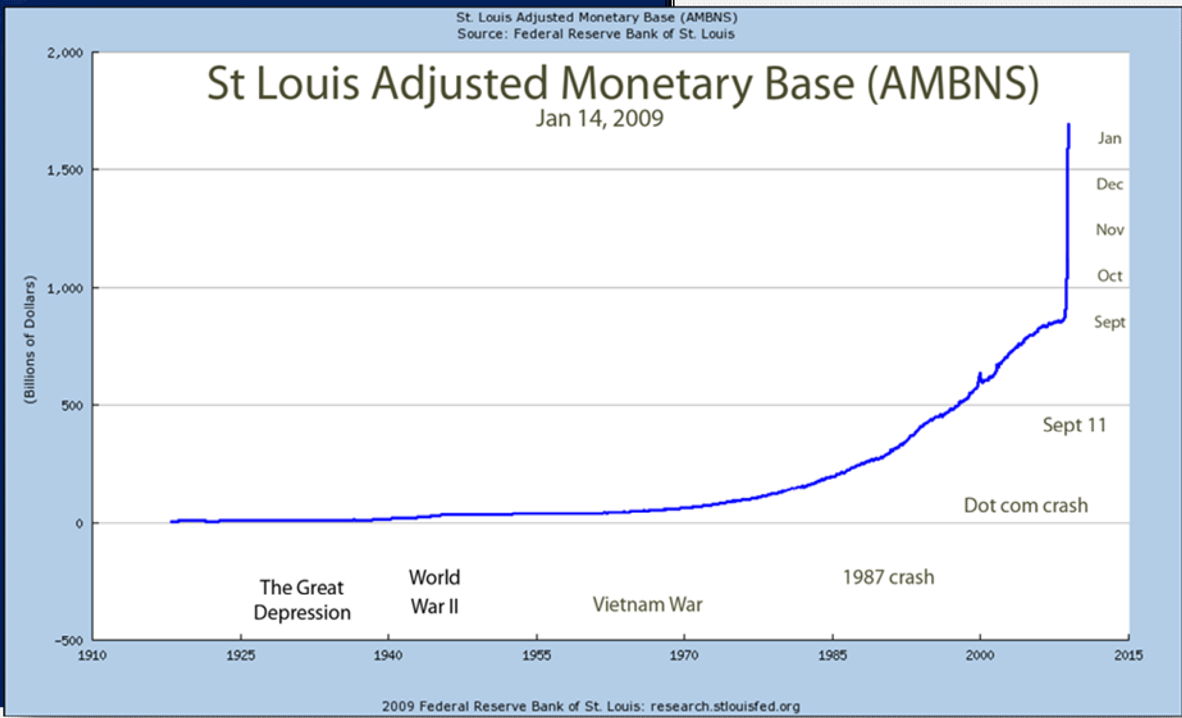
Carbon Credits
Another Corrupt Currency?



The *real* hockey-stick graph

An SPPI Original Paper

By Joanne Nova

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Summary for Policy Makers

Carbon credits are a form of fiat currency, yet as calls for carbon trading grow, ironically, another fiat currency collapses—destroying life savings, wiping out jobs, and taking down historic institutions overnight. Fiat money has a long history of failure, corruption and fraud. The inevitable booms, busts and inflation act as an invisible tax, transferring wealth from people who work and save to speculators, middle men, and crooks. The US dollar—sovereign issue of a great capitalist, democratic nation—is on life support. So far at least eight hundred billion dollars has been created from thin air to stop the banking system from crashing.

Meanwhile, global warming alarmists are asking us to create another fiat currency, this time based on hot air. Large multinational conglomerates are already pouring billions into exchanges and derivatives in anticipation of carbon trading. There are 'options' to buy credits in the future.

There's no longer any evidence that carbon matters much to our climate; and in the unlikely event that carbon might matter, the benefits of trading carbon don't add up. If the US adopted Obama's strict 80% reduction in emissions tomorrow, thus transforming the main energy source used by Americans since Columbus[1], the savings in carbon merely delay the claimed warmer-Armageddon by six years.

Currencies based on nothing are powerful tools that have reshaped civilizations. But they draw out the darkest elements of human nature. We open this Pandora's Box with trepidation. Is the risk worth the benefit?

Our Failing Fiats

A fiat currency is any form of money that has no intrinsic value other than by government decree. It is not backed by any commodity or good. Instead dollars, pounds, euros, yen, and renhimbi are all glorified IOU's, backed only by government promises. Humans being human, it's no surprise that historically, fiat currencies have always disintegrated under the weight of human temptation to get something for nothing. As they collapse, the inevitable collateral is a litany of tragic outcomes—life savings disappear, marriages fail, some lose the will to live and on distant shores, people starve.

The current US dollar has only been a true fiat currency since 1971 when the gold standard was finally completely abandoned. Since then its value has dropped by four fifths (and that's using the official BLS[2] calculator, in reality it's probably fallen further). What we witness now is the painful crisis point – a gathering of corruption, fraud and self interest.

All fiat currencies are inflating at the moment. Uncle Sam provides a great example of how artificial growth in a fiat currency feeds false prophets—like Bernie Madoff; encourages corruption—think of Enron; and seeds stupidity—think of home loans to unemployed fruit pickers. The sub-prime crisis wouldn't have happened if there hadn't been easy loans, to fuel dumb decisions.

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The US Economy is on Life Support!

The US currency and the economy are implacably tied to each other. The economy is currently shrinking, and the currency is undergoing open-heart surgery.

Right now, the people of the United States, through their government, owe over 10.6 trillion dollars[3]—around $35,000 per person (that's in addition to personal debts like mortgages, credit cards, and margin loans). Worse, according to Richard Fisher[4] from the Federal Reserve, if you include unfunded future liabilities and use General Accepted Accounting Principles (GAAP), the nation has promised 99 trillion dollars to its citizens that it can't find. That's an extra ninety nine thousand billion dollars the country has to produce in coming decades to pay future health and welfare costs. To balance the books the average citizen needs to pay $300,000 more to the government—above and beyond the taxes and fees they already pay.

If the USA were a company it would be in receivership: unable to meet it's commitments.

As far as the currency goes, once or twice a century our monetary system breaks. To get an idea of the scale of the current crisis look at the Federal Reserve Bank graph[5] of the monetary base. It's a graph to take your breath away.

This is the real hockey stick graph.

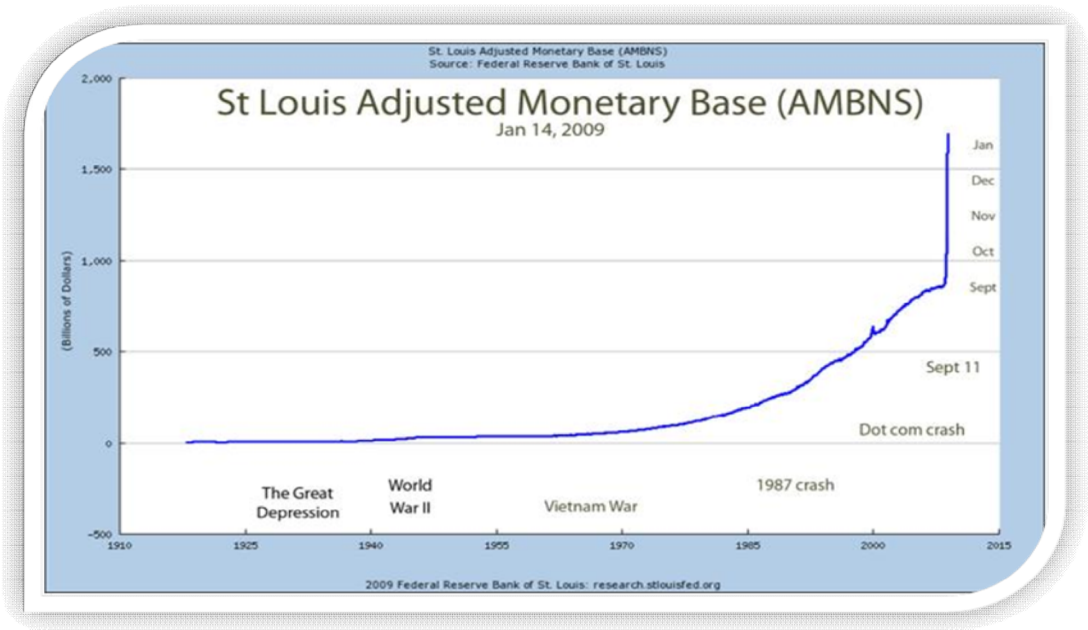

Figure 1: Base money has grown almost vertically since September 2008.

The US money base is the total of all currency and reserves of commercial banks in the central bank itself. It's the narrowest form of monetary aggregate (but getting fatter fast). It took 95 years for the monetary base to grow to a total of 900 billion dollars. In the last four months, it doubled.

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This is what the start of hyperinflation would look like.

Nothing bar anything has touched the US money supply with this much impact. Not the Great Depression and not World War II. As the bail-outs grow by the minute, the hockey stick from Hell becomes more extreme: the spikes of all previous crashes and booms shrink to goosebumps as the scale of the graph is redrawn.

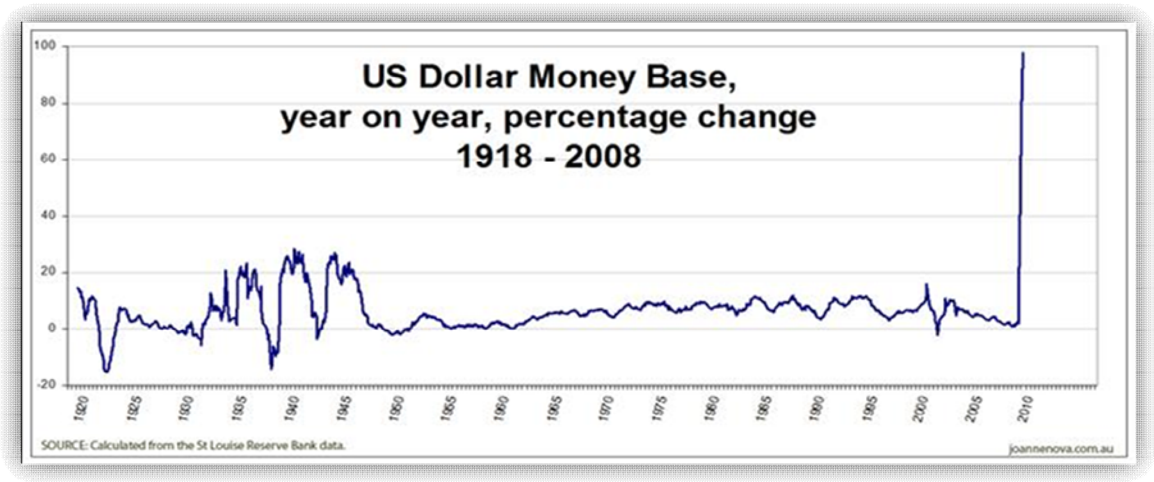

Figure 2: This graph compares the proportionate changes in base money supply. At its worst in WWII, base money expanded by no more than 28% in any 12 month period. Currently it's expanding over three times faster.

Bear in mind that during WWII, the nation was consumed and remade. Four hundred thousand citizens died: that's eighty-six times as many casualties as the War in Iraq has accumulated so far, yet the money base growth was sedate in comparison. This is clearly a defining moment for the nation.

Like all fiat currencies, this new money is made from thin air, backed only by government promises that it's worth something. The money isn't 'pumped' from some deep mythical vault, instead, numbers are created in bank accounts each time someone takes out a loan. The only thing that moves is binary code. Since new money competes with old money, it's hard to imagine how it won't lead to higher bids, higher prices, and thus, inflation. So ultimately, it's not taxpayers paying for the bailouts—it's every holder of the US dollar: including retirees in RV's, hobos without homes, and preschoolers with pocket-money. Inflation sucks purchasing power from every US dollar, but not equally, not fairly – the longer you save, the more it sucks.

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There is no way through the god of taxation that the US government can rescue its balance sheet. Fisher points out that the government would need to pull in two thirds more tax revenue each year, every year, ad infinitum, or cut discretionary spending by an unthinkable 97%. The fate of the US dollar hangs in the balance. There are only two ways out:

1. *Salvation through Inflation:* The cheat's way. Think 'Weimar Republic' and wheelbarrows of cash—all debts become payable as dollars are created from thin air and the US dollar devalues. It didn't work that well for the Germans, Hungarians, or Argentinians. And there's no rush to migrate to Zimbabwe right now.

2. *Prosperity through Productivity:* The hard work way—and usually, the American way. Fix the trade deficit by making things other countries want.

The best way for the US to get out of this mess is by making real goods and services to export. Anything that hinders that productivity should be put under a microscope.

Since carbon underlies most forms of energy generation and agriculture, it's obvious that a tax on carbon could not possibly enhance the productivity of these central industries—at least not until a realistic alternative could be found, tested and mass produced. Energy use on its own accounts for 7-8% of the entire GDP.

The Dark Side of Any Financial Game

We can see the potential future and risks of carbon markets by looking closely at the money markets.

Neither dollars or carbon credits, are backed by any hard fast fixed material good. Indeed the carbon market is based on a nullity—the traded 'good' is vacant atmosphere or air with *less* carbon. Therefore both currencies are open to fraud and corruption. It's a given that if there are unscrupulous players out there – these markets will attract them.

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'Sub-prime Carbon' is Coming

As an example of how this financial behavior can bring down not only its participants, but also unrelated, distant players, consider the derivatives market. It's a good example both of how our current financial system is verging on collapse, and also why we should think very carefully about creating any new financial markets based on 'hot air'.

The last six months of world finance have been dominated behind the scenes with the ever present threat of the one-quadrillion-dollar-derivative-bomb. One quadrillion (or 1,000 trillion) is the rough total of the notional value of financial derivative agreements (and no, that's not a typo, it's based on estimates from the Bank of International Settlements)[6] [7]. These unregulated, non standardized agreements between companies were originally designed to work as 'insurance' or ways of hedging risk. But because they could be manipulated to help avoid tax, and bolster

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profits (or just profit reporting), they've growth far beyond all pretence of being 'insurance'. For example, some of these agreements 'guaranteed payments for bonds or treasuries'—so they appeared to reduce the risk of default to zero—therefore companies who bought these agreements could book, say, ten years in profit immediately, whip up their share prices, and cash in their options, 'thanks for the money'.

For the most part these notional derivative amounts would, theoretically cancel each other out, but the big problem is that if one pin in the complex array of agreements collapses (like say, Lehman Bros), that suddenly exposes many companies who used Lehman as a counterparty to huge payments that they never thought they'd have to make. The numbers and values are astronomical. Worldwide GDP is around $50 trillion dollars, so if just 5% of the agreements fail, that would take out the equivalent of a whole year of global human effort and production. The derivative agreements were an accident waiting to happen. Worse, the potential for one failure to wipe out, domino style, almost every major finance corporation means that governments can't allow any to fail. Hence they rescue or arrange 'take-overs' of all and sundry, so as not to trigger the derivative bomb.

Not coincidentally some of the biggest potential traders of carbon credits are the same fiscally 'responsible' corporations that managed the rest of the economy so well. These are the same pool of traders who bet $1 trillion on Credit Default Swaps for General Motors and its bonds—all while GM had a market capitalization of just $11 billion[8]. In other words, the 'insurance' was supposedly (and nonsensically) worth 100 times the value of the company. The markets have become a glorified casino. Unleashing a new form of currency – carbon credits – invites all the same speculative risk, and gives financial sharks a different market to target.

All past efforts at managing fiat currencies have so far eventually failed—and 'eventually' can arrive all too soon. The US dollar is a product of arguably the strongest capitalist oriented democracy in the world, yet even so, the current US dollar and banking system is on the brink of collapse. The US dollar today is the fourth incarnation since 1775, the first one—known as a 'Continental' was inflated to oblivion within a mere six years. It's "not worth a continental", as citizens of that continent came to say.

The human hunt for 'free lunches' crosses borders and eras. Roman emperors steadily diluted their Denarius until a 94% pure silver coin dropped to just 0.05% 'silver'. Being pre-modern they took 300 years to accomplish 'devaluation-wise' what the US has achieved in the last 110. But even as Rome collapsed they still had 0.05% more silver in their coins than the coins from the United States Mint currently have.

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The Chinese cottoned onto the easy lifestyle of a paper currency almost a thousand years ago, creating possibly the earliest form of 'crack up boom'. At one point in the Song and Yuan dynasties China had as many as a million in their standing army and the largest navy in the world. The nation flowered with potential in science, literature and art, but the aftermath of the failed paper money era, lasted hundreds of years.

The French tried at least three times, and their paper Franc in the 1930s lost 99% of its value in just 12 years.

Argentina was one of the ten most prosperous countries in the world earlier in the 20th Century, but after bouts of inflation—especially a notorious episode in 2001-2002—the middle class were financially ruined, about half the population lives below the poverty line, and unemployment reached 25% in 2003.

The list of nations that have tried and failed with paper currencies tells its own story: Angola, Austria, Bosnia, Bolivia, Brazil, Chile, China, Germany, Greece, Hungary, Japan, Poland, Philippines, Romania, Russia, Turkey, Ukraine, Yugoslavia, Zaire, and of course Zimbabwe. It's not like rampant inflation is an *unusual* event.

Thomas Jefferson warned of the damage that would be caused if the people gave control over any currency to the banking sector:

> *"I believe that banking institutions are more dangerous to our liberties than standing armies. If the American people ever allow private banks to control the issue of currency, first by inflation, then by deflation, the banks and corporations that will grow up around them will deprive the people of all property until their children will wake up homeless on the continent their fathers conquered."*

Sure, just because other currencies have failed and wreaked havoc doesn't prove that a carbon currency won't work. It's possible that for the first time in human history, we *might* get the regulation right, enforce the accounting, and fix the legal loopholes. But if most of the leading democratic sovereign nations can't keep their own currencies from imploding, what chance is there for an international currency that buys and sells theoretical atmospheric nullities in the third world?

The bill for *enforcing* carbon credits might end up costing more than the credits themselves.

The Carbon Casino has Opened for Business

The carbon market was worth $118 billion in 2008[9] so it is already far advanced. There are exchanges in Chicago, Montreal, and in Europe, and you can buy Certified Emissions Reductions (CER—the Kyoto protocols main offset), or European Union Allowances (EUA's), Carbon Financial Instruments (CFI), and Regional Greenhouse Gas Initiative (RGGI) Futures Contracts.

The Australian Securities Exchange plans to make carbon futures and renewable energy futures available in 2009. The government has not finalized the Carbon Pollution Reduction scheme, which it plans to launch in 2010, but the punters are in already, presumably betting-by-default on whether it will be approved. (It seems you can't hold a good speculator down).

Carbon credits behave like any fiat currency. The European Union issued too many carbon permits; the price of said permits fell to less than $1 per ton of CO_2; no one cut emissions, and the scheme collapsed.

Companies in Europe found it was cheaper to buy permits from China through something called the Clean Development Mechanism (CDM). As usual, the intentions are good—if it's cheaper to help the third world cut emissions than do it at home, then why not? But the practice, as always, is complexified to the point of absurdity. To qualify, a project has to prove it would *not* go ahead without the subsidy (so this 'free market solution' ends up rewarding marginal efforts with questionable returns, proving that in practice, it's anything but 'free'). One project in China got around this rule by just ignoring it—allegedly submitting an application two years after the construction of the dam began.

Another requirement is that the environmental projects the CDM's sponsor are built with local community approval—something that must be very difficult to monitor in a country with a human rights record like China.

In India, ten thousand people protested in 2005 at plans for the largest sponge iron plant in the world to expand even further. It is already collecting funding from four separate CDM projects, and is accused of land grabs and ironically, creating local pollution[10].

Given the risks of corruption, fraud, slower growth and unemployment, the first place to start any carbon market is with the question – what's the evidence? After all, if there is no evidence that carbon matters, there's no reason to take the risk in creating a new currency.

In 2006 the NY times reported that one chemical factory in China was such a source of pollution that it's emissions were equivalent to those from a million American cars, each driven 12,000 miles.[11] An incinerator to clean up the factory would cost $5 million dollars, yet because the factory is such a source of pollution, foreign companies will end up paying $500 million for the incinerator. The enormous profits would go to the factory owners, a government fund and the London bankers who arranged it.

A Currency We Don't Have to Have

Given the risks of corruption, fraud, slower growth and unemployment, the first place to start any carbon market is with the question – what's the evidence? After all, if there is no evidence that carbon matters, there's no reason to take the risk in creating a new currency.

Note that in science 'evidence' has a very specific meaning, and it's not the same as that of politics and law. Since science aims to discover natural laws, the only evidence that counts comes from the natural world—for example, observations about the temperature, or the composition of ice cores. Opinions, text books and committees don't prove anything about the natural world. If the evidence is overwhelming, it should be easy.

But the question remains unanswered: *"What's the evidence that man-made CO2 makes much difference to our climate?"* So far no one can answer it without using the words 'IPCC', 'consensus', 'mainstream', 'expert', or 'computer model'.

Dr. David Evans pointed out the lack of evidence in *The Australian* on July 18, 2008[12] (see Appendix II). Despite the widespread coverage of this article, to date no one has refuted it by providing empirical evidence. Replies fall into four categories.

1. *"The IPCC says so, and there is mainstream consensus."* — There is no consensus, it wouldn't prove anything if there was, and the IPCC is a UN committee that was set up to find evidence of anthropogenic greenhouse warming.
2. *Computer Models* — Models are made of assumptions built on estimations, amplified by conjecture. They are a series of calculations and thus theory, not evidence.
3. *Laboratory Theory* — Test tube experiments don't match real world measurements. The "greenhouse effect" has almost no effect in a real greenhouse (the warming is almost entirely due to convection), which undermines the idea that greenhouse gases have much effect in the real atmosphere.
4. *Irrelevant Evidence* — Proof of global warming is not proof that CO2 is the cause. Icebergs would melt even if a team of UFOs were heating the planet with ray guns.

A tax review cannot seriously recommend setting up an Emissions Trading Scheme based solely on a laboratory theory, inadequate inaccurate computer models, or the decree of a UN committee.

There is grave danger that the reviewers who recommended an Emission Trading Scheme, and the government who instigated it, would both be seen as negligent, when newer scientific evidence has been available since 2006 that shows that on balance, carbon appears to have at most a minor role.

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If carbon has very little effect on our climate, the benefits of any carbon trading scheme would be next to nothing, or if we're lucky, a pleasant accident. If money is transferred to the third world from the workers of Europe, it doesn't necessarily help a single soul if the money ends up in the pockets of petty local bureaucrats, and corrupt bankers. It could even do more harm than good—providing funds for large companies to ride roughshod over community based groups, and giving more power to the equivalent of the third world mafia.

Hoping for a happy outcome is no reason to risk hand-feeding financial sharks.

The Pointlessness of Slowing Carbon Emissions

The Russians were always skeptics, and would no doubt prefer a spot of warming. If they join in, it's only because the west would be worse off.

Not only is there no evidence that carbon matters, even if carbon *was a serious threat*, reducing it makes very little difference unless it is done in a coordinated international way—which is already an impossibility, since the Indian government has flatly stated it will not join in[13]. China is too smart to be swung by western propaganda, so if it does join in, it's only because they're financially better off for saying, 'Yes Please'. (Why fight westerners who send you money for projects you were going to do anyway?) The Russians were always skeptics, and would no doubt prefer a spot of warming. If they join in, it's only because the west would be worse off.

The tables attached in Appendix I show just how insignificant any state based system would be—even if the state stopped emitting CO2 in entirety. For example, using the exaggerated IPCC estimates, cutting *all* carbon emissions from California *immediately* would theoretically stop global sea levels from rising by less than a millimeter by 2050—which would surely qualify as one of the most expensive, unquantifiable outcomes that any committee ever aimed for.

Conclusion

$100 million spent on a wind farm could have been used to rescue 151,000 blind children.

Any new tax lets bankers, lawyers, politicians, con men and crooks slice more money from the people who are building, making, healing or teaching. The potential new renewable technologies sound great, but restoring vision to blind children only costs 27 pounds per child[14], so $100 million spent on a wind farm could have been used to rescue 151,000 blind children.

Suddenly when a windfarm has a human cost, it doesn't appear so attractive. Whatever we spend our money on is where we spend our brain power, our skill, our sweat—since it's always at the expense of something else, we ought spend it wisely.

The US position as THE global hegemon is under a cloud, and parties are claiming that power is shifting as we speak. With the US economy based on a precipice, and no evidence left that atmospheric carbon matters, now is *not* the time to dump the energy source the nation was built on and tax everything that moves.

Using a fiat currency system to control a harmless natural gas is like using a combine harvester to prune the roses. It might get the job done, but there's a risk you'll lose the house.

Appendix I

http://scienceandpublicpolicy.org/originals/climate_action_plans_fail_to_deliver.html

Table 1

State-by-State Analysis of Carbon Dioxide Emissions[15]

State	2005 Emissions (million metric tons CO2)	Percentage of Global Total	Time until Total Emissions Cessation Subsumed by Foreign Growth (days)		Temperature "Savings" (ºC)		Sea Level "Savings" (cm)	
			Global Growth	China Growth	2050	2100	2050	2100
AK	48.1	0.18	18	29	0.0009	0.0013	0.0110	0.0222
AL	142.2	0.52	54	85	0.0025	0.0038	0.0326	0.0656
AR	61.2	0.23	23	37	0.0011	0.0016	0.0140	0.0282
AZ	97.7	0.36	37	59	0.0017	0.0026	0.0224	0.0451
CA	395.5	1.45	150	237	0.0070	0.0105	0.0906	0.1825
CO	96.0	0.35	37	57	0.0017	0.0026	0.0220	0.0443
CT	44.4	0.16	17	27	0.0008	0.0012	0.0102	0.0205
DC	3.9	0.01	1	2	0.0001	0.0001	0.0009	0.0018
DE	17.7	0.07	7	11	0.0003	0.0005	0.0041	0.0082
FL	262.6	0.97	100	157	0.0047	0.0070	0.0601	0.1211
GA	185.7	0.68	71	111	0.0033	0.0049	0.0425	0.0857
HI	23.4	0.09	9	14	0.0004	0.0006	0.0054	0.0108
IA	81.3	0.30	31	49	0.0014	0.0022	0.0186	0.0375
ID	15.7	0.06	6	9	0.0003	0.0004	0.0036	0.0072
IL	250.4	0.92	95	150	0.0045	0.0067	0.0573	0.1155
IN	237.9	0.88	91	142	0.0042	0.0063	0.0545	0.1098
KS	72.8	0.27	28	44	0.0013	0.0019	0.0167	0.0336
KY	153.8	0.57	59	92	0.0027	0.0041	0.0352	0.0709
LA	183.1	0.67	70	110	0.0033	0.0049	0.0419	0.0845
MA	85.1	0.31	32	51	0.0015	0.0023	0.0195	0.0393
MD	83.4	0.31	32	50	0.0015	0.0022	0.0191	0.0385
ME	22.9	0.08	9	14	0.0004	0.0006	0.0052	0.0106
MI	192.3	0.71	73	115	0.0034	0.0051	0.0440	0.0887
MN	103.0	0.38	39	62	0.0018	0.0027	0.0236	0.0475
MO	142.8	0.53	54	86	0.0025	0.0038	0.0327	0.0659
MS	63.1	0.23	24	38	0.0011	0.0017	0.0145	0.0291
MT	36.2	0.13	14	22	0.0006	0.0010	0.0083	0.0167
NC	155.6	0.57	59	93	0.0028	0.0041	0.0356	0.0718
ND	52.8	0.19	20	32	0.0009	0.0014	0.0121	0.0244
NE	43.6	0.16	17	26	0.0008	0.0012	0.0100	0.0201
NH	21.3	0.08	8	13	0.0004	0.0006	0.0049	0.0098
NJ	133.4	0.49	51	80	0.0024	0.0036	0.0306	0.0616
NM	59.5	0.22	23	36	0.0011	0.0016	0.0136	0.0274
NV	50.1	0.18	19	30	0.0009	0.0013	0.0115	0.0231
NY	212.2	0.78	81	127	0.0038	0.0056	0.0486	0.0979
OH	274.0	1.01	104	164	0.0049	0.0073	0.0628	0.1264
OK	107.7	0.40	41	64	0.0019	0.0029	0.0247	0.0497
OR	42.5	0.16	16	25	0.0008	0.0011	0.0097	0.0196
PA	284.0	1.04	108	170	0.0051	0.0076	0.0650	0.1310
RI	11.1	0.04	4	7	0.0002	0.0003	0.0025	0.0051
SC	86.0	0.32	33	51	0.0015	0.0023	0.0197	0.0397
SD	13.3	0.05	5	8	0.0002	0.0004	0.0031	0.0062
TN	125.9	0.46	48	75	0.0022	0.0034	0.0288	0.0581
TX	625.2	2.30	238	374	0.0111	0.0166	0.1432	0.2884
UT	67.2	0.25	26	40	0.0012	0.0018	0.0154	0.0310
VA	130.6	0.48	50	78	0.0023	0.0035	0.0299	0.0603
VT	6.8	0.03	3	4	0.0001	0.0002	0.0016	0.0031
WA	83.8	0.31	32	50	0.0015	0.0022	0.0192	0.0387
WI	112.1	0.41	43	67	0.0020	0.0030	0.0257	0.0517
WV	114.3	0.42	43	68	0.0020	0.0030	0.0262	0.0527
WY	62.9	0.23	24	38	0.0011	0.0017	0.0144	0.0290
U.S. Total	**5,978.0**	**21.99**	**2274**	**3579**				

Table 2

European Union Country-by-country Analysis of the Impacts of a Complete Cessation of Carbon Dioxide Emissions[16]

Country	2005 Emissions (mmt CO2)	% Global Total	Time until Total Emissions Cessation Subsumed by Growth (days)		Temperature "Savings" (ºC)		Sea Level "Savings" (cm)	
			Global Growth	China Growth	Year 2050	Year 2100	Year 2050	Year 2100
Austria	78	0.28	30	47	0.0013	0.0020	0.0173	0.0349
Belgium	136	0.48	52	81	0.0023	0.0035	0.0301	0.0606
Bulgaria	51	0.18	19	30	0.0009	0.0013	0.0112	0.0225
Cyprus	9	0.03	3	5	0.0002	0.0002	0.0020	0.0039
Czech Republic	113	0.40	43	68	0.0019	0.0029	0.0250	0.0503
Denmark	51	0.18	19	31	0.0009	0.0013	0.0113	0.0227
Estonia	19	0.07	7	11	0.0003	0.0005	0.0042	0.0084
Finland	52	0.19	20	31	0.0009	0.0013	0.0116	0.0233
France	415	1.47	158	249	0.0072	0.0107	0.0920	0.1853
Germany	844	2.99	321	505	0.0145	0.0217	0.1870	0.3767
Greece	103	0.37	39	62	0.0018	0.0027	0.0229	0.0460
Hungary	60	0.21	23	36	0.0010	0.0015	0.0133	0.0267
Ireland	44	0.16	17	26	0.0008	0.0011	0.0098	0.0197
Italy	467	1.66	178	279	0.0080	0.0120	0.1034	0.2082
Latvia	8	0.03	3	5	0.0001	0.0002	0.0019	0.0037
Lithuania	14	0.05	5	8	0.0002	0.0004	0.0031	0.0062
Luxembourg	13	0.04	5	8	0.0002	0.0003	0.0028	0.0056
Malta	3	0.01	1	2	0.0001	0.0001	0.0007	0.0013
Netherlands	270	0.96	103	161	0.0046	0.0069	0.0597	0.1203
Poland	285	1.01	108	170	0.0049	0.0073	0.0631	0.1270
Portugal	65	0.23	25	39	0.0011	0.0017	0.0144	0.0290
Romania	99	0.35	38	59	0.0017	0.0026	0.0220	0.0443
Slovakia	38	0.13	14	23	0.0007	0.0010	0.0084	0.0169
Slovenia	17	0.06	6	10	0.0003	0.0004	0.0037	0.0075
Spain	387	1.37	147	232	0.0067	0.0100	0.0858	0.1727
Sweden	59	0.21	22	35	0.0010	0.0015	0.0130	0.0262
United Kingdom	577	2.05	220	346	0.0099	0.0149	0.1279	0.2575
Total	**4,276**	**15.17**	**1,627**	**2,560**	**0.0737**	**0.1101**	**0.9471**	**1.9077**

Japan, Australia, New Zealand, Canada: Analysis of the Impacts of a Complete Cessation of Carbon Dioxide Emissions

Country	2006 Emissions (mmt CO2)	% Global Total	Time until Total Emissions Cessation Subsumed by Growth (days)		Temperature "Savings" (ºC)		Sea Level "Savings" (cm)	
			Global Growth	China Growth	Year 2050	Year 2100	Year 2050	Year 2100
Australia	417	1.43	159	250	0.0072	0.0108	0.0929	0.1872
Japan	1247	4.27	474	747	0.0216	0.0323	0.2778	0.5595
New Zealand	38	0.13	15	23	0.0007	0.0010	0.0085	0.0172
Canada	614	2.10	234	368	0.0101	0.0159	0.1369	0.2757

Appendix II

No Smoking Hot Spot

By: Dr. David Evans ~ July 18, 2008

I devoted six years to carbon accounting, building models for the Australian Greenhouse Office. I am the rocket scientist who wrote the carbon accounting model (FullCAM) that measures Australia's compliance with the Kyoto Protocol, in the land use change and forestry sector.

FullCAM models carbon flows in plants, mulch, debris, soils and agricultural products, using inputs such as climate data, plant physiology and satellite data. I've been following the global warming debate closely for years.

When I started that job in 1999 the evidence that carbon emissions caused global warming seemed pretty good: CO2 is a greenhouse gas, the old ice core data, no other suspects.

The evidence was not conclusive, but why wait until we were certain when it appeared we needed to act quickly? Soon government and the scientific community were working together and lots of science research jobs were created. We scientists had political support, the ear of government, big budgets, and we felt fairly important and useful (well, I did anyway). It was great. We were working to save the planet.

But since 1999 new evidence has seriously weakened the case that carbon emissions are the main cause of global warming, and by 2007 the evidence was pretty conclusive that carbon played only a minor role and was not the main cause of the recent global warming. As Lord Keynes famously said, "When the facts change, I change my mind. What do you do, sir?"

There has not been a public debate about the causes of global warming and most of the public and our decision makers are not aware of the most basic salient facts:

1. The greenhouse signature is missing. We have been looking and measuring for years, and cannot find it.

Each possible cause of global warming has a different pattern of where in the planet the warming occurs first and the most. The signature of an increased greenhouse effect is a hot spot about 10km up in the atmosphere over the tropics. We have been measuring the atmosphere for decades using radiosondes: weather balloons with thermometers that radio back the temperature as the balloon ascends through the atmosphere. They show no hot spot. Whatsoever.

If there is no hot spot then an increased greenhouse effect is not the cause of global warming. So we know for sure that carbon emissions are not a significant cause of the global warming. If we had found the greenhouse signature then I would be an alarmist again.

When the signature was found to be missing in 2007 (after the latest IPCC report), alarmists objected that maybe the readings of the radiosonde thermometers might not be accurate and maybe the hot spot was there but had gone undetected. Yet hundreds of radiosondes have given the same answer, so statistically it is not possible that they missed the hot spot.

Recently the alarmists have suggested we ignore the radiosonde thermometers, but instead take the radiosonde wind measurements, apply a theory about wind shear, and run the results through their computers to estimate the temperatures. They then say that the results show that we cannot rule out the presence of a hot spot. If you believe that you'd believe anything.

2. There is no evidence to support the idea that carbon emissions cause significant global warming. None. There is plenty of evidence that global warming has occurred, and theory suggests that carbon emissions should raise temperatures (though by how much is hotly disputed) but there are no observations by anyone that implicate carbon emissions as a significant cause of the recent global warming.

3. The satellites that measure the world's temperature all say that the warming trend ended in 2001, and that the temperature has dropped about 0.6C in the past year (to the temperature of 1980). Land-based temperature readings are corrupted by the "urban heat island" effect: urban areas encroaching on thermometer stations warm the micro-climate around the thermometer, due to vegetation changes, concrete, cars, houses. Satellite data is the only temperature data we can trust, but it only goes back to 1979. NASA reports only land-based data, and reports a modest warming trend and recent cooling. The other three global temperature records use a mix of satellite and land measurements, or satellite only, and they all show no warming since 2001 and a recent cooling.

4. The new ice cores show that in the past six global warmings over the past half a million years, the temperature rises occurred on average 800 years before the accompanying rise in atmospheric carbon. Which says something important about which was cause and which was effect.

None of these points are controversial. The alarmist scientists agree with them, though they would dispute their relevance.

The last point was known and past dispute by 2003, yet Al Gore made his movie in 2005 and presented the ice cores as the sole reason for believing that carbon emissions cause global warming. In any other political context our cynical and experienced press corps would surely have called this dishonest and widely questioned the politician's assertion.

Until now the global warming debate has merely been an academic matter of little interest. Now that it matters, we should debate the causes of global warming.

So far that debate has just consisted of a simple sleight of hand: show evidence of global warming, and while the audience is stunned at the implications, simply assert that it is due to carbon emissions.

In the minds of the audience, the evidence that global warming has occurred becomes conflated with the alleged cause, and the audience hasn't noticed that the cause was merely asserted, not proved.

If there really was any evidence that carbon emissions caused global warming, don't you think we would have heard all about it ad nauseam by now?

The world has spent $50 billion on global warming since 1990, and we have not found any actual evidence that carbon emissions cause global warming. Evidence consists of observations made by someone at some time that supports the idea that carbon emissions cause global warming. Computer models and theoretical calculations are not evidence, they are just theory.

What is going to happen over the next decade as global temperatures continue not to rise? The Labor Government is about to deliberately wreck the economy in order to reduce carbon emissions. If the reasons later turn out to be bogus, the electorate is not going to re-elect a Labor government for a long time. When it comes to light that the carbon scare was known to be bogus in 2008, the ALP is going to be regarded as criminally negligent or ideologically stupid for not having seen through it. And if the Liberals support the general thrust of their actions, they will be seen likewise.

The onus should be on those who want to change things to provide evidence for why the changes are necessary. The Australian public is eventually going to have to be told the evidence anyway, so it might as well be told before wrecking the economy.

Dr. David Evans was a consultant to the Australian Greenhouse Office from 1999 to 2005.

Article from: The Australian
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