy- *in typical cases the internal rate of return exceeds 20% and would easily go over 25%. The return period would be 5 or even 4 years.*

Other comparative parameters
-area needed to produce a million kWh per year: 250 square meter compared with 12 thousand for photovoltaic cell.
Initial investment 2000-2500 dollar per average Kw compared to nearly 40 thousand photovoltaic cells.
Electricity cost: 2-6 cents per kWh compared with 30-50 cents for solar energy.

Company overview

"Arubot Sharav" (in Hebrew) or "Sharav Sluices" Ltd., originally associated with Technion (Israeli institute of technology), completed the development of a technology which allows for the production of electricity at the lowest known cost. The technology does not use direct solar radiation but the fruit of the sun. The source of power is hot and dry air which is supplied 24 hours a day, 365 days a year by the "Hadley cell circulation" and therefore, the production is possible non-stop.

Anticipated market The calculated potential worldwide market is of about 200 Energy Tower per years which will produce roughly an average of 60 thousand megawatts. The overall investment in 200 Energy Towers would come close to 200 billion dollars per year, not taking into account the investment in the byproducts. Typical internal rate of return would be in the order of 20-25% or a return period of less than 4-5 years.

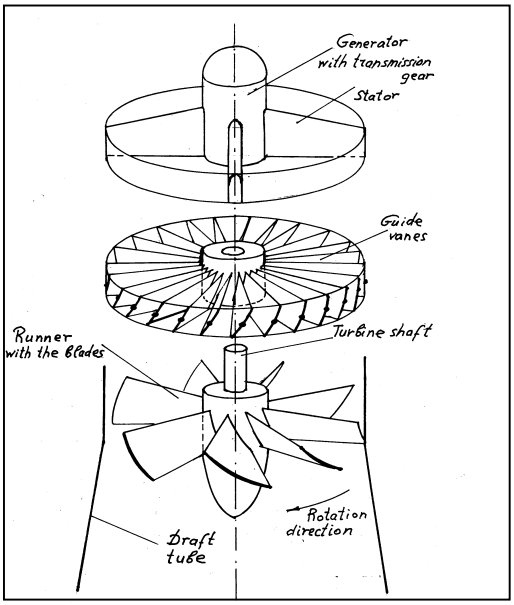
Our immediate aim is to establish a joined corporation that will, at a first stage, conduct preparatory work (2 years) at the cost of 12 million dollars. Once completed, we will be ready to construct the first full scale power station (at the cost of 800-1000 million dollars), produce electricity and make use of byproducts available for immediate use. The number of material-tangible byproducts is 13. the actual applied number depends on the site and the regional programs.

Byproducts 3 byproducts are built-in methods of almost perfect adaption of the supply carve to the dement curve. This is with a negligible investment and no energy loss; It has been proven that it is possible to desalinate sea water at less than half the cost and to double the amount of available water per capita in Israel; Having so much water in an arid land enables irrigation of deserts. We can double the irrigated land in Israel and add more than 50% irrigated land on a global level; This would lead to possible supply of bio-fuel that will replace fossil fuel for transportation, without hurting traditional agriculture; Retention of the spray water in a pond around the "energy Tower" will enable growing aquaculture with a potential of 130 million tons a year and more, compared with today's fishing of about 95 million tons.
There are more byproducts. The last one has proven that we can help to cool the globe and there is a positive feedback so that in warming climate the towers will provide more electricity and more water.
The byproducts are estimates to contribute between 4-14 cents neto income per kWh in addition to the replacement price of the present supply. Calculations showed at least 7 cents in Israel.
We have numerated only 7/13 byproducts. However, in addition to these there are additional general byproducts solving the environmental problems on the globe, major economical problems and strategic ones.

The mechanism

According to the technology, large diameter tall chimneys are to be built In an area of hot and dry air, possibly not far from sea and not too high above sea level.

The mechanism is as follows. Water is spread from the top entrance of the chimney. About half of this water evaporates and cools the air. The cooled air then flows down and can reach a speed of even 80 km per hour. It comes out through an opening at the base and move turbines that rotate and produce electricity.



Schematic view of the turbine

The technology

The design of geometry, choice of details and calculation of the flow system in numerous ways, have been taking place since summer of 1982. Experiments in several scales have taken place, amongst which is a pilot of the chimney over 20 meter high and production of droplets their accumulation at an outflow in a scale of 1:1. Droplet production and accumulation has required more original approaches that could not be found in known technologies.

The technical development of the technology has been completed. Overall in the on going resource and development, 150 men participated in research and over 20 high academic degrees were dedicated to the technology. All these equivalent to over 12 million dollars in cost.

Patents and know-how patents have been registered in 15 important countries, the know-how is summarized in over 30 volumes in Hebrew.

Reviews of the technology

The work had been continuously reviewed. During most parts of development, the development has been reviewed weekly by the Ministry experts and daily by the Israeli electricity corporation. The technology was also reviewed by 2 special committees in Israel and by additional reviews in France, India, US and Australia. All have been with flying colors.

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