



The Katrina Effect

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Renew Hope with Renewable Action

I must confess that I have given up.

I have been resisting buying a new house – conventional cement-concrete that is, for quite a few years. I (idly) thought of creating my own place – looking at all the new-appropriate technologies and traditional knowledge systems still available to us.

Yes, our apartment building will have a centralized solar-heating system and individualized water-meters. And, I will have to buy a new bicycle alongside the car that I might finally bring home this month – given where I stay, a bicycle will not last more than two years, and if some input from S & T is available to the lowly bicycle, I might be able to push it along for five years (can the washerman who irons my clothes afford to buy a bicycle every second year?)

Yet, I will still dream of a home with all my ideological fantasies in place.

Until then resigned I am, to the system. But not without hope.

The tide is turning – surely. And if all the wisdom spouted by the traditionalists, the left, the greens and the deep-ecologists did not work, the rapid rise in oil prices has – and so has Katrina. Hurricane Katrina has hit the neo-cons, the ‘small(government)-is-beautiful’ propagandists, the climate-change doubters, where even the forest fires of the last few years in Australia, the US, Spain and Portugal; and the heat-wave that killed scores in France; and the spate of floods in Europe, did not touch these die-hards a bit. Katrina has shaken the establishment like nothing else has – and not just about climate change, but also about the very nature of the dominant thinking on government, public and private spaces, the rich and the poor, the limitations of ‘free’-market, etc.

But hope needs to be nurtured, mollycoddled, - in order to survive, in order to thrive, in order to bring into predominance the practice and acceptance of what is only in the realm of dreams and possibility.

Renewable Energy is what we see today as that possibility – some of it practised through the ages, some of it modern-day inventions, much of it nascent, experimental, costly, uncertain and unable to beat the system. But it is the widespread use of these inventions and technologies that will result in economies of scale, and bring them within the reach of those who wish to live more sustainable lives through their daily choices in transport, power, and housing.

Unless, of course, we wish to underwrite the pernicious delusion that nuclear fission is the answer to Climate Change! India seems to be sidling on to this path.

India also seems to be playing footsie with American intransigence on Kyoto, as parties to the UNFCCC begin the countdown to 2012 by when the Kyoto Protocol will have run its course. COP11 at Montreal sets the ball rolling for the 2012 deadline.

Living Religion tells us that we do need to get back to the simple basics in our worldviews – but not to bigoted fundamentalism as is understood and increasingly practised among sizeable sections of the major organized or widespread religions of the world today – whether Christianity, Islam, Buddhism, or Hinduism; or even Socialism!

Let us, in turn, not be bigoted about ‘renewable’ as the ultimate mantra, - but until other technologies in conception in our diverse laboratories come by, this is all that we have that can give us a concrete alternative to the mad rush to self-destruction that we are currently compulsively collectively colluding with.

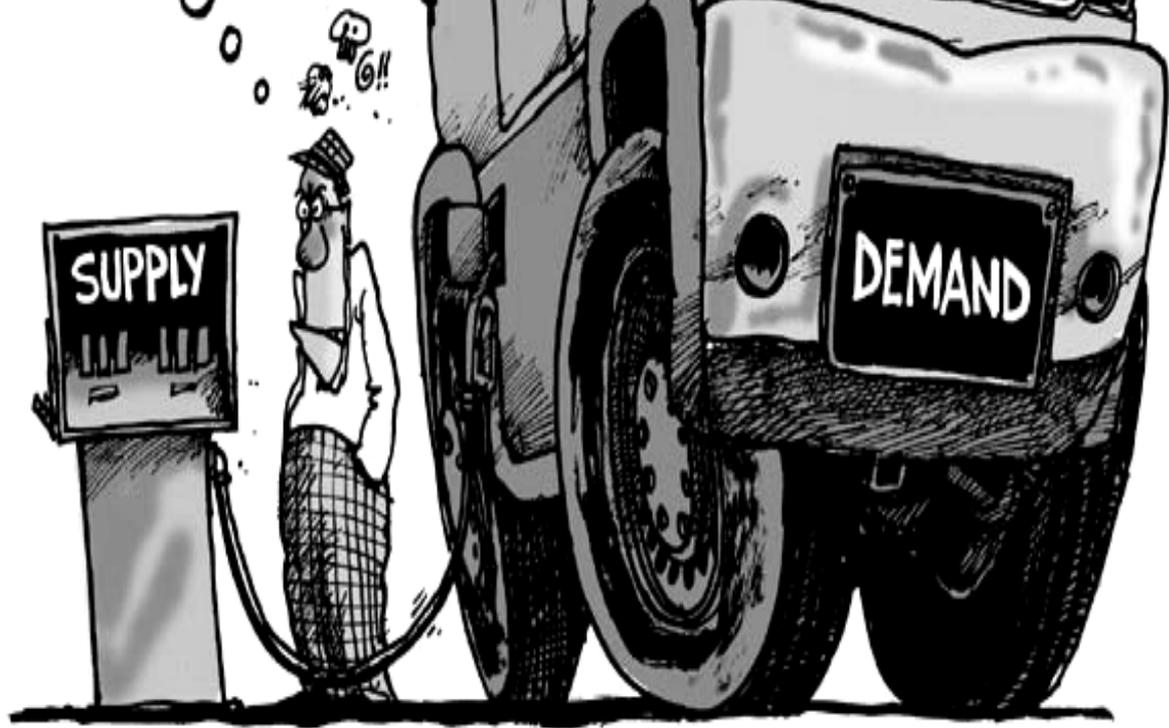


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JUST WHY
IS GAS SO
EXPENSIVE?



The Renewable Imperative

As oil prices shoot up to historic highs, India must immediately redouble its renewable energy programme, with a strong emphasis on rural energy security based on biomass and wind power, with employment generation tied to it.



K.K. Mustafah

Windmills in farm near Nagercoil in Tamil Nadu.

India's renewable energy programme is looking up under the Ministry of Non-Conventional Energy Sources (MNES). While its expansion is nowhere near the potential for - or imperative of - growth, its overall performance has improved significantly with energy capacity doubling over the last four years.

As of now, renewable sources contribute 5,077 MW in electrical capacity to the 100,000 MW-plus national grid. Off grid, their capacity appears even more modest - just 130 MW (70 MW from solar photovoltaics and 60 from biomass gasifiers). But some of this energy lights homes (some 800,000 of them) mainly in remote villages where darkness would otherwise rule for years. In addition, India has 850,000 m² of solar-thermal collectors mainly for low-temperature applications. Of the grid-connected power from renewable resources a little over one-half comes from wind, about 1,600 MW from small hydro-electricity projects, and just under 700 from biomass.

Wind Power – Impressive Growth

The most impressive story here is that the growth

of wind-driven power generation, capacity of which has doubled over three-and-a-half years. Last year, its growth rate rose to 100 per cent. According to MNES sources, wind generation today contributes an electrical capacity of 2,731 MW. Quite simply, wind energy has just overtaken nuclear power generation, which according to the Nuclear Power Corporation (NPC) web site, has a capacity of 2,710 MW spread over six stations. At this moment, another 60 MW is being added to India's wind farms.

By this current financial year, wind generation is expected to notch up a total of 3,200-3,300 MW. After that, some big projects, in the 500 MW range, are expected to come on line. (The Oil and Natural Gas Corporation and Reliance have already tendered for projects in that class.) India now boasts of Asia's biggest wind farm (298 MW) at Satara in Maharashtra. It could soon enter into the same league as Denmark, Germany and California in total wind-generation capacity. Indian companies, which started with small 20-50 kW turbines, are beginning to instal big generators with capacities that are a couple of orders of magnitudes higher - 2 MW each.

All this has taken place without a fuss, without huge publicity, and without massive public investment in research and development and other subventions or big subsidies - unlike, say, in the case of nuclear power. The expenditure budget for 2004-05 of the Department of Atomic Energy (DAE) is Rs.4,470 crores. Its principal research and development organisations alone absorb over Rs.1,200 crores a year. The Bhabha Atomic Research Centre annually costs the exchequer Rs.954 crores, the Indira Gandhi Centre for Atomic Research, Kalpakkam, another Rs.164 crores, the Centre for Advanced Technology, Indore, Rs.101 crores and Kolkata's Variable Energy Cyclotron, Rs. 76 crores.

True, there is a varying element of subsidy for wind generation that is determined by state-based electricity regulators. But this is moderate, usually under Re.1 a unit. The point is, wind generation can deliver power commercially at Rs.2.70 to 3.50 a unit - and make a profit.

Any renewable energy source which is clean, does not leave a huge stream of waste, and which does not contribute to greenhouse gas (GHG) emissions, emphatically deserves generous public support. Its real, long-term social costs are considerably lower than those of conventional energy, despite deceptively low short-term claimed costs. Wind is growing remarkably fast even with modest to moderate support.

It must be conceded that wind farms have problems. They are noisy, aesthetically unsuitable in some places, and often occupy too much space. (There is also the unproven belief in Maharashtra that they interfere with rainfall.) But these disadvantages must be weighed against both the merits of wind and defects of other technologies, for example high levels of pollution and GHG emissions from fossil fuels.

Impressive as the potential for wind generation is - now raised to 45,000 MW (gross) nationally - **it is still seen primarily in terms of grid-linked power. But it should be used in decentralised stand-alone modes, specifically for rural applications.**

Bio-mass

-a decentralized Village-Based Option

The greatest renewable resources in this respect is biomass, with its amazing versatility and its omnipresence. India, as has been said, is a biomass-based society. This is especially true of rural India, where 72 per cent of the population lives. Almost a third of all energy consumed in India comes from non-commercial sources like fuel wood (220 million tonnes), and animal dung and agricultural wastes (130 mt.).

Villages are the site of India's gravest energy crisis, both commercial - commercial forms are dear and scarce - and non-commercial - because biomass sources are becoming less accessible and more expensive and because common property resources are being privatised. Officially, over five lakh of India's six lakh villages are "deemed" to be "electrified": defined as a minimum of 10 per cent of households being connected to power supply. This rarely translates into access to power, however reliable, for a majority of village homes.

Only 44 per cent of India's 138 million rural households use electricity for lighting - a particularly efficient and desirable application of power. Over 55 per cent still use kerosene - a grossly inefficient source, which is increasingly becoming expensive too. In recent years, rural India's dependence on fossil fuels has grown thanks to an appalling power supply situation, and greater reliance on diesel for irrigation pumpsets and other agricultural applications.

There is a compelling argument for a holistic approach to rural energy, which focusses on the demand side (or on the services that energy is meant to provide), which strongly relies on locally available resources, and which is environment-friendly, sustainable and affordable - in accordance with the paradigm developed by Professor Amulya Kumar N. Reddy, a pioneer in rural energy systems analysis and one of the world's greatest energy planning experts. His work, launched through ASTRA (Application of Science and Technology to Rural Areas) of the Indian Institute of Science, Bangalore, in the 1970s and since carried forward, remains a

contd p10-->

Blueprint for Sustainable Development

LESTER BROWN, the Founder-President of the Earth Policy Institute, Washington, is a doughty green warrior of impeccable credentials. Planet Earth, in his eyes, is indeed in peril as evidenced by burgeoning undernourished populations, the HIV/AIDS menace, water stress, falling land productivity and adverse climate change induced by greenhouse gas build-up in the atmosphere.

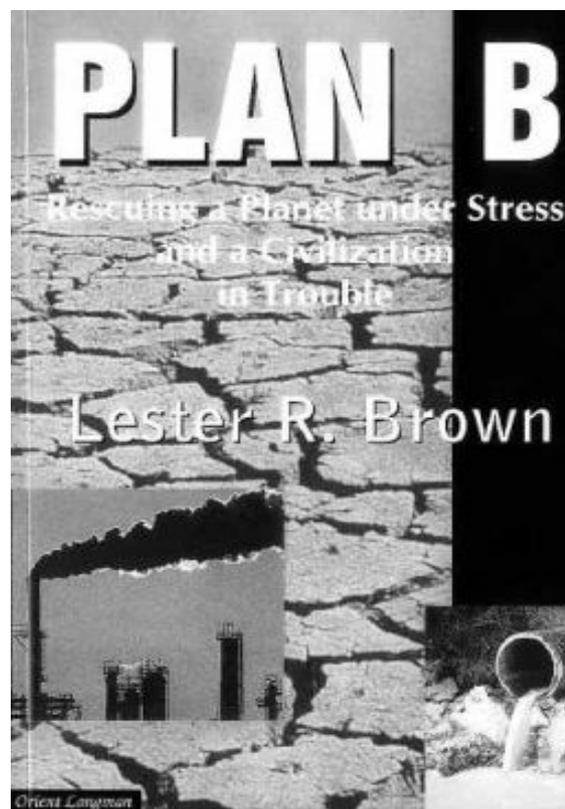
By their very nature, these issues cannot be tackled by mere technological fixes. What Plan B advocates is a transformed lifestyle marked by the small family norm, switchover to an economy based on renewable energy, water use efficiency and above all a world that believes more in human development than in an arms race.

The great divide

Brown draws upon a vast mass of data in picturing the challenges facing mankind. What emerges strikingly is the great divide between one section of humanity and another. On the one hand, there are those who have a surfeit of everything and on the other are those who have very little of anything. Thus, in a world of five billion people, about 1.2 billion are over-nourished and an equal number are grossly undernourished. While in some countries more than half of all young men and women are college graduates, there are 875 million illiterate adults in others.

Life expectancy is set to fall precipitously in many regions of Africa due to the spread of AIDS. In sub-Saharan Africa, it has fallen from 62 years to 47, from 70 to 40 in Botswana and to 33 this year in Zimbabwe. South Africa, under White rule till a few years back, would experience a shrinkage in life expectancy to 42 years from 68.

The fall in productivity of agricultural lands is a global phenomenon. The annual rise in land productivity that averaged 2.1 per cent in the period 1950 to 1990 fell to one per cent during the next 12 years. Between 1997 and 2002, the average annual rise was a mere half per cent. As a result, per capita grain production, which climbed from 251 kg in 1950 to 344 kg in 1984,



PLAN B — Rescuing a Planet Under Stress and a Civilization in Trouble: Lester R. Brown; Orient Longman Pvt. Ltd., 1/24, Asaf Ali Road, New Delhi-110002. Rs. 330.

fell to 290 kg in 2002.

The blame for the fall in land productivity can be ascribed to poor land management encouraged by poor government policies. Governments extend wrong subsidies, more people lead to fragmentation of land holdings and markets send out wrong signals to agriculturists.

Global warming

The water crisis, asserts Brown, is again manmade almost totally. Water suffers from all the misuses and abuses to which all public goods are subject. It is either not priced at all or grossly under-priced. Free electricity supply to the farm sector, as in India, has only encouraged wasteful use of electricity as well as of water. In many

parts of the world, even the non-rechargeable aquifers have been exploited to exhaustion. Brown shares the grim view of many scientists that the biggest threat to mankind's survival may arise out of global warming. Of the greenhouse gases, the most prominent one namely carbon dioxide is emitted by the burning of fossil fuels like coal, oil and natural gas for myriad purposes.

The fossil fuel driven economic growth that began in the last century is like an expanding soap bubble that may burst sooner than later. Hence, Brown argues for less dependence on fossil fuels and greater reliance on solar and wind power, hydro energy and hydrogen.

Sustainable model

Plan B's messages make one recall the prognosis made by the Brundtland Commission almost two decades back. The call for sustainable development is being heard but sadly not still acted upon vigorously.

There could be three possible reasons for this inaction. One could be that history had proved false many an apocalyptic prediction beginning from that of Malthus in the 19th Century to the "Limits to Growth" study in the 1970s. The other could be the familiar "Prisoner's dilemma" which makes each country feel that adoption of any alternative model of development may leave it disadvantaged compared to others. The arms race is a testimony to this dilemma.

On top of it all, disagreements among scientists

on issues like climate change and scepticism on the part of economists of concepts like sustainable development have not helped matters much. There is a beguiling and self-deluding comfort in following what Brown calls Plan A, "Business as usual."

Plan B may, at first sight, appear to be unfeasible given the sea change in attitudes and goals that it calls for. But, surprisingly, the world is already moving towards its implementation, albeit slowly and unnoticeably. Take energy. One cannot fail to appreciate the progress made by Europe in switching over to renewable sources of energy.

Germany already has 12000 MW of wind-based electricity generating capacity and Denmark with 2900 MW is meeting 18 per cent of its electricity needs through this renewable source. India has an impressive fifth position in the world with 1700 MW of which Tamil Nadu accounts for two thirds.

Restoring the productive capacity of agricultural lands is receiving priority, notably in the U.S. Striking advances have been made the world over in water conservation in agriculture and industry.

The question, therefore, is not whether sustainable development is achievable or not but of converting people to believe in it. In fact, the world is not so much in need of monumental scientific and technological breakthroughs to improve peoples' living standards as of a just and equitable economic order. Brown's message is straight and simple. ☺

N.R. Krishnan, Book Review, The Hindu, March 29, 2005

Reducing oil dependence in the future

It is time we followed traditional wisdom in exploiting indigenous sources of energy - commercial and non-commercial - to fuel economic growth.

The Ministry of Power has identified 50,000 megawatts of hydel capacity that it deems feasible. Many of them are run-of-the-river, mini and micro-hydel projects that can be built speedily without involving massive relocation or rehabilitation. Hydel is a clean source of energy without recurring fuel costs and it needs to be fully exploited, before we rush to add more gas-based capacity.

We must also fully harness non-conventional sources of energy such as crop residues and biomass, but while doing so, we must employ technologies that will enable us to utilise these indigenous resources in a clean, efficient and sustainable manner.

Simultaneously, we must beef up our public transport systems and provide a clean and affordable alternative to the present profligate and unsustainable quest for personalised transportation. Even when we implement all the measures outlined above, our dependence on fuel imports will continue but at least we can slow down the pace of growth.

Sudha Mahalingam, Opinion, The Hindu, Apr 23, 2005

From The Sun To The Masses



With an energy crisis looming large, here's the success story of solar energy and its multiple uses

Thane city is acquiring a brand new image—an environment-friendly makeover. Large-scale use of solar energy, which was considered a somewhat far-fetched concept, has brought in real benefits and results in cost and energy savings. It's being applied to heat water, power traffic lights and advertising hoardings. And leading this unique experiment is the Thane Municipal Corporation. In fact, two months ago, the corporation made it mandatory for all new buildings in the city to instal solar water heating systems.

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Top Her Up With Jatropha



With several commercial trials showing encouraging results, biodiesel may be the next big thing in fuel.

This could be the beginning of another green revolution. Only, it won't be in agriculture. Instead, it has the potential to change the energy landscape of India, as well as other crude-deficient, yet oil-guzzling economies.

Imagine buses, cars and superfast trains running on fuel extracted from plants. Welcome to the world of biodiesel, a natural fuel made from plant extracts. We're talking of living, growing ones—and not the fossilised ones that take millions of years to transform into crude.

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**Hydrogen-fuelled cars
could be just 3 years away**



**The Indian Oil Corporation has set itself a bold target
in eco-friendly fuel development**

In a joint initiative with India-based electric car pioneer, Reva, the public sector company's Faridabad-based research arm will create by 2008 the infrastructure and logistics to service 1,000 vehicles running on a hydrogen-based fuel cell.

The announcement here, timed for World Environment Day (June 5), will see Reva build two test cars, running on futuristic fuel cells which will pump out 5,000 watts of motive power by converting hydrogen fuel and oxygen from the air, in a chemical reaction, to generate electric power.

All that Gas



**Brazil leads the charge in alternative fuels ready
to give crude oil a run for its money**

Brazil's Rio de Janeiro is known for its annual February festival, beautiful beaches, and its fun-loving mindset.

It's a city where there's a party on 24 hours despite warnings by locals not to walk alone at nights. But at the state-owned Petrobras (short for *Petróleo Brasileiro*) headquarters, officials are seriously working on a blueprint to make Brazil a dominant player in the global energy game. For them, the time to act is now; they can party later—that is, once Petrobras cajoles fuel guzzlers like Japan, India and China to adopt ethanol as a petrol substitute to attain energy security.

guiding beacon in this regard. (He has since further refined his analysis in the International Energy Initiative.)

The MNES has now embraced this very approach, and drawn up a plan for creating energy security in villages based on biomass. Briefly put, its scheme aims to meet the total energy requirements of cooking, electricity and water pumping through locally available biomass resources. The strategy relies on plantations of fast-growing trees and oil-bearing plants raised by local communities.

The plan has modules of 100 households. It has three main components besides energy plantations: cooking energy; electricity generation and supply; and motive power for irrigation pumps, and so on. A successful village energy plan should eliminate all use of diesel and kerosene, improve cook stoves, supply adequate biogas, and generate enough electricity for lighting homes, schools and clinics, and powering rural industries.

The crucial link between biomass and power is the gasifier or biomass engine, which generates producer gas (containing carbon monoxide and other products of controlled combustion). This technology was used during the World War to cope with acute scarcity of petroleum, and has been further developed since, including in India. MNES has identified about 15 manufacturers of gasifiers, who supply units of up to 500 kW capacity. So far, 1,850 gasifiers have been installed.

Another important plank of the plan is biofuels produced from oil-yielding plant species such as *jatropha*, *karanj*, *mahua*, *kusum* and so on. The Botanical Survey of India (BSI) has identified more than 400 species that can yield oil, which can be burnt in place of diesel in an engine powering an irrigation/drinking water pump.

The MNES plan seeks to use biomass of various kinds: woody biomass and agricultural wastes, animal dung and leafy biomass, as well as oilseeds. The dung and leaf/waste would be digested in biogas plants to generate 72 cubic metres of cooking fuel for the 100-household villages. The

gasifier, accounting for about half the total cost of the project, would provide enough fuel to generate power for five and a half hours a day for all households, run three irrigation pumps for three hours a day for 100 days, and supply 5 kW to rural industries - an annual total of 50,000 units, a little over 70 per cent of it for domestic and community use. There would be some additional income from oilcake made by expellers too.

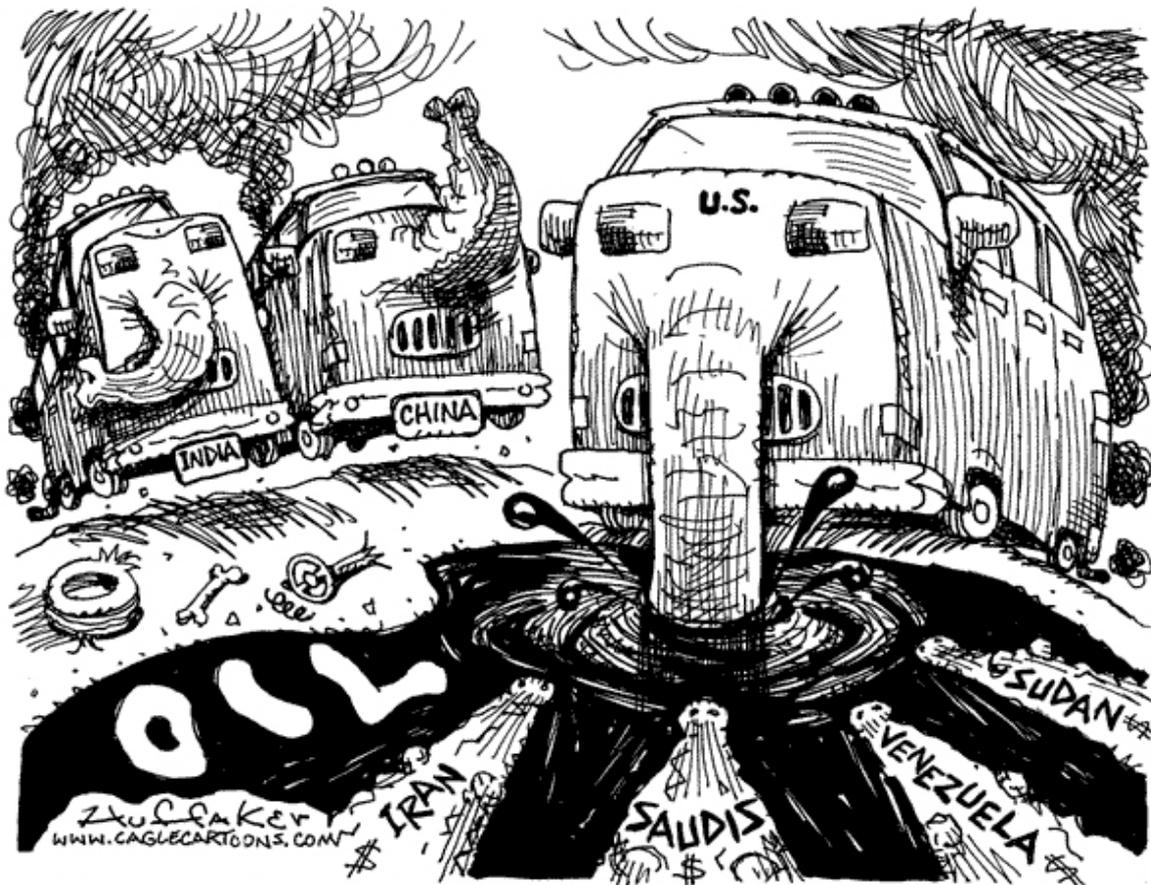
The total cost of the project per village works out to Rs.20 lakhs - no mean sum, but by no means unaffordable if loan and grants are given. The MNES reckons that such a rural energy security plan could deliver power at about Rs.4 a unit to industry/irrigation, and supply adequate power for basic use (two light bulbs, and an optional fan or a TV set, and so on) to every household at a cost varying from Rs.60 to Rs.135 a month (depending on how much money is given as loans or as grants). In addition, it will make each home self-sufficient in cooking energy, and power needed for irrigation - and totally independent of diesel and kerosene.

The plan is eminently worthy - the more so because it promotes a bottom-up approach. It must be tried out through people's participation and self-help groups' involvement on a large scale, for example, perhaps 20,000 villages, so it can be fine-tuned to different climatic conditions and energy-use patterns before it is universalised to all panchayats. This could be usefully combined with resource-mapping surveys by local students and creation of networks of young people who learn to maintain the various systems.

The village energy security concept offers tremendous possibilities for grassroots-based planning and energy-user cooperation from below. Above all, it has the merit of creating jobs - on plantations, in biomass collection, oilseeds processing, power distribution, and rural industries. The future of energy security of India's villages lies in this direction - and away from petroleum. ☺

*Prafull Bidwai, Frontline,
Vol 21- Issue 22, Oct 23-Nov 5, 2004*

KYOTO in Tatters ?



Overnight, the EU is suddenly no longer driving international climate change policy. This was symbolically demonstrated at the conference when Paula Dobriansky, the senior US State Department official, showcased US partnerships with other countries on projects to reduce greenhouse gas emissions. **On the platform with her were representatives of China, India and Italy.**

To the dismay of the European Commission (and green NGOs) it quickly became clear that the US, Australia and some developing countries had teamed up to oppose any strategy for a Kyoto Mark II or any similar arrangement with binding commitments. Without something like that, there will also now not be any global system of trading credits for carbon dioxide emissions. To have credits to trade, countries have to limit production of carbon dioxide. That needs a global treaty. Unless the US, China, India and other developing countries change their mind, there will be none.

*By Alan Oxley - posted Friday, December 31, 2004
ON LINE opinion – Australia's e-journal of social and political debate*

New Climate Pact: for good or bad?

On the surface, there's no conflict between the new Asia-Pacific Partnership for Clean Development and Climate and the United Nations process which led to the Kyoto Protocol.

So said Australia's Environment Minister Ian Campbell on Wednesday; so said US Deputy Secretary of State Robert Zoellick as he unveiled the pact in the Laotian capital, Vientiane.

But as the principal architects of this new agreement, the US and Australia would say that, wouldn't they?

Scepticism

Why, then, are environmental groups so down on the pact - and are they right?

"We should recognise this as a serious attempt to come up with something which is needed if the major developing nations are to be engaged," commented climate change specialist Jacqueline Karas, from Chatham House, the Royal Institute of International Affairs in London, to the BBC News website.

"The US has succeeded in engaging with three major developing economies in an effort to ensure they don't have to follow the same polluting path that industrialised countries followed in their development.

"But I think at the same time it is fair to say it's a serious attempt by the US to deflect attention away from their own profligate emissions - to look at technology for tomorrow rather than at cuts for

today - and it may also be timed to attempt to undermine negotiations in Montreal."

In Montreal, at the end of November, delegates from nearly 200 nations will convene to try and work out a path beyond the Kyoto Protocol.

The European Union believes such a treaty must include mandatory, binding cuts in greenhouse gas emissions.

"[The Asia-Pacific pact] is no substitute for agreements like the Kyoto Protocol and we do not expect it to have a real impact on climate change," the European Commission's environment spokeswoman Barbara Helferrich told BBC News.

"There will have to be binding global agreements, but on what scale and what basis is yet to be decided."

This vision is the polar opposite of what's included in the Asia-Pacific agreement, which is entirely voluntary, entirely technology-based, with no binding targets for reducing emissions, no sanctions, no mechanisms, and as yet no funding.

"What is different and what is disturbing about this initiative is the attempt to organise a bloc of developing countries, including China and India, around what's officially a complementary approach but which could be converted into an opposing bloc," Philip Clapp, president of the political lobby group the National Environmental Trust in Washington DC, said. ☹

*Richard Black, BBC Environment Correspondent,
BBC NEWS Science-Nature, 28 July, 2005*

EU pushes binding Climate Deal

The European Union says it will push for legally binding global restrictions on greenhouse gas emissions.

A spokeswoman's comments came after the announcement of a voluntary pact, based on new technology, between the US and five Asia-Pacific states.

She also told BBC News that the new pact was unlikely to bring a significant reduction in emissions.

The EU's intention to pursue further legally binding reductions could lead to political disputes later this year.

'Superior' deal

The new pact will allow signed-up countries - currently the United States, Australia, China, India, South Korea and Japan - to set goals for reducing greenhouse gas emissions individually, with no enforcement mechanism.

The core approach is to develop clean technologies, such as low-emission coal-fired power stations, which can be used in developing countries as their energy needs increase.

The signatories argue it complements, rather than weakens, the 1997 Kyoto agreement, which imposes targets on industrialised countries to cut their emissions.

Speaking at the announcement, which came during the Regional Forum of the Association of South-East Asian Nations (Asean) in Laos, US Deputy Secretary of State, Robert Zoellick, said the six nations "view this as a complement, not an alternative" to Kyoto.

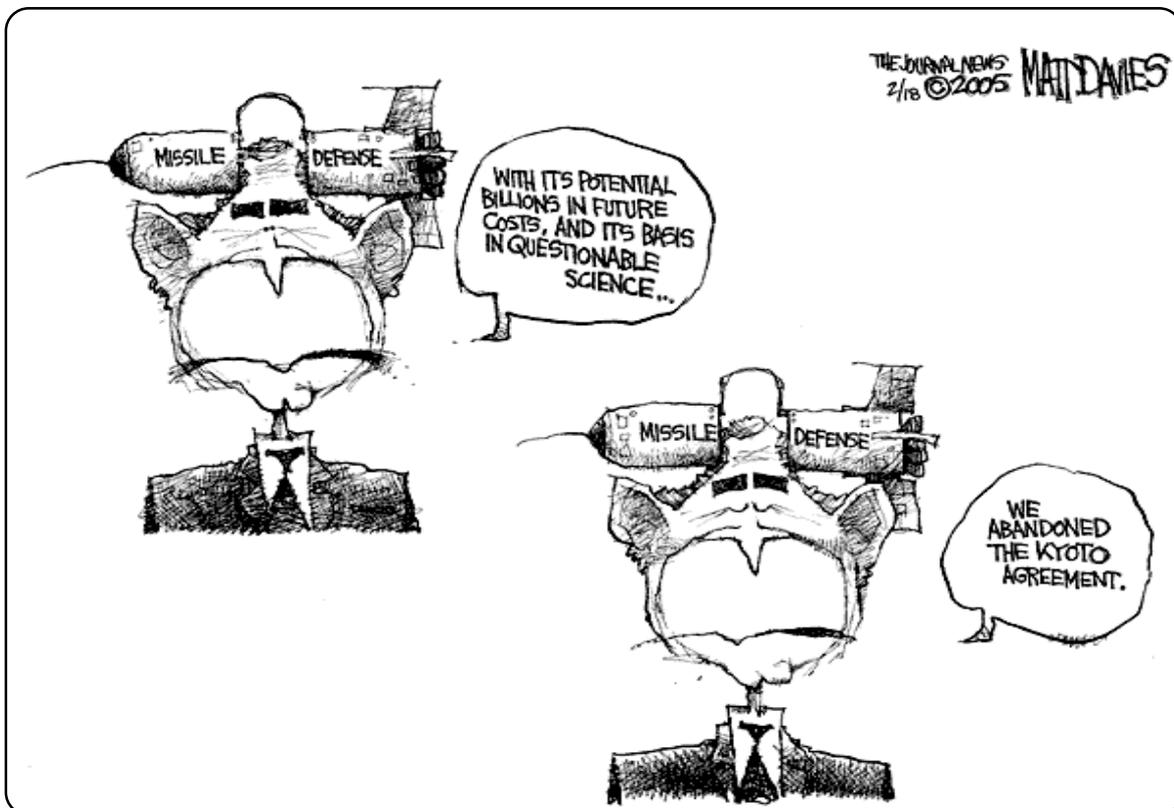
Both the US and Australia have refused to ratify Kyoto, which came into effect earlier this year - partly, they say, because big developing countries like India and China escape emissions limits.

Australian Foreign Minister Alexander Downer told BBC News: "Our view is you really need to focus on technological change to solve the climate change problem... and you do have to involve the major developing countries, which are very substantial emitters."

A Chinese spokesman called the pact a "win-win solution" for developing countries.

But environmental groups argue that the new agreement undermines the Kyoto Protocol, and will make the process of agreeing a successor treaty more difficult. The Geneva-based World Wide Fund for Nature (WWF) said: "A deal on climate change that doesn't limit pollution is the same as a peace plan that allows guns to be fired." 

Richard Black, BBC Environment Correspondent, BBC NEWS Science-Nature, 28 July 2005



Nuclear Technology



Capitulation to the nuclear lobby is a politics of despair

Fear of the people, their cars and flights is blocking creative energy policy

Despair is the great peril in climate change policy. Nothing can be done, we're all doomed! Democratic politics reaches its nemesis here: who dares to stand for election on a consumption-cutting agenda? No one. What opposition will hold its tongue as a government takes tough measures? None.

What would it take to cut carbon emissions enough to save the planet? This is where despair gets a real grip. The rich world, already anxious about the rise of India and China, will not hold back its own growth, so why should the developing world? Extreme inequality within countries such as the US and UK also makes the obvious solutions difficult: how do you tax energy heavily when the burden falls so unfairly?

In this convenient climate of political despair, one

easy solution steps in smartly. Let's all go nuclear, it's the only way. Nuclear is becoming the grown-up, *bien pensant* solution. With a sigh, the world-weary declare that renewables are trivial beside the nuclear option. Climate change is the nuclear lobby's best weapon: only global warming is more dangerous than massive proliferation of nuclear power across the world.

But these myths are gaining ground, that nothing but nuclear will do. Don't underestimate the immense power of the pro-nuclearists. They will begin with the reasonable claim that nuclear is just "part of the mix", but the monumental cost of a new nuclear programme would devour all the cash - and far more - needed to develop better alternatives. ☹

*Polly Toynbee, The Guardian, Wednesday May 25, 2005
polly.toynbee@guardian.co.uk*

I'm an environmental writer mostly. I've never progressed further in the church hierarchy than Sunday school teacher at my backwoods Methodist church. But I've spent most of my Sunday mornings in a pew. I grew up in church youth groups and stayed active most of my adult life - started homeless shelters in church basements, served soup at the church food pantry, climbed to the top of the rickety ladder to put the star on the church Christmas tree. My work has been, at times, influenced by all that - I've written extensively about the Book of Job, which is to me the first great piece of nature writing in the Western tradition, and about the overlaps between Christianity and environmentalism.

Indeed, it was my work with religious environmentalists that first got me thinking along the lines of this essay. We were trying to get politicians to understand why the Bible actually mandated protecting the world around us (Noah: the first Green), work that I think is true and vital.

But one day it occurred to me that the parts of the world where people actually had cut dramatically back on their carbon emissions, actually did live voluntarily in smaller homes and take public transit, were the same countries where people were giving aid to the poor and making sure everyone had health care - countries like Norway and Sweden, where religion was relatively unimportant. How could that be? For Christians there should be something at least a little scary in the notion that, absent the magical answers of religion, people might just get around to solving their problems and strengthening their communities in more straightforward ways.

The tendencies I've been describing - toward an apocalyptic End Times faith, toward a comfort-the-comfortable, personal-empowerment faith - veil the actual, and remarkable, message of the Gospels. When one of the Pharisees asked Jesus

what the core of the law was, Jesus replied:

You shall love the Lord your God with all your heart, and with all your soul, and with all your mind. This is the greatest and first commandment. And a second is like it, You shall love your neighbor as yourself. On these two commandments hang all the law and the prophets.

Love your neighbor as yourself: *although its rhetorical power has been dimmed by repetition, that is a radical notion, perhaps the most radical notion possible. Especially since Jesus, in all his teachings, made it very clear who*

But one day it occurred to me that the parts of the world where people actually had cut dramatically back on their carbon emissions, actually did live voluntarily in smaller homes and take public transit, were the same countries where people were giving aid to the poor and making sure everyone had health care - countries like Norway and Sweden, where religion was relatively unimportant.

the neighbor you were supposed to love was: the poor person, the sick person, the naked person, the hungry person. The last shall be made first; turn die other cheek; a rich person aiming for heaven is like a camel trying to walk through the eye of a needle. On and on and on - a call for nothing less than a radical, voluntary, and effective reordering of power relationships, based on the principle of love.

I confess, even as I write these words, to a feeling close to embarrassment. Because in public we tend not to talk about such things - my theory of what Jesus mostly meant seems like it should be left in church, or confined to some religious publication. But remember the overwhelming connection between America and Christianity; what Jesus meant is the most deeply potent political, cultural, social question. To ignore it, or leave it to the bullies and the salesmen of the televangelist sects, means to walk away from a central battle over American identity. At the moment, the idea of Jesus has been hijacked by people with a series of causes that do not reflect his teachings. The Bible is a long book, and even the Gospels have plenty in them, some of it seemingly contradictory and hard to puzzle out. But love your neighbor as yourself - not do unto others as you would have them do unto you, but

love your neighbor as yourself - will suffice as a gloss. There is no disputing the centrality of this message, nor is there any disputing how easy it is to ignore that message. Because it is so counterintuitive.

A rich man came to Jesus one day and asked what he should do to get into heaven. Jesus did not say he should invest, spend, and let the benefits trickle down; he said sell what you have, give the money to the poor, and follow me. Few plainer words have been spoken. And yet, for some reason, the Christian Coalition of America - founded in 1989 in order to "preserve, protect and defend the Judeo-Christian values that made this the greatest country in history" - proclaimed last year that its top legislative priority would be "making permanent President Bush's 2001 federal tax cuts."

The power of the Right rests largely in the fact that they boldly claim religious authority, and by their very boldness convince the rest of us that they must know what they're talking about. They're like the

guy who gives you directions with such loud confidence that you drive on even though the road appears to be turning into a faint, rutted track.

But their theology is appealing for another reason too: it coincides with what we want to believe. How nice it would be if Jesus had declared that our income was ours to keep, instead of insisting that we had to share. How satisfying it would be if we were supposed to hate our enemies. Religious conservatives will always have a comparatively easy sell.

Admittedly, this is hope against hope; more likely the money changers and power brokers will remain ascendant in our "spiritual" life. **Since the days of Constantine, emperors and rich men have sought to co-opt the teachings of Jesus. As in so many areas of our increasingly market-tested lives, the co-opters - the TV men, the politicians, the Christian "interest groups" - have found a way to make each of us complicit in that travesty, too.** ☹

Bill McKibben, Harper's Magazine, 07.27.05
<http://www.harpers.org>

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United Nations Climate Change Conference (COP 11 and COP/MOP 1)



28 November to 9 December 2005

Palais des Congrès de Montréal

Montréal 2005

Canada will host the first Meeting of the Parties (COP/MOP 1) to the Kyoto Protocol in Montréal in conjunction with the eleventh session of the Conference of the Parties to the Climate Change Convention (COP 11)
High-level segment: 7-9 December 2005 (attendance of ministerial representatives)

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