

60 Minutes Skewers 'Cleantech' Energy Share article on Facebook share Tweet article tweet Plus one article on Google Plus +1 Print Article Adjust font size AA by Greg Pollowitz January 6, 2014 11:04 AM 60 Minutes took on the enviros in a segment yesterday titled "The Cleantech Crash." There's already pushback on the piece from the usual voices, but I thought it was a pretty accurate description of what has gone wrong and why. Here's the opener: About a decade ago, the smart people who funded the Internet turned their attention to the energy sector, rallying tech engineers to invent ways to get us off fossil fuels, devise powerful solar panels, clean cars, and futuristic batteries. The idea got a catchy name: "Cleantech." Silicon Valley got Washington excited about it. President Bush was an early supporter, but the federal purse strings truly loosened under President Obama. Hoping to create innovation and jobs, he committed north of a \$100 billion in loans, grants and tax breaks to Cleantech. But instead of breakthroughs, the sector suffered a string of expensive tax-funded flops. Suddenly Cleantech was a dirty word. Investor Vinod Khosla, known as the father of the Cleantech revolution, has poured over a billion dollars of his own money into some 50 energy startups. He took us to one in Columbus, Miss. KiOR is a biofuel company that's replacing oil drilling with oil making. Vinod Khosla: Nature takes a million years to produce our crude oil. KiOR can produce it in seconds. The company took over this old paper mill, where logs are picked up by a giant claw, dropped into a shredder and pulverized into woodchips. Vinod Khosla: And we take that, add this magic catalyst- Lesley Stahl: This is the secret sauce? Vinod Khosla: Yeah. Lesley Stahl: You throw that on top of the chips? Vinod Khosla: And then, out comes something that looks that looks just like crude oil. The crude is created through a thermo-chemical reaction in seconds. And by using wood instead of corn, this biofuel doesn't raise food prices which was a concern with ethanol. Vinod Khosla: It smells like crude, it works like crude except it's 100 percent renewable. Then it's distilled onsite into... Lesley Stahl: Clean gasoline? Vinod Khosla: Clean green gasoline. Lesley Stahl: This goes right into the tank, right? You don't have to build a new infrastructure? Vinod Khosla: Absolutely. Lesley Stahl: You make it sound almost – sorry – too good to be true. There must be a downside. Vinod Khosla: There is no downside. Well there is: first off, his clean green gasoline costs much more than what you pay at the pump. And despite hundreds of millions of dollars invested – including 165 million of Khosla's own money, KiOR is still in the red, and the manufacturing is so complex, it is riddled with delays. The Left doesn't consider price a "downside" because their goal is to add taxes to the cost of other fuels which would make Khosla's "secret sauce" profitable. If something needs a tax to work, that's a huge risk factor in the viability of the venture, no? Future Congresses can always end a tax. The rest of the transcript here. Video: I also wanted to point out this piece on Gigaom, which lists what they think was right and wrong with the 60 Minutes segment. Here's one of their examples from the wrong category (emphasis mine): As Michael Grunwald has pointed out in his book *The New New Deal*, government support — from the Department of Energy through the stimulus — has created a large amount of jobs over the years. Beyond the stimulus, solar panels and wind power have reached record levels in the U.S. in the last year and that's also thanks to U.S. government support. Even within the loan program, there were more wins than the 60 Minutes piece let on, like the Ivanpah solar farm that created a lot of jobs outside of Las Vegas. The U.S. government needs to give more support to next-generation energy technologies, not less. Actually, the DOE investment in Ivanpah is a different problem altogether: it's a project that didn't need to use taxpayer dollars in the first place. The \$1.6 billion of taxpayer money is basically guaranteed by utilities that have already agreed to purchase the electricity. We have questioned in the past why a company like BrightSource, the developer behind Ivanpah, needs taxpayer financing for this type of project. Here are the details via the DOE website: The project includes solar fields containing over 173,000 dual-mirror heliostats. Brightsource's proprietary technology controls the mirrors to follow the sun, capturing a greater percentage of solar energy than other solar thermal technologies. Electricity from the project will be sold under long-term power purchase agreements with Pacific Gas & Electric and Southern California Edison Company (SCE). The project will be interconnected to the electricity grid via an upgraded SCE transmission line. Along with these purchase

agreements in place, BrightSource has A-list investors. Here's the partial list from their 115 million C-round in 2008: Investors included Google.org, the philanthropic arm of Google, as well as VantagePoint Venture Partners, BP Alternative Energy, Statoil Hydro Venture, and Cargill subsidiary Black River. Existing investors DBL Investors, Draper Fisher Jurvetson, and Chevron Technology Ventures The Chevron-Google-BP-Cargill-DFJ-backed company with contracts in place couldn't go to a bank for the money? Not likely. Doubtless, money from the DOE cheaper than the alternatives, and that's why they went that route. As for future job-creating projects in the U.S. from BrightHouse now that they've used taxpayer money to get to the next level: Don't count on it. The Company's CEO, John Woolard, stepped down in June and BrightSource is looking internationally for growth: BrightSource's flagship project is the 377-megawatt Ivanpah Solar Electric Generating System, currently under construction on federal land in California's Mojave Desert. The massive solar power plant, which faced opposition from environmentalists because of its impact on desert tortoise habitat, is nearing completion. When fully online this year, Ivanpah will generate enough electricity for about 140,000 California homes. [. . .] In a blog post Thursday, the company announced it is "evolving from being a U.S. project developer to becoming a global technology provider." "As we actively pursue international markets, we will continue to align with partners to emphasize our role as a provider of best-in-class technology and related services into projects that are developed, financed and owned by others," it said. There are two more things Gigaom got wrong in their Ivanpah conclusion, ". . . like the Ivanpah solar farm that created a lot of jobs outside of Las Vegas. The U.S. government needs to give more support to next-generation energy technologies, not less." One, via the DOE, Ivanpah will only create 86 permanent jobs. That's "a lot" to Gigaom? And two, there's nothing "next-generation" about Ivanpah technology. It's just a big solar-farm using technology currently employed around the world. Additionally, BrightSource had to pull their 2012 IPO because the cost of natural gas has fallen so dramatically, making future solar projects in the U.S. not cost effective. Finally, as a bonus, there's this: some environmentalists still hate Ivanpah as its sun-death-ray has already started killing birds.

Read more at: <http://www.nationalreview.com/planet-gore/367648/60-minutes-skewers-cleantech-energy-greg-pollowitz>

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The Cleantech Crash

Despite billions invested by the U.S. government in so-called “Cleantech” energy, Washington and Silicon Valley have little to show for it

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The following is a script from "The Cleantech Crash" which aired on Jan. 5, 2014. Lesley Stahl is the correspondent. Shachar Bar-On, producer.

About a decade ago, the smart people who funded the Internet turned their attention to the energy sector, rallying tech engineers to invent ways to get us off fossil fuels, devise powerful solar panels, clean cars, and futuristic batteries. The idea got a catchy name: “Cleantech.”

Silicon Valley got Washington excited about it. President Bush was an early supporter, but the federal purse strings truly loosened under President Obama. Hoping to create innovation and jobs, he committed north of a \$100 billion in loans, grants and tax breaks to Cleantech. But instead of breakthroughs, the sector suffered a string of expensive tax-funded flops. Suddenly Cleantech was a dirty word.

Investor Vinod Khosla, known as the father of the Cleantech revolution, has poured over a billion dollars of his own money into some 50 energy startups. He took us to one in Columbus, Miss. KiOR is a biofuel company that’s replacing oil drilling with oil making.

Vinod Khosla: Nature takes a million years to produce our crude oil. KiOR can produce it in seconds.

The company took over this old paper mill, where logs are picked up by a giant claw, dropped into a shredder and pulverized into woodchips.



Giant pile of woodchips at KiOR

CBS News

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Lesley Stahl: This is the secret sauce?

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The crude is created through a thermo-chemical reaction in seconds. And by using wood instead of corn, this biofuel doesn't raise food prices which was a concern with ethanol.

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Then it's distilled onsite into...

Lesley Stahl: Clean gasoline?

Vinod Khosla: Clean green gasoline.

Lesley Stahl: This goes right into the tank, right? You don't have to build a new infrastructure?

Vinod Khosla: Absolutely.

Lesley Stahl: You make it sound almost – sorry – too good to be true. There must be a downside.

Vinod Khosla: There is no downside.



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Khosla: Capitalist or environmentalist?

Well there is: first off, his clean green gasoline costs much more than what you pay at the pump. And despite hundreds of millions of dollars invested – including 165 million of Khosla’s own money, KiOR is still in the red, and the manufacturing is so complex, it is riddled with delays.

Lesley Stahl: All kinds of glitches.

Vinod Khosla: That always happens but part of anything, whether you're building a refinery or a solar facility or a computer factory, you get exactly the same unanticipated glitches.

He’s downplaying the glitches. But the venture capital model is that for every 10 startups, nine go under. And he says he expects at least half of his energy companies will fail. But Khosla can take that gamble. He earned billions with two giant Silicon Valley winners: Sun Microsystems and Juniper Networks. It was successes like these that gave Khosla and the other Silicon Valley moneymen the moxie to jump into energy.

Steven Koonin: I think they saw it as a technical opportunity, thinking that the people in energy are just troglodytes and they don't understand what they're doing.

Former Energy Department under secretary, Physicist Steven Koonin, says there was a lot of arrogance. He thought the venture capitalists and Internet geniuses were underestimating the challenges of the energy sector.

Lesley Stahl: Like what?

Steven Koonin: Managing risks that have to do with market, with supply, with operation, with regulation. And in the end, hoping that you get returns on a 20 or 30-year time scale.

Lesley Stahl: Yeah, but they must've known they weren't going to get a payoff for 20 or 30 years.

Steven Koonin: I don't think they understood that. The average venture capitalist likes to get in and out in about 3 to 5 years.

While other venture capitalists have withdrawn from the energy sector, Khosla is staying in, but with a lot of help from taxpayers. Over the years, the federal government has committed north of a hundred million dollars to his various Cleantech ventures and several states have pitched in hundreds of millions as well. But his critics say he's in over his head.

Robert Rapier: Vinod Khosla is very smart, but would you let him operate on your heart?

Lesley Stahl: No.

Robert Rapier: No, because that's not his area of expertise.

Robert Rapier, a chemical engineer specializing in Biofuels, says Khosla and almost all the other venture capitalists in Silicon Valley got caught up in their own hype.

Robert Rapier: He set up a system where he overpromised and under-delivered and so the public and the politicians all developed unreasonable expectations.

Lesley Stahl: But hasn't technology advanced enough so that somebody like Vinod Khosla could think: "Ah, we can do it more cheaply, faster."

Robert Rapier: Well yeah, but in the field of advanced biofuels, he has not done very well. The companies that he's brought out are in trouble. Their share prices are down 80, 85 percent.

"[Vinod Khosla] set up a system where he overpromised and under-delivered, and so the public and the politicians all developed unreasonable expectations."

Lesley Stahl: What about this criticism that what it takes to be successful in Silicon Valley does not translate into the energy business? It's such a completely different field.

Vinod Khosla: That's fair criticism. But I am learning. And I am trying. And they're sitting there doing nothing. They're being the nay-sayers, the pundits who say why it can't be done. But they won't try. Now, sure we've done lots of things that failed in energy. But every time, we learned. Picked ourselves up and tried something new.

Robert Rapier: He's getting up that learning curve, but taxpayers funded that. A billionaire came into the energy business –

Lesley Stahl: You're saying we paid him to learn is what—

Robert Rapier: We paid him to learn the energy business.

The federal government has allocated a total of \$150 billion to Cleantech – through loans, grants and tax breaks with little to show for it.

Lesley Stahl: The taxpayers have lost a lotta money in the general Cleantech area.

Vinod Khosla: Look, we have to take risks. And risks mean the risk of losing money. So let me ask you a question. We've been looking for a cure for cancer for a long time. How much money has the U.S. government spent? Billions and billions of dollars. Should we stop looking for a cure for cancer because we haven't found a cure?

But under the Obama Stimulus Act, the government wasn't just supporting research. With Cleantech it was shoveling money to build assembly lines, helping startups in the manufacturing phase. Over half a billion dollars went to a solar-panel company named Solyndra to build a factory. When solar was undercut by low prices in China, Solyndra died.

Another half billion in loan guarantees went to Fisker, a clean car startup that promised to open a plant in Delaware, but went bankrupt. And in other cases production was ramped up before there was any demand – as with LG Chem in Michigan.

"Look, we have to take risks. And risks mean the risk of losing money. So let me ask you a question. We've been looking for a cure for cancer for a long time. How much money has the U.S. government spent? Billions and billions of dollars. Should we stop looking for a cure for cancer because we haven't found a cure?"

[Obama: Shovels will soon be moving earth and trucks will be pouring concrete where we are standing.]

The plant was built with \$151 million from the stimulus to make batteries for electric cars that people never bought. So the plant went idle and workers were paid tax dollars to sit around and do nothing.

These loans and grants were administered by the Energy Department. They wouldn't give us an interview, but Steven Koonin was actually the head scientist for the department, approving many of the stimulus projects.

Lesley Stahl: The government spent about \$150 billion into these innovations. Taxpayer dollars. Money well spent?

Steven Koonin: I think there are significant developments that have come out of that spending that impact our energy system now. New technologies demonstrated. I think it was good value for the money.

Lesley Stahl: Well, Solyndra went through over half a billion dollars before it failed. Then I'm gonna give you a list of other failures: Abound Energy, Beacon Power, Fisker, V.P.G., Range Fuels, Ener1, A123. ECOTality. I'm exhausted.

Steven Koonin: As I told you in the beginning, the energy business is tough.

Lesley Stahl: What happened?

Steven Koonin: Oh, gosh, there are so many reasons. I put some of the major blame on the government, both the executive branch and Congress, for an inability to set a thoughtful and consistent energy policy.

Lesley Stahl: Let me interrupt you. You were the government. How many of the loans were you involved in?

Steven Koonin: Difficult to know the exact number. But I would say in the order of 30.

Lesley Stahl: Did you make mistakes?

Steven Koonin: I think I didn't do as good a job as I could've. In retrospect, I would've done things a bit differently.

Lesley Stahl: Part of this was supposed to be creating new jobs. Everything I've read there were not many jobs created.

Steven Koonin: That's correct.

Lesley Stahl: So what went wrong there?

Steven Koonin: I didn't say it would create jobs. Other people did.

Lesley Stahl: So you never thought it was gonna create-

Steven Koonin: I didn't think it mattered as a job creation, no.

Lesley Stahl: So, is Cleantech dead?

Steven Koonin: There are parts of it that I would say are on life support right now.

The stimulus investment wasn't a total bust. It helped create the successful electric car company Tesla. A few of other companies are starting to show promise, and loans are being repaid.

But Cleantech was dealt a hammer blow by this: plentiful, inexpensive and relatively clean domestic natural gas. So by 2012, the moneymen of Silicon Valley were dropping energy from their portfolios and soon struggling and bankrupt Cleantech companies were on the auction block at firesale prices. And guess who snatched them up? China! The most aggressive buyer is arguably this man.

Pin Ni and his autoparts company Wanxiang have made six big investments in American Cleantech so far, including buying A123, another electric car battery startup that lost over 130 million tax dollars.



Pin Ni and Lesley Stahl

CBS News

Lesley Stahl: A lot of the companies that you have bought in the Cleantech area got a lot of federal subsidies. I have the list.

Pin Ni: A123 did, yes.

Lesley Stahl: Well, Ener1 did –

Pin Ni: Ener1 did, yeah.

Lesley Stahl: Smith Electric Trucks.

Pin Ni: I would think so, yeah.

Lesley Stahl: There's something that just doesn't feel right about a Chinese company coming in and scooping it all up after the taxpayers put so much money into it.



[60 Minutes: Segment Extras](#)

Wanxiang: Chinese or American?

Pin Ni: My answer will be: Do we like the capitalism or not? If we do, that is the capitalism.

Lesley Stahl: But do you think it's a good business? Do you think Cleantech is going well?

Pin Ni: Cleantech is not going well.

But China is willing to make a long-term bet on the technology, and spend what it takes to develop the manufacturing. But here's where it gets complicated: this is Wanxiang's American subsidiary with 27 plants in 13 states and some 6,000 American workers. Pin Ni says every third car made in the U.S. has Wanxiang parts.

Lesley Stahl: You understand the suspicion around you, this company that you're here just to take our high-tech-

Pin Ni: Sure. Absolutely.

Lesley Stahl: --technology, you know, and get it back to China as fast as you can.

Pin Ni: But my simple question is: for what? I'm not the president of China. I'm the president of Wanxiang America, right? So whatever we do has to benefit us. We are here to conduct business. We are here to make money.

And so the irony: that taxpayer money for Cleantech and jobs ended up with a Chinese company creating Cleantech and Jobs... in America.

Lesley Stahl: American taxpayers have spent billions on Cleantech. Have we gotten our money's worth?

Pin Ni: If you measure them by today's standard I would say definitely not. You didn't see anything come out of it. But if you view this as a step stone to the future, when you get there, when you look back, I would say yes.

But Vinod Khosla says if the U.S. government doesn't put more money into this technology – when we get there, it will all be in China. He wants to open KiOR biofuel plants like this in every defunct paper mill in the country.

Lesley Stahl: Now some people call you a dreamer, and I don't think they mean it in a positive way.

Vinod Khosla: In fact you need dreamers to stretch. I probably have failed more times in my life than almost anybody I know. But that's because I've tried more things. And I'm not afraid to fail because the consequences of avoiding failure are doing nothing.

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Lesley Stahl

One of America's most recognized and experienced broadcast journalists, Lesley Stahl has been a 60 Minutes correspondent since 1991.