



## The Energy and Environment Round-Up: November 6th 2007

Posted by [Stoneleigh](#) on November 6, 2007 - 4:08am in [The Oil Drum: Canada](#)

Topic: [Miscellaneous](#)

The dominant theme today is water, notably the effects of too much or too little of it. Climate change is predicted to impact on water supplies severely in many places, through both diminished rainfall and increased evaporation, while in other areas rainfall may increase to dangerous levels. Food supplies are also likely to be impacted. This has significant implications for the stability of the human societies affected, which has been recognized as a security issue for wider areas.

On the Canadian energy scene, resource royalties, pipeline construction and a reduction in natural gas drilling stand out. Oil and gas exploration continues in the Orphan Basin in the Newfoundland and Labrador deep offshore, and Alberta research institutes get excited about biodiesel from canola.

### [Noel whips Atlantic Canada, leaves thousands with no power](#)

Between 160,000 and 170,000 Nova Scotians are without power after post-tropical storm Noel roiled through the province early Sunday morning.

The storm brought winds as high as 113 kilometres an hour with gusts up to 135 kilometres an hour as it roared into Halifax Harbour. About 50,000 people lacked power in the Halifax Regional Municipality early Sunday....

...."This thing was so huge, it didn't matter where it was going to go, it was going to effect everybody," said Bob Robichaud, a meteorologist with the Hurricane Weather Centre....

....The strongest winds were reported in the Cape Breton Highlands where gusts hit as high as 145 kilometres an hour and in south-western Newfoundland, where they peaked at 180 kilometres an hour.

In New Brunswick about 4,800 people currently lack power.

### [El Nino's 'evil twin' fuelled Noel's wrath - La Nina will disrupt weather for months to come, UN warns](#)

Her name may be Spanish for "little girl," but La Nina – a weather pattern related to better-known bigger brother El Nino – can hold her own.

She is capable of causing extreme weather around the world, as Atlantic Canada discovered this weekend at the hands of Noel, a storm that packed winds of 135 kilometres an hour and waves as high as 15 metres.

And there's more to come. The United Nations weather agency warns that this little girl is going to be with us for the next five months, and that could mean a bigger finish for the last month of Atlantic hurricane season, as well as heavy rain, a colder winter and more snowfall.

### [Mexicans Appalled by Scenes From Flooded State](#)

Water covers much of Tabasco and its capital, Villahermosa.

Newspapers and television showed photos of Navy helicopters scooping up children from roofs and rescuers lowering elderly people into boats. Many of those who could leave on their own waded or swam through chest-high brackish water.

The flooding in the state was brought on by days of unrelenting rain, which caused several rivers to overflow.

President Felipe Calderón, who has visited Villahermosa twice this week, said that Mexico was facing one of the worst natural disasters in its recent history. But it was hard to gauge how widespread the damage was.

The Tabasco governor, Andrés Granier, who compared Villahermosa to New Orleans after Hurricane Katrina, said that as many as one million of the state's 2.2 million residents had been affected by the flooding. But it was not clear if they had been left homeless.



### [Exodus from Mexico's flood zone](#)

Hundreds of thousands of people have fled severe floods in the south Mexican state of Tabasco where rivers burst their banks after heavy rain.

The centre of the state capital, Villahermosa, is under between 2m (6 feet) and 6m of water with only rooftops visible from the air.

Some 300,000 are still trapped in their homes in Tabasco, waiting to be rescued by boat or helicopter....

....Soldiers, first-aid workers and volunteers are scouring the streets in small boats, handing out fresh food and water, both of which are now in short supply.

The Mexican government has admitted that the scale of this disaster has taken them by surprise and for those still trapped in the remote areas of Tabasco aid is still a long way off.

As the massive operation continues, there are now fears that disease could spread and forecasters say more heavy rain is on the way.

Many people left in Villahermosa seem resigned to spending another night on their rooftops while tens of thousands are crammed into emergency shelters struggling to provide enough hot meals and dry beds.

### [Wave of mud buries town near flooded Mexico](#)

"This village practically disappeared," said Chiapas Gov. Juan Sabines, who was at the scene where rescue workers were digging for possible victims. Helicopters were seeking out residents who had fled into the hills, in order to evacuate them.

The village, 45 miles southwest of Villahermosa, is near to the border of heavily flooded Tabasco state and linked to the same river systems. The landslide was the latest damage caused by a week of devastating flooding and heavy rains that left 80 percent of Tabasco under water, destroying or damaging the homes of about half a million people.

### [Think Tank: Climate Affects Security](#)

Climate change could be one of the greatest national security challenges ever faced by U.S. policy makers, according to a new joint study by two U.S. think tanks.

The report, to be released Monday, raises the threat of dramatic population migrations, wars over water and resources, and a realignment of power among nations.

During the last two decades, climate scientists have underestimated how quickly the Earth is changing — perhaps to avoid being branded as "alarmists," the study said. But policy planners should count on climate-induced instability in critical parts of the world within 30 years.

The report was compiled by a panel of security and climate specialists, sponsored by the Center for Strategic and International Studies and the Center for a New American Security. The Associated Press received an advance copy.

Climate change is likely to breed new conflicts, but it already is magnifying existing

problems, from the desertification of Darfur and competition for water in the Middle East to the disruptive monsoons in Asia which increase the pressure for land, the report said.

### [Climate wars threaten billions - More than 100 countries face political chaos and mass migration in global warming catastrophe](#)

A total of 46 nations and 2.7 billion people are now at high risk of being overwhelmed by armed conflict and war because of climate change. A further 56 countries face political destabilisation, affecting another 1.2 billion individuals.

This stark warning will be outlined by the peace group International Alert in a report, A Climate of Conflict, this week. Much of Africa, Asia and South America will suffer outbreaks of war and social disruption as climate change erodes land, raises seas, melts glaciers and increases storms, it concludes. Even Europe is at risk.

'Climate change will compound the propensity for violent conflict, which in turn will leave communities poorer and less able to cope with the consequences of climate change,' the report states.

The worst threats involve nations lacking resources and stability to deal with global warming, added the agency's secretary-general, Dan Smith.....

....Conflict triggered by climate change is not a vague threat for coming years, he added. 'It is already upon us.'

### [Climate fears paint bleak future](#)

Climate experts have long argued that climate change is real. But it's only recently that their medical colleagues have begun considering the implications planetary warming holds for the health of people living on a changing globe, claims epidemiologist Tony McMichael. "Climate change doesn't exist in isolation," said McMichael, the head of the National Centre for Epidemiology and Population Health at Canberra's Australian National University and lead author of the Research Australia report. "Increasingly, the risk it poses to human well-being and health is now being seen as part of the policy discussion agenda." ....

....According to the outlook, 60 per cent of global fish stocks have collapsed and about 40 per cent are falling precipitously, increasing the risk of starvation for people who depend on them. Fresh water? Availability per person has plummeted. Three million people die of water-related diseases each year. By 2050, close to two billion people may face "absolute" water scarcity.

### [Climate shift 'poles apart'](#)

The Antarctic will be spared the worst of global warming and its ice mass could even grow, but the Arctic will be devastated by rising temperatures, a major new scientific report will claim.

In contrast to earlier fears that ice around the South Pole will suffer widespread melting, the United Nations intergovernmental panel on climate change says that Antarctica's ice sheets will remain too cold for widespread melting before the end of the century and are expected to get bigger as more snow falls.

The Arctic, by comparison, will suffer widespread loss of sea ice while the Greenland ice sheet will have almost completely disappeared by the end of the century. Up to half of the Arctic tundra will be replaced by forests as temperatures rise by 4degC.

### [Nordic nations sound alarm over melting Arctic](#)

Nordic nations sounded the alarm on Wednesday about a quickening melt of Arctic ice and said the thaw might soon prove irreversible because of global warming.

Sweden, Finland, Denmark, Norway and Iceland also urged all governments to agree before the end of 2009 a broader U.N. plan to curb greenhouse gases in succession to the Kyoto Protocol.

"The Arctic and the world cannot wait any longer," environment ministers from the five nations said in a joint statement after talks in Oslo. The five all have Arctic territories.

"The climate is hurtling towards a turning point after which irreversible processes will have been set in motion," they said of the Arctic thaw.

### [Northern Pebbles New Pawns in Arctic Chess Game](#)

The best candidate to date for the world's northernmost point of land -- a mythical place sought by explorers for centuries -- was spotted in July during an expedition led by Arctic veteran Dennis Schmitt.

California-based Schmitt, best-known for his 2005 discovery of Warming Island off the eastern coast of Greenland, named it Stray Dog West because, he said, it "erred under the ice".

It was exposed mainly by shifting pack ice.

As Greenland is under Denmark's administration, this scrap of land just 40 metres long could extend Danish territory further north and strengthen Copenhagen's claim on the pole.

Its discovery comes as countries around the Arctic Ocean -- the United States, Russia, Canada, Denmark, Norway and Iceland -- are rushing to stake out the Polar Basin's seabed, fishing rights and maritime routes.

"This little island could have a wide international significance," said Stefan Talmon,

professor of international law at Oxford University in Britain. "With the ice melting, more and more of these islands could emerge and play a role in maritime delimitations," he said.

### [Water supply being drained](#)

A noted Canadian author and activist said people need to act now to save Canada's freshwater supply.

Water mining, melting glaciers and pollution are having a negative impact on Canada's freshwater, said Barlow....

....Barlow first became involved in protecting Canada's water after Canada signed the North American Free Trade Agreement, which included water.

"Water is not a commodity like chairs or lamps, it is different and we have to recognize that," said Barlow.

She's urging the government to act now to protect and preserve Canada's water for future generations. One way to do so is by developing a national water policy and strategy to protect its water ecologically and politically.

"I have my fingers crossed that this book will make a difference," said Barlow. "I'm hoping the book will make people act (and) help governments to act."

In her book she says about two billion people are living in parts of the world where water shortages are a reality. The world is running out of fresh water and things are only going to get worse if the world continues to do what it's doing.

### [Wetlands a critical issue](#)

We are losing wetlands at an alarming rate. They are the greatest resource Saskatchewan has. They are critical to the health of our environment and agricultural sector, and are an economic driver, provide recreation, tourism and wildlife habitat right across the province.

Yet, why are the political parties ignoring this important environmental issue?

Wetlands act as natural filters to improve the quality of Saskatchewan's lakes, streams, rivers and groundwater. In Saskatchewan, many communities have had "boil-water" advisories. By ensuring there are healthy wetlands, the government will ensure the people of this province can have safe, clean, drinking water.

### [Warmth, wind speeds lower Lake Superior](#)

Sharply higher water temperatures and an increase of up to 30% in wind speeds over

Lake Superior appear to be coconspirators in the relatively rapid decline in water levels on the world's largest freshwater lake, a scientist told a Great Lakes conference Friday.

Water temperatures on Lake Superior, now at near-record low levels, have risen twice as fast as air temperatures in the last 25 years, said Jay Austin, a researcher at the University of Minnesota-Duluth.

The same phenomenon has happened on Lakes Michigan and Huron, which are inches above record lows.

### [Lake Huron water levels spell deep trouble](#)

When Julie Woodyear was a kid, she and her brother raced each other around their family's Georgian Bay island in dinghies.

Thirty years later, a dinghy race would involve dragging the boats over land because her island is no longer an island. It's become part of the mainland.

Hers is a familiar story around Lake Huron where, over the past decade, water levels have dropped about a metre. Docks that stretch more than 100 metres now lead to land. Boats have been abandoned in boathouses 300 metres from water. Tanker owners complain they can no longer get their ships to ports. Wetlands have turned to meadows. And marinas, like Brian Ramler's in Waubaushene, have had to cut business by half because boats can't land in knee-deep water.

Forecasts hold it will get even worse. The Army Corps of Engineers predicts Lake Huron will drop another 20 centimetres by next spring. And Environment Canada hydrologists predict that given another dry winter, the lake will break its all-time low since scientists began to record water levels almost 150 years ago.

### [As U.S. water worries emerge, all eyes are on the Great Lakes](#)

When Democratic presidential candidate Bill Richardson suggested last month that states "awash in water" could share, it rocked a lot of boats in Great Lakes states.

"I believe that Western states and Eastern states have not been talking to each other when it comes to proper use of our water resources," Richardson, the governor of New Mexico, told the Las Vegas Sun. "I want a national water policy. ... States like Wisconsin are awash in water."

Environmental groups and politicians up and down the lakes blasted the idea, and Richardson later backed down, saying through a press secretary that he "in no way proposes federal transfers of water."

But the episode created a buzz that still could be heard here last week at a large conference about the future of Lake Superior, and it has fueled speculation about the "water wars" some predict for America as dry regions such as Richardson's run short.

## [US-Canada War Looms Over Energy, Water](#)

Washington's new tensions with its northern neighbor and largest trading partner appear to be over perceived Canadian reticence to support US imperial adventures in the Middle East. But the vast resources of Canada itself—made more critical both by instability in the energy-rich Mideast and by shortages of such basic commodities as water brought on by climate change—may be providing a long-term source of conflict between the two giants of North America.

While on the economic front all talk is currently of integration and falling trade barriers, battles are already being waged by the grassroots both sides of the border against resource plunder and mega-development schemes. These could eventually mean war between the two longtime allies if a populist government comes to power in Ottawa and tries to turn off the spigot of south-bound resources—and the Pentagon has already drawn up plans for this contingency. Rumbles are already being felt in such unlikely places as the rolling farmlands of upstate New York, the grizzly-haunted pine forests of Montana's wild Flathead Valley, the windswept high plains of northern Alberta, and the remote passages of the Arctic Sea.

## [Army drafts drought plans](#)

"It's no longer theory. There is a drought in the South. It is also important to recognize that the solution can and will come from the governors," he told a Washington news conference relayed via telephone.

The region's worst drought in decades has prompted a water war among the three states. Georgia Gov. Sonny Perdue has filed a lawsuit to force the corps to reduce the amount of water it releases each day from Lake Lanier, 45 miles north of Atlanta.

The Washington meeting was the first opportunity for all three states to discuss the issue after weeks of acrimony and all three welcomed the plan, which they said was not enough of a reduction to hurt downstream activity.

## [Drought a wake-up call for South](#)

A truce has been declared in the water war among several Southeastern states, but the drought that caused it all remains.

Meeting with federal officials last week, the governors of Alabama, Florida and Georgia proposed a settlement that would keep water flowing from Georgia into Alabama reservoirs while also helping other states meet their demands.

The extreme drought conditions in Georgia and other nearby states has jeopardized the long-standing agreement among states about how the region's water supply would flow. Georgia officials, for example, wanted to keep all of the water at home to ease the



drought-related problems for their residents, particularly in the Atlanta area, by blocking the flow into Alabama and Florida.

### [Appalachia facing water emergency](#)

Under the initial stage of a formally declared water emergency, Luntsford said residential customers who use more than 4,000 gallons per month will be charged an additional \$5 per 1,000 gallons over the 4,000-gallon limit, and businesses will be required to cut back to 80 percent of their consumption based on the average use on the previous two months of water bills.

The town's emergency water use plan triggers even more restrictive consumption edicts at 30-day and 15-day supply levels, if and when that should happen. Tapping the Powell River, however, may ensure the critical-level restrictions won't need to be implemented.

### [Water: Boone Pickens has big plans](#)

You might have heard about T. Boone Pickens' plan to capitalize on the South's growing water needs by transporting Ogallala Aquifer water to growing towns and urban areas via pipeline.

But did you know that Pickens' planned water infrastructure will be pieced together using eminent domain laws?...

....Pickens' plan to transport water to growing areas seems to fulfill the market demand for the much needed resource, but it does so at a cost. Conservationists are worried about the toll water pumping will take on the Ogallala Aquifer. One also has to wonder how Texas' "right of capture" laws have contributed to the race by landowners to pump and sell water.

### [Drought slams California farmers](#)

A few years ago, the math seemed simple enough for Bruce Allbright: Plant several hundred acres of pistachio trees, add water when needed, then pick the money from the trees.

Now, drought and water restrictions are exacting a high price on Allbright and other California farmers who must make tough decisions about what to plant or fallow, harvest or plow under, prune or chop down.

"I was hoping to build a nice little pistachio farming operation," said Allbright, who grew cotton and lettuce on his farm in the Fresno County town of Huron before planting the trees. "Right now, it's not as nice as it looked four or five years ago."

In recent years, a number of farmers have shifted from annually planted fruits and

vegetables to more profitable permanent crops such as nuts and grapes.

With less water, many are struggling to keep the plants alive.

### [Nation must adapt to greater wildfire risk](#)

Droughts, floods, severe storms, and sea-level rise often get the lion's share of attention in the litany of projected effects from global warming. But October's disastrous wildfires in California – part of one of the most intense fire seasons in the United States in nearly 50 years – are likely to raise the profile of such events, even if a firm link between the state's fires and climate change has yet to be made.

Planning for how to adapt to larger and more frequent wildfires is under way. It includes building homes with fire-resistant roofs and windows, and landscaping with fire-resistant plants. It also means planning new communities with streets wide enough to handle evacuation traffic even when the curbs are lined with fire trucks.

### [Global Warming Disrupts Insurance Coverage - The insurance industry is in crisis and coastal homeowners' costs are soaring, study shows](#)

A new Environmental Defense report, *Blown Away: How Global Warming Is Eroding the Availability of Insurance Coverage in America's Coastal States*, documents an unsettling trend. With record losses and payouts far outstripping premiums in recent years, insurance rates are rising and many companies are moving out of America's coastal states.

Allstate, one of the nation's largest insurance providers, has cut off coverage for 40,000 coastal homeowners in New York, and is no longer writing any new policies in Florida.

### [Suburban murder over water shocks Australia](#)

A 36-year-old man, Todd Munter of the south Sydney suburb of Sylvania, appeared in court Thursday on a charge of murdering Kenneth Proctor, 66, who lived in the same suburb.

Police allege an argument about water restrictions erupted as Munter walked past Proctor's home on Wednesday afternoon and the pensioner turned the hose on the younger man, soaking him with water.

Munter is then alleged to have punched Proctor in the head and knocked him to the ground before kicking him. The older man suffered a massive heart attack and died a short time later in hospital.

Water meant to safeguard Victoria's electricity supplies has been traded off to NSW rice growers in secret multimillion-dollar deals with the Snowy Hydro corporation.

Snowy Hydro Ltd and the NSW Department of Water and Energy are accused of jeopardising the future of electricity outputs, the livelihoods of other irrigators and environmental flows to the Snowy and Murray rivers for the sake of short-term profits.

The revelation of the secret sales comes as a cross-state deal on the Snowy River made by two former premiers threatens to tear apart the already frayed relationship between the current premiers of Victoria and NSW.

Former senior Snowy Mountains engineers and managers accuse the corporation of abandoning established drought strategies to maintain specified minimum annual water releases without emptying storages in lakes Eucumbene and Jindabyne during drought.

### [Mexico: Mixteco region is ecological disaster](#)

According to the Mexican Center for Environmental Law, within eight years the nation will be faced with a critical water shortage.

At the same time, a World Bank study suggests that the Mixteco region - located within the states of Puebla, Guerrero and Oaxaca - is already an "ecological disaster" zone. The study was conducted to help Mexico improve access to clean water and adapt to climate change.

It is predicted that global warming will change rainfall patterns and erosion will worsen in arid regions.

In Náhuatl, the Mixteco region is called "nation of rain." But the rain has ended, and in Mixteco country erosion has reached disastrous levels.

Rainfall is scarce and variable, the mountainsides have lost their vegetation, and enormous quantities of earth tumble down into the rivers and canyons below.

To rescue the environment, the few campesinos who haven't emigrated from the area have been given the task of planting trees, in an attempt to heal the once-prosperous lands that used to produce ample corn, beans and squash.

The Mixteco situation - with 56% of its territory arid or semiarid, and supplies of potable water running out - is considered to be an example of what the rest of the country will face in the future.

### [One third of Europe's freshwater fish face extinction: IUCN](#)

More than one third of European freshwater fish species are threatened with extinction, according to a study released by the World Conservation Union (IUCN) on Thursday.

Twelve of the 522 species are already extinct, mainly due to population growth and the accompanying use of water, pollution and overfishing over the past 100 years, the IUCN said in a statement.

"With 200 fish species in Europe facing a high risk of going extinct we must act now to avoid a tragedy," said IUCN programme officer William Darwall.

"Many of these species, not considered as 'charismatic' or with any apparent 'value' to people, rarely attract the funds needed for their conservation -- they risk disappearing with only a dedicated few noticing the loss," he added.

The IUCN said the biggest single threat comes from water shortages in Mediterranean areas, which are increasingly leading to dried rivers in summer months as climate change progresses.

### [It's going to get very hot - much earlier than expected](#)

Of particular concern to Thai scientists is that this extreme heat may stay longer and engulf a much greater proportion of the country. Peering further into the future, the new findings suggest that by 2100 much of the country could be spending eight months a year in summer temperatures of 35 degrees, compared to just three months at present.

"The modelling suggests that we will see the effects of global warming sooner than we thought, in the 2020s instead of the 2040s and 2050s," said modeller Dr Anond Sanidvongs, director of the Southeast Asia Regional Centre of the Global Change System for Analysis, Research and Training (Start).

### [Mussels face extinction as oceans turn acidic](#)

By the end of the century many popular seafood dishes will disappear from our tables as shellfish become increasingly scarce, scientists warn.

They have found that the build up of carbon dioxide in the atmosphere is causing the oceans to grow more acidic as increasing amounts of the gas dissolve in sea water.

This change is reducing the ability of shellfish to make their protective shells. By 2100 some waters are expected to be corrosive enough to cause the shells to dissolve completely, making it impossible for them to survive.

Marine biologists warn that this could have a devastating effect on the ocean environment, as other creatures that eat shellfish will find food increasingly scarce while corals, which make reefs, will also be unable to build their hard external skeletons.

### [Kyoto here we come - Manitoba commits to meeting protocol](#)

On Nov. 20, the provincial government will commit in the speech from the throne to meeting its targets under the Kyoto Protocol. That means in just over four years, we have to find a way to cut greenhouse gas emissions by more than 3.3 megatonnes.\*

That is the equivalent of taking 660,000 passenger cars off the road. Putting that in perspective, there were 522,031 passenger cars registered in Manitoba in 2006.

As daunting as the figure appears, there is a plan in the works that makes hitting Manitoba's target "very doable," says John Clarkson, deputy minister for Science, Technology, Energy and Mines.

"Is it going to be easy to do? No, but then again most major changes we try to make are not easy to do."

### [B.C. joins international carbon trading partnership](#)

British Columbia is teaming up with European Union countries and U.S. states in an international effort to fight climate change.

Premier Gordon Campbell is the only Canadian in Lisbon for the launch of the International Carbon Action Partnership (ICAP), which aims to create a global market for buying and selling greenhouse gas emissions.

Campbell said he believes modelling B.C.'s carbon trading program after those established in Europe and North America will allow B.C. to take part in a growing international carbon trading market.

"We believe that if we co-ordinate the development of our cap and trade system with the European system, with the Norwegian system, and with the system in the northeastern part of the United States, we build a larger marketplace, we build consistency and stability over the long term for this and it's a critical component of us reducing carbon emissions and greenhouse gases globally," said Campbell.

The premier said he believes the new program will dovetail with B.C. and Manitoba's participation in the Western Climate Initiative, which aims to set caps and trading goals for carbon emissions among several U.S. states and the two Canadian provinces.

### [Most ready for 'green sacrifices'](#)

Most people are ready to make personal sacrifices to address climate change, according to a BBC poll of 22,000 people in 21 countries.

Four out of five people indicated they were prepared to change their lifestyle - even in the US and China, the world's two biggest emitters of carbon dioxide.

Opinion was split over tax rises on oil and coal - 44% against, 50% in favour.

Support would rise if the cash was used to boost efficiency and find new energy sources, the poll suggested.

## [Forests that once reduced CO2 turn into net producers of the gas](#)

A huge swath of Canada's boreal forest, one of the largest storehouses of carbon on the planet, is spewing more greenhouse gases into the atmosphere than it soaks up, scientists say.

"The sink has become a source," says forest ecologist Tom Gower, at the University of Wisconsin, whose team has documented an ominous shift in the "carbon balance" of the forest blanketing northern Manitoba, Saskatchewan and Alberta.

"These boreal forests not too long ago were helping offset rising atmospheric carbon dioxide concentrations by taking up carbon dioxide and storing it," Gower said in an interview. But with an increase in the frequency and size of fires in recent years, he says "that is no longer the case."

## [Sold down the river](#)

Taming China's longest river has been the dream of emperors and dictators for centuries. The first water diversion works on the Yangtze were built during the Han Dynasty more than 2,000 years ago and the Three Gorges dam was first proposed by Sun Yat-sen, the revolutionary father of modern China, nearly 100 years ago as a way to mitigate the river's frequent and devastating floods. The project was championed by Mao Zedong in the 1950s but decades of disastrous political blunders and fierce domestic opposition meant it would take another 50 years and the crushing of a nascent democracy movement before Mao's dream of building the world's largest hydropower station could be realised.

When the river's flow was cut and the Three Gorges reservoir filled in 2003, the Chinese government hailed the project as an engineering marvel that would boost the region's economy, improve the environment and raise living standards for the 1.3m forced from their homes to make way for the rising water.

But in recent months, senior officials have publicly admitted for the first time the Three Gorges region faces an environmental catastrophe if urgent action is not taken. In interviews they have also acknowledged that rising discontent among the dam's refugees will be resolved only with huge new investment. In mid-October the Financial Times traveled the length of the reservoir and spoke to numerous officials and residents to check on reports of an environmental and humanitarian disaster in the making.

## [One dam thing after another](#)

Peasants in the village of Miaohe on the north bank of the Yangzi River say nothing like it had occurred in their lifetimes, nor those of their parents and grandparents. One afternoon in April, for a few grim seconds, the ground shook beneath them. The Wild Cat

landslide, long at rest beneath the terraced maize fields, orange-tree groves and earth-brick houses perched on the steep slope, was stirring.

Experts had long worried about the Wild Cat, 17km (10 miles) upstream from the Three Gorges dam in a narrow stretch of reservoir, in the first of the soaring gorges. Last year a coffer-dam built to protect the main dam during construction was blown up. Monitoring of the landslide zone intensified, for fear that the blast might destabilise it. If the Wild Cat's earth and boulders tumbled down the slope, they could wipe out Miaohe and slam four boats and barges with giant waves.

Officials have long stressed the dam's benefits: a reduction (some say exaggerated) in flooding downstream; the generation of (very expensive) carbon-free power; and the creation of a 660km-long, navigation-friendly reservoir. The official press has largely ignored the many criticisms of the dam. The authorities have rapidly and sometimes brutally crushed protests by some of the more than 1.2m people moved from the reservoir area, and have often poorly compensated them. Allegations abound of resettlement funds lining officials' pockets.

### [Jialing River at Chongqing](#)



### [China dam plan threatens world's oldest irrigation system](#)

A series of 10 small hydro plants to be built on the Botiao river in Sichuan province will destroy the natural ecology of the Dujiangyan irrigation system, a UNESCO World Heritage listed site, the China Daily reported.

"It is irrational to build such stations as they will destroy the natural ecology along the river," Chen Qingheng, a expert at the China Academy of Sciences, was quoted by the paper as saying.

"Moreover, (the dams) will affect the local drinking water."

The system was built around 250 BC and continues to work "perfectly" today in

controlling and distributing water throughout the Chengdu plains, according to the UNESCO website that explains why Dujiangyan has World Heritage listing.

The Dujiangyan administration bureau is a backer of the one billion yuan (135 million dollar) dam project, which if built will have a combined electrical capacity of 100,000 kilowatts, according to the China Daily.

### [Global food crisis looms as climate change and fuel shortages bite](#)

Empty shelves in Caracas. Food riots in West Bengal and Mexico. Warnings of hunger in Jamaica, Nepal, the Philippines and sub-Saharan Africa. Soaring prices for basic foods are beginning to lead to political instability, with governments being forced to step in to artificially control the cost of bread, maize, rice and dairy products.

Record world prices for most staple foods have led to 18% food price inflation in China, 13% in Indonesia and Pakistan, and 10% or more in Latin America, Russia and India, according to the UN Food and Agricultural Organisation (FAO). Wheat has doubled in price, maize is nearly 50% higher than a year ago and rice is 20% more expensive, says the UN. Next week the FAO is expected to say that global food reserves are at their lowest in 25 years and that prices will remain high for years.

Last week the Kremlin forced Russian companies to freeze the price of milk, bread and other foods until January 31, for fear of a public backlash with a parliamentary election looming. "The price of goods has risen sharply and that has hit the poor particularly hard," said Oleg Savelyev, of the Levada Centre polling institute.

India, Yemen, Mexico, Burkina Faso and several other countries have had, or been close to, food riots in the last year, something not seen in decades of low global food commodity prices. Meanwhile, there are shortages of beef, chicken and milk in Venezuela and other countries as governments try to keep a lid on food price inflation.

Boycotts have become commonplace. Argentinians shunned tomatoes during the recent presidential election campaign when they became more expensive than meat. Italians organised a one-day boycott of pasta in protest at rising prices. German leftwing politicians have called for an increase in welfare benefits so that people can cope with price rises.

"If you combine the increase of the oil prices and the increase of food prices then you have the elements of a very serious [social] crisis in the future," said Jacques Diouf, head of the FAO, in London last week.

### [Sustainable Living: Fossil fuels feed our food supply](#)

We have seen a major leap in farm productivity in the last 50 years, with food production doubling and even tripling in the case of cereal grains. This amazing leap did not come from new farms or farmlands, since we lost more than half of our small farms during that same period.



Farmlands are also in decline and being gobbled up by urban sprawl. These massive gains in food production can be credited to the use of synthetic fertilizers and, to a smaller extent, better plant hybrids.

"Two out of every five humans on this Earth would not be alive today" without the widespread use of chemical fertilizer, said Vaclav Smil, Canadian professor, author and energy expert.

We are eating fossil fuels in the form of synthetic fertilizers and pesticides.

### [Biofuels drive threatening food security--consumer watchdog](#)

Consumers who are supportive of efforts to cut down the country's oil import bill, as a way of preventing upticks in food prices amid the current long-drawn oil price spike, should think twice about biofuels.

According to consumer welfare advocate Raul T. Concepcion, the Philippines -- which was among the vanguards in the rush to massive cultivation of biofuel crops -- is now feeling the negative effects of this move on food supply, be it food from produce or from livestock.

Concepcion echoed the views of Jean Ziegler, United Nations Special Rapporteur on the Right to Food, who has called on governments to temporarily stop the drive for biofuel production.

Ziegler, a sociology professor at the University of Geneva and the University of Sorbonne (Paris), has branded the production of biofuels a "crime against humanity" at a time when land, produce and investments are being diverted from food production despite widespread hunger in some parts of the world.

### [Biofuel vehicles need more places to fill up](#)

About 600,000 cars and light-duty trucks on Canada's roads today can run on green biofuels, but there are only two public fuel-ling stations where drivers can gas up.

The Canadian Vehicle Manufacturers' Association is lobbying the federal government for tax incentives to make E85 ethanol and biodiesel fuelling stations available across the country, so those vehicles don't have to use conventional gasoline and diesel, which emit more greenhouse gases.

### [Some people like their biofuels home brewed](#)

A plumbing and gasfitting instructor at Red Deer College, Aucoin got interested in biodiesel production a few years ago. He experimented making the green fuel in mason

jars and then 25-litre pails, before moving onto a more elaborate system.

He eventually perfected the process and decided "to dump this stuff in my truck and see if it works."

"It worked great," he said.

Aucoin said he can produce biodiesel for as low as 20 cents a litre depending on the price of methanol, which is used with a catalyst to make the biodiesel.

On this particular day, diesel is 94 cents per litre at the pump.

He's now under contract with Red Deer College to demonstrate his portable biodiesel processing system as part of an educational and marketing initiative aimed at the general consumer.

### [Fuel for the Future](#)

As head of biodiesel production at the Biofuel Technology Centre, a small-scale facility for research and demonstration at Olds College, 96 kilometres north of Calgary, it's Zenert's job to perfect the small-scale biodiesel-making process that begins here by crushing canola seed in a cast iron screw press.

"I produce about a litre of oil a minute," Zenert said inside the 750-square-foot production facility, where biodiesel processing equipment eats up a good chunk of the floor space and the air is infused with the innocuous odour of warm canola oil.

Outside, there's a 2,300-square-foot storage area for the canola seed, press cake and methanol, which is used with the catalyst sodium methylate to make the biodiesel.

The aim of the \$300,000-pilot-project, which includes the capital cost of the facility, is to produce about 50,000 litres of biodiesel annually in 400-litre batches -- with the option to scale up the system to produce 1 million litres a year should demand warrant, said Tanya McDonald, biodiesel project lead and a bioenergy research associate at Olds College School of Innovation.

### [Exxon confirms second Orphan Basin well](#)

ExxonMobil confirmed Thursday that it will drill a second exploration well in the Orphan Basin offshore Newfoundland in 2008.

The well had been forecast but until Thursday, the oil giant had been reluctant to commit to drilling.

Its first well in the deep water area north of the Jeanne d'Arc Basin - site of current offshore production at Hibernia, White Rose and terra Nova - cost an estimated US\$200 million.

The Orphan Basin is located approximately 390 kilometres northeast of St. John's. The area is estimated to hold as much as eight billion barrels of oil.

### [Canadian Natural shifts gas focus out of Alberta](#)

Oil patch giant Canadian Natural Resources Ltd. has responded to Alberta's new royalty regime with a kick and a hug.

The company created and controlled by billionaire Murray Edwards is radically cutting plans for natural gas drilling, saying it will move production to British Columbia, West Africa and the North Sea. But it will stay the course for most of its oil sands investment plans, which amount to more than \$20-billion and are the future of the company.

Thursday, CNQ prominently declared it would cut its gas drilling in 2008 by about 40 per cent because of higher royalties to be imposed in Alberta starting in 2009. The cut is less than the 67 per cent that the company had previously said it would make but still a major blow to the sector as it begins its winter drilling season.

### [EnCana drops \\$2.5-billion for control of Texas gas field](#)

EnCana Corp. is paying \$2.5-billion (U.S.) to buy out its partner in the Deep Bossier natural gas play in Texas a little more than two years after acquiring its first chunk, and says the play could become the most important in its North American portfolio.

The Calgary company, North America's largest gas producer, said Monday that it is buying the 50 per cent of the Amoruso Field it does not already control from privately owned partner Leor Energy of Houston.

"These assets are a seamless fit with our existing production and operations, and they hold tremendous growth potential in the near and longer term," EnCana president and chief executive officer Randy Eresman said in a news release.

"It has the potential to be the leading resource play in our North American portfolio."

### [Syncrude, Suncor urged to renegotiate royalties](#)

Alberta Premier Ed Stelmach said Friday that oil sands producers Syncrude Canada Ltd. and Suncor Energy Inc. should agree to renegotiate royalty rates with the province to comply with changes to Alberta's royalty scheme announced last week.

Though the two firms' contracts do not expire until the end of 2015, Mr. Stelmach said he expects both to agree to new, higher royalty terms.

"I'm sure, at the end of the day, those companies will realize it is in the best interests of their shareholders ... to sit down with the government and look at the two agreements

and discuss how we can reach a solution," Mr. Stelmach told reporters.

He said Alberta had agreed in the past to reopen the contracts setting out royalty rates when oil prices were low.

### [Alberta Tories risk election disaster, Manning warns](#)

Preston Manning launched a broadside yesterday against Alberta Premier Ed Stelmach, attacking the Progressive Conservative leader's competence and predicting his electoral demise.

The former Reform Party leader - whose father Ernest was Alberta's longest-serving premier, as part of the Social Credit dynasty in the mid-20th century - said Mr. Stelmach failed to consider larger issues such as the environment and energy security last month in deciding to raise oil royalties.

### [Resource Royalties in Alberta and Saskatchewan](#)

So what about Saskatchewan? While prices of oil, potash and uranium have been skyrocketing, the NDP government has been cutting royalties and taxes. The opposition Saskatchewan Party and Liberal Party are on side. The Saskatchewan Federation of Labour has been silent on this issue while arguing for additional taxpayer subsidies for Weyerhaeuser Corporation. The NDP government says it is not interested in opening a debate on resource royalties. The mass media agrees. We have a consensus in Saskatchewan among those whose opinion counts.

### [\\$2B pipeline planned](#)

Enbridge Inc. agreed with Fort Hills Energy LP to develop a \$2 billion pipeline and terminal facilities for an oil-sands project to capitalize on a forecast that Alberta tar-sands output will triple.

The pipeline will serve mine and bitumen extraction plants 90 kilometers north of Fort McMurray, the Calgary-based company said Friday.

Enbridge, Canada's largest pipeline company by revenue, expects the line will start in mid-2011.

### [Pipeline to the Pacific](#)

Super-sized new pipe is being laid in Alberta oil's lone route west across the Rocky

Mountains to prepare for years of staged export increases onto world energy markets.

"It's a fundamental advantage we have," Kinder Morgan Canada president Ian Anderson said in explaining the scale of a project that has startled visitors to Jasper National Park since construction began in late summer.

"We're able to expand incrementally as new production comes on incrementally," Anderson said, as crews on the \$443-million addition to Trans Mountain Pipe Line hit a fall peak of 490 workers and 70 managers.

### [Researcher finds way to measure pollution from flares and venting](#)

You can't regulate greenhouse gas emissions if you can't measure them, says Carleton University professor Matthew Johnson, who has discovered some new ways to measure what happens at pipeline leaks and gas flares at oil wells.

"If you're going to legislate a reduction, you have to be able to measure how that reduction occurred and that's a huge challenge," Johnson said Monday after presenting some new research to colleagues.

Johnson filed a provisional patent this year on his newest technique -- a combination of mathematical models and instruments -- for measuring methane leaks in pipelines. Kilo for kilo, methane is 25 times worse than carbon dioxide as a greenhouse gas, said Johnson, who is Carleton's research chair in energy and combustion-generated air emissions.

### [Cutting car emissions saves lives: T.O. report](#)

A new study on the health effects of air pollution from traffic in Toronto says a 30 per cent reduction in vehicle emissions could save nearly 200 lives a year and \$1 billion in health costs.

The Toronto Public Health report, to be released Monday, also estimates that "mortality-related" costs associated with traffic pollution in the city are about \$2.2 billion annually.

The report uses a Health Canada computer-based method called the Air Quality Benefits Tool to calculate the "burden of illness" and economic impact from traffic-related smog.

Authored by Dr. David McKeown, Toronto's medical officer of health, the study claims this pollution contributes to about 440 premature deaths and 1,700 hospitalizations a year in Toronto.

### [How to Build a Local Energy Economy](#)

Q: How does the issue of net metering factor into this?

A: Net metering was a revolution, a very quiet revolution. It said that the utility companies had to allow you to turn your meter backwards. Since 1979, by federal law, the utility companies had to agree to buy your electricity if you had solar panels, but they could put any conditions they wanted on it, and they put on conditions that made it uneconomical for you to do that. So what net metering says is that the utility can't charge you for a second meter; it has to allow the meter to run backwards, which means you get the retail price for your electricity. So that redefines the electric system as a two-way system, by law.

### [More landfills turning trash byproduct into electricity](#)

The putrid smell of rotting garbage may be sickening to most people, but it's becoming gravy to a growing number of landfill owners.

And it could soon be finding its way into your workplace or home -- as electric power, that is.

With the planned March opening of a project at Pine Grove landfill in Schuylkill County, 29 of the state's 48 landfills will have plants that turn methane -- the volatile gas that's a byproduct of landfills -- into heat and power.

### [From Burma to Beijing: Asia's sensitive petrol politics](#)

A bull oil market has been putting a squeeze on poor households in Asia, even before the recent spike that took crude oil prices closer to \$100 a barrel. Now, Asian governments are starting to feel the strain over subsidies on politically sensitive fuel prices.

China raised domestic fuel prices Thursday on diesel and gasoline by nearly 10 percent after gas stations reportedly began rationing diesel to truck drivers in response to bottlenecks at state-run refineries. The jump in prices came despite a recent pledge by Prime Minister Wen Jiabao to stick to existing price caps amid concerns over rising food costs. Even gas stations in Beijing have suffered shortages.

In Asia, hiking fuel prices can be a perilous political move. The recent protests in Burma that were later brutally repressed began in August, after diesel prices doubled overnight. Commuters unable to pay higher bus fares had to walk to work, and their plight became a lightning rod for dissent. In recent years, authorities in Nepal and Indonesia have also faced demonstrations over the removal of fuel subsidies.

### [China Struggles With Fuel Crunch](#)

Bus drivers in the bustling southern province of Guangdong have a new daily chore: Hunting for diesel. Amid widespread shortages, service stations allow drivers just a few quarts at a time, forcing buses to stop repeatedly to fill up while passengers fume, said Dai Guowei, an employee of the Zhaoshang Passenger Transport Co.

"After using up the diesel from the last filling station, we have to rush to another station," Dai said Friday. "Usually we have to wait at least a half-hour to fill up. So we get a lot of customer complaints."

Companies across China are hurting amid diesel shortages blamed on price controls that force oil refiners to lose money on each barrel they process. That's prompted them to cut back on production.

The government raised prices Thursday by nearly 10 percent to curb demand and encourage refiners to produce more. But it gave no sign it will change what analysts say is the root of the problem: an antiquated system of state-set prices that encourages waste and distorts business decisions by oil suppliers.

### [World's growing dependence on coal leaving a trail of environmental devastation](#)

It takes five to 10 days for the pollution from China's coal-fired plants to make its way to the United States, like a slow-moving storm.

It shows up as mercury in the bass and trout caught in the Willamette River in the western U.S. state of Oregon. It increases cloud cover and raises ozone levels. And along the way, it contributes to acid rain in Japan and South Korea and health problems everywhere from Taiyuan to the United States.

This is the dark side of the world's growing use of coal.

Cheap and abundant, coal has become the fuel of choice in much of the world, powering economic booms in China and India that have lifted millions of people out of poverty. Worldwide demand is projected to rise by about 60 percent through 2030 to 6.9 billion tons a year, most of it going to electrical power plants.

But the growth of coal-burning is also contributing to global warming, and is linked to environmental and health issues ranging from acid rain to asthma. Air pollution kills more than 2 million people prematurely, according to the World Health Organization.

### [Sustained Outrage](#)

The 2006 Sago mine disaster left 12 coal miners dead, and earned a dark place in American history and memory. For nearly two days in Upshur County, West Virginia, family and friends gathered, awaiting news of their loved ones, and just before midnight on January 3 cries of joy and relief rang out: "Twelve alive! Twelve alive!" Unfortunately, the families were given false information; only one man survived.

The outrage and horror of Sago would make worldwide headlines. But despite the reams

and reams of reporting on what happened at Sago, few reporters dug deeper to find out how, why and if tragedies like this need to happen at all. Reporter Ken Ward Jr. and The Charleston Gazette did go deeper, taking a long hard look at the history and heartbreak of the coal mining industry and the governmental bodies that regulate it. Ward found that not only are most mining accidents preventable -- the result of lapsed or ignored safety regulations -- he also reported that most miners who die on the job die solitary, painful deaths without satellite trucks or reporters or much fanfare. It is these deaths, taken in the aggregate, that form a portrait of an industry that has a very hard time taking care of its own.

### [Loyalty to coal takes wind out of clean energy advocates' sails](#)

In April last year the future of wind energy in Australia was in doubt after the Coalition Government blocked a Victorian wind farm project to protect the endangered orange-bellied parrot, a bird so rare it appeared never to have flown near the site.

The decision to overturn state approval for the project ostensibly on environmental grounds sparked outrage from green groups and prompted a string of Pythonesque jokes about dead parrots.

The Labor Party made much mileage from the drama but it refused to say how much renewable energy it would aim for if it won government. Meanwhile, both parties continued to support the country's dirtiest industry, assigning millions of dollars to an elusive technology they said would clean the carbon out of coal.

The renewable energy industry watched in despair. Wind turbine manufacturers threatened to quit the country and solar power researchers headed overseas.

Things look very different 18 months later. The two main parties are locked in a battle to prove their green credentials. Opinion polls show voters respond enthusiastically to renewable energy, and to wind and solar power in particular. Ever conscious of the public mood, the Prime Minister, John Howard, in September announced a 15 per cent "clean energy target". That was pipped this week by the 20 per cent target announced by the Opposition Leader, Kevin Rudd.

But this is no climate change epiphany, environmentalists warn. They say claims by the Environment Minister, Malcolm Turnbull, that Australia is "leading the world on climate change" ring hollow in light of the latest World Bank figures showing the country's emissions rose 38 per cent between 1994 and 2004, more than the combined increase in emissions from Britain, France and Germany, which have 10 times Australia's population.

### [The wave of the future?](#)

Hurricane Humberto was a pleasant surprise to at least one energy executive visiting the Texas Gulf Coast.

The mid-September storm that rapidly grew into a Category 1 hurricane shortly before coming ashore in High Island brought 20-foot waves and winds exceeding 50 mph.



The unexpected surge in strength gave a Minnesota company's cean-wave energy device, being tested off the coast of Galveston, its first bout with bad weather.

"It was pounded for hours, but the storm didn't crush or flip it," said Mark Thomas, CEO of Independent Natural Resources, a small private start-up in landlocked Minneapolis suburbia. "We're comfortable with its resiliency."

The device, dubbed the Seadog, is designed to capture ocean-wave energy from swells or waves to pump seawater into storage tanks. The water then could flow through hydroelectric turbines to provide energy.

Land-based systems do the same thing by moving water through turbines from one reservoir to another at a different elevation. But unlike land systems, an ocean-based system can rely on wave rhythm to move the water.

### [G-Wiz! Electric car goes up in smoke](#)

The electric car's potential for saving the planet by reducing our dependence on oil and lowering carbon emissions has been dealt a blow with the news that a best-selling model may suddenly burst into flames.

A total of 629 G-Wiz cars – about two-thirds of the number on Britain's roads – have been recalled and repaired because their battery chargers may be prone to overheating. The alarm was raised when a parked car spontaneously combusted.

No one was hurt and, although just one car was involved in the incident in August, the Reva Electric Car Company decided to recall every G-Wiz fitted with the same charger.

Publicity about the recalls could stunt the growing popularity of the Indian-made three-door hatchback, which can be charged from a normal power socket and costs just 1p a mile to run. Its British retailer, GoinGreen, offsets the car's manufacture and use, allowing it to claim that the vehicle is completely "carbon neutral".

### [The plastic fantastic recycling trap](#)

It's the underlying assumption of modern design: Everything made by human hands will eventually outlive its worth. Consider, for example, the Swiffer. By almost every existing measure, it's better than mop, broom and dustpan. In fact, each single-use cloth is all but indestructible and no recycling program on the planet is equipped to deal with it. Point being: It's not the fault of the Swiffer, the failure is in the design structure of this fossil-fuelled age.

### [Iraq dismisses Mosul Dam warnings](#)

The Iraqi government has dismissed a US warning that Iraq's largest dam is at

imminent risk of collapse and is threatening the lives of thousands.

Spokesman Ali al-Dabbagh said US claims that Mosul Dam, in the country's north, was the most dangerous in the world were inaccurate and "totally untrue".

Mr Dabbagh said it was under constant observation and regularly maintained.

In May, the US told Iraq a catastrophic collapse could unleash a 20m (65ft) wave on Mosul, a city of 1.7 million.



### [Mexico City might face Katrina-scale flooding](#)

Mexico City is at risk of flooding of the kind that devastated New Orleans in the wake of Hurricane Katrina if authorities don't take steps to unclog the canals, reservoirs and lagoons that make up the municipal sewer system, experts warn.

An intense stench rises over the houses of some 300,000 people living on the city's west side because of the raw sewage running through a network of unlined canals 89 kilometers (55 miles) long and held by a system of 13 reservoirs, most of them clogged with mud, trash and organic waste.

The foul liquid moves through what more than 70 years ago was a system of hillsides, slopes and gullies feeding the rivers of the Mexican capital, but which were largely removed to be used for sand and gravel in the 1930s.

Untold thousands of shanties are crowded on the slopes of the hills a few kilometers from Santa Fe, the development center for modern and luxurious apartments and gleaming corporate headquarters....

....A strong rainy season could put too much pressure on the dams and breach them, releasing a monstrous wave of putrid wastewater down the hillsides into the lower neighborhoods of the capital, he said.

GELLERMAN: It's Living on Earth. I'm Bruce Gellerman. In India, the benefits of modern agriculture come with a high price. It's been reported as many as 150,000 Indian farmers over the past decade have committed suicide —many by drinking the pesticides they put on their crops. According to physicist and social activist Vandana Shiva, the farmers' despair is due to the weight of overwhelming debt. They can no longer afford the escalating price of chemicals and bio-engineered seeds, like pest-resistant Bt cotton. Shiva says the suicides in India are only part of a global problem that can be traced to the way food is produced.



VANDANA SHIVA: Chemical agriculture really is a theft from nature. Organic ecological farming is the only way we will be able to address the ecological crisis related to farming, the agrarian crisis emerging from industrial globalized agriculture, and the public health crisis coming from using war chemicals to produce our food.

### [Sharon Astyk: Change your diet to winterfood](#)

What grows in upstate NY in the winter? Green stuff. Cole crops like cabbage, Collards, Kale and Brussels Sprouts. Spinach. Some lettuces. Arugula. Asian greens like mizuna and bok choy. Cress. Mustards. Mache. Minutina. Lots, and lots and lots of greens. I can keep some root crops in the ground under cover (carrots, turnips, parsnips) as well. But in order for me to sell those crops, I'd have to have a large population that likes brussels sprouts, arugula and kale enough to eat large quantities of them daily....

....And may be the most basic truth about food I can think of. The simple fact is that if we're ever to change our agriculture, the initiative cannot primarily come from farmers - farming pays too badly for your average farmer to subsidize the tastes of their customers. It has to work the other way around, starting at our dinners. That is, if we want a society where our food is safe and grown in a non-violent, non-destructive way, we have to eat in a non-violent, non-destructive way, in tune with the reality of the place we live in.

It is easy to believe that the great transformative acts are about marching and voting, but our power to alter the nature of our agriculture is firmly located at our tables. When we reject corporate food and look locally, when we learn to cook and eat what is native to our place and can be grown by our farmers, when we insist of creating a local cuisine, we not only eat better, but we make what may be the most central necessary change in our lives - we create food security.

### [Experts urge toilet training to clean up Indian railways](#)

Experts at the World Toilet Summit Friday urged Indian railways to stop trains

scattering hundreds of thousands of litres of human waste across the country every day.

The world's largest network transports 16 million passengers on 8,000 trains every day, spreading 300,000 litres (60,000 gallons) of human waste from "open-discharge" toilets, transportation expert Ganesan Raghuram told the gathering.

"We are probably the only railway system in the world that has open-discharge of faecal matter," said Raghuram of the Indian Institute of Ahmedabad in western Gujarat state.

### [China birth defects soar due to pollution](#)

Birth defects in Chinese infants have soared nearly 40 percent since 2001, a government report said, and officials linked the rise to China's worsening environmental degradation.

The rate of defects had risen from 104.9 per 10,000 births in 2001, to 145.5 in 2006, affecting nearly one in 10 families, China's National Population and Family Planning Commission said in a report on its [web site](#).

### [Cairo tries to escape life under a black cloud](#)

Ranked one of the most polluted cities in the world, Cairo is once again under the shadow of a highly toxic black cloud which mysteriously settles above the huge city every autumn.

Exhaust fumes belched by millions of cars mixed with the hypertoxic emissions of the annual burning of rice stubble in rural areas of the Nile Delta are a prime cause, along with the city's ever-expanding population.

"We have here 540 micrograms per cubic metre of PM10 (polluting particles), which is three times higher than the official limit, and 10 times the limit of the World Health Organisation," meteorologist Magdi Abdel Wahab told AFP.

The thick "lead blanket" settles every year over this Nile city, triggering serious health concerns for its 16 million residents.

Emissions of nitrogen dioxide and carbon monoxide gases, mainly from the city's traffic, are mixed with the PM10 particles to create a potentially lethal cocktail, experts say.

### [Asbestos shame](#)

Since it's a carcinogen, Canadians don't use much of it any more. Even the asbestos in the Parliament Buildings is being removed. But the country remains one of the world's biggest purveyors of the deadly mineral, selling abroad 95 per cent of the output from the country's two remaining mines, both in Quebec, a business worth about \$93-million

a year....

....It's not just that Canada is home to companies that sell asbestos abroad. The federal and Quebec governments actively promote it, spending tens of millions since 1984 to encourage the remaining markets, mainly in developing countries. Ottawa has even mobilized Canadian diplomatic staff, from Jakarta to Washington, as recently as last summer, to stand on guard against asbestos bans in the roughly 70 countries that still buy it from Canada.

Natural Resources Canada is the lead federal department dealing with asbestos. It declined a request from The Globe and Mail to interview officials about Canada's asbestos policy, but agreed to answer written questions.

"Canada has long advocated, at home and abroad, a responsible, controlled use approach for chrysotile asbestos," the department said, although it added that "the implementation of domestic measures to ensure workplace health and safety is a sovereign responsibility of importing countries."

The response sidestepped questions about whether promoting asbestos abroad is a good use of taxpayers' money and whether it is done to protect federalism in Quebec.

### [Wind-up lights for African homes](#)

The technology behind the wind-up radio could soon be helping to light up some of the poorest homes in Africa.

The Freeplay Foundation is developing prototypes of a charging station for house lights it hopes will improve the quality of life for many Africans.

The Foundation said the lights would replace the expensive, polluting and unhealthy alternatives many Africans currently use to light their homes.

Field testing of the prototypes will start in Kenya in the next few months.

### [Study Reveals that Nitrogen Fertilizers Deplete Soil Organic Carbon](#)

The common practice of adding nitrogen fertilizer is believed to benefit the soil by building organic carbon, but four University of Illinois soil scientists dispute this view based on analyses of soil samples from the Morrow Plots that date back to before the current practice began.

The research, also drawing upon data from other long-term trials throughout the world, was conducted by U of I soil scientists Saeed Khan, Richard Mulvaney, Tim Ellsworth, and Charlie Boast. Their paper "The Myth of Nitrogen Fertilization for Soil Carbon Sequestration" is published in the November/December 2007 issue of the Journal of Environmental Quality.

"It is truly fortunate that researchers over the past 100 years have been diligent in collecting and storing samples from the U of I Morrow Plots in order to check how

management practices have affected soil properties," said Khan. The Morrow Plots are America's oldest experimental field. "We were intrigued that corn growth and yields had been about 20 percent lower during the past 50 years for the north (continuous corn) than for the south (corn-oats-hay) end of the Morrow Plots, despite considerably greater inputs of fertilizer nitrogen and residues."

To understand why yields were lower for plots that received the most nitrogen, Khan and his colleagues analyzed samples for organic carbon in the soil to identify changes that have occurred since the onset of synthetic nitrogen fertilization in 1955. "What we learned is that after five decades of massive inputs of residue carbon ranging from 90 to 124 tons per acre, all of the residue carbon had disappeared, and there had been a net decrease in soil organic carbon that averaged 4.9 tons per acre. Regardless of the crop rotation, the decline became much greater with the higher nitrogen rate," said Khan.



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