

## **Greenstar Foundation**

## Solar Community Center Installation March, 1999



Mahmoud, a villager at Al-Kaabneh, serves hot, sweet mint tea to the Greenstar technicians installing solar panels on the roof of the local school.

Al-Kaabneh Village West Bank, Palestine



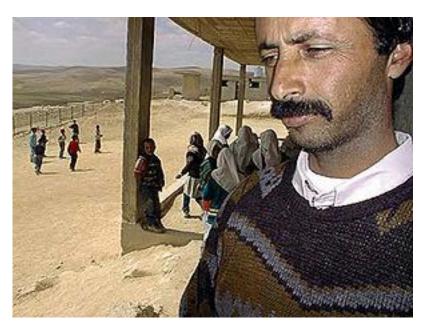
**Al-Kaabneh**: a small Palestinian settlement on the West Bank, 2000 people with no electricity, no telephones and no running water. About 10 miles southeast of Hebron, 15 miles from Masada, near the Dead Sea.

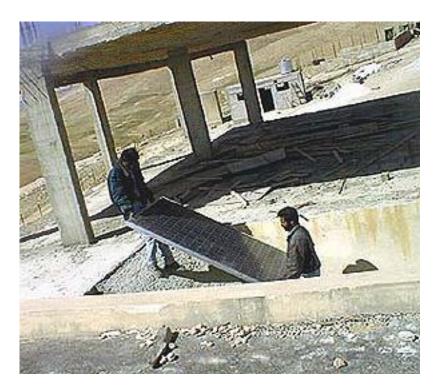
Selected, in a 1998 study by Friends of the Earth Middle East and the Palestinian Hydrology Council, as one of dozens of communities which are "off the grid" -- no conventional electricity, and ideal for participation in renewable solar energy programs.





The people of Al-Kaabneh are Bedouin, with thousands of years of experience living in the desert. They are devout Muslims, understated and friendly, eager to share, aware of the larger world and fascinated by the potential of computers and the Internet, which they have read about but mostly never seen. They receive a full eight years of English education, and dream of working as teachers, lawyers, engineers, programmers...their potential is enormous.





Eight large, sturdy 300-watt photovoltaic solar energy panels, provided by ASE Americas, were hand-carried and mounted on the roof of the partly-finished school. They were wired together and connected to electrical gear that charges an array of batteries for up to four days of backup power, and converts the power into usable AC power. People in the village were active and knowledgable about every part of the process; they built some of the panel mountings and installed all the interior wiring and sockets themselves. They are receiving education in operation and maintenance, to go forward independently.





Once electricity was flowing for the first time to the school, people were eager to make it work; the first item connected was a Pentium-class multimedia computer, with camera, microphone, color printer, speakers, touchscreen and a small library of educational and work software. The teachers immediately began typing up a lesson plan, and the students explored the sights, sounds and history of Palestine. The touchscreen proved useful, for those people unfamilar with moving a mouse pointer and clicking a button. The system has a 10BaseT network adapter, for the planned high-speed Internet wireless connection, which will allow video conferencing and ecommerce to be introduced to Al-Kaabneh.







A key element of the Greenstar program is to provide a connection to electronic commerce for local villages, so they can economically offer local products for sale to a worldwide market. The tapestry and stringed "rebaba" instrument above were both made by Al-Kaabneh villagers for their own use, and will shortly find their way onto "Al-Kaabneh.com."

The hand-blown glassware and beautiful brass coffee servers below are made in nearby Hebron. These products, including a slingshot identical to David's from the Bible, ancient clay oil lamps and vases, a shepherd's unique double-barreled bamboo flute, and artwork created by local students, will help provide a steady source of cash income for the villagers.

Greenstar is developing the necessary business network to manage finance and export in conjunction with local Palestinian businessmen.







In recognition of the pioneering work of the Palestinian Energy Authority in making the Al-Kaabneh installation possible, Greenstar presented its International Innovation Award to the PEA. Shown (left) accepting the award is Dr. Abdul Rahman Hamad, Minister of Housing, from Greenstar director Michael North.

More information on Greenstar Foundation, its programs in Palestine and elsewhere in the Middle East, and its plans for activities in developing communities around the world, is available at

## http://www.greenstar.org email: directors@greenstar.org



Photos and narrative by Michael North; ©copyright 1999, Greenstar Foundation Thanks to Fuad Abulfotuh of ASE and IbrahimYehia of Sol-Nur for their assistance in installing the Greenstar system in Al-Kaabneh.