

Go nuclear

If you're looking for green energy stocks, one technology has already proved itself.

Jonathan Lipow

26 Apr 07 11:26

A combination of environmental and geo-political challenges has made renewable energy technology one of the fastest growing segments of the global securities and venture capital markets. It seems that everywhere you turn, someone is peddling a perfectly viable technology that will convert French fries grease into jet fuel or generate electric power by harnessing the energy of fitness enthusiasts working out on treadmills and elliptical trainers.

While some of these new alternative energy ideas seem “off the wall,” many of them are sure to pan out and make an important contribution to global environmental quality and energy security. Any investor who bets on the right technologies will be richly rewarded. Unfortunately, I will not be one of those investors I have none of the scientific understanding required to separate “wheat from chaff” when it comes to alternative energy investment.

There are, however, several alternative energy technologies that are certain to constitute part of the solution to global environmental and energy insecurity. Of these, the most obvious is nuclear energy.

Nuclear energy has gotten an extremely bad rap. The key complaints against atomic energy have focused on the safety of reactors, the high cost of building nuclear infrastructure, and the “intractable” problem of radioactive waste. Over the years, however, it has become clear that most of these concerns are wildly overblown.

The safety record of atomic energy compares favorably with that of alternatives such as coal or natural gas accidents at Chernobyl and Three Mile Island (TMI) notwithstanding. The reality is that had Chernobyl operated coal fired plants, far more people would have died of respiratory ailments over the years than ended up dying as a result of the meltdown. Furthermore, current reactor designs literally cannot melt down in the way the Chernobyl and TMI did. These new “inherently safe” reactors will make meltdowns a thing of the past.

The economics of nuclear power has improved as well. Early generation reactors proved capable of operating far longer than originally thought, vastly improving their lifecycle profitability. Meanwhile, the advent of inherent safety features has made it possible to reduce the expensive safety systems that the original reactors needed (and that the Chernobyl reactor lacked). This has made nuclear energy an extremely profitable proposition.

Nuclear waste remains a problem, but it is easy to overestimate the dangers involved in dealing with radioactive gunk. The fact is that it is possible to recycle virtually all of the

most dangerous components of the nuclear waste stream. Many countries do so. The US, rather conspicuously, does not do so, but is also heading belatedly in the direction of waste re-processing. Reprocessing greatly improves the economics of nuclear power, and reduces waste problems to a quite manageable scale.

Given its economic and environmental advantages, nuclear energy projects are proliferating rapidly. New reactors are going up in places as far flung as China, India, and Finland. Even the US, a country that has not commissioned a new “nuke” since the 1970s, has proposals for the construction of 20 new reactors on the drawing board. Clearly, there is a renaissance in nuclear power.

How should investors play the atom? Here is a hint avoid uranium. Long term, it is not clear whether uranium prices will remain at elevated levels. New nuclear technologies vastly increase the efficiency with which uranium is converted into energy, and now that nuclear energy is popular again, there is growing interest in exploring for new uranium deposits. Improved technologies or a major find could easily turn today’s uranium shortage into a glut. As such, betting on long term uranium supply shortages is probably a bad idea. Instead, my fund has invested in no less than six firms that benefit from renewed interest in nuclear energy. The first is USEC (NYSE: USU). USU runs the US’ uranium enrichment facility, and is developing a new centrifuge based system that should come on line early next decade.

My second and third choices would be the Shaw Group (NYSE: SGR) and Mitsubishi Heavy Industries (Tokyo SE: 7011). Mitsubishi actually builds reactors. SGR, meanwhile, owns a stake in Westinghouse; the firm that most analysts agree is destined to enjoy the largest market share in the nuclear power market. In addition, SGR itself is one of the few firms capable of doing the heavy engineering work required to install reactors.

My three other picks all specialize in the heavy engineering required to installing or decommissioning nuclear reactors. These firms would be Washington Group International (NYSE: WNG), McDermott (NYSE: MDR), and Toshiba Plant Engineering (Tokyo SE: 1983). All three stand to win their fair shares of the lucrative contracts for nuclear power installations that are coming. Toshiba Plant Engineering, a subsidiary of Toshiba, is exceptionally well placed, given that the Toshiba conglomerate is the senior partner in the consortium that controls Westinghouse. Meanwhile, WNG and MDR are likely to participate in the new US Department Of Energy effort to recycle nuclear waste.

Nuclear power is a good investment for those with long time horizons and low risk tolerance. These firms will grow over time, and all six are currently profitable. The same cannot be said for firms involved in ethanol, solar energy, or wind power. Those sectors are rife with competition and alternative technologies. No more than 10 firms, on the other hand, dominate nuclear power, and there are high barriers facing any new entrants.

Dr. Jonathan Lipow is the chief economist of Forum FIE, the Israeli distributor of Vanguard and Wellington portfolio management products. Dr. Lipow also manages the Forum International Equity Fund, a global hedge fund

Published by Globes [online], Israel business news - www.globes.co.il - on April 26, 2007