The Jakarta Post

                         December 19, 2007 Wednesday

**GEOTHERMAL PROMOTERS TOLD TO SEEK OPPORTUNITIES IN CARBON MARKET**

LENGTH: 425 words

from THE JAKARTA POST -- WEDNESDAY, DECEMBER 19, 2007 -- PAGE 13 The government
wants geothermal energy promoters to take advantage of global carbon trading
market as an alternative source of funding to help lower their investment and
production costs, a minister says

Energy and Mineral Resources Ministry Purnomo Yusgiantoro said Tuesday that
geothermal energy promoters could benefit hugely from the global carbon credit
program to compensate for their huge investment costs, thereby allowing them to
offer competitive tariffs to state power firm PT PLN as their buyer

"Let say that to build a 100-megawatt geothermal power plant, the investors will
need some $100US million. If the project was eligible for carbon credits, for
example, credits worth $70 million, that means that the investment would only
cost $30 million," Purnomo said

The carbon-credit mechanism was created under the Kyoto Protocol to help
developed nations meet the target of reducing their carbon dioxide emissions by
5 percent from the 1990 level by 2012

Under the scheme, businesses developing clean projects in developing nations can
seek compensation in the form of carbon credits, certified by the United Nations
(UN), and then sell these to the developed nations

Purnomo's remarks came after a recent study by a special ministry committee
showed that the feasible price for geothermal-generated electricity is around 7
to 8 U.S. cents per kwh, well above PLN's standard purchase price of around 5
U.S. cents per kwh

The committee, which was established to come up with a formula for determining
an economically feasible ceiling price for electricity, said the main reason for
such a high price was the huge investments geothermal projects require

However, according to Purnomo, the carbon-credit trading mechanism now provides
a quid pro quo for investors in the geothermal sector

"With lower investment costs, we can expect the price of the electricity to be
much lower than the 8 U.S. cents per kwh suggested by the committee," he said

Purnomo pointed to three geothermal projects -- Drajat and Kamojang in West Java
and Lahendong in North Sulawesi -- which he said had secured carbon credit
certificates worth $156 million

Indonesia has great potential to participate in the carbon-credit market through
geothermal projects as it is host to 40 percent of the world's reserves

Currently, the country only has seven geothermal plants in operation, which have
a combined capacity of a mere 852 megawatts

Ika Krismantari, The Jakarta Post, Jakarta Copyright 2007 The Jakarta Post

  The Times of Trenton (New Jersey)

                         December 19, 2007 Wednesday
                                FINAL EDITION

**Too late for later**

BYLINE: THOMAS L. FRIEDMAN

SECTION: EDITORIAL/OPINION; Pg. A20

LENGTH: 775 words

BALI, Indonesia - The negotiators at the U.N. climate conference here in Bali
came from almost 200 countries and spoke almost as many languages, but driving
them all to find a better way to address climate change was one widely shared,
if unspoken, sentiment: That "later" is over for our generation.

"Later" was a luxury for previous generations and civilizations. It meant that
you could paint the same landscape, see the same animals, eat the same fruit,
climb the same trees, fish the same rivers, enjoy the same weather or rescue the
same endangered species that you did when you were a kid - but just do it later,
whenever you got around to it.

If there is one change in global consciousness that seems to have settled in
over just the past couple of years, it is the notion that later is over. Later
is no longer when you get to do all those same things - just on your time
schedule. Later is now when they're gone - when you won't get to do any of them
ever again, unless there is some radical collective action to mitigate climate
change, and maybe even if there is.

There are many reasons that later is over. The fact that global warming is now
having such an observable effect on pillars of our ecosystem - like the frozen
sea ice within the Arctic Circle, which a new study says could disappear
entirely during summers by 2040 - is certainly one big factor. But the other is
the voracious power of today's global economy, which has created a situation in
which the world is not just getting hot, it is getting raped.

Throughout human history there was always some new part of the ocean to plunder,
some new forest to devour, some new farmlands to exploit, noted Carl Pope,
executive director of the Sierra Club, who came to observe the Bali conference.
But "now that economic development has become the prerogative of every country,"
he said, we've run out of virgin oceans and lands "for new rising economic
powers to exploit."

So, too many countries are now chasing too few fish, trees and water resources,
and are either devouring their own or plundering those of neighbors at alarming
rates.

Indeed, today's global economy has become like a monster truck with the gas
pedal stuck, so no one can stop it from wiping out more and more of the natural
world, no matter what the global plan.

There was a chilling essay in The Jakarta Post last week by Andrio Adiwibowo, a
lecturer in environmental management at the University of Indonesia, about how a
smart plan to protect the mangrove forests around coastal Jakarta was never
carried out, leading to widespread tidal flooding last month.

This line jumped out at me: "The plan was not implemented. Instead of providing
a buffer zone, development encroached into the core zone, which was covered over
by concrete."

You could read that story in a hundred different developing countries today. But
the fact that you read it here is one of the most important reasons that later
has become extinct. Indonesia is second only to Brazil in terrestrial
biodiversity and is No.1 in the world in marine biodiversity. Just one and a
half acres in Borneo contains more different tree species than all of North
America - not to mention animals that don't exist anywhere else on earth. If we
lose them, there will be no later for some of the rarest plants and animals on
the planet.

And we are losing them. Market-driven forces emanating primarily from China,
Europe and America have become so powerful that Indonesia recently made the
Guinness World Records for having the fastest rate of deforestation in the
world.

Indonesia is losing tropical forests the size of Maryland every year, and the
carbon released by the cutting and clearing - much of it from illegal logging -
has made Indonesia the third largest source of greenhouse gas emissions in the
world, after the United States and China. Deforestation actually accounts for
more greenhouse gas emissions than all the cars and trucks in the world, an
issue the Bali conference finally addressed.

I interviewed Barnabas Suebu, the governor of the Indonesian province of Papua,
home to some of its richest forests. He waxed eloquent about how difficult it is
to create jobs that will give his villagers anything close to the income they
can get from chopping down a tree and selling it to smugglers, who will ship it
to Malaysia or China to be made into furniture for Americans or Europeans. He
said his motto was, "Think big, start small, act now - before everything becomes
too late."

Ditto for all of us. If you want to help preserve the Indonesian forests, think
fast, start quick, act now. Just don't say later.

Thomas Friedman is a New York Times columnist.

   Fresno Bee (California)

                         December 19, 2007 Wednesday
                             SOUTH VALLEY EDITION

**Visalian delivers message from Bali**

BYLINE: Lewis Griswold The Fresno Bee

SECTION: LOCAL NEWS; Pg. B1

LENGTH: 496 words

Global warming is real, but mankind can beat the heat by following the example
of Europe -- and California -- in getting a start on reducing greenhouse gas
emissions into the air.

That was Mike Chrisman's "take home" message after a week in Bali, Indonesia, at
the United Nations conference on climate change.

Chrisman serves as secretary of the California Resources Agency. He hails from
Visalia, spending weekdays in Sacramento and weekends at the family ranch.

"The argument about global warming is pretty much over," Chrisman said,
rejecting the belief espoused by critics that global warming is a myth.

Industrial societies make "greenhouse gases" such as carbon dioxide, methane and
nitrous oxide that get into the air. These gases trap heat in the atmosphere,
causing a one degree Fahrenheit rise in mean global temperatures (two degrees at
the poles) over the past 100 years or so, according to the scientists, causing
the globe's climate to change.

"There will always be doubters on this," Chrisman acknowledged.

But "the scientific evidence is very compelling," he said. "It is happening. You
look at the rate that glaciers are melting."

One thing new that Chrisman learned on the trip is that Indonesia, a nation of
about 17,000 islands, has lost 30 to 35 islands to rising sea levels -- an
effect of global warming.

In Bali, Chrisman traded tips with officials from other countries, including the
environmental minister of Sweden, and folks from nongovernmental organizations.

The California delegation gave its PowerPoint presentation about the state's
Global Warming Solutions Act, signed into law last year, which establishes a
"cap and trade" market system to push down greenhouse gas numbers to 1990 levels
by the year 2020.

"There's going to be a generation or two to slow it down and reverse it,"
Chrisman said.

It's not just the United States that needs to reduce emissions, he said. China
and India must get with the program, too.

By the way, just because California is ahead of the Bush administration in
getting a law on the books does not mean that Republicans like himself and Gov.
Schwarzenegger have a beef with the White House, he said.

"Good people disagree," Chrisman said. "We just disagree with the national
administration. California has always been ahead, particularly on environmental
stuff."

LAW LIBRARY: Tulare County Public Defender Mike Sheltzer and lawyer John Bianco
have been reappointed to the Tulare County Public Law Library board of directors
by the Tulare County Board of Supervisors.

The law library, in the basement of the Tulare County Courthouse, is open 8 a.m.
to 5 p.m. weekdays. It is used by judges, lawyers and the public, said Director
Anne Bernardo.

About 65% are nonlawyers, many preparing to defend themselves in court or file a
lawsuit on their own, which is why the "how to litigate" books are popular.

Lewis Griswold's column appears on Wednesday, Friday and Sunday. He can be
reached at lgriswold@fresnobee.com or (559) 622-2416.

The Nation (Kenya) - AAGM

                         December 19, 2007 Wednesday

**THE WORLD IGNORES CLIMATE CHANGE AT ITS OWN PERIL**
BYLINE: Wangari Maathai

LENGTH: 782 words

THE INTERGOVERNMENTAL Panel on Climate Change estimates that temperatures will
rise by 1.8° to 4° C this century. A less stable climate will bring massive
ecological and economic challenges.

Already, we see that droughts, floods, hurricanes and heat waves are becoming
more common. Will we watch as catastrophic disruption to Earth's environment and
its people occurs on an unimaginable scale? Or will we change course and work
together to mitigate the effects of global warming?

For the global South, and especially Africa, environmental issues are not a
luxury. Arresting the world's warming and protecting and restoring our natural
systems are issues of life and death for much of the world's population.

In its recent report forecasting the effects of global warming on Africa, the
IPCC predicts that the volume in rivers will fall as temperatures rise, making
it harder to access clean water. Some regions will receive more rain, allowing
cultivation of new crops.

BUT OTHERS, ESPECIALLY in southern and western Africa, will become drier,
fuelling desertification. As rainfall patterns shift, the IPCC estimates that by
2100, crop revenues could fall by 90 per cent, devastating Africa's small-scale
farmers. Climate change will also create new malaria zones, affecting 80 million
people.

Resource scarcity made worse by global warming, will cause conflicts to flare
up. We see this in Darfur, where unscrupulous leaders have used clashes over
resources to stir up massive violence.

Africa's greenhouse gas emissions are negligible compared to the industrialised
world's, and those of the emerging economic giants of China and India, yet those
of us living in the southern hemisphere are likely to be most affected by global
warming.

For this reason, I and many others are challenging the leaders and citizens of
industrialised countries, and in fact, all nations, to reduce energy consumption
and to move beyond fossil fuels; to cut greenhouse gas emissions from all
sources; and to adopt policies so that corporations operate more responsibly and
individuals can live more sustainably on the planet.

As major polluters, industrialised countries have a moral responsibility to
assist Africa and the rest of the developing economies by making available
technology affordable to reduce our vulnerability and increase our capacity to
adapt to global warming, including through the use of alternative and renewable
sources of energy.

Natural resources provide a buffer against the effects of climate change. While
technological advances and developing alternative sources of energy are
essential, we cannot forget to conserve and act to restore what we have.

One of the most important policy measures is to prioritise protection and
rehabilitation of standing forests - such as those in Amazonia and Indonesia,
the Boreal region and the Congo Basin.

These forests are the ecosystems that make life possible for numerous species,
including our own. They are also Earth's lungs, absorbing enormous quantities of
carbon dioxide and holding significant stores of carbon in their soils. We have
a global obligation to safeguard them.

We also must make concerted efforts to end unsustainable logging, and support
initiatives, like reforestation programmes, through which poor people can secure
a livelihood by protecting, not destroying, their environment.

Well-managed, participatory tree-planting programmes that serve as carbon
offsets as well as delivering livelihood benefits to local communities, are an
important means to support mitigation efforts in southern countries.

Such activities, of course, do not provide an excuse for industrialised
countries' greenhouse gas emissions. All countries both in the North and South
must act to deal with the negative impacts.

BUT INDUSTRIALISED COUNTRIES should enable countries with developing economies
to participate in the carbon market and to develop industry based on renewable
energy sources. This is a case of environmental justice that ought to be
addressed more responsibly by all.

Although the challenges posed by global warming are enormous, we can rise to
them. At last year's UN climate meeting in Nairobi, the Green Belt Movement, the
United Nations Environment Programme (Unep) and the World Agroforestry Centre
(Icraf) launched the Billion Tree Campaign.

The campaign inspired millions across the planet. Pledges came in from
individuals, NGOs, businesses, governments, communities and associations in all
regions. And in a year, we met our goal: planting a billion trees worldwide.

Prof Maathai, the 2004 Nobel Peace Prize laureate, is the Goodwill Ambassador
for the Congo Basin Forest Ecosystem.

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The Times Union (Albany, New York)

                         December 19, 2007 Wednesday
                                  1 EDITION

**If it takes an expert to explain, it isn't real**
BYLINE: By THOMAS FRIEDMAN

SECTION: MAIN; Pg. A13

LENGTH: 805 words

BALI, Indonesia - As readers of this column know, I have a rule that there is a
simple way to test whether any Arab-Israeli peace deal is real or not: If you
need a Middle East expert to explain it to you, it's not real. I now have the
same rule about global climate agreements: If you need an environmental expert
to explain it to you, it's not real.

I needed 10 experts to explain to me the Bali climate agreement - and I was
there! I'm still not quite sure what it adds up to. I'm not opposed to forging a
regime with 190 countries for reducing carbon emissions, but my gut tells me
that both the North and South Poles will melt before we get it to work.

There is a better way. Just make America the model of how a country can grow
prosperous, secure, innovative and healthy by becoming the most clean,
energy-efficient nation in the world - and let everyone follow us.

Unfortunately, the Bush team has not been able to lead on this issue - for two
reasons. First, its credibility is shot, even though if you add up all the clean
energy, biofuel and other programs the administration has initiated over the
past two years, plus the half-a-loaf energy bill spearheaded by the Democrats
that the President is scheduled to sign today, they're not a zero anymore.

There was a revealing encounter here Thursday between the U.S. negotiating team
and environmentalists that was worthy of pay-per-view. The American team was
giving its big briefing. The room was packed with activists from around the
world. They came loaded to carve up the Americans, who, it was just assumed, had
to be stupid because they represented the Bush administration.

And then something unexpected happened. For 90 minutes, Andy Karsner, who runs
the Department of Energy's renewable energy programs, James Connaughton, who
heads White House climate policy, and their colleagues put on a PowerPoint
performance that was riveting in its understanding of the climate problem and
the technologies needed to solve it. Their mastery of the subject was so
impressive that it left this room full of global activists emotionally confused:
On the one hand, it was obvious that these U.S. officials really knew their
stuff, yet on the other, I'd bet not a single person there believed they
reflected the true Bush policy.

As if reading the minds of everyone there, Malini Mehra, the chief executive of
the Centre for Social Markets, an Indian activist group, took the microphone
and, in so many words, asked the Bush aides: Who are you, and what planet did
you come from? It could not possibly be from planet Bush.

"Anyone who has been listening to the news on climate change knows that there
has been one message from this administration - that any serious action on
climate change threatens the U.S. economy and our way of life," Mehra said to me
later.

So to now hear these American technocrats "present what was a thoughtful
analysis that made sense, flies in the face of what we have come to know about
this administration," she added.

A lot of this is the price America is paying for the gratuitous way President
Bush trashed the Kyoto treaty in 2001, without presenting any alternative for
six years. Message to world: "Get lost. We only care about ourselves."

So now, when both Bush and Congress have moved a little, few people believe even
that is for real. As Irwandi Yusuf, the governor of Indonesia's Aceh province,
bluntly said to me: "We don't believe the Americans in this administration."

The other reason we can't be a model is that whatever the U.S. is now doing to
address the global warming challenge, it is not transformational. It is an
incremental approach to a scale problem that can only be solved by triggering
massive innovation in clean power. And without a price signal - a carbon tax or
cap-and-trade system - to make it profitable to invest enormous sums, long term,
in new clean technologies, it will not happen at scale.

The Bush team loves new technologies, but not the price signals needed to
initiate them. By the way, finance or energy ministers who deal with price
signals weren't even at the Bali convention, which was dominated by
environmental regulators.

"This is a problem of economic transformation, not environmental regulation,"
said Glenn Prickett, senior vice president at Conservation International.
(Disclosure: My wife is on its board.) "The transformation needed will require
far more than just passing one law or signing one treaty. It will require the
same level of focus and initiative that the Bush administration is devoting to
the war on terror. No political leader in the U.S. is approaching this issue yet
with anywhere near the seriousness required."

So I still don't know what Bali was about, but I do know that it was
incremental, not transformational - and incrementalism, when it comes to clean
energy, is just a hobby.

December 19, 2007 Wednesday

**World to America: Cool down**
BYLINE: Katharine Mieszkowski

SECTION: FEATURE

LENGTH: 790 words

HIGHLIGHT: The Bali global warming talks ended with a stubborn U.S. finally
making promises that other countries could live by.

Booing, jeers, tears and finally cheers lent high drama to the conclusion of the
United Nations climate change talks in Bali last weekend. The talks culminated
in a meeting in which the United States delegation was publicly humiliated.
"I've never seen anything like it," declares David Doniger, who attended the
meeting as the policy director of the Natural Resources Defense Council's
Climate Center, and had been a negotiator for the Clinton administration at
Kyoto. "The U.S. was pounded for nearly an hour by country after country."

Differences between countries are usually hammered out in private during breaks,
or behind closed doors. Yet in the public plenary, the U.S. objected to an
attempt by India to reword a sentence concerning how rich countries might aid
developing ones in reducing their greenhouse gas emissions. None of the usual
U.S. allies, such as Japan, South Africa and Canada, took its side, and the
international frustration with the Bush administration boiled over in the public
forum. The island nation of Papua New Guinea castigated the industrial giant.
"We seek your leadership," Kevin Conrad, the delegate from Papua New Guinea,
told the Americans. "But if for some reason you are not willing to lead, leave
it to the rest of us. Please get out of the way."

Within the hour, the apparently chastened U.S. reversed course, inspiring
cheers, and an agreement was soon reached. "The U.S. caved from the
psychological and emotional pressure of 190 countries in a room," says Peter
Goldmark, director of the climate and air program for Environmental Defense, who
attended the talks in Bali. "The Bush team was really battered and isolated, and
any American who said it was not painful to see was lying."

After two weeks and many late-night meetings, the delegates agreed to a "road
map" for future climate negotiations, which they will attempt to ratify in a new
climate treaty by the U.N. climate change conference in Copenhagen in December
2009. "Nobody was there to commit to anything, and nobody did commit to
anything," says Elliot Diringer, director of international strategy for the Pew
Center on Global Climate Change, who attended the Bali talks.

The Bali conference did produce a few significant developments. Developing
countries, including China, South Africa, Brazil, India and Mexico, agreed to
consider taking action to curb greenhouse gases. Previous climate negotiations
exempted developing countries from doing anything to reduce their emissions
growth. "It doesn't put anyone on the hook right now for emission reductions,
but it doesn't let anyone off the hook either. If we had let developing
countries off the hook, we'd never get an agreement that the United States could
ratify," says Diringer.

In Bali, fighting deforestation, which accounts for some 20 percent of
human-induced greenhouse gas emissions, also became a priority for future talks.
Indonesia, Brazil, Papua New Guinea and other countries with rain forests want
financial incentives from the carbon markets to help them cut down on illegal
logging and conserve forests. "Right now, the forests are valued as wood or
acreage for farming and plantations," explains Doniger. "We have to have a world
where it's just as valuable, maybe more so, to keep the forests standing."

Even with these positive developments, a pall hung over Bali, as the U.S. played
a game of climate-change chicken with developing countries like China. Now that
Australia has agreed to the terms of the Kyoto Protocol, the U.S. is the only
industrialized nation that has refused to cap its emissions. Developing
countries are using the U.S. reluctance to commit to a carbon cap as a way to
avoid making commitments of their own. The result: The final documents from Bali
do not include even a range of possible emissions targets that will be
considered in future negotiations.

"The Bush administration still managed to force any mention of the specific
limits needed to head off climate catastrophe into a footnote in the Bali
agreement," says Rep. Edward Markey, who chairs the Select Committee on Energy
Independence and Global Warming, in a statement: "Not since Emperor Nero tried
footnoting firefighting through more fervent fiddling, have we seen such a
transparently vain effort to avoid the inevitable. When it comes to meeting the
challenge of climate change, the Bush Administration still appears willing to
operate on the basis of denial and obfuscation, not science and logic."

And there's no evidence that will let up, at least until there's a new president
in the White House. Just hours after the talks ended, the White House released a
statement expressing "serious concerns" that the Bali road map doesn't demand
enough of the developing world.

 El Caribe de Hoy

                                November 2007

**Guyana forms new body to push climate concerns**
SECTION: REGION; Pg. 21 Vol. 18 No. 12

LENGTH: 541 words

ABSTRACT

"The principal tasks of the committee will involve examining the program of
events and activities for the conference; identifying md discussing key issues
and areas of relevance to Guyana; and to prepare briefing documents for Guyana's
representafives to conference", the Government Information Agency GIN A) said in
a statement.

"Guyana would ensure guaranteed sustainable forestry practices as well as focus
heavily on conservation if there is economic reward for that and that we're
prepared to work with bilateral donors, as well as commercial entities to put
this to the market or to guarantee a financial flow to the country," [Bharrat
Jagdeo] said when questioned afterwards.

FULL TEXT

GEORGETOWN, Guyana, CMC - A newly formed local body has met ahead of a December
climate conference in Bali, Indonesia to draft and refine a blueprint to push
major climate change concerns of Guyana and the rest of the region.

A statement from the Guyana government said the National Climate Change
Committee, under the auspices of the Agriculture Ministry, will prepare a
document for the Bali Conference "to encourage stronger global actions and
support in addressing the issues.

"The principal tasks of the committee will involve examining the program of
events and activities for the conference; identifying md discussing key issues
and areas of relevance to Guyana; and to prepare briefing documents for Guyana's
representafives to conference", the Government Information Agency GIN A) said in
a statement.

According to GINA, in a oid to sharpen the focus of the briefing document, the
National Climate Change Committee is to hold talks with national stakeholders.

'ROADMAP'

The effects of global climate change have generated much debate and many
countries are co-operating to formulate effective strategies to help mitigate
the problem. The conference in Bali is aimed at looking at possible solutions.

The government release said a "Bah Roadmap" is expected to establish the process
to work on the key building blocks of a future climate change regime, including
adaptation, mitigation and technology co-operation and financing the response to
climate change.

Guyana is willing to deploy its vast rainforest in the global climate change
fight if there will be financial rewards for the sacrifice, President Bharrat
Jagdeo told the recent Commonwealth Finance Ministers Meeting which was held in
the capital city, Georgetown.

"Guyana would ensure guaranteed sustainable forestry practices as well as focus
heavily on conservation if there is economic reward for that and that we're
prepared to work with bilateral donors, as well as commercial entities to put
this to the market or to guarantee a financial flow to the country," Jagdeo said
when questioned afterwards.

"We're hoping that in the post-Kyoto protocol framework that there would be
provisions for standing rainforests and a mechanism for rewarding countries for
conserving those rainforests," the president added.

In the interim, Jagdeo said work needs to be done with bilateral donors so they
can guarantee a particular financial flow to the country and then possibly use
the carbon credits that could be derived from standing rainforests if they are
assessed, to offset carbon emissions.

[Chinadaily.com.cn](http://Chinadaily.com.cn)

                         December 19, 2007 Wednesday

**IT TAKES A WORLD TO FIGHT CLIMATE CHANGE**

LENGTH: 1108 words

Monitoring the progress of the United Nations climate change conference in Bali,
Indonesia, was a bit like watching a battle unfolding in front of me.

No, this was not a war between rich countries - particularly the United States,
which has been polluting our sky for the past 300 years and continues to do so
on a large and escalating scale - and poor countries - with China as a glaring
example, though it has entered the polluting game late and committed much lesser
crimes per capita, but is seen to be making its best effort to clear up the
mess. This is all about mankind confronting a common problem, one that might put
us out of existence. It is our common war.

Report upon report from different groups of independent scientists have clearly
warned us that we are heading toward a global catastrophe and are about to pass
the point of no return. The most recent scientific data from the
Intergovernmental Panel on Climate Change (IPCC) clearly shows that action to
reduce emissions must be taken now. Something urgent and drastic has to be done
about the situation if we are to have any hope of heading off our common
extinction. We have the means to slow down climatic change, and even ultimately
reverse the situation and get back to a healthier ecology, but it seems we just
do not have the collective wisdom to do so.

The adoption of the United N...

CongressNow

                         December 19, 2007 Wednesday

**Kerry: EU Climate Goal a Non-Starter in Senate**
BYLINE: Geof Koss, CongressNow Staff
SECTION: Environment
LENGTH: 541 words

Sen. John Kerry (D-Mass.) today said a stringent short-term greenhouse gas
reduction goal favored by the European Union and others would generate too much
political opposition to be included in a cap-and-trade bill that will be brought
before the Senate next year.

"It's not going to happen," Kerry said this morning when asked about adding the
EU's favored limits to the Lieberman-Warner Climate Security Act (S. 2191), a
cap-and-trade bill passed by the Senate Environment and Public Works Committee
earlier this month.

The EU at the United Nations climate change talks in Bali, Indonesia, earlier
this month pressed for the inclusion of a goal for developed nations of 25 to 40
percent reduction of greenhouse gas emissions by 2020. The figure was dropped
because of opposition from the United States delegation and others.

Jim Connaughton, the White House's top environmental official who attended the
Bali talks, told reporters this afternoon the goal was unattainable. "The United
States and most other countries could not accept that," he said.

But Kerry said new technologies and the right policy approaches could be
employed to meet the schedule. "We're not going to get 25-40 percent now, but
that doesn't mean it shouldn't be a goal," he said this morning after giving a
speech on his trip to the Bali meeting. "If you don't have goals, you don't
achieve anything."

Kerry was the lone member of Congress to travel to Indonesia for the climate
talks, which represent the initial effort to map out a successor to the Kyoto
Protocol, the international global warming treaty that expires in 2012. He said
he spent 40 hours traveling to the talks to deliver a key message to
participants.

"That message: There is real movement on this issue in America, and we are ready
to lead again," he said. "The United States is not going to continue to be the
skunk of the party." Kerry also said the Bush White House, which opposes
mandatory controls on carbon dioxide favored by much of the world, is
"increasingly irrelevant" to future climate talks.

But Connaughton disagreed.

He said the Bush administration's decision to join the consensus Bali document
mapping out the path forward will make it easier for the next administration to
transition into international climate negotiations in early 2009.

In addition, he highlighted upcoming talks among major economies that the Bush
administration will convene in Hawaii next month. "We have a lot to offer," he
said.

Connaughton also cited progress in another key area: the role of major
developing economies like China and India - which are currently exempt from the
Kyoto Protocol - in a future treaty. He said the administration was pleased that
major developing economies acknowledged they too must make emissions cuts, which
he called a "modest first step."

He declined to comment on specific bills or policy approaches under discussion
in Congress, but said the White House continues to talk to the Hill on climate
change. "We will be constructive participants in those discussions," he said.

For his part, Kerry told CongressNow he and other Senators are working to build
bipartisan support for the Lieberman-Warner bill, which he said is likely to be
brought to the Senate floor in the first half of 2008.

The Nelson Mail (New Zealand)

                         December 19, 2007 Wednesday

**The heat is on - reflections on Bali**

BYLINE: SINNER, Jim

SECTION: FEATURES; OPINION; FOCUS; Pg. 15

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Bali was indeed a fitting setting for global negotiations on how to address
climate change.

Emerging from the airport in Denpasar into the pressing tropical heat, humidity
and humanity, I quickly escaped into an air-conditioned taxi. On the way to the
conference, my taxi travelled through semi-urbanised areas that epitomised the
emerging economies of Asia - throngs of people, living simply but busy trying to
get ahead. Small shops lined the streets.

Motorbikes were ubiquitous - a common means of transport for everyone from
grandmothers to families of four, on one motorbike. We passed the heavy security
cordon into the luxury resort area of Nusa Dua - a dozen five-star hotels, all
of them air-conditioned, surrounding the Bali International Conference Centre.

The thought occurred - should emissions from catering to rich tourists and
climate change bureaucrats be exempt from Kyoto emission limits just because
they occur in a developing country?

The climate change conference in Bali was actually two conferences, side by
side. One was an ideas-bazaar-cum-trade-show, with all and sundry presenting
concerns for the planet and/or protests about the injustice of it all, mixed
with businesses promoting their ideas and services to help solve the greatest
challenge of our time.

This was a cacophony of voices - on such a diverse range of topics that they
could only be related by climate change: deforestation of peat lands, the
potential for seaweed to absorb carbon, carbon markets and derivatives, worries
about production of biofuels displacing food production and natural habitat,
impacts on indigenous peoples, the world energy outlook, next year's G8 summit
in Japan.

The Viscount Monckton of Brenchley, a climate change skeptic, made a minor scene
because he wasn't given a seminar room (he hadn't booked one). Government
officials sang the virtues of their policies - which, in many cases, including
New Zealand's, have yet to be enacted. Harvard academics described - to the
audience's dismay - why the world shouldn't expect the USA to join a global
agreement.

Business leaders described what their industries are doing to reduce emissions,
and to persuade the US government to act.

The second conference - the negotiation itself - was labyrinthine and obscure,
with long-winded debate over words with hidden meaning and uncertain
implications. Officials haggled over text describing not some concrete action on
climate change but rather what these same officials will argue about the next
time they meet to discuss the next small step towards reaching a global climate
agreement by the end of 2009.

The tedious haggling occurred not once or twice, but on at least two dozen
different agenda items, all inter-linked but negotiated separately and often
simultaneously in ``contact groups" and ``informals" in different rooms,
generally for government officials only.

One such agenda item was the terms of reference for a scheduled review of the
Kyoto Protocol. Developed countries wanted this review to focus on
``effectiveness", hoping the review would conclude that the protocol cannot be
effective without some limitations on developing country emissions. Developing
countries, not surprisingly, resisted this suggestion at every turn, and
proposed that the review focus on ``implementation" of the protocol. They want
the review to highlight that the rich countries have not fulfilled their
commitments to provide funding for adaptation, technology transfer and capacity
building.

Perhaps, given the paltry efforts to date, developing countries could be
forgiven for thinking that the rich countries are never going to reduce their
emissions, and therefore for focusing on funding for adaptation. But it didn't
help get agreement on a framework for emissions reductions. In the end, the
wealthier countries conceded the point, presumably concluding that it wasn't a
big enough issue to fight over.

Another example. In one room, countries engaged in a ``dialogue" on how to make
further progress under the Framework Convention on Climate Change - the 1992
treaty that virtually every country signed up to because it had no legally
binding emission obligations.

Meanwhile, in another room, were the countries that have ratified the Kyoto
Protocol - ie, the US was not in the room. Here, officials were negotiating a
framework for negotiations on further commitments after 2012, when the first set
of Kyoto obligations end. Surely this depended upon whether the US would re-join
the global consensus, which was the unspoken question in the ``dialogue" in the
other room.

And in yet another room, officials discussed what, when and how they should have
further negotiations on reducing emissions from deforestation in developing
countries. This accounts for 20 percent of global emissions and is therefore a
key part of the bigger picture.

All of these items needed to be resolved and incorporated into the ``Bali road
map".

Tensions between developing and developed countries are constantly in evidence.
Developing countries constantly remind everyone that the wealthy countries have
caused this problem, and still have per capita emissions that are many times
those of developing countries. China, Brazil and India are determined to fulfill
their economic (and geopolitical?) potential, and are not about to accept
obligations that will stymie their superpower ambitions.

Meanwhile, Russia is an enigma. Is it being difficult just to show that Russia
is still a force to be reckoned with? Australia was welcomed back into the fold
- the prodigal son. But the USA remains a pariah, Canada is in danger of
becoming one for saying it will not honour its Kyoto commitments, and Saudi
Arabia complains that not enough is being done to address impacts on
oil-producing nations from the rest of the world using less fossil fuel. Yeah
right.

It would be easy to despair given the snail's pace of progress. Given that the
world needs to reduce emissions by around 30 percent by 2020 and 80 percent by
2050, relative to 1990 levels (which we are already well above) to avoid
dangerous climate change. Given that those who will be most affected by climate
change are least able to bear the costs, and those who need to pay are likely to
be the least affected.

How can we overcome the rich-poor divide? What will bring us together in the
common cause? Yet I derive hope from the fact that a solution is within reach.
There is an enormous amount of brainpower being devoted to the problem. Major
multinational corporations have added their voices to the call for action.
Foreseeable technologies could achieve the necessary reductions in emissions at
reasonable cost if we would only invest in developing them, and learn by doing.

Large reductions can be achieved from energy efficiency - and will actually save
money. There is a willingness to address deforestation in developing countries.
Solar energy can meet the world's insatiable demand for energy - if it can be
harnessed efficiently, without covering a sizeable portion of the earth in solar
panels. And finally, I am still optimistic because, as was said many times in
Bali, we simply cannot afford to fail.

Jim Sinner, who heads the sustainable business group at Nelson's Cawthron
Institute, attended the UN Climate Change Conference in Bali as a member of the
New Zealand delegation. Nelson MP Nick Smith's take on the Bali conference will
run tomorrow.

Chemical Week

                    December 19, 2007 / December 26, 2007

**Alternative Fuels;
Filling the Gap**

BYLINE: MICHELLE BRYNER

SECTION: COVER STORY; Pg. 18

LENGTH: 1828 words

Alternative fuels are vying for a spot on the transportation highway as
petroleum costs escalate, light oil reserves diminish, and environmental issues
raise concerns. Bioethanol, biodiesel, and other alternative fuels will be
needed to fill an expected petroleum supply gap, sources say.

Global demand for transportation fuels, including alternative technologies, is
expected to reach 1,021 billion gals/year by 2030 -- a 50% increase over 2005
demand, says ExxonMobil, a major blender of ethanol in gasoline. Transportation
will be the fastest-growing energy sector in 2030, the company says.

Bioethanol and biodiesel currently comprise just 1% of global transport fuel
consumption, according to a recent study by Accenture (New York). This number is
projected to grow to about 5%-10% by 2017, the report says.

Crude reserves are sufficient to meet projected demand through 2030, says
ExxonMobil. However, existing local production volumes in the European Union
(EU) and the U.S. have declined, and access to and development of existing
reserves "in an environmentally responsible way" are problematic, the company
says.

Also, addressing renewable fuel mandates as well as GHG legislation in the EU
and the U.S. will further drive growth in the alternative fuel market, says
Melissa Stark, senior executive/energy industry group at Accenture.

There are several promising alternative fuel technologies, but biofuels, in
particular, are making headlines as the near-term solution to those issues.
"It's only biofuels that can really respond powerfully to both greenhouse gas
issues and concerns around energy security," says Phil New, president/biofuels
at BP, a major ethanol blender. Biofuels could supply 10%-25%, or 85 billion-195
billion gals/year, of road transport fuels in the U.S. by 2030, New says.

"Our research shows that technology is the biggest uncertainty in the future of
the biofuels industry," Stark says. "Technology will continue to improve the
economics of biofuels development, but it is still uncertain which technologies
will have the most impact and what the ultimate scale of the industry will be,"
she says.

Bioethanol and biodiesel are the most abundant biofuels currently produced.
Ethanol can be made from any source of fermentable sugars but is primarily made
from food crops including grains, oilseeds, and sugar cane.

First-generation ethanol has several drawbacks, however. It puts a strain on the
food supply. "There's simply not enough arable land available to grow the crops
necessary" to meet demand of both food and fuel, New says. Other issues include
performance, he says. Bioethanol is a low energy-density fuel that cannot be
blended with gasoline in high quantities. Also, there are issues surrounding
transporting ethanol, as well as uncertainty regarding emission-reduction
potential of biofuels, including ethanol.

Given those issues, the ceiling on the amount of corn-based ethanol that the
U.S. can produce is about 12 billion-15 billion gals/year.

However, next-generation products including cellulosic biofuels will address
some of the first-generation's drawbacks. Commercial production has yet to begin
using second-generation products, though it is expected in 2010.

Cellulosic biofuels allow for use of a wide range of non-food crops, including
fibrous plant material, that can be converted into fermentable sugars. Producing
ethanol from cellulose sources requires three main steps: A thermochemical
pretreatment process to open up the structure so it is accessible to enzymes;
hydrolyzing the material into simple sugars using special enzymes; and
fermenting the sugars into ethanol.

Several chemical companies are partnering with the National Renewable Energy
Laboratory (NREL; Golden, CO), part of the U.S. DOE, to develop cellulosic
ethanol technology. Genencor and Novozymes have been selected to work on
lowering the cost of enzymes (p. 21); UOP and Pacific Northwest National
Laboratory are ceveloping technology to enable the production of biofuels in
existing U.S. petroleum refineries; and Archer Daniels Midland (ADM) and DuPont
are also involved with the project.

The goal is to develop a process to convert cellulose into ethanol that is cost
competitive with corn ethanol within the next five years, and cost competitive
with petroleum-based gasoline by 2030.

Cost is a major hurdle for making cellulosic ethanol commercially viable,
companies say. "Feedstock cost, enzyme cost, and depreciation are the three big
cost factors for cellulosic ethanol plants," says Jack Huttner,
v.p./bio-refinery business development at Genencor. Cellulosic biomass is more
difficult to break down into fermentable sugars than corn, Huttner says. The
process requires a factor of 50-100 more enzymes. This translates into an
operating cost that is 2-3 times more expensive than producing corn ethanol.

"The challenge for enzyme development for cellulosic ethanol is that every
combination of feedstock and pretreatment conditions changes the optimal enzyme
cocktail required," Huttner says. Genencor focuses on three feedstocks -- sugar
cane bagasse, corn-stover, and wood pulp -- and one pretreatment process. The
company has developed the first commercially available enzyme for cellulosic
ethanol (CW, Oct. 24, p. 8). The enzyme, trade named Accellerase, is probably
not the optimal enzyme for cellulosic ethanol plants, but it is a good starting
point for producers to design their cellulosic facilities, Huttner says.

Mascoma (Cambridge, MA), a Dartmouth College (Hanover, NH) spinout, will use
Genencor's enzyme for a previously announced 500,000-gals/year cellulosic
ethanol demonstration facility at Rome, NY. The company broke ground on the
facility this month, and expects it to be operational in 2009.

An alternative to bioethanol is biobutanol, which is a higher-performing fuel.
Biobutanol contains 86% energy relative to gasoline, compared to ethanol which
contains only 66%. DuPont was the first chemical company to invest in this
technology, though it has also broadly invested in several other bio-fuel
technologies. DuPont says it intends to improve existing ethanol production
through ag-biotechnology, and develop cellulosic bio-fuel technologies as well
as next-generation biofuels. DuPont expects its process technology for
biobutanol and cellulosic ethanol to be ready for commercial introduction in
2010.

DuPont is working with BP through a 50-50 joint venture to develop, produce, and
market biobutanol (CW, June 28, 2006, p. 13). The companies expect biobutanol to
be commercially available in the U.K. in 2007, and in the U.S. by 2010. The jv
will build a 20,000-liter/year biofuel demonstration facility designed to
produce advanced biofuels from feedstocks such as wheat, corn, barley, and rye
-- the first such facility worldwide, the companies say. DuPont expects the
plant to start up in early 2009.

While not currently used in the U.S. as a transportation fuel, biodiesel is
gaining ground in other countries. It is the predominant biofuel consumed in the
EU. Biodiesel is generally produced by reacting methanol with vegetable oils,
used cooking oils, or animal fats.

ADM is one of the world's largest producers of biodiesel and is investing in
biodiesel production in Brazil and Indonesia. Dow Haltermann Custom Processing
(DHCP), a Dow Chemical business, also manufactures biodiesel. DHCP has been
producing biodiesel at a Houston plant for almost two years in an exclusive
supply deal with World Energy Alternatives (Chelsea, MA).

UOP and ENI (Rome) have developed an alternative technology for producing
biodiesel, trade named Ecofining. The technology uses hydrogen and vegetable oil
to produce high-cetane diesel fuel. The resulting fuel is a "an
ultra-high-quality hydrocarbon resembling Fischer-Tropsch diesel," says Jennifer
Holmgren, director/renewable energy and chemicals at UOP.

Further out on the commercial development timeline is hydrogen fuel. "The
ultimate end-game of trying to meet the objectives of sustainability, energy
security, and energy independence is going to require a variety of fuels," says
Nick Mittica, commercial manager/hydrogen energy systems at Air Products.
"Biofuels do help extend the current gasoline pool but they have some
limitations in terms of emissions potential and availability," Mittica says. Air
Products, the world's largest hydrogen producer, has set its sites on hydrogen
fuel.

Air Products expects the use of hydrogen as a transportation fuel to take off in
2015, Mittica says. About 2,500 hydrogen-ready vehicles will be available in
California in 2010, and hydrogen fueling stations will be built in concentrated
areas in Los Angeles and San Francisco to support these fleets. Buses and other
transit vehicles equipped with hydrogen fuel cells will be released more broadly
across the country, he says. "Hydrogen fueling stations will be built to support
buses in major cities, and that will be the beginning of the hydrogen
infrastructure around the country," he adds.

Air Products says it uses the traditional method of steam methane reforming to
produce hydrogen, but that it also invests in renewable production methods.
"Clearly, the win over the long run is going to be the production of hydrogen
from renewable sources," Mittica says. The company is exploring the use of
several other processes for producing hydrogen, including methane-rich offgas
from landfills, and biodigesters at waste treatment facilities. "We'll take that
offgas and convert it into electricity, power, and hydrogen," he says.

Air Products is also developing technology for the capture and sequestration of
carbon dioxide (CO[2]) to be used with steam methane reforming, as well as a
process to produce hydrogen from nuclear sources, which do not produce CO[2].

Meanwhile, coal and natural gas will continue to play a role in transportation
fuels, companies say. Technologies, including gas-to-liquids (GTL), and
coal-to-liquids (CTL), will be used to produce cleaner-burning synthetic diesel
fuel, they say.

"There was an initial flurry of activity in the early 2000s, up until about 18
months ago for GTL projects in the Middle East," says Tom Mutchler, general
manager/worldwide equipment at Air Products. Soaring construction costs and
concerns about natural gas supply have slowed GTL projects, however. ExxonMobil
and Qatar Petroleum (QP; Doha) recently dropped plans to build a $ 7-billion GTL
project, in favor of developing an LNG project in the Norrh Field reservoir of
Qatar.

Air Products is currently completing construction of two 3,500-m.t./day air
separation units (ASUs) for the GTL plant that QP and Sasol are jointly building
at Ras Laffan, Qatar. The plant will produce 34,000 bbl/day of liquids,
comprised of 24,000 bbl/day of synthetic diesel, 9,000 bbl/day of naphtha, and
1,000 bbl/day of liquefied petroleum gas.