

ISRAEL'S ENVIRONMENTAL SUCCESSES

DRIP IRRIGATION: Israel's single largest environmental contribution to the world – and Israel's most-exported environmental technology – is the drip-irrigation plastic emitter, allowing for much more efficient watering of crops. Drip irrigation uses about half the water of traditional sprinkler irrigation.

DOOD SHEMESH: Literally "sun machine," the dood shemesh is a solar-powered water heater that supplements — and often replaces — conventional electric and natural gas water heating. The dood shemesh is a ubiquitous sight on Israeli rooftops.

SOLAR TECHNOLOGY: Because many of the world's leading solar-energy companies are Israeli, many of the large-scale solar-energy facilities around the world – from California to Spain – are being built by Israeli companies. The bad news is that they're not being built in Israel, where solar power constitutes less than one percent of Israel's energy production.

ARID AND SEMI-ARID AFFORESTATION: Historically, Israel hasn't always planted trees well suited for its arid and semi-arid climates. But in so doing, the country developed a wealth of knowledge in arid and semi-arid afforestation. And today, thanks to the work of the Green Zionist Alliance, most new trees that are planted are suitable for the country's dry climate. The combined upshot is that Israel was the only nation in the world to enter the 21st century with more trees than it had when it entered the 20th century.

ELECTRIC-CAR NETWORK: Israel is about to become the first country in the world to launch a nationwide electric-car network. Although the system will only be as green as the method of energy production powering Israel's electric grid, it's still better than the status quo, and there's potential for tremendous carbon reductions if Israel switches its energy production from burning coal to renewable technologies such as solar and wind.

PRESSURE-RETARDED OSMOSIS: Pressure-retarded osmosis utilizes the flow of water from fresh water to salt water to generate electricity. Although it's an Israeli technology, it isn't being used for energy production in Israel yet – but it is being used commercially in Norway.

DESALINATION: When the desalination plant in Ashkelon was built, it was the largest in the world. It's not anymore, but today Israel still has some of the largest desalination plants in the world, and Israeli scientists continue to push the edge of the nascent technology.

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