Carbon Trading

How it is undermining positive solutions to the climate crisis

Carbon trading ideologues

tell us that trading is merely a "way of finding the most cost-effective means of reaching an emissions goal". . .

They say it is compatible with protecting and developing low-carbon technologies and ways of life; undertaking public works to help the transition to a green economy; shifting subsidies; conventional regulation; taxes and so forth. . . .

Carbon trading, they say, merely provides "additional options to lower costs".

Carbon trading ideologues

tell us that trading is merely a sauce added to the dish of climate change mitigation to make it more palatable . . .

. . . that in the great ocean of climate change solutions it is “merely the wave, not the water”

. . . that it is merely a necessary means for raising capital for the changes that need to be made and could not be funded otherwise. . .

The reality is different:

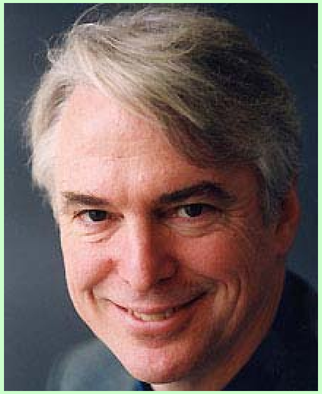
In fact, carbon trading is *not* a "supplement" to other policy measures that makes them more "efficient" . . .

or just an "instrument for cost-savings" or a source of funding that leaves everything else exactly as it is . . .

Instead, it *interferes* with positive solutions in numerous ways . . .

As Steve Rayner (Oxford University) and Gwyn Prins (London School of Economics) pointed out in October 2007:

"Kyoto [i.e., carbon trading] has failed . . . not just in its lack of success in slowing global warming, but also because it has *stifled discussion of alternative policy approaches*."



But it’s not only *discussion* that carbon trading is stifling . . .

1. Carbon trading is interfering with EXISTING low-carbon or no-carbon technologies that are already providing jobs and ensuring livelihoods as well as providing materials for a climate-responsible future.

For example, . . .

Upper Tehri

CARBON CREDITS FOR DESTROYING SUSTAINABLE IRRIGATION TECHNOLOGY

A mountain livelihood dependent on a home-grown, low-carbon irrigation system developed over many generations . . .

. . . Using porous rock dams to divert water gently into larger channels while letting silt through . . .

Feeding downhill through recently-improved channels into . . .

. . . smaller channels feeding rice/wheat terraces that then discharge back into the river.

But such well-established, sustainable, continually-developing low-carbon systems are now being wrecked by “small” hydropower systems governed by the incompatible technical imperatives of electricity production (and which are applying for carbon finance).

The likely (and ironic) effect: loss of livelihood, migration, loss of knowledge of sustainable technologies and of how to live low-carbon lives . . .

2. This amounts to a loss of exactly the kind of EXISTING technical and social knowledge that has to be preserved, developed and shared if a non-fossil future is to become possible.

A few of the technical experts involved in the continuing development of the Tehri low-carbon systems.

. . . and this example is hardly an accident or an “exception” . . .

. . . in that the UN carbon “offset” market (including the Clean Development Mechanism or CDM) is set up in a way that *systematically* discriminates against initiatives that could lead away from fossil fuel dependence . . .

. . . and in favor of corporate bad citizens whose interests are tied up with perpetuating the fossil fuel economy . . .

Who benefits from the CDM market?
some examples

Buyers	*Sellers*
Shell	Tata Chemicals
BHP-Billiton	ITC
EDF	Plantar
RWE	Votorantim
Endesa	Petrobras
Rhodia Energy	Shri Bajrang
Mitsubishi	Birla
Cargill	Oil & Gas Nat. Corp.
Nippon Steel	Sasol
ABN Amro	Mondi
Chevron	Hu-Chems Fine Chemical
Chugoku Electric Power	Chhatisgarh Electricity Co.

. . . Not surprisingly, the CDM mainly incentivizes clever gimmicks for generating lots of pollution rights for fossil fuel users, rather than incentivizing clever ways of reducing and eliminating fossil fuels . . .

The two, needless to say, are very different . . .

In a deal that has angered environmentalists, the Indian company SRF plans to take a £300m profit it has made selling greenhouse gas pollution rights to Western companies and invest it in a new plant producing a gas 1,300 times more climatically damaging than carbon dioxide.

SRF's new plant, which would produce an environmentally-dangerous refrigerant gas called HFC-134a, would be built on profits that SRF's existing plant earned off a mere £1.4m investment in a process that burnt off another powerful greenhouse gas called HCFC-23, also a by-product of refrigerant manufacture. Because one tonne of HFC-23 is considered to have the same climate-warming impact as 11,700 tons of carbon dioxide, SRF has been able to claim a 3.8m-ton cut in carbon emissions equivalent every year. This cut it will then be selling on in the form of carbon credits to Western firms under theUN's carbon trading scheme, the Kyoto Protocol.

It is illegal to let the HFC-23 escape into the atmosphere in Britain, but not in India. SRF – run by Indian rupee billionaire Arun Bharat Ram – vented the gas into the air for 15 years until 2004. It stopped when new measures to save the planet made the gas – or more accurately, the absence of it – a licence to print money. The Indian company's windfall is the biggest so far under the Protocol's Clean Development Mechanism, which came into force in 2005.

Other manufacturers in India and China producing similar products are expected to earn an estimated £3.3 billion over the next six years by cutting emissions at a cost of just £67m. These profits, too, will derive from selling licenses that allow Western firms to keep polluting.

Signs around the SRF plant say the company is leading the way to make India "clean and green". But locals complained about chemical leaks which they claim had affected crops and water. Suresh Yadav, a local landowner, said: "Fifty per cent of my crops are damaged by the chemicals. Our eyes are pouring, we can't breathe, and when the gas comes, the effects last for several days."

Among the main purchasers of SRF's carbon credits have been Shell International Trading, Barclays Capital and Icecap, a London-based emissions trading company. They are part of a booming market of speculators who buy credits to make a profit rather than directly help stop global warming.

-- *Times on Sunday (London)*

“Huge numbers of CDM credits are being created by a scam under which incentives are being created to set up HFC plants just to destroy the substance to make money. This can only be described as a higher form of madness.”

Gwyn Prins,
London School of Economics, 2007

“This is supposed to be about clean development. It's not meant to be a subsidy to refrigerant factories in China.”
Lionel Fretz, Carbon Capital Markets

3. Carbon trading is also at odds with positive schemes such as the Ecuadorian plan to keep oil in the ground.

KYOTO'S CARBON TRADING PLAN

- Impunity for historical emissions
- Compensation for oil companies, polluters, business
- Punishment for the South: more impacts, debt for adaptation
- Not oriented around elimination of fossil fuels

THE ECUADOREAN PROPOSAL

- Carbon debt recognition
- Polluters should pay
- Compensation for countries that preserve forests, avoid new emissions (oil and gas)
- Less oil, less climate change

4. Renewable energy and energy conservation are not getting the money that it was claimed they would get from the sale of carbon offsets . . .

The money is being diverted instead to keeping the wheels on the fossil fuel system . . .

CDM projects by type, November 2007

	credits issued	*no. of projs.*	*all projs.*
HFCs	42m	11	19
N_2O	16m	4	44
Biomass	7m	74	462
EE own gen	6m	13	235
Hydropower	3m	41	612
Landfill gas	2m	11	177
Wind	2m	33	311
Agriculture	2m	29	177
Geothermal	0.1m	2	10
Solar	0	0	8
Tidal	0	0	1
TOTAL	**83m**	**247**	**2551**
2020 (proj.)	*4.067b*		*5390*

"We are writing you this in order to probe your chances for the following project: A multination refinery company have invited Expression of Interest from competent parties to under take a study for identification of emissions leakages/losses on company's pipelines, storage tanks, refinery complex and associated facilities; to identify and implement feasibility projects for its syetem that will generate Certified Emissions Reductions under the Kyoto Protocol Clean Development Mechanism.

"Please contact us per return fax if you are interested to jump into this project . . ."

Lahore-based consultancy,
April 2008

"Industry caught in **carbon 'smokescreen'** "

Financial Times front page, 25 April 2007

"Truth about Kyoto: **Huge profits, little carbon saved** . . ."

Guardian front page, 2 June 2007

"**It isn't working** . . . a grossly inefficient way of cutting emissions in the developing world . . . **A shell game** . . . $3 billion to some of the worst carbon polluters in the developing world."

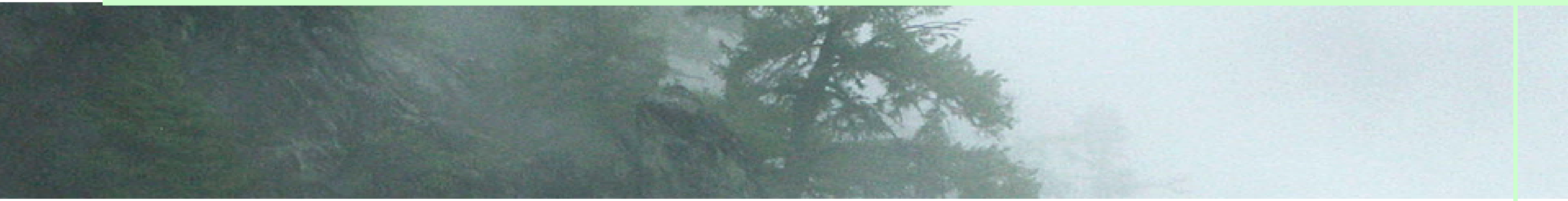
Newsweek, 12 March 2007

And if one opportunity for gathering cheap, “low-hanging fruit” is closed, another one is likely to open . . .

“CDM is not like Peak Oil. We will not run out of cheap CDM options any time soon. People may think we will, but we won’t.”

Guy Turner,
New Carbon Finance,
at a European Commission meeting,
June 2007

5. Meanwhile, community-oriented renewable energy developers in the South who are trying to pick up drips and drabs from offset trading are finding themselves at odds with the carbon market’s bureaucratic requirements . . .



"As a long time worker and activist for renewables in Africa, I have been thoroughly discouraged with eco-entrepreneurs looking for the next green carbon offset opportunity in Africa. We seem to forget that originally, it was about rural livelihoods, creating wealth and renewable energy. When the company for which I worked for 10 years got into carbon trading, I became increasingly distraught. ***It was no longer about 'sustainable development', it was about tonnes of CO_2 on make-believe spread sheets.*** *Donor agencies are throwing money at carbon trading like nobody's business."*

Renewable energy worker, East Africa

6. . . . while renewable energy and "green economy" advocates in the industrialized North are even more frustrated by the way the carbon market drains away the funds they need . . .

"If you provide incentives for renewables, that will displace the incentives built into the carbon market."

Carlo de Riva,
Chief Executive, EDF,
March 2008

"Britain accused of trying to wreck planned EU target of using renewable power to produce 20% of Europe's energy by 2020. Leaked paper argues that renewables are a more expensive way of reducing carbon emissions than the European Emissions Trading Scheme."

The Guardian,
13 August 2007

At a closed session of the energy council of ministers this month, the business minister, Lady Vadera, proposed that British investments in renewable energy anywhere in the world should count as part of the UK's effort to increase the current 3 per cent of power generated by renewables by fivefold within 12 years.

"It is imperative that cost-efficiency is at the heart of our approach ... Demand for renewable energy projects outside the EU should be considered [part of the renewable target]." She also said electricity generated by 'clean coal' should count as renewable energy.

"**This would kill renewable energy in Britain**," said Dale Vince, chief executive of Ecotricity, Britain's biggest windfarm company. "It makes a mockery of any attempts to address climate change. If it were possible to build projects anywhere in the world where planning is lax, nothing would be done in the UK."

The Guardian, 29 March 2008

"We want to suggest you to call on Sweden to keep and strengthen its national target: -4% reductions of greenhouse gases until 2010 in Sweden without the use of flex-mex or sinks. This target was adopted in the parliament in 2001. Strong forces in the ministries and industries are trying now to change this policy and open for use of flex-mex."

Göran Persson, Chairman, Swedish Social Democratic Party

Maria Wetterstrand and Peter Eriksson

Spokespersons, The Green Party of Sweden

Lars Ohly, Chairman, Left Party

October 2005

. . . all of which makes it unsurprising that Califonia's environmental justice and "green economy" advocates are also opposing the carbon market . . .

"Environmental justice coalition launches campaign to oppose carbon trading in California . . . 'A cap and trade program will not achieve actual greenhouse gas emissions reductions in time. It's a charade to continue business as usual,' said Angela Johnson Meszaros with the California Environmental Rights Alliance."

LA Times,
20 February 2008

THE EXAMPLE OF LOS ANGELES

- ***Heavily coal dependent***
- ***$8b health care bill yearly***
- ***21 new fossil plants planned for CA,*** **all** ***in poorer communities of color***
- ***32% increase in fossil capacity planned for CA***

What to do? One path forward under the new law (AB32) . . .

- *20% renewables target by 2010*
- *$2b for energy efficiency*
- *$1b renewable portfolio standard*
- *$3b for RPS infrastructure to get renewables to market (esp. "green path" making green jobs possible for impacted communities)*
- *Fenceline communities, environmental justice movement support*

. . . is in danger of being ***undermined*** because AB32 leaves the door open for carbon trading instead:

- *$4b for offsets – for example, trees in Alberta, methane burning in Utah*
- *Facilitating 21 new fossil fuel plants – 32% MORE fossil fuels*
- *Can’t do both renewable path and carbon trading*
- *Flouting community wishes, path to green jobs, climate action*

“. . . If the Public Utilities Commission’s proposed decision [to back cap and trade] is implemented it could very well harm low income residents, make fewer funds available for energy efficiency investments and renewables, and undermine Los Angeles’ ability to reach its goals.”

State Senator Alex Padilla,
letter to Commissioner Timothy Simon, PUC,
19 February 2008

“We are at a cross-roads. **We can invest in a clean energy future, *or* we can condemn the planet staying chained to a hopeless fossil fuel future**... Pollution trading schemes are undemocratic because these decisions are made in corporate boardrooms with no public participation or government oversight.”

Angela Johnson Meszaros,
California Environmental Rights Alliance

“Our people are **sick and dying from the refineries. Trading schemes knowingly concentrate pollution, exacerbating existing ‘hot spots’ in our communities of color. You can’t buy us off with promises** of parks and asthma education programs, and then somehow think we’ll be OK with subjecting our children to increased cancer risk.”

Dr. Henry Clark,
West County Toxics Coalition

“Pollution trading is wrong. It treats clean air and public health as a private commodity to be traded, speculated against, and profited from. **We must fight it**.”

Martha Arguello,
Physicians for Social Responsibility-Los Angeles

How one company (RWE) is using carbon trading to avoid action on global warming

Expected annual emissions, EUETS Phase II:

140 Mt CO_2

Expected handout of free permits:

70-80 Mt CO_2

Shortfall:

60-70 Mt CO_2

RWE's strategy?

- **Buy CDM and JI carbon credits**

  - 90 Mt allowed under German law; company plans to use full amount, is lobbying to have more available after 2012
  - 50 Mt contracted already
  - 2 CDM projects destroying N_2O at nitric acid plants in Egypt and South Korea
  - 2 projects destroying HFC-23 at chemical plants in China (World Bank Umbrella Carbon Facility)
  - Exploring methane capture from landfills and coal mines in China and Russia
  - Half the price of future EUA permits

Secondary strategies?

- Develop **carbon capture and storage (CCS)** starting with pilot facility at Niederaussen lignite plant
- Demand more **subsidies for CCS**
- **Fight planned nuclear phaseout** in Germany (RWE has 3 nuclear plants)
- Plan **IGCC coal-fired plant**
- Expand **hydro, wind, solar portfolio**

Nor is emissions trading *within* Europe providing incentives for climate solutions. On the contrary: it is helping to keep the wheels on the fossil fuel economy. . . .

"**The European Emissions Trading Scheme has done nothing to curb emissions** . . . is a highly regressive tax falling mostly on poor people . . . Enhances the market power of generators. Have policy goals been achieved? Prices up, emissions up, profits up . . . so, not really."

Peter Atherton, Citigroup Global Markets, January 2007

"All generation-based utilities – **winners**. Coal and nuclear-based generators – **biggest winners**. Hedge funds and energy traders – **even bigger winners**. **Losers** . . . herm . . . Consumers!"

Ibid.

“Campaigners say offsets have **perverse effects** . . . slow the changes needed to cope with global warming . . . **actually contribute to global warming**.”

International Herald Tribune, 19 February 2007

“Coal plants receive more allowances than eco-friendlier” fuels.

Deutsche Bank Research, 6 March 2007

"The Kyoto market and the CDM are a risible disaster, entirely of their own making. The CDM can only be dismissed as a joke. This market has run into disasters over the last 18 months from which it can never recover."

Nick Pitts-Tucker,

Sumitomo Bank,

September 2007

"The cap and trade system of emissions trading is . . . pretty much breaking down . . . [CDM projects] are not effective: . . . It is precisely because I am a market practitioner that I know the flaws in the system. It would be better if a flat rate carbon taxation system was introduced with the revenues invested in a global innovation fund to fight climate change. We may also have to take steps in areas like taxing energy consumption rather than the income of employees or such."

George Soros,

18 October 2007

"European Commissioner for Energy gives damning verdict on EU's efforts to tackle climate change . . . '**A failure'** . . ."

TV Channel 4 Evening News, London,
lead story, 7 March 2007

Emissions trading "would make money for some very large corporations, but don't believe for a minute that this charade would do much about global warming . . . **old-fashioned rent-seeking** . . . making money by **gaming** the regulatory process."

Wall Street Journal,
3 March 2007

7. Policies that depend unduly on price signals are actively displacing incentives for initiatives that *could* work . . .

"The policy instrument of choice pretty well everywhere is a price for carbon, and **it is not going to work** . . . To stop climate change moving from a bad problem getting worse to a worse problem becoming catastrophic, you have to make the global energy system carbon neutral by 2050 -- and that will not happen just using carbon pricing. . . . You have got to drive the carbon out of the energy system and then keep it out forever. . . . **serious step changes are not going to be accomplished by marginal changes in price**. . . . Change is well within our technical competence. The trouble is that **there are a lot of people out there making a lot of money out of carbon trading and who want to perfect the market rather than press for the changes that are actually needed**."

Tom Burke, E3G, 2007

The EU ETS “has not encouraged meaningful investment in carbon-reducing technologies.”

Tony Ward, Ernst & Young

“By 2015, the UK’s electricity system will look remarkably similar regardless of assumptions on how the EU ETS plays out.”

IPA consultants

“The weight of evidence . . . Does not support the superiority of the 1990 Clean Air Act . . . as an inducement for environmental technological innovation, as compared with the effects of traditional environmental policy approaches.”

Margaret Taylor, UC Berkeley

Efficacy in achieving short term numerical molecule targets (measurable in principle) → technology-neutrality, location-neutrality, culture-neutrality, indifference to historical starting points, tolerance of "hot spots", indifference to nonlinearities in local responses, simplification

Ronald Coase

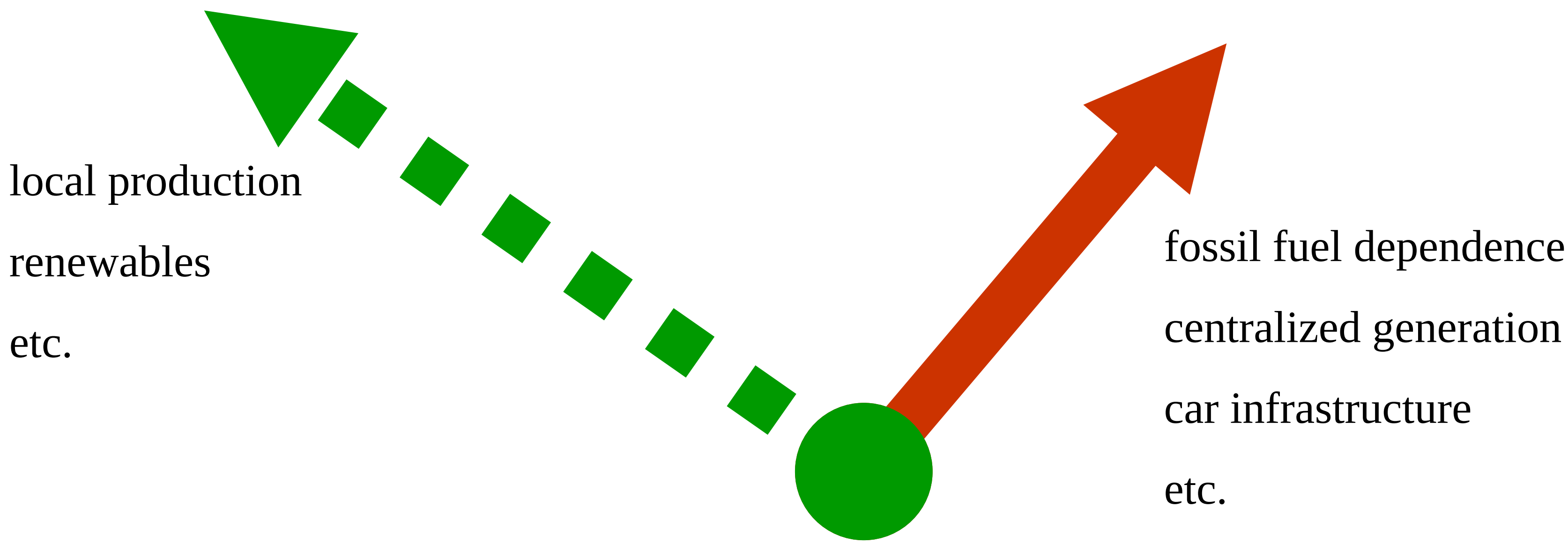
Efficacy in addressing global warming → attention to lock-in, path dependence, historical trajectories, structural nature of problem, positive feedbacks, innovation → non-neutrality in all respects

Brian Arthur

After all, if you’re going
to put a cork in it . . .

. . . you have to take account of

LOCK-IN



. . . and the fact that structural change has to be undertaken immediately to avoid more problems later . . .

e.g., putting off action from 2008 to 2012 toward achieving a target of 80% reductions by 2050 doubles the yearly rate of change required

. . . and avoid shocks and mechanisms from changes in political regimes that would derail momentum.

“Investments taking place today will lock us into an emissions pathway for the next 30 to 40 years. It will be far easier to ensure that installations being built today are sustainable now, rather than pushing for their large-scale closure and replacement five or ten years from now.”

Miles Austin,
EcoSecurities,
November 2007

“[T]he real action in the game is not about the most efficient allocation of existing resources, but the creation of new ones.”

Daniel Buck,
Oxford University,
2007

8. And carbon trading is even interfering with existing positive *pricing* policies such as carbon taxation . . .

3 March 2008 – The Swedish government has proposed lowering a tax on carbon dioxide emitted from installations covered by the EU emissions trading scheme (ETS).

Swedish industry currently has to pay a SEK605 (€64) CO2 tax per 1,000 litres of oil consumption, which the government proposes to lower to SEK432 for installations that are covered by the EU's cap-and-trade scheme for carbon dioxide emissions.

The country had previously sought to *remove* carbon taxes for companies covered by the scheme, but cancelled its plans after meeting resistance from the European commission.

However, as this is just a lowering of the tax, Sweden is confident it will be accepted by Brussels, said Lars Lundholm of the Swedish finance ministry.

– *Point Carbon*

. . . and the early regulatory support for wind that ensured Denmark's lead in the technology . . .

9. Much money that could be put to useful purposes is meanwhile disappearing down the black hole of fruitless attempts to measure the unmeasurable . . .

. . . whether it is the hopeless attempt to measure offsets . . .

“Offsets are an imaginary commodity created by deducting what you hope happens from what you guess would have happened.”

Dan Welch, *Ethical Corporation*

“There is no technically ‘correct’ answer … Never has so much been said about a topic by so many without ever agreeing on a common vocabulary.”

Mark Trexler, 2006

“There is no objective way to find out if a project would have happened without the CDM. If you are a good storyteller you get your project approved. If you are not a good storyteller you don’t get your project through.”

Lambert Schneider, Öko Institute, Germany, 2007

“What, exactly, are we trading in?”

Environmental Data Services Report, 2005

A growing “pseudo-knowledge”-producing infrastructure comprising hundreds of institutions and companies, thousands of careers and millions of useless dollars devoted to acting on the false assumption that

“reductions = offsets” . . .

PEDRO MOURA COSTA, co-founder of Oxford-based EcoSecurities, 44, made 4.8 million pounds ($10 million) when he sold some shares in the firm which helps convert emission cuts into tradable carbon credits. His remaining shares are worth about 37 million pounds ($73 million).

Q: How did you get rich?

A: I saw the carbon market could be big business and the Kyoto Protocol confirmed my views. But I didn't expect it to take 10 years to come into force.

ECOSECURITIES

. . . and control the rampant “cheating” made possible by unmeasurability . . .

ภาพนิ่ง 60

"Many carbon project proponents "tell their financial backers that the projects are going to make lots of money" at the same time they claim to CDM officials "that they wouldn't be financially viable" without carbon funds.

James Cameron, Climate Change Capital, 2006

There is a lot of relabelling of business as usual as "additional". Up to 50 per cent of projects are not really "additional."

Michael Schlup, The Gold Standard

"Seventy-one per cent of respondents agreed with the statement: 'Many projects would also be implemented without CDM registration'."

Öko Institute Delphi Survey, 2007

CDM carbon-accounting methodology “will create other Enrons and Arthur Andersens.”

Bruno vanderBorgh, Holcim Cement

Kyoto Protocol biotic offsets are “completely unverifiable”, making Kyoto a “cheat’s charter”.

International Institute for Applied Systems Analysis

"... prone to fraud and fluctuations beyond the control of the developer or the CDM Board."

O. P. R. Van Vliet et al., 2003

"If there's an eight-fold difference in price, we can't be talking about the same product."

Francis Sullivan, HSBC, 2005

"Bullshit . . . stupid . . . a mockery . . . an outrageous waste of public money."

UK Parliamentary Committee on the UK Emissions Trading Scheme, 2004

"The argument that producing pig iron from charcoal is less bad than producing it from coal is a sinister strategy . . . What about the emissions that still happen in the pig iron industry? What we really need are investments in clean energies that contribute to the cultural, social and economic well-being of local populations."

Letter from 50 trade unions, local groups and academics, Minas Gerais, Brazil

. . . or whether it is just the difficulty of measuring emissions only, for the purposes of pure cap and trade systems . . .

"It is not possible to verify data accurately and equipment is outdated and not suited to current standards of measurement in many cases."

Yvo de Boer, UNFCCC, October 2007

"UK greenhouse gas emissions could be much higher than government estimates, according to a new report by the National Audit Office. This is because of a high level of uncertainty surrounding emissions other than carbon dioxide, authors say. It is difficult to measure these emissions with accuracy, especially those arising from diffuse sources such as agriculture, they add.

ENDS *Europe* daily, 18 March 2008

"Although the market has accepted a certain level of inaccuracy in measurements, an even greater level of uncertainty shrouds the framework post 2012."

Hedge Fund Review, October 2007

"There is no reason to expect that countries will reduce their greenhouse gas emissions to comply with quotas that cannot be effectively monitored and enforced."

Daniel Cole, Indiana University

Making things the same for the sake of the market

Global Warming Potential (GWP) and the absorption of unknowns

1990: IPCC offers "preliminary" estimates of GWPs of 19 gases, not including HFC-23.

1995-6: List expands to 26, including a GWP estimate for HFC-23 of 11,700. Fungibility and liquidity in the future carbon market are promoted, but scientific questions (arbitrary time periods, uncertainties, different effects of pulse emissions of different gases on temperature at different times, extent of damages) are concealed or "black-boxed".

1997: Kyoto Protocol dictates that such GWP "exchange rates" are to be used until 2008-12.

2007: Consensus estimate of HFC-23's GWP **rises from 11,700 to 14,800**. Cash equivalent of the change at the scale of HFC-23 offset market to 2012: **$927,000,000**.

Source: Donald MacKenzie, "Making Things the Same," forthcoming 2009

10. Carbon trading is also undermining public awareness and political participation and creating ignorance.

For example, carbon offset trading teaches buyers that:

- Emissions are due to individuals, not social choices.
- We can exercise our responsibility just by individual consumer action.
- Fundamental change is really hard.
- Climate action is highly technical and mostly about numbers.

“I am astonished I have been such a monster.”

Executive trainer Charlotte Robson, on learning that her ‘personal ‘carbon dioxide footprint was 24 tonnes per year

“A cost of £156 is nothing. Think of the money you spend on lipstick and magazines.”

Charlotte Robson, on learning that a payment to CNC would ‘neutralise her emissions’.

The offset market meanwhile does **not** *teach buyers that:*

- Climate change is a problem of historical power imbalances and large-scale social/technical processes and has to be tackled through political and social organising.
- Even what offset companies present as “unavoidable” emissions are avoidable through social action.
- There are limits to using unseen Southerners to assuage middle-class individual Northern guilt.
- The emerging climate movement has many encouraging precedents, not in consumer choice, but in other social movements against inequality and exploitation.

The biofuel stove system part of which appears in the right background is supposed to replace the use of firewood such as that piled behind the concrete biogas well.

Offsets also create ignorance about consumers' own ignorance. Without carbon trading, we would not imagine that we know all about distant offset locations we have never visited. This is an offset project in Rajasthan that uses money from one of the most "transparent" private offset companies according to *Which?* magazine, Britain's Climate Care firm. The firm's offices are located approximately 8000 km from the site.

"[Through the Kyoto carbon trading mechanisms,] the debate on climate protection has been moved increasingly out of the everyday world into the hands of 'global resource managers'. The escape hatches which the documents leave open can hardly be identified by the experts themselves, never mind by the broad public. . . . the causes of the risks produced by climate change and capitalism's destructive relationship with nature are no longer discussed. . . . what is really important about Kyoto is what has been neglected, postponed, left out, omitted and lost since the beginning of the conference series . . . [Climate policy's] emphasis on economic instruments . . . largely excludes alternative approaches to solving the problem, such as a far-reaching structural change in energy production and use."

Achim Brunnengraber,
Free University,
Berlin,
2007

"From a critical international relations perspective the carbon offset market epitomizes continued neo-liberal governance building on **a capitalist compact between business and government elites in industrialized and developing countries** . . .**effectively marginalize[s] local actors . . . and reproduce[s] patterns of inequity**. In a similar vein the technocratic and administrative control and verification apparatus . . . contradicts the image of the international climate regime as an expression of a less state-centric and just market order. Instead of promoting active participation of non-state actors on equal grounds, **the . . . project cycle privileges the managerial perspective of Big Science and policy elites**."

Karin Backstrand and Eva Lovbrand, 2006

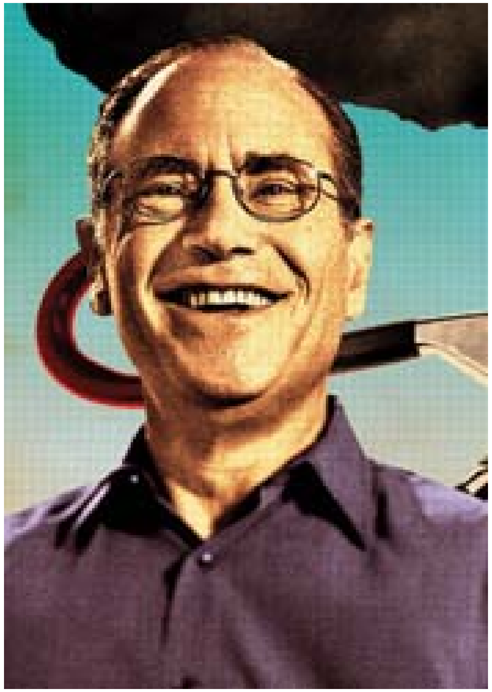
“In India, people see their land taken away and destroyed both for big and ‘sustainable’ developments, for large dams and small hydros (Uttaranchal), new carbon sinks (ITC, Andhra Pradesh), environment-friendly wind mills (Maharashra, Satara), and liquid and gaseous filth from the ‘clean and green’ companies poison their soils, rivers and air. Beyond boundaries of their everyday lives and knowledge, climate games go on with baselines, BAUs, additionality and CER vintages. The Himalayan glaciers meanwhile continue to melt, cloudbursts and flash floods wipe away whole villages, prolonged droughts and extremes of temperature create havoc with agriculture, and cyclones devastate fisherfolk villages. The real and perceptible danger of climate change is offset by the illusion of the most absurd and impossible market human civilization has ever seen.”

Soumitra Ghosh,

National Forum of Forest Peoples

and Forest Workers

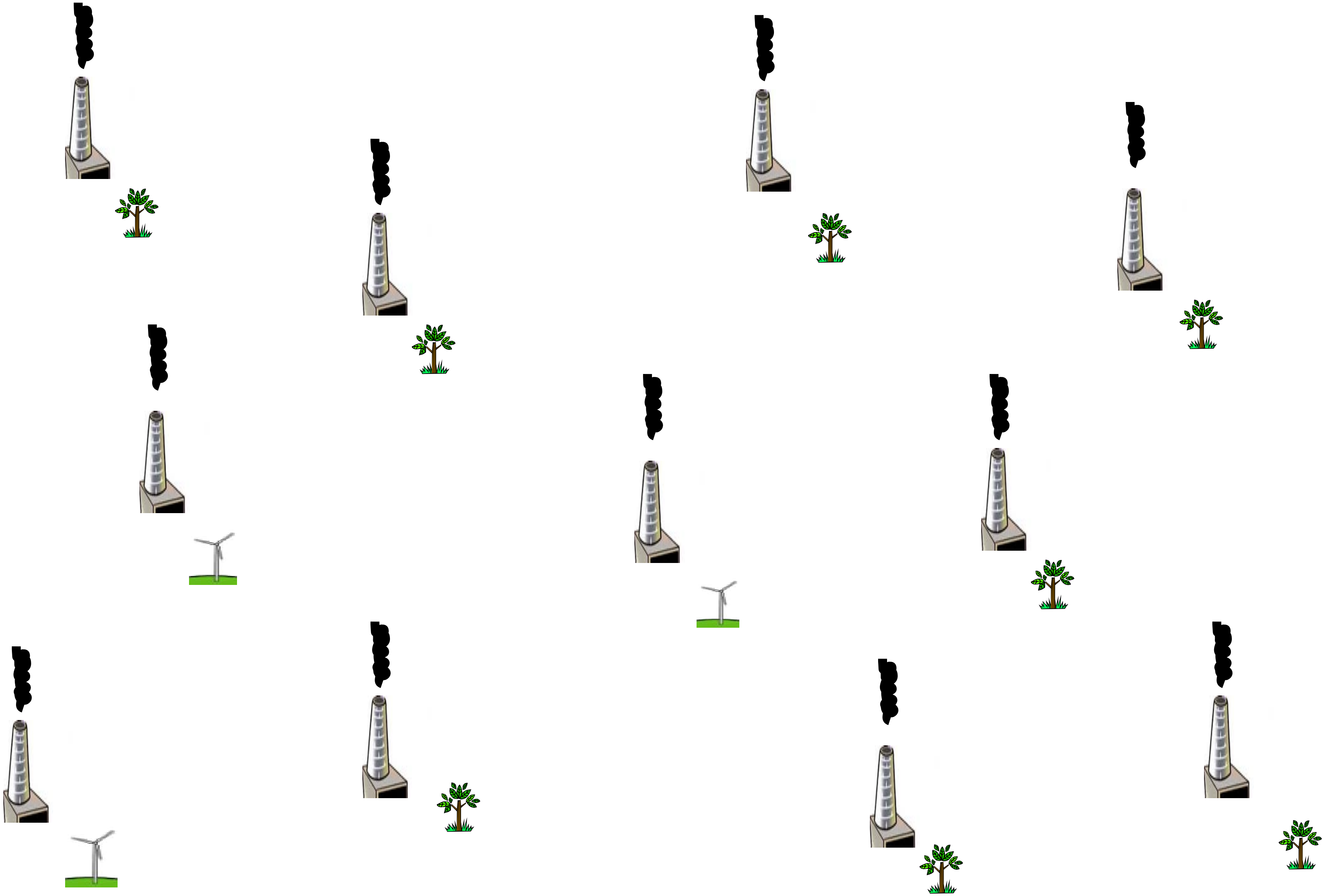
Vast ignorance is also created among the carbon traders themselves and their media apologists . . .

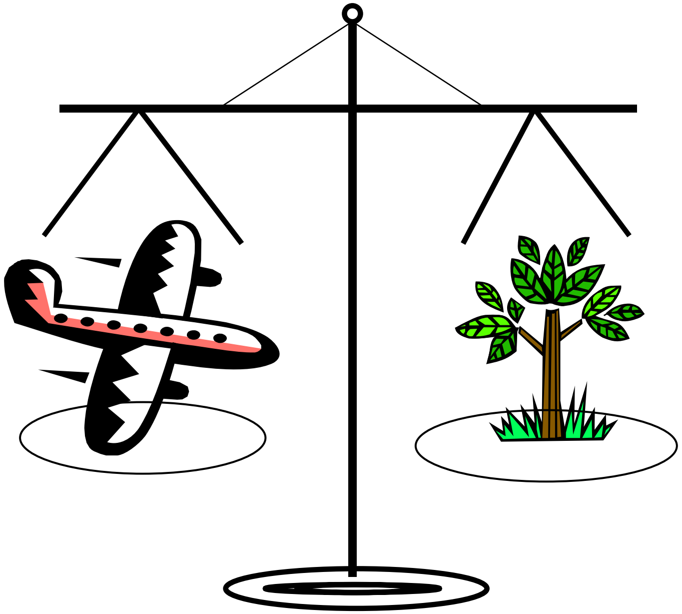


Richard Sandor, Chicago Climate Exchange

"I got a call from a scientist a while ago"—Isaac Berzin, a researcher at M.I.T. "He said, 'Richard, I have a process where I can put an algae farm next to a power plant. I throw some algae in and it becomes a super photosynthesis machine and sucks the carbon dioxide out of the air like a sponge. Then I gather the algae, dry it out, and use it as renewable energy." Berzin asked Sandor whether, if he was able to take fifty million tons of carbon dioxide out of the atmosphere in this way, he could make a hundred million dollars.

"I said, 'Sure,'" Sandor recalled, laughing. "Two dollars a ton, why not?" . . . it didn't take Berzin long to raise twenty million dollars from investors, and he is now working with the Arizona Public Service utility to turn the algae into fuel. Sandor shook his head. "This is at two dollars a ton," he said. "The lesson is important: price stimulates inventive activity. Even if you think the price is too low or ridiculous. Carbon has to be rationed, like water and clean air. I absolutely promise that if you design a law and a trading scheme properly you are going to find everyone from professors at M.I.T. to guys in Silicon Valley coming out of the woodwork. That is what we need, and we need it now."



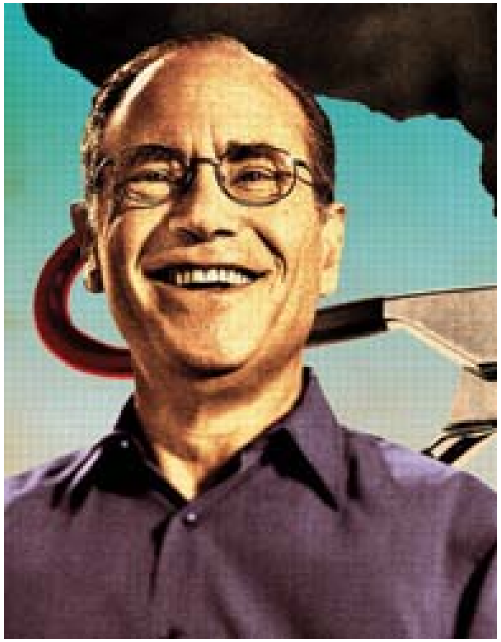


“From both a political and an economic perspective, it would be easier and cheaper to reduce the rate of deforestation than to cut back significantly on air travel. It would also have a far greater impact on climate change and on social welfare in the developing world. Possessing rights to carbon would grant new power to farmers who, for the first time, would be paid to preserve their forests rather than destroy them.”

Michael Specter, *The New Yorker*, February 2008

“Frankly, the debate [over offsets] just makes me want to scream. The clock is moving. ***They*** are slashing and burning and cutting the forests of the world. It may be a quarter of global warming and ***we*** can get the rate to two per cent simply by inventing a preservation credit and making that forest have value in other ways. Who loses when we do that?”

Richard Sandor,
quoted in *The New Yorker*,
February 2008



11. Carbon trading also undermines the ability of states to undertake positive action.

Under neoliberal approaches such as carbon trading, states are "progressively losing their capacity to plan effectively for a rational policy at even the national level."

Leo Panitch and Colin Leys,

University of Toronto, 2007

" . . . mitigation activities in developing countries provide politicians in industrialized countries with a welcome strategy to divert the attention of their constituencies from the lack of success in reducing greenhouse gas emissions domestically."

Axel & Katharina Michaelowa,
Climatic Change, September 2007

“In politics, sunk costs are often seen as political capital or as an investment of reputation and status. So we acknowledge that those advocating the Kyoto regime will be **reluctant to embrace alternatives** because it means admitting that their chosen climate policy has and will continue to fail. But **the rational thing to do in the face of a bad investment is to cut your losses and try something different**.”