



China Is Investing in Renewable Energy – But Why?

Based on a Survey of 200 Respondents

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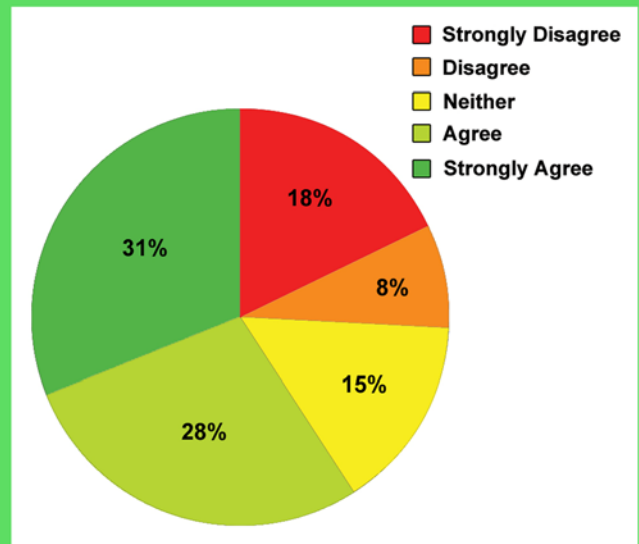
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In its ongoing effort to understand the most important trends: technological, economic, and political, that are facing the world of clean energy, 2GreenEnergy provides this free report as another in our ongoing series on the subject. Here, based on a survey conducted in August 2011 of 200 respondents, we attempt to answer the question: *Why exactly is China making such robust investment in renewable energy?* As always, I'd like to offer my sincere thanks to each of the participants.

Of course, the major reason to ask such a question is to see if we in the U.S. may be able to learn something here, and head in the same direction. So let us begin with the tabulation of "closed-ended" questions, in which survey participants were presented with a series of nine ideas, and asked to rank them on a scale from one to five, according to their level of agreement with each. The results are below:

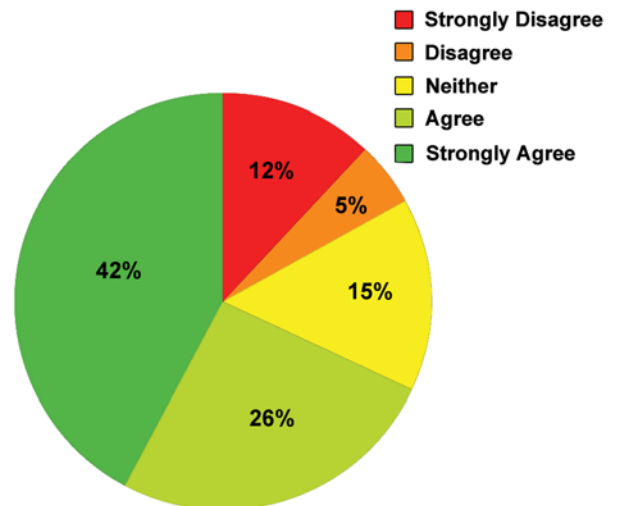
A)

China, with a command economy, can simply make a decision and it happens immediately; democracies don't work that way.



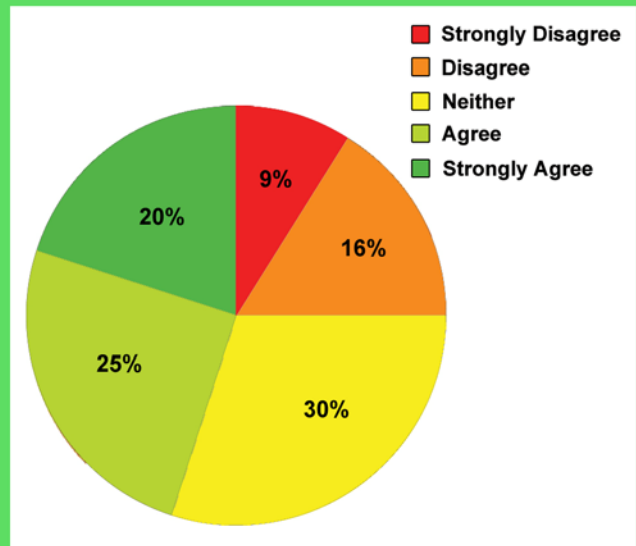
B)

We're understandably proud that we live in a democracy, but what we call "democracy" is actually terribly corrupt. Our lawmakers are essentially owned by powerful corporate interests that favor "industries" with horsepower behind them to hire lobbyists and slant the playing field in their favor. Oil, coal and gas are true "industries"; clean energy businesses are not.



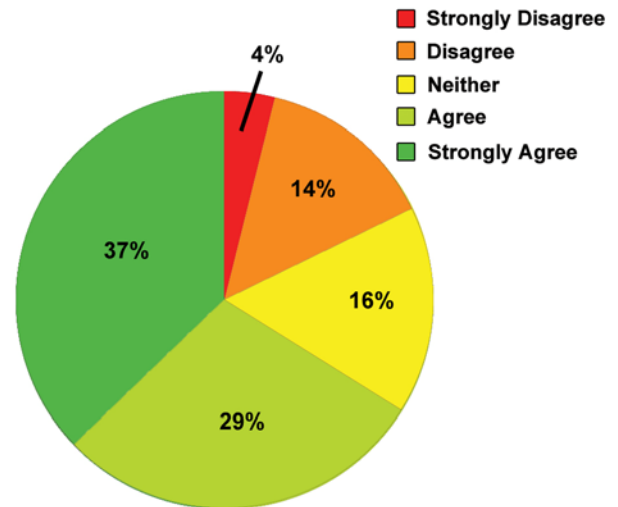
C)

The low cost of Chinese labor (a function of the fact that the Chinese don't live very well, with relatively poor human rights, etc.) makes the development of renewables (and everything else) relatively easy.



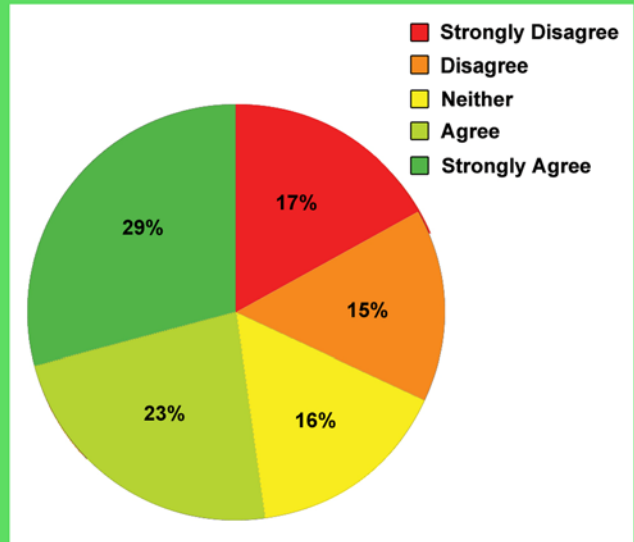
D)

Our deep and long-lived recession keeps private money sitting on the sidelines. People with money aren't investing in anything, and certainly not a nascent industry whose future looks even more uncertain than our economy as a whole.



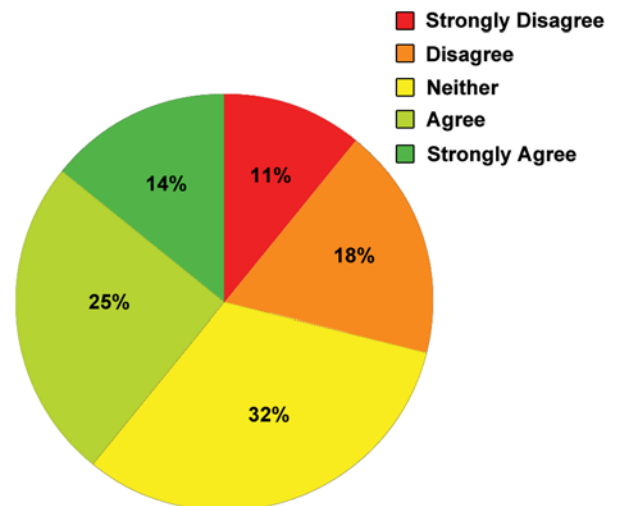
E)

In terms of public money, we in the US are essentially broke; we couldn't invest in renewables even if we had the political will. Medicare, Social Security, and never-ending wars have brought us to the brink of (and possibly into) economic collapse.



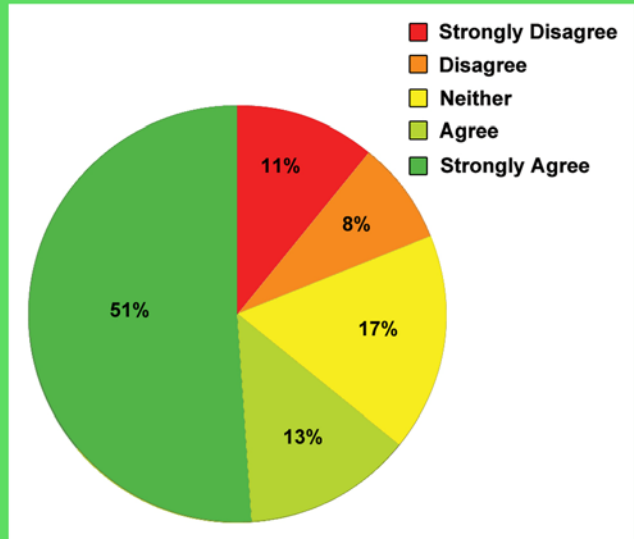
F)

The US government has made a reasonably honest attempt to promote renewables with a certain set of incentives. However, these have largely been taken advantage of by smart, profit-minded people. E.g., there are wind farms being built every day in high-traffic, high- curtailment zones that offer no value whatsoever, but will be built anyway, because of the way the government incentives (in their haste — or corruption?) were written.



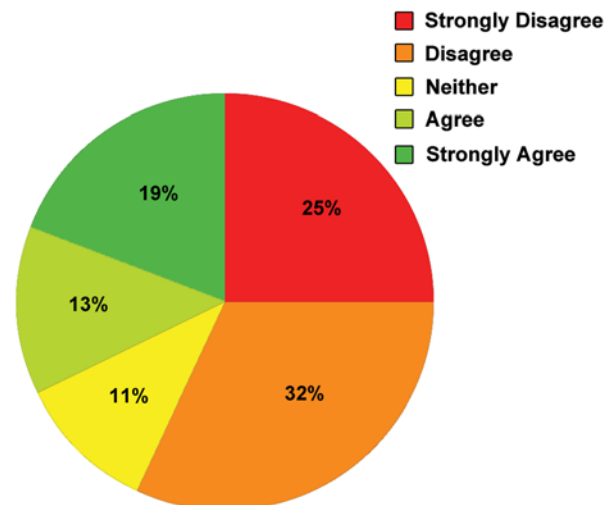
G)

The political right wing has done a magnificent job in convincing voters that clean energy isn't important anyway — that global warming is a hoax, that clean energy is a job-killer, anti-capitalist, etc.



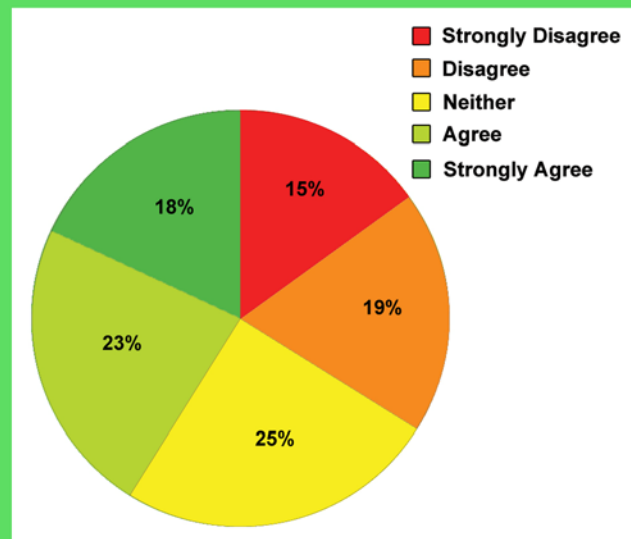
H)

China is also the world's biggest polluter; their participation in renewables is largely to create positive PR with the West.









I)

China is completely sincere in its quest here; this is a demonstration of enlightened thinking and international behavior.






We come now to an analysis of the last question, in which respondents were asked to comment on this subject without prompt, i.e., to provide their own words as to the principal reasons that China is investing in renewables. Here, the reader can see how truly complex and varied this subject seems to be, noting many different – yet inter-related answers offered here. I believe the reader is best served by a simple presentation of some of the most representative answers, which, for convenience, I've grouped into categories. I've added a few words of my own at the end.

Expansion and Domination - Want Leadership in Everything

-  China looks after China. It's about resources and an economic strategy.
-  China is investing in renewable energy because of necessity; their demand is explosively growing and alternative energy is a fast and wise way to produce energy.
-  China invests in renewables because solely of its own needs and concerns; they are the ultimate capitalists; renewables mean energy security, manufacturing dominance and eventually world market dominance.
-  They want to shift the focus from 'made in China' to 'designed in China.'
-  China seeks to attain one goal – to be the world's leader in every category. The speed at which their development is attained leaves me concerned as to their inclusion of sustainability as one of the necessary components for development.
-  China's renewables policy is based on the opportunity and ability to dominate a huge future market and increase their overall world financial power. Money talks louder than almost any group of individuals... just look at our media conglomerates.

Social Stability vs. Unrest – Providing Jobs

-  China must keep its 10% growth rate or potentially suffer civil unrest. I have witnessed that potential for civil unrest first hand. The country is caught in a growth cycle that they must continue in the face of limited resources.
-  China continues to move aggressively in the global economy. As long as there is growth and problems are addressed for the citizens at some level, the people will follow their leaders.
-  All countries act in their own economic and political self-interest. China's push into green energy is chasing profits that will continue to provide jobs to its citizens.

- Building renewable energy facilities and products tends to keep its domestic labor force busy while maintaining/increasing its positive trade balance through exports.
- A billion hungry mouths will unseat even the most powerful government,
- China is preoccupied in making colossal investments in infrastructure due to its high domestic savings rate. It is making such investments in all sectors of infrastructure, and investments in renewable energy is only a logical corollary of this economic reality. Of course, the fact that China is so terribly energy hungry also prompts such a policy.

Pollution Causes Health Problems

- This is driven by serious health issues directly related to extremely poor environmental policies in the last generation.
- Coal – of which it has an ample supply – has been a major contributor to poor air quality in many urban areas.
- (One has to) sympathize with the overwhelming haze that permeates most industrial areas in China. When I was working with a large engineering firm, a great many of our people sent to offices over there came back with severe health problems.
- I think their leaders realize the costs of caring for all the people whose health is ruined by pollution and are simply making a long term investment in their country's future based mainly on simple economics.
- China is part of the planet; if the planet suffers so will they. They are also highly polluted and suffer major shortages of clean water. They must be concerned re: melting ice/snow in the Himalayas re: future water security.

China Is Not Hampered By Corporate Lobbying/Corruption

- So long as the U.S. stays paralyzed politically, China can press its advantage. China wins, we lose.
- The U.S. does not support renewables here because the “right people” here do not totally control it yet. Leave it up to their stooges in Washington to position it correctly for the advantage of their corporate masters and renewables will be the new mantra. Bend over and grab your ankles.

- Oil is no longer the future of energy. Granted that the big oil companies and OPEC are milking oil for all they can get, but it still is not the future of energy. Having renewable and distributed energy is where we all will be in the next century. China thinks in futures and they are simply setting up their future now.

.... *And Can Demonstrate Its Great Planning, Superior Patience*

- America is such a young country, with citizens having very little pride or knowledge of history. China is not just a command economy but also a nation with thousands of years of history. Its culture and economic thinking are almost completely opposite of ours, based on millennia of development and monoculturalism.
- China has social/economic/environmental-running plans that go back to an era when the U.S. was still sicking dogs on segregated African Americans.
- They will make money doing this, lots of money, because they have a plan. It may have a lot of soot and stuff all over it, but they got a plan. They are synchronizing. They seem good at planning.
- China knows they are going to need mass quantities of energy in the future, and they correctly see the writing on the wall with respect to the coming end of the Great Golden Age of Petroleum. We as usual have our hubristic head in the sand.
- The U.S. has devolved into a “next year” or “next quarter” profit mentality. Any long-term vision is lost. China, while not perfect (by a long shot) has more discipline and a longer-term point of view.
- China has always been much better at looking at the long view than western democracies. 50 years out is not unrealistic. Some of those in power expect to continue in power for that time. We share a sense of the market economy. The Chinese are the businessmen of the Asian world wherever you go. But cast on top of this is a sense of unity that does not exist in the West. The Chinese will organize and develop lines of power more readily than in the west. A close analogy without implication might be found in the power structures of organized crime.
- As a planned economy, China’s “planners” can see that renewables are the world’s (and China’s) future. Renewables are sustainable, often “infinite” resources. A “smart” government interested in the welfare of the citizens and their common good would move away from finite, rapidly diminishing resources and invest in renewables and sustainable use of what resources we have available.

- Remember that phrase, “Think globally, act locally”? Americans tend to think locally and short-term, or act locally and short-term. I teach a class in renewable energy, and ask what payback people want. The usual answer is 1-3 years. This is the main reason most people don’t even insulate more than required by code.

This is Opportunity to Leapfrog an Approach to Energy that Is Obsolete


- China, as a developing country, has a relatively newer infrastructure system, which makes it easier for them to enter into the renewable energy industry than developed countries with older, aged energy infrastructure.
- The big difference is that China is growing rapidly. The relative costs in installing new wind power vs. installing new coal power is actually not that high (in some cases the wind costs less, but China has few regions of wind potential that rival ours), but the cost between continuing to burn coal vs. building a new wind tower are quite different. We started with the coal infrastructure, and in building wind we are replacing existing and operating infrastructure with something new...
- China must spend on some form of new power production, so they can either spend the money on a new coal plant or a new wind farm or a hydropower dam.
- The reason they are leaving us in the dust is that they are building out capacity to meet demand, while we are building out capacity to replace existing capacity. One of these things is much easier to authorize the money for than the other.


Amorality – This Is Not About Being Green


- They are building new nuclear and coal plant capacity at least as fast as they are adding green energy. They want energy at any cost. They are not adding green energy because they have a green philosophy; the solar and wind just add to the total. Their leadership is amoral about the whole thing.
- The government of the PRC has no regard for altruism, or ‘green’ philosophy, except as propaganda. Deeply suspicious of debate, dissension and innovation, the Politburo only acts with complete self-interest. In the next five years, PRC will complete 851 massive new power stations -- all coal fired.


Energy Independence and National Security

- China invests in renewables for the same economic reason the rest of the world would be smart to do so. It puts the generation of needed energy within the control of the country generating it. This makes China less dependent on other nations for its energy needs, allowing it to maintain an edge in autonomy.

 China is merely one more nation that realizes oil and other fossil fuels reserves are not unlimited and are generally located in countries over which its influence/control is not at all certain.

 I think China's lack of infrastructure in remote locations initially started the ball rolling for their renewables industry, but now they see it mostly as a way to gain world dominance in the energy sector. Whatever country that leads the world in clean energy technologies will be the economic leader, and sadly, that is not the U.S.

 Cultures like China strive for self-reliance and independence, wanting to provide for themselves, therefore appreciating the value of providing their own energies even where they are more expensive than imports or other options. Americans don't seem to care about how much of their energies are imported or delivered from very far away, and aren't willing to pay more if it's local or closer. Look how long the U.S. has imported most of its oil, for example. Pres. Nixon set up that commission to study how to get us off oil imports, but that went nowhere when oil prices dropped and embargoes ended.

 Renewables are a military priority for China. Their military wants to avoid the choke points that come with the supplies of oil, gas and even coal (to a lesser extent).

My Belief

This is simply a perfect storm, in which every single factor has aligned to push China in the direction of renewable energy. When there are 10 reasons to do something and not a single one not to, it happens ... and it happens *quickly*.

Here, the many different ends that concern the Chinese (or any nation, for that matter) are clearly and directly served by investing heavily in renewables. And it's quite an impressive list: national security, energy independence, the health and safety of the citizenry, providing jobs -- and thus social stability, and achieving the world economic domination that they've been eyeing carefully and enviously for a very long while. In addition, we need to realize that all this is happening in an atmosphere without any of those pesky countervailing forces that make it difficult in the U.S. (partisan bickering, and corporatocracy, with its lobbyists from hell).

But wait! There's more! If you order before midnight tonight.... China's vigor in embracing clean energy comes with the added bonus of good public relations. But are they really concerned about environmentalism? Only a few people know for sure, and I'm certainly not one of them. Yet their sincerity doesn't matter; they reap the bonus anyway.

The Chinese investment in renewables couldn't possibly be any easier. They don't let uneducated citizens decide strategic direction, led by someone like Sarah Palin, whose only skill is herding sheep. They have a small group of smart people at the helm who calmly and patiently guide them into whatever direction actually serves their long-term interests. They've been working at this silently and patiently, while we in the States have been overspending, under-investing, partying like rock stars, dumbing ourselves down, and arguing with each other. Now it appears that the chickens have come home to roost -- unless we take decisive action.

Now hold on a second. Is it really an open question as to whether or not a democracy can be truly responsive to the needs of its people? Doesn't that sound self-contradictory? But yes, that's what is at stake; we have a form of government that has become so completely usurped by the interests of an elite few that it has long since ceased to serve the will of "We The People." Again, decisive action is required. And as always, for all those interested in taking that action, I recommend www.MoveToAmend.org.

Here's one final factor that affects the calculus that, as far as I can recall, not a single person mentioned in the survey: the Chinese culture is not dominated by lawyers.

When Steve Jobs was asked why he had the iPad manufactured in China, he didn't point to labor rates. In fact, he said specifically that labor represented a very small difference in his overall cost and profit projections. To paraphrase his answer: "I want them NOW. While my Chinese partners were erecting the second floor of the facility, they were already building the iPad on the first floor. The legal process took a couple of weeks, not a few years."

That's sobering, isn't it? Maybe part of the reason we're so ridiculously uncompetitive in critically important global markets is that our business processes are mired down with legal regulations and paralyzed by litigation.

Another quick story: As it turns out, it is possible to design three-wheeled cars that are every bit as stable as their four-wheeled counterparts, and have distinct advantages in terms of cost and performance. Recently, Volkswagen went through extensive design and test of such a vehicle, and was very close to launching the product – until their lawyers realized what was happening.

“You think you're going to sell that in the United States?” they responded, quite astonished that anyone – let alone a team of well-educated people – could be so stupid. “Forget it. The engineering calculations have nothing to do with it. The first time it rolls over, the American attorneys will be fighting each other to sue, and we'll be in court for a decade. It's out of the question.”

This phenomenon is utterly pervasive in our lives, and it's getting worse. Of the five best friends I had when I was growing up, two became doctors. Both quit years ago, largely due to the strain brought about by medical malpractice claims and the outrageous expense of the insurance.

It's a shame we're so entirely powerless to do anything about this. It sure would be nice to be building tens of millions of iPads here in the US, or to be driving better, more efficient cars, or to have our best and brightest treating us when we're sick or injured — but it's just not in the cards.

For what it's worth, I'm a strong advocate of government regulation, IP protection, and many other elements of our society that seem to require lawyers. I just wish there were a way in which they could function without bringing the world around them to a dead stop, while profiting in the extreme. Perhaps I'm dreaming.

Conclusion

I'd like to close with a short piece that I think you'll find relevant to the occasion. I'm deeply indebted to my friend Cameron Atwood for his wit and insight into the matters of the world, and I'll conclude this report with his artful summary:

I seem to recall an old film noir plot where an up-and-coming crime boss with big potential was under an older boss who had a gambling habit that inch by inch pervaded his entire power structure.

The new boss ruled his own neighborhood ruthlessly and dictated that his will be accepted without question, but he took better care of his people than they were used to (as long as they stayed in line), and he planned very well in order to grow and consolidate his power over the long term. He also kept lending money to float

the old boss's gambling habit, and kept doing him favors and learning more and more about his operation – and at the same time he was duplicating what he liked about the old boss's operation inside his own territory until his own set-up provided him with greater and greater real power.

Both bosses had begun as vicious thugs who bullied and abused wide swaths of people to get whatever they wanted, but, more and more, the new boss often took an enlightened approach to develop stronger lasting influence outside his territory, while the older boss used his henchmen crudely and brutishly with little regard even for their own safety, let alone considering how this brutality would play out should his power ever wane. Meanwhile, the old boss's old powerful friends were scrambling to knock down the competition and keep new ideas out of the way. These 'friends' gladly propped the old boss up more and more as they saw their own positions weakening and needed the old boss's henchmen to keep up the protection rackets that guaranteed them access to the goods they traded on – goods that either had been gambled on and scammed and diluted to the point of being nearly valueless, or goods that got more and more scarce and dangerous to get at as time crept on. They made ever surer that the old boss cared more about what they wanted than what his people needed in his territory.

Then at last, one dark night, when the old boss had long played out his hand and had his back to the wall, and not a friend was left to him in the world, the new boss finally called in his chips. The old boss had no choice but to allow his operation to become a subsidiary syndicate of the new boss's territory, where the old boss was allowed to remain top dog in name only, while the new boss tightly held his leash. The people in the old boss's territory suffered greatly under this new arrangement, but they were powerless against the new boss because the old boss and his henchmen were already spread too thin, and the new boss had plenty of henchmen and plenty of friends.

No, wait... that's not an old movie, it's modern life – and our future. The old boss is our government, and the new boss is the Chinese government. But you knew that, didn't you?

The Chinese government is more responsive because ours has been bought and paid for by moneyed interests who like things fine just the way they are. Without the bribery that is the lifeblood of our modern elections, we wouldn't be stuck with the greed and cowardice that exemplifies our leadership today.

The people – and their satisfaction and prosperity in the majority – would be the key to staying in office.

We'd have universal single-payer healthcare, and our business could shrug off that enormous financial burden to be more competitive globally and pay their fair share at home to invest in the people and infrastructure through higher wages and taxes – and still profit handsomely (as they did under Eisenhower and Nixon).

We'd have free university to develop a highly educated and skilled world-class workforce that would make us even more competitive.

Our commerce would be regulated to preserve the natural world on which we all will always depend, and business would be structured for the benefit of the majority of the people – not a tiny elite percentage. People could bargain collectively for each other, so that those who have worked all their lives could then hope to live out their closing years free from poverty.

By the way, Social Security has always paid its own way; it has never contributed to the debt. The plain truth is that the debt would now be far larger without Social Security, because both red and blue administrations have borrowed richly from that trust fund. If all the money had been left in the fund that was collected from the increases in contributions as a result of the adjustments made to the program in the 1980's (under Reagan and the Democrat Congress) the "shortfall" foreseen in 2047 would never occur.

Moreover, pensions are not "entitlements", they are deferred compensation that was granted as a condition of employment and should be regarded as what they are – a contractual obligation worthy of full satisfaction. Union workers are not "overpaid", they are prosperous in accordance with their skills and labor, and their prosperity was the key to the economic growth driven by consumer spending – an economy to which we had all grown accustomed, and which is now collapsing beneath our feet as our corporate masters decide that foreign markets and foreign workers are all they need to make a killing.

Our old corporate masters were a lot more like the "new boss" in my old movie plot – they weren't paragons of philanthropy, far from it, but they were more enlightened and planned for the long haul. Henry (not a liberal) Ford knew he ought to pay his workers enough to buy his product if he wanted to have customers. The rampant tycoon JP Morgan thought not even the highest executive should make more than twelve times the pay of the worker on the factory floor. But now, wages have remained stagnant for decades while productivity and profits have soared, and C-suite staff members make 300 to 500 times what the average worker on the line makes – and these elite pay a much smaller share of every dollar toward investment in the collective power of the nation (you know, that investment that goes by the much berated name of "taxes").

People in more prosperous western European nations – like Germany and Norway and Switzerland and the Netherlands – pay far higher taxes than we do, but they have far more responsive governments than ours, and can expect much more in return for their investment in their nations. In spite of recent "reforms" they still have a much easier time than we do getting a university degree and getting quality healthcare for themselves and their children. They are accustomed to very well maintained roads and bridges, and they demand and possess a much

higher level of reverence for the natural world. Their societies are more sustainable and enlightened.

We have much to relearn – is there still time?

About 2GreenEnergy



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Craig Shields, the site's editor, is the author of [Renewable Energy — Facts and Fantasies](#), published by Clean Energy Press, 2010.

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