BUILDING WEALTH IN CHANGING TIMES

The Solari Report

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Creative Destruction: Launching a Breakthrough Product

with Mark Dansie

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C. AUSTIN FITTS: Ladies and gentlemen, it's my pleasure to welcome Mark Dansie who is a very accomplished entrepreneur and venture capitalist in the renewable and breakthrough energy area. He comes to us from the Philippines. He was in Hong Kong yesterday and we had great bandwidth, and the Philippines is not great bandwidth.

We're going to be talking about creative destruction, launching a breakthrough or renewable energy product or other breakthrough products, and this is a topic that many members of our network have requested that we address many of the scientists and engineers and inventors among you are grappling with this issue as we speak.

So, Mark, thank you so much for joining us. Let's start. If I could ask you to describe your background and how you came to your current evolution, and also describe a bit about your website and what we can find there.

MARK DANSIE: Okay. I originally was kind of a Industrial Design Engineer, but I somehow ended up in a university managing several of the commercial companies and bringing academic innovations and sometimes not so innovative products to market or businesses created in.

I'd only ventured into the worst form of capitalism to me, currency trading. I wasn't very happy there. One day my daughter said, "What's your generation going to do about the inequalities of the world, and most of all about pollution in the environment?"

She was very serious about it. I thought, "She's right."

She said, "No. I'm not talking about your generation; I'm talking about you."

Three weeks later I'm in America investigating hydrogen technologies and it took me on a journey around the world looking for technologies, both alternative and exotic, and evaluating claims to see what's real and what's not real. And have the potential to bring some changes. That led me to here eventually. I was working in America, and here I am in the Philippines. I've been working in Asia on energy projects.

C. AUSTIN FITTS: Tell us a bit about your Revolution-Green and what we can find there.

MARK DANSIE: Revolution-Green is really a bit of a friendly sort of blog. There are a couple of people in free energy climbs – people who climb with magnetic matters and other exotic technologies. There are a lot of inventors who tinker with those things.

We also cover developments in solar, electric vehicles, and also the politics of energy. We like to cover what's real, what's feasible, what's a good idea, what's a bad idea, and what's changing and how the model of energy is evolving on the planet, and what's going to bring back the paradigm shift from going from fossil fuels into more sustainable energy environments. What's GI political, what's technology, and how those things are connected together to bring about the paradigm shift.

C. AUSTIN FITTS: You know, I get lots of – if you can imagine – claims of fantastic different things. Whenever I want to check out if something is real or ya-ya, I just go to your website. If it turns out it's ya-ya, I always get a great laugh.

MARK DANSIE: There's a lot of ya-ya out there unfortunately. The industry draws a lot of interesting characters. Some of them are more interested in their bank balance I think.

C. AUSTIN FITTS: Well, before we start, can you define what renewable energy is, and then what is breakthrough energy or – as you describe –

more exotic technologies? Let's see if we can sort-of provide a framework for what it is you're dealing with.

MARK DANSIE: In renewable I would say things that we are drawing from the environment in a friendly way – not mining coal or oil. We're using wind, we're using ocean energy, we're using sunshine that is available, and we're able to build sustainable energy systems.

"The real breakthrough that I call a breakthrough would be when you get cheap storage so you can be fully independent of the grid and be able to drive your electric car further."

The real breakthrough that I call a breakthrough would be when you get cheap storage so you can be fully independent of the grid and be able to drive your electric car further. And there are massive developments and breakthroughs happening every day in storage backfeeds and capacities.

On the other hand is what I call 'exotic technologies'. That involves what we can call interesting people who try to invent from one extreme perpetual motion to different devices - buoyancy devices using magnetic motors. I call it more exotic with development of foreign technology.

C. AUSTIN FITTS: I'm sorry. What kind of technology?

MARK DANSIE: Technology like foreign nuclear is one I put in that category, which is a cleaner energy, and materials-based technology. They're taking these breakthroughs. I worked in a lab in Utah for two years where you're able to create materials that continually, reliably generate electricity and create it. I think you're going to see breakthroughs in those areas, and there are other ways of harvesting environment we don't even know about yet. Those are exotic technologies.

C. AUSTIN FITTS: Okay. So I wanted to start with an overview of some of the risks. Any technology or project that involves creative destruction of existing successful products and businesses or constituencies of a variety which could include government and political constituencies. Any project that involves creative destruction faces risks because you have a

variety of players in the marketplace who have an interest in it not succeeding, and I wanted to talk about some of the risks that have served as obstacles to people trying to launch such a product. I wanted to start with one of my favorites, which is patents. Maybe you could address patents.

MARK DANSIE: I had a very good discussion in Hong Kong yesterday with a manufacturer. If you've got a very interesting technology or exotic process, first of all, don't register in the US because if the government sees it could be a beneficial use for the military, they can just take the technology. So the first rule of thumb is if you have something interesting, register it overseas.

The second rule is don't register a patent because things can be copied and manipulated and changed or whatever very, very easily by the company. You're better off having trade secrets. In other words, don't tell them how you do it because when you publish a patent, you're telling everybody how to do it.

The only patent I would recommend is one that carries a fundamental change in the science, like when the laser was invented. Something that it doesn't matter what they do; they're going to have to use that fundamental property. But on the other hand, you're registering a lot of iconic patents at the moment. I'm going to walk away from the barking dog in a minute.

We're able to protect some electronic circuit boards with a super-high efficiency, but they require a lot of investment and they need to protect investors' investment. These would bring about big change in the lighting industry.

So patents can be your best friend or they can be your worst enemy.

C. AUSTIN FITTS: Right.

MARK DANSIE: Your best friend can protect you, but only to a limited degree. So if somebody copies you, you're in a 15-year court case and $5 million.

Seriously, you're better off not telling people how to do it and let them try to figure it out.

C. AUSTIN FITTS: Right, and going really fast. Why get all mixed up in the expense and time of patents?

MARK DANSIE: The common term they use and everybody I've talked to, the manufacturers and that, said it doesn't matter how many patents you've got; you're going to get copied, whether it's in India who steal the Chinese patents, which is quite funny, and the Chinese say they have been stealing our ideas. Well, guess what? You've been doing that to the rest of us for the last 50 years.

A relative term is 'quick to market'. The technology I'm working on now, which is a lot of product technology, which is a water powered technology so you won't need to use batteries anymore. but you bring in a revolutionary portable power device technology. Originally I was going to release one product and everybody said no, and it's now the whole range of ten products and ten applications and I said why. They will copy them before you get your modifications to market; everybody else would have them.

C. AUSTIN FITTS: Right.

MARK DANSIE: So it's first to market and fast to market.

C. AUSTIN FITTS: Right. So let's talk about buyouts. Clearly one of the things that happens is somebody comes up with a great product, it's working, and the next thing you know someone shows up showing a great deal of money to buy it and then sit on it. Part of that is if you have more than one decision maker or if you have a couple of partners, it can certainly make crazy within the leadership team.

MARK DANSIE: Venture capitalists, depending on the amount of capital, they have to put in always want control. The first thing I do is or advise others to do is put in performance clauses. I've seen it actually where a really great idea or energy device is suppressed for five years because

somebody gave them a lot of money, they had the rights to it, and they decided not to use it.

C. AUSTIN FITTS: Right.

MARK DANSIE: So what've got to build in is two things. License the technology so you can control the IP. Don't sell the IP, and make sure you've got control in the interest of the company that has the lawsuits. Let them have 100% control of the manufacturing and distribution. That's fine.

The second thing is building a performance clause. If you do not perform and do this and this by this day, then you lose all rights and you lose your investment. The inventors have to protect themselves.

The other thing that's common is people come in and promise the world but don't have the capital, so they give you a little bit of money, walk off with the technology, and then they go try to set it up with somebody else. That is probably 90% of the time.

These other people get involved with the rights to the technology, and don't have a big business model or experience or they just are selling you a whole lot of porkies (lies).

C. AUSTIN FITTS: One of my subscribers many years ago said to me, "I'm pretty upset. My brother just got a job with a firm that specializes in mergers and acquisitions." In fact, what he has discovered is their business model is to get into the company that needs to be acquired or needs to raise capital, get all their information, figure out how they can do something to smash them down, and then the big firms they're working with pick them up for cheap. They make their money on that spread between the price you would have had to pay if it was a legitimate deal and the price you can get by playing dirty tricks.

To me, one of the things you've got to do from the beginning is only deal with people who are clean. That's tough because there are a lot of dirty players who would love to come in and get involved if they like the

technology.

MARK DANSIE: You might even consider is finding the right people or venture capitalist and the right ethical people. It's a battle. I'd say over the years I got money for two major projects now, but it took me about five or six years of burning your fingers to learn to due diligence and who's investing and the natural law of the technology itself.

C. AUSTIN FITTS: Right. So let's talk about how you raise capital. As you know, one of the things I'm particularly interested in is we're still waiting for the SUC to promulgate the crowdfunding rules, but I'm very interested to see what crowdfunding makes available. So talk a little bit about what the successful routes are to get capital when obviously you've got to be very quiet about what you're up to.

"The quickest way to track it is to have a good business model. The one here in the Philippines is a solar farm at the moment."

MARK DANSIE: That's tricky. You have to check into networks. It took me several years to build up networks. The quickest way to track it is to have a good business model. The one here in the Philippines is a solar farm at the moment. We want to do a big one and make it available to the people. The way to attack the initial funding that is needed to build the initial infrastructure required given that you already have the land is the build a business model. People want ROIs and they want a good return on investment. They can say, "Hey, we can give you 10, 15 percent and a good ROI. Here's the proven model, here's the figures," and people will invest.

We've got a model and we're opening it up to small people and large people to invest by borrowing solar panels that sits on the farm, and they get the benefits of it financially or liquidity credits. That's one way. Build a business model.

The other thing for all inventors and all these people proclaiming they have great technologies, the number one thing is to have a working proof

of concept. There are a whole lot of books of theory. You want a working proof of concept, and you want to have somebody with credibility – an institution, a scientist, or an engineer – who will put their name to it.

If you do that, it's pretty easy to find. The catch is giving the terms you want, and depending on how revolutionary the technology is, the capital is available. It doesn't take long to find the capital, but what everybody wants is the proof of concept. And why that is is simple.

There are a lot of scam artists out there who take millions of dollars. There's one court in the US at the Moment where the SCC is taking a free energy person to court. They've done jail time.

With so many scam artists out there, investors are very weary. From an investor's point of view, you want to make sure that these people don't get caught up in the hype and don't get caught up in the cultist behavior. Make sure that if you're investing in a technology that there is incredible evidence that some third party has provided that supports their claim. Then it's pretty real.

The only other thing I'd like to add to that is the one thing you don't want to do is upset people. So if you come in with a technology that's going to virtually shut down the whole industry of coal mining or another energy interest that we know of, you want to make sure you partner those companies or plug in those industries because the fact that you have a disruptive technology, they can help you distribute or somehow they can get involved, and they will become your friend. If they're not your friend, they will become very, very powerful enemies.

C. AUSTIN FITTS: Right. So building a network of constituencies is a little bit like building a campaign. You need to want to build as many people who want you to succeed as possible.

MARK DANSIE: Absolutely. I'm sitting here in the Philippines going, "This is the highest priced electricity in Asia, and the third highest in the world. Solar panels are cheap, there's no tax for seven years, and yet why isn't

anybody doing this?"

It's because the business interests has taken control of bureaucrats, and the politicians. And suddenly a politician's son, made the breakthrough. He started a company that suddenly could sell panels to shopping malls and farms. He suddenly the Chinese coming and the French coming in and everyone are happy. No one knows it's happening, but politicians and corporations had to be first. Now it's really easy to do.

It's incredible what you have to do. Now being part of this project, it does bring the bureaucrats and the politicians together. I live in an area where we don't have many cars, everybody gets around on motorbikes.

I should have called from Hong Kong when I was in the Crown Plaza!

C. AUSTIN FITTS: You know, Mark, I've always believed that when you look at the economics of improvements in the energy model, in fact the biggest profits are not on the energy; they are on the application. So if you look at a community, it's the value of the real estate if you bring the energy cost down.

I always thought the politically feasible way of getting a lot of this technology financed was if you brought the investor. You said the right thing, "Have a good business model."

Ninety percent of the people I meet in this area don't have a good business model and don't think it's important. They don't respect the investors' needs as a result.

If you can put together a business model where the business is bringing in the energy application, making money on the real estate, enhancing the investment on the real estate, then you've got something where if it fails you've still got a reasonable investment in real estate.

The down side is significantly less, and I think the upside can be engineered to be greater than just doing the energy itself.

MARK DANSIE: Some of that was run into me, but you're right. We've actually got this land donated, and that's the most valuable piece of the equation. It is important to protect equity that if someone files, you are able to recover something, and that's important.

With inventions to get committed is a little more difficult, and that's why I say that you need a proof of concept. If you're funding something – and most investors will tell you this – they will give you very little money if you haven't got a proof of concept. They'll give you a few crumbs and whatever. Once you get the proof of concept done, sell them the value and you're in a good bargaining position. You can peel off 10%. You don't have to give them 90%. Then put them under a performance contract.

Another thing that people don't realize is, you're right, 90% have no idea about business. You can't just go and say, "I want a million dollars for my invention. I want $500 million."

The real world says you'd better have achievable milestones, and it has to be backed by financial models. That's the rah-rah. That's the ROI whats the return on investment. You have to be reasonable and work with these people because they need to get a return on the investment. They don't have to get roped into anything, and you have to be reasonable about how quickly that's achievable and what the product is being used for. If you do not expect the investors' money, you're not going to get the investment. You're going to get in jail or a really bad reputation quick.

I spend more time educating inventors with new ideas about the business model than the technology. I've got to tell you the business model and the politics of the industry – the energy industry – is very, very powerful. Look in the US now and Australia even. It's solar people now going, and the utilities are saying, "It's cheaper to put solar panels on than to use our power in the states in Australia."

So suddenly they love the government and all the subsidies get pulled back. That's the first step. They're going, "Wow! They're still buying the

solar panels. They didn't have independence. We can't have that!"

So now they're putting in penalties and bringing in tax. If you want solar, we're going to charge you a tax.

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C. AUSTIN FITTS: Right.

MARK DANSIE: So you've really got to work through all those issues. I'm using an alternative energy model, but the same goes through exotic technology. You just can't bring out something and shout to the rest of the world and bring that industry down; you've actually got to try to find ways where everybody's a winner. So you might use their work force or their distribution set-up or their skill set. You might want to partner with them rather than saying, "Ha! Ha! I'll shut you down."

You might want to realize their current strengths and work with the industry rather than acting as their enemy.

C. AUSTIN FITTS: Right because they've built and know how to operate a successful business model.

MARK DANSIE: Exactly.

C. AUSTIN FITTS: And they have a lot of knowledge. So let me just talk about some of the more gruesome risks. There are a couple of them, and I'll run through them. One of them is that as soon as you get in this area, a lot of flakey people show up. Some of them are flakey because they're not ethical. Some of them are flakey because they're not competent. And some of them are flakey because they've been paid to sabotage things.

So how do you get rid of the fruit flies?

MARK DANSIE: There are a lot of flakey people. Most of the flakey people are financial people who pretend they have got money or have got an interest in you and all that. You're better off licensing when you start out

or working with a bigger company or an established group. You might get a good investor who wants to help you.

How do you evaluate those people? You really need to do your due diligence. Are they hotel or an airline, or are they a reputable company? Are they a client or somebody who are well-known entrepreneurs or a well-known institution or a rich person who's got a bent for doing this? You've got to be very, very sure in what you're doing. So it's about due diligence. That's how you get rid of them. You need to do due diligence.

Most people just see dollars in their eyes and they will sign anything. I just saw a technology in Europe that was declaring this and that, and yet people signed a contract and with no performance clause in there, so if it doesn't work, there's no legal recourse on your money. And it's a big-time investment community.

The other one is the so called experts – the so-called self-professed technical experts, chemical experts, wind industry experts. I think you know the characters in the exotic energy or free energy field. If you look at their personal lives, you would say, "My God! They should be arrested for this," or, "They've been involved in that!"

Those sorts of people and the scam artists who come with them, really, once again it's due diligence. Be careful. Ask questions. Check out backgrounds. And then you can get an opinion or advice. Don't trust their lawyers; get your lawyers to check it out.

The third category, I think a few years ago there was definitely a little bit of hanky-panky going on and people being threatened, but I think that's died out now because lot of the new technologies are now accepted. It sneaked up on industry before they could do anything about it.

Solar is cheaper than coal mining, and the investment community and the banks investing in solar wins and they make money at it. So suddenly it's legitimate.

C. AUSTIN FITTS: Right. The real money is clearly shifting in. It's almost like

Howdy Doody time is over, and now the adults are moving in.

MARK DANSIE: Yes, but if you waited to do solar panel at the cost it is now, you probably would have been shot down 20 years ago. Somebody would have shut you down. They would have either bought you out or the technology out or something would have happened.

Now there's not so much of the threat anymore. I think one reason why that is is the need is growing. People know there are limited resources so they're looking for answers, and if you partner with big corporations and partner with governments and somehow involve people, they won't hate you; they'll become your friend.

C. AUSTIN FITTS: Right.

MARK DANSIE: If you cut out any of them, they will hurt you. They may not hurt you directly – although in Asia they probably would; it doesn't cost much to snatch somebody. But when we looked at the business model in the solar industry we said, "Who's toes can't we tread on? Which politicians, which bureaucrats do we have to go and see? Who do we have to make happy first?" That was our approach because if you step on toes you will not succeed.

So how can we appease everybody? Once we get a model, then we work on the rest. Write your business model. You have to appease everybody so you're not going to hurt them, and I can benefit.

C. AUSTIN FITTS: Right. So talk a little bit about what, to date, has worked and why? Let's talk about the projects, not the risk.

Where are the products and projects that have succeeded?

MARK DANSIE: I think the whole world can see a big paradigm shift, and I'll talk about renewables first. Solar is now in many countries just booming. Over here in the Philippines all of a sudden it used to be nothing and now every major company and country is coming in and rolling out solar faster than they are making the panels in China. Wind power. Germany

is 53% wind-powered and solar-powered now. One state in Australia can run the whole state for a whole day on wind and sun power alone, and that solved the fossil fuel problem of a neighboring state. They kept the generators just in case.

It seems like paradigm shifts in how things are moving forward are accepted, and as storage technologies get cheaper, like Tesla recently announced. Look what he's done with the cars now and power supplies. Everybody in cars knows it's cheaper to be independent of the grid or be involved in community market grids or be part of the renewable energy projects. Then our world could be connected to the grid.

C. AUSTIN FITTS: Right.

MARK DANSIE: So that's a big change. The bankers and the governments, the banks now like the Asian development banks and the European banks are not backing coal mines anymore. If you want to borrow money to build a coal mine, they'll tell you to get lost. If you want to build a wind farm, they all have their checkbooks out, provided you have a half decent business model. They've now got proven business models that are working, and they're getting a higher return on renewables than they are on fossil fuels.

Look at the rates in oil prices. Look at what's happening in the coal industry. Look at the mining resources. In America it's prompting wide energy independence. You've got so much gas welled there that you don't have to buy from other countries. It's cheaper to use the gas now than to go out and invade an Arab country.

That's where the model is growing and it's gaining speed.

On the exotic side, I've got some semi-good news and bad news. The bad news is none of these devices – magnetic motors, buoyancy machines, free energy, or any over unity devices – to date have ever come up and been able to be tested or used or put in production because they don't work. However, there are a few anomalies that are very interesting. One is what they call LENR, Low Energy Nuclear Reactions. A lot of

institutions and scientists now are very interested in that because seeing its result, it's not consistent. They're trying to understand how they're getting more energy out. It's a form of cold fusion. How are we getting more energy out than not?

When they crack the code and understand it and know how to engineer it, that will be a breakthrough. It really will be.

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And then there is a materials science. There are more and more materials. Especially Graphene, and other materials that may be possible to create materials and energy devices using the tools of science. I was demonstrating this at a conference there in Holland where I had a disk that ran for over a decade, and had everybody stumped.

C. AUSTIN FITTS: Right.

MARK DANSIE: So those technologies, when we can figure out how to extract more payout out of those, they are going to be the future.

C. AUSTIN FITTS: Part of it is if graphene can become economic or materials like that, the other thing is that it radically reduces the energy you need for an amazing number of functions.

MARK DANSIE: Yes. Just this year there have been four or five major breakthroughs making graphene affordable and mass-produced. I expect in the next two or three years it will be as easy to make as any material.

See, a lot of money has been poured into energy storage. They're spending tens of billions of dollars a year, and also graphene. The marriage of the two – in fact, the relationship between graphene, efficiency of energy, and also storage of energy – these materials are leading the way. I really believe we will probably never see a breakthrough if someone invented a perpetual motion machine.

And I've investigated hundreds of them. I spent 40 flights one year, 22 of them international one year investigating magnetic motors, and I blew a lot of money investigating and friends blow millions investigating all these claims, and none of them ever worked. I'm not saying it can't be done; I'm just saying today everything I've seen hasn't worked.

On the other side of the coin, I've seen some real magic. I've seen Low Energy Nuclear Reactions. Materials technology and the process is getting new materials emerging that are magical. It's like a crystal. It's like certain combinations of materials, and when you put them together it suddenly produces energy.

Then I've seen because of this technology and materials we're seeing solar panels coming down from $4 a watt to manufacture to below $0.50 a watt. Liken that to a kilowatt of solar panels for $500 every year, and five years ago, that was $5,000 ten years ago.

You can see the materials technology has dramatic cost reduction and a capital cost they've discovered in these technologies.

C. AUSTIN FITTS: So I'm constantly listening to people who are doomsayers who say, "The end of the world is coming. The economy is going to collapse." One of the things I see is if we can just predict out five years to the natural evolution of the things you're talking about, what we're talking about is absolutely massive increases in productivity. Massive.

MARK DANSIE: Yes. When you say 'productivity' can you define that? What area?

C. AUSTIN FITTS: In bringing down either the environmental ecosystem cost of doing something or a product and bringing down the economic cost. So if you can make a car with graphene or a much lighter material that's as strong – if not stronger – then you dramatically reduce the energy costs of that equipment. So that's an example.

Or with solar and batteries, dramatically bringing down the energy. Forty percent of manufacturing costs in the United States are energy. If

you cut that in half, you dramatically improve the productivity of those manufacturing processes.

MARK DANSIE: I want to give you a really, really important message about your example, okay?

C. AUSTIN FITTS: Okay.

MARK DANSIE: New Zealand is 90% self-sufficient of energy now. Norway is 90% renewable. Germany, who everybody is criticizing, while it's costing a lot of money to get renewable energy and solar and wind and do away with coal and nuclear, look at about ten years' time. Look at the cost of energy and how it's climbing and all that.

You think about manufacturing, and the biggest cost in this country – and you're quite correct in the world – it's now becoming the energy cost. So if you've got spare energy, if you've got solar energy or wind energy, it costs a lot now because of the investment and setting up the networks to control it and the storage. But in ten years, the countries that are going to have massive renewable energy, they don't have to import gas coal or nuclear or any other resource from any other country.

C. AUSTIN FITTS: Right.

MARK DANSIE: Then they're going to be paying about one-third of the cost. In Dubai at the moment, they're building a massive solar farm. They've got the costly generation of the solar farm. They have free oil bases, and it's way below what it can generate using fossil fuels and oil.

With solar and wind, countries that are investing now, China has got a massive expansion in renewables. You're going to see the countries that are going to have huge manufacturing advantages over everybody else will be the ones that have renewable energy. They'll be fine in ten years while the rest of the world is fighting over resources and pushing the prices up.

C. AUSTIN FITTS: Right.

MARK DANSIE: It's crucial. It's those countries that are going to survive – whichever country it is – it has to have cheap energy, and the only way to have cheap energy in the future is not having resources being consumed.

C. AUSTIN FITTS: I want to talk about some leadership issues. Before we start on this, let me just ask you, Mark, because I think dealing with these issues right now is generally harder and more difficult in most places than the United States. The United States' economic environment is much less free and much less innovative and much more centrally controlled.

If you were going to launch a product like this, where would you be based? If you were in the United States? What's the ideal place in the world to bring these kinds of projects to market?

MARK DANSIE: Not the US. The US is not a good market because of the politics and the difficulties and the obstacles that will be putting you way by the corporations, or by the government and are controlled by corporations to a degree. You need to be somewhere that is friendly, and I'll mention a few countries. Europe is a good place because they're hungry for alternative energy and they accept it, and the Green Party controls a large part of German politics.

In Asia now, for instance, they're actually at a key point that is really scary. A lot of accountants in America now, and a lot of the companies that grew in innovation in America are shutting down their engineers, designers, and innovation centers to save costs, and it's been putting the pressure on the manufacturers here in Asia and other countries to provide the innovation. So America is going to lose a wonderful thing that built America, which is innovation. They had the best innovation, and it's coming. It's all coming. We can't go to a manufacturer now and say, "Here's the design. Produce it." They all have to be OEMD (manufacturing and design) developers now.

I was at a company yesterday that was just magnificent. They are a world leader in the technologies they're working in – lighting and sound and

everything. They were forcing that position ten years ago because their clients said, "I wish you'd been in development and innovation. You no longer have our account."

So there's a mass transfer of innovation going from America for short-term balance sheet equations to make some accounting executive look good for getting a bonus, but the long term is that the innovation has gone to India, it's gone to Europe, and it's gone to Asia, especially Asia.

I know we're off energy now. That's going to be a big failing. Aside from countries which have cheap energy, the countries that are going to thrive and survive are going to have innovation, and that innovation has been driven through Asia at the moment from the countries who lacked the foresight.

"Aside from countries which have cheap energy, the countries that are going to thrive and survive are going to have innovation, and that innovation has been driven through Asia at the moment from the countries who lacked the foresight."

C. AUSTIN FITTS: Right. There's nothing that makes me sadder than hearing that, but that's certainly the message I'm getting from everywhere around the world, and it's one of the reasons I'm on a plane tomorrow to Australia and New Zealand for a month.

I'm disappointed you won't be there so I can't see you.

MARK DANSIE: Australia is a good place to do innovation. New Zealand is probably better in cheap energy, but Australia now, the current government will pull all the subsidies away, yet the recent economic meeting in Australia where Russia and China were there pushing renewables. Australia is trying to push coal still. The Prime Minister is so far out of touch. He's pulled all the solar subsidies and he's pulled all the renewable energy.

Do you know what's happened? The real change that's coming will not be politically driven anymore, because the alternative energies will either be exotic or they will all be renewable like solar, have got that cheap it's

the economic business environment that's bringing the change down. I'm sitting here laughing, going, "Who would have thought ten years ago that major banks, corporations, and industries investing in solar in such a big way, divesting themselves of coal and other interests as fast as they can?"

What happened is the previous government in Australia had enough people invest, so they have critical mass in my home state now, 20% of all rooftops have solar, and they have enough wind energy to drive about 50% of the state's power. They've gained enough critical mass that it doesn't matter what the government does. The people just can't be stopped now.

As soon as they get storage – and this is what's holding everything back. If we had a cheap form of storage now for car batteries for electric cars, they are very close to the threshold where: Why would you want to have a gasoline car anymore? If you can go out and put your solar panels up, charge your personal car, and provided the prices can come down, it would be far cheaper than manufacturing electric cars.

In Norway, for instance, 20% of all car sales are electric. They're putting their solar panels up, and they're plugging into windmills.

The economic environment is changing where if the governments can bring in these taxes and crude, crude stuff, and we draw the subsidies, but this year and last year is really the time where government is no longer relevant anymore. It's economics that are going to drive the paradigm shift.

Every major mall is putting their whole roofs in solar. One reason is the government did help there. They said, "If you don't have solar, you're going to have to turn your air conditioners off."

There went that, and up went solar. It's more economic to put solar on. If they're putting solar on, they're doing PPO's. So a company comes along and says, "I've got three megawatts of solar," or, "500 kilowatts of solar on my roof. You just promise to buy the power, and I will be 20%

cheaper than what you're paying for electricity now."

You're going to find that investors who are financing that are getting a 15-20% return. That's huge! Where else do you get that? You don't get that in the banks anymore. You know, where can you get a 15-20% return? With and ROI of less than five years.

So investors get good returns, and then for the clients, if you say, "Well, if I put solar power on, that means during the day when I'm paying the most to run a TV and we have the brownouts because we don't have enough electricity, I'm going to get my payout forever of 20% less than the current market. Where do I sign?"

But you have to know who's driving the paradigm shift. That domain specifically, and I'm just giving you one model, is absolutely being driven by economics, and no longer being driven by government.

C. AUSTIN FITTS: That's fabulous! So the energy model on planet earth for the next five years, what do you think is going to happen?

MARK DANSIE: This is an exciting bit! I've been watching this for years, and ten years ago there was no solar and hardly any wind. What's going to happen with the energy model is it's going to be big and balanced between the have and have nots in 20 years' time. The countries that have natural resources to burn and invest in that. Like the US, you've got a lot of gas there. You're going to be okay. You've fracked your way into energy survival. I don't know about the environment; I'm just giving you the energy balance.

I think what's going to happen is in about ten or fifteen years you're going to see countries that suddenly realize who they're competing against because they have cheap energy and renewable energy, they're going to get on the bandwagon. But what's going to really change everything, at the moment solar is gaining momentum, wind is gaining momentum, and electric cars are gaining momentum. All of the renewable energies and environmental energies are gaining momentum.

The thing that is going to be absolutely the thing that is going to smash it out of the park and the game is over, is when they can get that storage technology a little bit cheaper.

Tesla is putting in a $5 billion factory in the US, and it's going to make a lot of money out of that, and that's halfway there. But there are 30 or 40 technologies now in the labs that have proven that they can get down any storage costs, so you can drive your car for 1,000 miles, and it's not going to cost you any more than a gasoline driving car.

That technology is now. It's in the labs, and it's three to five years away from full commercialization. What that means to a household and the independent people is that you'll be able to put solar panels and storage on your roof, not only is it cheaper, but it's going to be if you go to your house and see a new building block coming up, it's going to be like you're crazy if you don't do it.

So the big shift in the energy balance is that renewables are going to gain massive momentum. It's going to be a bureaucracy that's going to shoot up out of the sky in the next three to five years if the storage technology is available that makes it economically desirable.

So I'm excited! You might hear my voice being excited on your end. "Wow! This is cool! This is a great time to be green!" There are massive problems in the world, but energy is going to be one that is going to sort itself out in the next 20-30 years.

C. AUSTIN FITTS: So if that happens with the storage, when does material sciences kick in and really shift it again?

MARK DANSIE: Well, the material science is really going to bring about the storage revolution, and where does it begin? With exotic technologies, I'm going back to research. I've spent the better part of ten years, and I know a lot of people have researched this technology and have come up with a lot of blanks and a lot of wild goose chases, but I think in the next two or three years – and I'm going back next year once I finish this project to research some other projects further develop the water

technologies of mine which is going to have a big impact on the third world.

Something that everybody forgets is the biggest flags for the fossil fuel in the multinationals, there are over 1.6 billion people in the world who don't have access to electricity. So guess what they're using? Kerosene. Every year there are a million burns or accidents a year, and tuberculosis is ten times higher in these huts, and five in all the rest. They're enslaved. These multinationals have got the third world enslaved.

"Something that everybody forgets is the biggest flags for the fossil fuel in the multinationals, there are over 1.6 billion people in the world who don't have access to electricity."

Solar rechargeable lighting is making a huge impact and bringing independence to these people. We're bringing out a technology that runs at a tenth of the cost, and it's using very renewable materials, totally pollution free, and they can charge their phones.

So you see another revolution happening, and we're using material science. And we're doing away with batteries using salt water and a metal that is very renewable and not harming the environment.

Then we try that in not only the third world, but every consumable you can imagine – radios, flashlights, and everything you can imagine. Then you've got your solar panels and your high-end, and then you've got electric cars.

I mean, the truest technology is going to have the big impact. When is it going to kick in? It's having an influence now in lowering the cost of solar, of windmills, and storage. Where is it going to be that it's a power source in itself? I'd say about five to seven years. It will take that long to fully develop those technologies.

C. AUSTIN FITTS: Okay. Well, Mark, in closing, just give us a little bit more on how to follow your work and keep posted with you. If there are people here who want to get in touch with you, what is the best way to

do it? Should they do it through your website?

MARK DANSIE: Yes. I have my email address there. It's got an interesting mix. I've probably got 50 or 60 friends around the world who are backyard inventors, and then I've got scientists who I work with in universities. I love having that diversity because there's no ownership in innovation. Sometimes you go in the backyard to come up with the most spectacular discovery; sometimes it's at the university or institution.

Get in contact at www.Revolution-Green.com. That's the website where I post when I get time. My email address is MarkDansie@gmail.com, and I always respond to emails from anybody in a day or two. I do get quite a few.

C. AUSTIN FITTS: I would imagine that your email would be exploding!

MARK DANSIE: It's funny. It comes in waves. In a couple of days you've got five, and then in a couple more days you've got 30 sitting there and you have to run through them, but I get back to everybody. One thing I did when I travelled was I was dealing with some of the best scientists and universities in the world, and then I'm also working in somebody's backyard workshop.

I always found them not to be snobby or, "I'm educated at Yale." Sometimes the guy in the backyard had more innovation creativity and imagination than the guy educated at Yale. It's a marriage of two. You're educating those people to understand major technology, but the other thing is my work that I'm doing now, which has been going on for two or three years, this technology is about to be released worldwide, and I'm going to tell you I cannot tell you what has been done in the US.

I'm under NBA, and there's a lot of money involved from investors. It's more than a million dollars. What I thought was a backyard project when I met you I thought, "This is good. I'll have it out in three months."

Then suddenly we realized to do it properly it's going to involve a lot of

professional people, a lot of engineers. Just the circuit boards cost hundreds of thousands of dollars to develop. Then we've got gearing up the manufacturers, but we've all had to do it under the cover. We've had to do it in stealth mode. But watch this because seriously, I just filmed one of the products in America last week ready to be released. Things are going to happen that I'm not at liberty to disclose because I mentioned something before: honoring investors' money. I have to honor and protect their investment.

C. AUSTIN FITTS: Yes. Absolutely.

MARK DANSIE: My own website, Revolution-Green, has products and projects we're working on in the next twelve months.

C. AUSTIN FITTS: I have to give you a compliment before you go. When I first met you, I never know when I meet people what I think of them. I discovered very quickly that you have an utter intolerance for charlatans and frauds. If you've ever been a successful investor, you know that you can get everything right, and all you need is one ding-dong who can ruin everything.

MARK DANSIE: The conference you met me at, I asked them, "Why did you invite me? I'm ranked as the number one world skeptic. Nobody is going to talk to me!"

They said, "No, no no."

I said, "Why are you inviting me?"

They said, "You're the only one who can bring two working devices."

C. AUSTIN FITTS: You know what? There's a big difference between having a technology and having a product that's reliable in the marketplace and that can be duplicated on a reliable and consistent basis. Big, big difference.

MARK DANSIE: There's a huge difference, and also there is economic viability

in technology. I've seen some great technologies, but if you're going to pay $50,000 just to power your torch or your refrigerator, it's just not viable. Who are we building technology for? You're better off buying a solar panel and a car battery.

You've got to look at the viability of these technologies, and there are some exotic things that are very interesting. On paper now I could build you a technology that would probably run your appliances in your house forever and never stop for 1,000 years, but you haven't got the $5 million that it's going to cost us to build it. So what good is that technology? You have to shelve it. It's there, and we know it works, but it's never going to happen.

You've got to look at economics as much as the technology.

C. AUSTIN FITTS: Right.

MARK DANSIE: You've had extensive experience. I was looking at your VC, and you've done more than more than a bit in public housing. You've been to Hong Kong.

You're right. The biggest thing I can do to help everybody is to get rid of the charlatans and point them out so when serious stuff comes up, the investment community will say, "Oh, that's not just one of those things again."

You can say, "No, this is serious," and try to expose the frauds to help legitimate people working in this industry.

By the way, Universities can exaggerate what they have got, too. "We've made a big breakthrough", and then you read the fine print. In 15 years' time it might be economically viable. You have to read it.

I've seen investments. People want to believe it so much. They just want to believe and they'll throw money at anything without due diligence – anything at all. That's a sad state of affairs.

C. AUSTIN FITTS: I just have to say there's something about when you deal with something which is powerful, whether it's political power or technological power. It causes people to lose their minds. I can't tell you – and I'm sure you've had this more, Mark – how many presentations I've sat in with someone who really believes they've got some incredible technology, and it has caused them to literally lose their mind and exhibit absolutely no understanding of how the fundamental economy and the governance system on Planet Earth works. You know what I mean?

"I can't tell you how many presentations I've sat in with someone who really believes they've got some incredible technology, and it has caused them to literally lose their mind and exhibit absolutely no understanding of how the fundamental economy and the governance system on Planet Earth works."

They announce they're going to bring this product to market and they're going to be worth trillions of dollars, and they're going to control the old Leonard G. model and the planet. You just think, "They've lost their minds!"

MARK DANSIE: You have no idea! In my job – and I do have a lot of these entities – and I do it freely. I don't charge them. They ask, "What should I do with this technology?"

I say, "Get a license. Do this. Don't do that. Be realistic. Don't think you're going to get $10 billion tomorrow. It may be worth that one day to you or the company, but you've got to do these things in small steps. You've got to reach the milestones, and when you reach those milestones, you've got to be realistic."

These people are in ga-ga land. This drives me terribly insane. In the science industry now, look at the power of government. The American government says, "we can slap higher tariffs on Chinese panels," or different states. "People get solar panels and you're going to have to tax them." Hang on! They're getting energy free from the sun, and you need a sun tax on them now? They've got to get tax out of it. This is going to

be a big threat in the government.

With an electric car, which can be powered by the sun through solar technology or we get an exotic technology introduced into the economy how are the dummies going to get the revenue? So they're not going to tax the fuel; what they're going to do is they're going to start taxing the mileage you're driving. So they'll put a GPS device and everything else in your car, and you're going to be paying the same tax that you were with fuel because they're going to be tracking the mileage.

C. AUSTIN FITTS: Right, as the old infrastructure loses market share. If you look at how the utility grid and the laws around utilities have been set up, you can see that there's a great deal of money being spent to try to make sure that as this comes the utilities continue to lock and control and maintain a cash flow to support their infrastructures.

There is definitely a major issue coming to a head, which is: Who is going to get the benefit of the savings? Is it going to be the utilities, or is it going to be the customer?

MARK DANSIE: Well, the battleground is drawn in the US and other countries, and the battle is between energy independence and having their own system of utilities. The governments and corporations are definitely fighting for survival.

I noticed in the Philippines you don't say, "Wow! Solar is happening." So you don't have people controlling it. There are only three corporations that are benefitting those billions of dollars. So suddenly we're working with the politicians and the government saying, "Okay, what if we do a model where everybody can own solar, and they don't have to go through six months of bureaucracy? They only sign one form, and it will be managed for them. If they move, they don't have to shift it with them."

C. AUSTIN FITTS: Market economics! What an amazing idea!

MARK DANSIE: And then you've got this incredible, generous person who's

going to be doing this. They'll donate the land and make this happen, but we have to make sure that everybody succeeds first and smooth out variables. So suddenly things don't relapse or anything else. Really, you have to feel it in some countries where the easiest way to stop this threatening them is just to stop you literally.

No politician can stop this because every politician wants to be for the people. This project is called power for the people so all people will be able to participate in solar energy.

C. AUSTIN FITTS: Can we find it through www.Revolution-Green.com? Can we find a description?

MARK DANSIE: Give me a month because we're getting the documents now. The business plan has been created, and the politicians we visited at the moment are supportive, but that model I'm going to send you a copy. I'll email you a copy.

C. AUSTIN FITTS: Okay.

MARK DANSIE: What it means is we're having the big corporations controlling everything where the battlegrounds are setting in. They want in on the solar farms because they can keep charging you for electricity and making a lot of profit. They don't want to get away from shutting down the coal plant. They don't want you to have a panel on your house; that doesn't make money.

So we've come up with this model that's so simple, and it's a one-page contract. People can either take the electricity or treat it as an investment, and we're talking about ROIs around five years, 20% returns, and or payouts. What we're doing is simple. We're putting a panel on a farm, and you own the panel. We might get five percent a year to polish it and plug it in and all the rest, but we actually wrote the business model that the big people who want to build farms can come to our farm.

We've already got land. We've already got the things plugged into the

grid. It's actually cheaper than trying to build a farm using expensive European consultants. So we're a company that has this vicinity for them. What we're trying to do is set up a model that bypasses government and bypasses everything.

That's the problem in Asia. I know you've been in Hong Kong. Hong Kong people live in high rises – nearly everybody. Ninety-five percent of the population lives in high rises there. How do you put solar panels on for them?

But if you've got a farm, those people can own that power or get credited for the power generated by the farm for their fuel or they receive financial income. It doesn't necessarily have to move houses, move apartments, change business premises; it goes with them. It's portable, and it could be economy of scale without having to put a meter in and somebody climbing on your roof.

The cost of installation is half because we're just putting panels on the row, and we're going to have a good deal for supplying one power company as they do not have enough power now.

That model is a principal anywhere for any country in the world, and that's why I think if we can get the model done, it's been done before. It's not original here, but nobody's done it on a grand scale. You get a model out, and you put that in the battlefield in America, and what in the hell are they going to do? What are the politicians going to do about that? They're screwed.

So you've got to come up with more imaginative and better business models that can encounter anything that might be thrown at you.

C. AUSTIN FITTS: Right. Exactly. Well, Mark, this has been unbelievably fascinating, and I agree with you. I think the energy model is in for some big evolutions over the next five to ten years. I'm sorry you're not going to be in Australia, but if you change your mind and find yourself in Sydney, will you let me know?

MARK DANSIE: I certainly will. I'll get back to the states again soon. One thing I want to mention is you mentioned one of my catch phrases, "Show me the data!" So as we see an energy climb, say, "Show me the data, and show me how you got the data!" That's just as important.

I just wanted to say one more catch phrase, which is, "Energy is the currency of the future." It really is.

C. AUSTIN FITTS: What is? Say it again.

MARK DANSIE: Energy.

C. AUSTIN FITTS: Energy is the currency of the future.

MARK DANSIE: Yes, and you'd better believe it because the people who have cheap energy and renewable energy will be the ones who will be the prosperous ones in the future, and everybody knows this. It's no longer the oil barons, and it's no longer the coal, although coal has got a few years to go yet.

C. AUSTIN FITTS: Mark, I can't thank you enough for joining us on The Solari Report. It's been a fascinating conversation. You have a great day.

MARK DANSIE: Thanks a lot! You're a pleasure to talk to.

C. AUSTIN FITTS: Bye!