OVERVIEW

SAIL CAPITAL PARTNERS (www.sailcapital.com)

SAIL was founded in 2002 as a pioneer in the cleantech investment sector and continues to be one of the sector’s recognized thought leaders. Our comprehensive portfolio currently includes fourteen leading companies spanning the universe of sustainable innovations in the areas of energy storage and efficiency, renewable fuels, electrical efficiency, green cleaning products and water purification.

In this era of profound changes in the way we produce and consume valuable resources, SAIL focuses on exceptional profit opportunities as a result of inefficiencies in the global markets. Our tea of uniquely talented investors employs their decades of experience and cleantech-related networks to the most exciting venture investment opportunities.
Each quarter the Cleantech Group releases their Investment Monitor which summarizes cleantech’s performance in key statistics and insights. Here’s an overview for fiscal year 2013:

### Global VC Investment in Clean Technology Sectors

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*Powered by data from i3*

- Worldwide venture investment across all clean technology sectors totaled $6.8 billion during 2013. That total was 15 percent lower than the 2012 total ($7.9 billion). On a quarterly basis, however, investment rose throughout 2013 at a rate of 14.5 percent, compounded quarterly, signaling a positive shift after five consecutive quarters of decline that began in 1Q12 and ended in 1Q13.

- Total deal volume reached 1,007, making 2013 the third straight year with more than one thousand deals tracked. This figure is expected to increase slightly once all investors have submitted deals. Of the 1,007 deals recorded so far, 53 percent of deals were Series B or later rounds, accounting for $5.8 billion or 85 percent of all money invested during the quarter.

- The Energy Efficiency sector continued to lead by both invested total and deal volume in 2013 with $1.3 billion (20 percent of total) invested across 188 deals (19 percent of total deal volume). That dollar total was up 23 percent from 2012, whereas the sector’s deal volume dropped by four percent.

- M&A transactions targeting VCPE-backed companies in clean technology sectors totaled 83 transactions in 2013 (up 15 percent compared to 2012) and $604 billion (down 37 percent), reflecting a high proportion of distressed sales.

- The decline in the overall venture capital investment dollars reflects the continual trend in which investors favor software and services instead of hardware technology that requires hefty money for lab research and manufacturing.
On January 5th, CBS’ 60 Minutes aired a segment titled, “The Cleantech Crash” that grossly misrepresented the state of the sustainable energy industry. Along with misinformation concerning the Department of Energy’s (DOE) Loan Guarantee Program, the piece ignored all evidence that did not fit its anti-cleantech narrative. Since its airing, cleantech experts have responded with facts and insights into the sector which show that cleantech is essential, massive, vibrant, and desired.

Cleantech is Essential

During the CBS broadcast, there was not a single mention of climate change, ocean acidification, lung disease, loss of biodiversity, water and food shortages, etc. Yet these issues are serious—take for example the air pollution in China. The country’s coal-fired power generation, rapid industrial growth, and significant increase in vehicles all contribute to poor air quality. The costs are not trivial: The Beijing Municipal Bureau of Environmental Protection has estimated it will cost China $817 billion to clean its air, and $163 billion for Beijing alone to do so. It’s just not air; but also water. Only half the water sources in Chinese cities are safe to drink. Seventy percent of the groundwater in the north China plain is unfit for human contact.

While air and water quality in the US are better than in China, the US has also been impacted by a changing climate. Hurricane Sandy caused $50 billion worth of damage, and Katrina caused $128 billion (in equivalent dollars); and a value can’t be placed on the loss of lives. California just experienced its driest year on record.

By 2030, nearly 4 billion people will live in emerging market cities. The world’s natural resources simply cannot support this consumption without significant changes to how we produce and use energy, water, transportation, food and products. In other words, the world needs cleantech.

Cleantech is Massive

Since the beginning of 2011, the average price of a solar panel has declined by 60 percent. Additionally, PV installations in the US have grown approximately 50 percent per year from 2011 to 2013. In 2012, renewable energy sources (biomass, geothermal, solar, water, wind) represented half of all new capacity in the US.

Demand-side markets are also very large and growing significantly. In the US alone, we consume approximately 70 quadrillion BTUs of energy per year across transportation, industrial, residential, and commercial applications. US buildings consume about 33.5 quads annually, representing over $420 billion in annual spending. Cleantech solutions however are making buildings smarter and more energy efficient. Furthermore, the sale of plug-in vehicles
more than doubled in 2013 compared to 2012. The Tesla Model S may be the most critically acclaimed new car of all
time, and not only by environmentalists but by auto enthusiasts and consumer product watchdogs.

Already, the Brookings Institute reports that the clean economy employs over 2.7 million workers.

Cleantech is Vibrant

The 60 Minutes report focused greatly on convincing viewers that the DOE loan program was a failure. They fell
short on putting their claims into context however—the portion of grants given to ventures that later failed
represents less than three percent of the total portfolio. Independent reviews of the DOE’s loan portfolio have
projected a likely repayment rate of 97 percent. Given that the loan guaranties were priced to assume that they had to
cover something around a 10 percent failure rate, the government is likely to make a profit on the federal loan
guaranty program as a whole.

Also consider that 75 percent of all businesses fail—whether they’re in cleantech or healthcare or pizza, government-
backed or not. And cleantech had endured the economic crisis, which, while unrelated to cleantech, has substantially
hurt the ability to fund cleantech research or projects.

Even so, major corporations are actively investing in cleantech to drive growth and competitive advantage,
differentiation and to further their sustainability goals.

Between the third quarter of 2011 and the second quarter of 2013, GE, ConocoPhillips, Total, and BP have all done more
than 10 deals. Shell recently launched a new venture fund, Shell Technology Ventures.

Cleantech is Desired

Every recent survey confirms that people want cleantech. For example, in its most recent annual National Solar
Survey, the SEIA found that nine out of ten Americans (92%) think that the United States should use solar. More
importantly, when companies develop awesome products, people want to buy them. For example, Nest Labs has built a
learning thermostat that consistently results in 20% energy savings. Nest is a young company yet is now selling ~50,000
thermostats per month, and was recently bought by Google for $3.2 billion.

This private sector trend is accelerating. The biggest banks including Credit Suisse, Deutsche Bank, Citigroup, etc. are
currently investing seven trillion dollars of private capital in cleantech.

In Conclusion...

To get to the energy-independent future we need, we must continue to try and sometimes fail, but the consequence for
not trying is guaranteed failure. In the venture industry, we make risky bets all the time because that’s what it takes to
innovate.

The Department of Energy said it themselves, “Simply put, 60 Minutes is flat wrong on the facts. The clean energy
economy in America is real, and we are increasingly competitive in this rapidly expanding global industry. This
is a race we can, must and will win.”
Investment banking giant Goldman Sachs has declared the renewable energy sector to be one of the most compelling and attractive markets—and it’s backing up its talk with $40 billion of made and planned investments.

Goldman Sachs is not the first big bank to talk up the renewable energy sector, or even “sustainable” investments. But it is one of the first to put real money behind it.

In 2012, the bank made a commitment to invest $40 billion in renewable energy, and it has made a number of large equity investments, over and above the normal advisory and fund-raising work that is the usual bread-and-butter revenue for investment banks such as Goldman Sachs.

“Goldman Sachs finds this market incredibly compelling,” Stuart Bernstein, who heads the bank’s clean-technology and renewables investment banking group, said in a recent interview. “It is at a transformational moment in time.”

Bernstein said the bank is taking a decades-long view and is convinced that renewable energy will be an important component of global GDP growth.

He dismissed suggestions that it was part of a PR campaign akin to BP’s infamous “Beyond Petroleum” pitch of a decade ago, during a period when that company appeared to spend more on marketing than it did on developing new technologies.

“It will be important from a societal perspective, and it will be good business for us and our clients,” Bernstein said. “We want to be extraordinarily focused, involved and have the best franchise in the area. That’s how we think about it.”

Among Goldman Sachs’ key investments are a recently approved $1.5 billion investment for a near 20 percent stake in Danish offshore wind energy developer Dong Energy.

It has also a substantial investment in BrightSource Energy, which is about to bring its huge Ivanpah concentrated solar power project into full production.

Goldman Sachs also provided $500 million in finance to SolarCity, allowing the biggest solar installer in the U.S. to expand its solar leasing business. Goldman is one of a number of banks to do that—the latest was Bank of America/Merrill Lynch.

It has also been an early investor in SunEdison and First Solar, the largest solar PV manufacturer in the U.S. It also made big money from the sale of Horizon Wind Energy to Portugal’s EDP for $2.15 billion in 2007.

Goldman’s commitment of $40 billion is based around a number of assumptions: that costs will continue to decline as efficiency improves, that solar and wind will reach grid parity without subsidies in the not-too-distant future, and that energy storage issues will also be solved.

Goldman also believes that the position of coal at the top of the global fuel mix is eroding—something that it highlighted in a recent report that said the window for thermal coal is closing rapidly.

Much of Goldman Sachs’ investments will be focused on the emerging economies of Brazil, China, India and Mexico—along with developed economies such as Japan and
South Korea that have also made a large commitment to renewables and are reliant on expensive fossil fuel imports.

In Japan, Goldman Sachs has established a new independent power producer called Japan Renewable Energy (JRE) to develop, build and operate solar, wind and other renewables projects. It is backed by the bank’s $3.1 billion GS Infrastructure Partners II fund (GSIP). It has already committed to a 250-megawatt solar project in Okayama and a 40-megawatt PV plant near Tokyo.

Goldman has paid more than $300 million for a majority stake in an Indian wind energy business called Renew Wind Power, which plans to build 1 gigawatt of facilities within two years, and it is looking to build solar energy plants to supply mining operations in Chile, where even companies such as BHP Billiton are looking at alternatives.

Bernstein also heads Goldman’s venture-capital group, which has a key office in California’s Silicon Valley and is focusing on late-stage venture companies. It also uses its convening power to host conferences and forums for sector stakeholders.

Other investments include the FloDesign Wind Turbine, a startup that is developing an experimental high-efficiency shrouded wind turbine, and South Korean wind turbine manufacturer CS Wind, which plans an IPO this year.

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**Water Stress to Effect 52% of World’s Population by 2050**

Some 52 percent of the world’s projected 9.7 billion people will live in water-stressed regions by 2050, MIT researchers say.

The researchers used the MIT Integrated Global System Model Water Resource System (IGSM-WRS) to evaluate water resources and needs worldwide. The modeling tool also allowed researchers to measure how climate change and socioeconomics affect water stress.

The study found population and economic growth are the socioeconomic factors most responsible for increased water stress, resulting in an additional 1.8 billion people living in water-stressed areas. Of these additional people, 80 percent will live in developing countries.

Climate change, on the other hand, will have a bigger effect on water availability in developed nations, the study says.

Thirty-seven countries face “extremely high” levels of water stress, using more than 80 percent of their available water supply every year, according to the World Resources Institute’s water stress rankings published last month.

This means that more than 80 percent of the water available to agricultural, domestic and industrial users is withdrawn annually, which can hurt businesses, farms and communities.

With this reality in mind, SAIL portfolio companies WaterHealth International and M2 Renewables are deployed across four continents to help meet the world’s water treatment and purification needs.
ABOUT

SAIL CAPITAl PARTNERS

SAIL Capital Partners ([www.sailcapital.com](http://www.sailcapital.com)) is a leading cleantech investment firm with a global vision of technologies, markets and opportunities. We invest in cleantech companies with proven technologies, visionary leadership, measurable impact and exciting growth potential. We have invested in a number of today’s leading cleantech companies including Xtreme Power, Ice Energy, The Cleantech Group, Enerpulse, SNTech, Flex Power, Paragon Airheater Technologies, M2 Renewables, Clean Technology Solutions, CNS Response and WaterHealth International. SAIL has offices in California, Toronto, New Orleans and Washington D.C. as well as a global network of investors and advisors.

DISCLAIMER

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SOURCES

- World Economic Forum
- ROTH Capital Partners
- PV Tech
- Greentech Media
- Orange County Register
- Cleantechonica