

BEFORE THE BOARD OF LAND AND NATURAL RESOURCES
OF THE STATE OF HAWAII

In the Matter of) BLNR Docket 2007
)
The DEPARTMENT OF TRANSPORTATION)
Issuance of a Direct Lease to)
IMPERIUM RENEWABLES INC)
At Honouliuli, Ewa, Oahu)

LIFE OF THE LAND's
MOTION FOR A CONTESTED CASE HEARING
&
CERTIFICATE OF SERVICE

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES
LIFE OF THE LAND

76 North King Street, Suite 203
Honolulu, HI 96817
phone: 808-533-3454
henry.lifeoftheland@gmail.com

November 5, 2007

Aloha Board Members

I) **INTRODUCTION**

We are surrounded by flora and fauna, by rocks and air, by land and ocean. Isn't the environment everything? Don't people, culture, business and government all exist within the environment? Isn't the environment worth saving? Isn't it the right thing to do?

A few years ago ethanol advocates began testifying about the benefits of ethanol, and the fossil fuel industry opposed changing the fuel paradigm. We didn't testify on ethanol bills because we hadn't researched ethanol, and didn't know whether it made sense.

Then about a year or two ago the fossil fuel industry dropped its opposition to ethanol.

That is when we decided we needed to research ethanol, and later, biodiesel. We read from a large variety of sources: Wall Street Journal, Pacific Business News, Scientific American, the U.S. Department of Agriculture, University of Hawai`i College of Tropical Agriculture and Human Resources (CTAHR), the Hawai`i Department of Business, Economic Development and Tourism (DBEDT), Hawai`i Agricultural Research Center (HARC), Company filings with the U.S. Securities and Exchange Commission, and web pages and blogs from around the world.

We needed questions answered

What are biofuels?

What are the benefits?

What are the impacts?

Who gains?

Who loses?

What are their carbon footprints?

How do the benefits of biofuels ripple across the economy?

How will local companies be affected?

Will the use of biofuels decrease Hawai`i's negative balance of trade?

Are some biofuels better than others? If so, why?

Are there public trust issues?

Which sources of information are credible?

It is fairly obvious that recycling (converting) waste grease into biodiesel makes a lot of sense. It keeps grease out of the land fill and provides locally produced fuel for transportation. The issue of using land to grow crops to be converted into fuel is more complex.

I read the Institute of Science in Society (ISIS: www.i-sis.org.uk/) web site due to their in-depth scientific analysis. In the Spring 2006 ISIS published analysis critical of biofuels, based in part on the work of Dr. Tadeusz W Patzek (Professor of Civil & Environmental Engineering, UC Berkeley). I sent a Letter to the Editor: "I found your article, "Biofuels for oil addicts" puzzling. You have cited the work of Tad Patzek. Some insight into Patzek's bias against ethanol can be found on his own website. Patzek spent nearly a decade working for Shell Oil Company as a researcher, consultant, and expert witness. He is the founder current director of the UC Oil Consortium, an organization funded mainly by the oil industry to the tune of \$60,000-120,000 per year per company"

Dr. Tadeusz W Patzek responded: "Yes, I worked for Shell Development for eight years, and I am proud of it. I was a researcher at Bellaire, the best research centre the oil industry ever had (it is in the past tense). Shell Development was organized and led for 20 years by one Marion King Hubbert. I hope that you remember his name. At Shell, I researched among, other things, the future of energy supply for humanity from coal (liquefied in situ), tar sands, ultra heavy oil, and oil shale.

My background in physics chemical engineering, chemistry and biology, as well as petroleum engineering has helped to sort fiction from the truth. I have many, many reasons to be extremely pessimistic about oil, but biofuels from energy crops is not the answer. They have been hyped up out of all proportions.

Please read the history of the South Sea bubble in England, ca 1720. A reading of the Louisiana Trading fiasco in France at the same time is also instructive."

The ISIS Editor Dr. Mae-Wan Ho included both my letter and Tad's response in the Summer 2006 ISIS edition, as well as her comments: "I am pleased to be able to say hat not only was I ignorant of Tad Patzek's personal history and his funding sources, but also that they turn out to be irrelevant to the science. My analysis was based solely on the science involved, and Tad's science is the best and most reliable I can find. "Biofuels for oil addicts" is one among four in the "Biofuels from energy crops"

series, and is most certainly not based solely on Tad's work, though Tad's work does feature quite prominently."

Dr. Mae-Wan Ho provide Tad and myself with each others emails, and we began corresponding on biofuels. As the depth of my knowledge increased, I came to see that he was credible and his arguments made a lot of sense.

Hawaiian Electric Company (HECO) proposed a power plant for Campbell Industrial Park in 2009. They supported biofuels, we supported ocean power¹, and we brought in 3 lawyers and 4 doctors among our 12 witnesses in the contested case hearing and at the Evidentiary Hearing. Dr. Tadeusz W Patzek was our chief biofuels witness. HECO did not cross-examine him and provided no biofuel witness of their own. The PUC ruled in favor of the plant and biofuels because HECO, the Consumer Advocate and LOL all stated their was a need, and biofuels are state policy.

There are two biofuel refineries (biorefineries) moving through the planning process: BlueEarth Maui Biodiesel LLC (BlueEarth) and Imperium Renewables Inc (Imperium). BlueEarth must conduct an EIS and have a BlueEarth-MECO biofuel supply contract approved by the PUC. Imperium must get a lease from DOT/BLNR and have the Imperium-HECO biofuel supply contract approved by the PUC.

There are a zillion types of biofuels. State policy does not explicitly favor one over the other, except that if BlueEarth wants to float SPRBs to finance a palm oil biorefinery on Maui, it must meet specific feedstock sustainability criteria and DBEDT must sign off on it. Both facilities are planning to use palm oil as the feedstock.

II) **MOTION**

In this Motion For A Contested Case Hearing, we have followed the Board of Land and Natural Resources (Board) Rules of Practice and Procedure (HAR §13-1-11). LOL is a person under state law. LOL will be represented by LOL's Vice President for Consumer Affairs, Henry Curtis, in accordance with HAR (13-1-10(a))

In this Motion, we will lay out the Legal Authorities under which this Action is being made. Then we

¹ We noted that electricity must be available when it is needed. While solar, wind and wave can offset fossil fuels, and are therefore good, the grid requires baseload energy (available 24/7/365, for ex. Ocean Thermal Energy Conversion), baseload displacement (for ex. Sea Water Air Conditioning), and eliminating the need for baseload (energy efficiency).

will discuss the specific parcels affected; followed by the specific disagreements we have with the proposal. We will outline the specific issues that we will raise in the contested case hearing. Finally we conclude with our request that the Imperium Renewables Inc lease be conditioned with the requirement that they use sustainable feed stock certified by DBEDT.

Life of the Land will sponsor a dozen expert witnesses, including several doctors (Ph.D., M.D., J.D.) We will show that the use of palm oil is causing ongoing, irreversible damage to natural ecosystems, threatened and endangered species and their vital habitats, raising social justice issues with indigenous people of these regions, ravaging the land, water, and air through the practices associated with slashing and burning to clean native forests for these huge mono-cropping operations, and increasing greenhouse gas emissions.

III) LIFE OF THE LAND

Life of the Land (LOL) is a 37-year old non-profit organization. Our actions have heavily influenced land use policy in the state, from our 1971 lawsuit with Maui Mayor Elmer F Cravalho which successfully required the Navy to conduct an Environmental Assessment on the bombing of Kahoolawe;² to landmark Hawaii Supreme Court decisions on land use.^{3 4} Our influence on state history is significant: The Honolulu Star-Bulletin ran a three special sections series reviewing four decades of Hawai'i's history: "The effect a person can have on a place is immeasurable. Here are the 10 people or organizations who, from 1965 to 1975, helped make Hawaii what it is today". The four organizations are: The state Land Use Commission; Bishop Estate; the Labor Unions; and Life of the Land.⁵

² Honolulu Advertiser: suit to seek end to Kahoolawe bombing (page 1, July 29, 1971)

<http://www.lifeofthelandhawaii.org/Newsletters/HA%2007.29.71%20Kahoolawe.pdf>

Maui News: Suit 'Reaffirms' Mayor's Kahoolawe Stand: Co-Complainant With Life of Land (July 31, 1971)

<http://www.lifeofthelandhawaii.org/Newsletters/Maui%20News%2007.31.71%20Kahoolawe.pdf>

³ Life of the Land, 63 Haw. at 176-77, 623 P.2d at 441 (1981) (group members had standing to invoke judicial intervention of LUC's decision "even though they are neither owners nor adjoining owners of land reclassified by the Land Use Commission in [its] boundary review")

Life of the Land, 61 Haw. at 8, 594 P.2d at 1082 (1979) (group members who lived in vicinity of reclassified properties and used the subject area for "diving, swimming, hiking, camping, sightseeing, horseback riding, exploring and hunting and for aesthetic, conservational, occupational, professional and academic pursuits," were specially, personally and adversely affected by LUC's decision for purposes of HRS §91-14). www.state.hi.us/jud/21124.htm

⁴ Our "fundamental policy [is] that Hawaii's state courts should provide a forum for cases raising issues of broad public interest, and that the judicially imposed standing barriers should be lowered when the "needs of justice" would be best served by allowing a plaintiff to bring claims before the court." Id. at 614-15, 837 P.2d at 1268-69 (citing Life of the Land v. The Land Use Comm'n, 63 Haw. 166, 176, 623 P.2d 431, 441 (1981)). <http://www.state.hi.us/jud/21124.htm>

⁵ Honolulu Star-Bulletin March 14, 1995.

Life of the Land's Executive Director has a particular focus on energy policy, having represented the organization in a contested case hearing before this Board (Wa`ahila Ridge CDUA OA-2801), and in a dozen energy dockets before the Public Utilities Commission. He has been described as an "energy wonk" (Honolulu Weekly, November 29, 2000) who "closely follows and participates in Hawai'i energy issues" (Environment Hawaii, September 2004).

The University of Hawai`i Richardson School of Law's Environmental Law Program participated in the 2007 National Moot Court competition. This year the fictional case was a suit by Province of Inuksuk (in real life the northern 1/3 of Quebec) v. U.S. Coal Companies re Sea Level Rise and Coastal Destruction due to Climate Change. LOL's Executive Director Henry Curtis and Assistant Executive Director Kat Brady served as US Appeal Court Judges in moot court practice sessions.

Life of the Land is the only entity in the state (government, industry, community) to have presented Expert Witnesses on Biofuels before any state agency. Life of the Land has sponsored Expert Witnesses on Climate Change.

Life of the Land co-wrote a critique of HECO's proposed palm oil feedstock plan⁶ with KAHEA: The Hawaiian-Environmental Alliance, `Ilio`ulaokalani Coalition, Sierra Club - Maui, and Environmental Defense. The document was endorsed by organizations, companies, and religious groups in 13 Countries, including 28 faith, environmental, community, cultural and media groups from Hawai`i and 20 groups from 10 Provinces of Indonesia.

Life of the Land maintains an extensive web site on biofuels,⁷ directs a biweekly series on `Olelo⁸ which has covered the biofuels issue, has testified on biofuels before the State Legislature and the Maui County Council, and raised the issue in a variety of other media and education outlets.

IV) LEGAL AUTHORITIES UNDER WHICH THIS ACTION IS BEING MADE:

A) Hawai`i State Constitution Article IX.

⁶ Final Analysis of Proposed HECO-NRDC Sustainability Criteria for Hawaiian Electric Company's Procurement of Biodiesel from Palm Oil (http://www.lifeofthelandhawaii.org/docs/2/HECO_palm_oil_biofuel_concerns_August_07.pdf)

⁷ http://www.lifeofthelandhawaii.org/Biofuels_Ethanol_Biodiesel_Blog_Impacts.html

⁸ Energy and Power in Hawai`i

Section 1. For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.

Section 6. The State shall have the power to manage and control the marine, seabed and other resources located within the boundaries of the State, including the archipelagic waters of the State, and reserves to itself all such rights outside state boundaries not specifically limited by federal or international law.

Section 7. The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.

Section 9. Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.

B) State Environmental Policy. HRS 344

Section 1 Purpose. The purpose of this chapter is to establish a state policy which will encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii. [L 1974, c 247, pt of §1; gen ch 1993]

Section 2 Definitions. As used in this chapter unless the context otherwise requires:

“Agency” means any department, office, board, or commission of the State or county government that is a part of the executive branch of that government.

“Environment” means the complex of physical and biological conditions that influence human well-being, including land, air, water, minerals, flora, fauna, energy, noise, and

places of historic or aesthetic significance.

Section 3 Environmental policy. It shall be the policy of the State, through its programs, authorities, and resources to:

(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.

(2) Enhance the quality of life by: ... (D) Establishing a commitment on the part of each person to protect and enhance Hawaii's environment and reduce the drain on nonrenewable resources.

Section 4 Guidelines. In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines:

(2) Land, water, mineral, visual, air, and other natural resources. (A) Encourage management practices which conserve and fully utilize all natural resources ...

(3) Flora and fauna. (A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard ...

(5) Economic development. (A) Encourage industries in Hawaii which would be in harmony with our environment ...

C) Management and Disposition of Public Lands. HRS §171

D) The Hawaii Supreme Court:⁹

"We therefore hold that [the constitution] adopt[s] the public trust doctrine as a fundamental principle of constitutional law in Hawaii. ... [t]he public trust doctrine applies to all water resources without exception or distinction [including surface and

⁹ IN THE SUPREME COURT OF THE STATE OF HAWAII ---o0o--- In the Matter of the Water Use Permit Applications, Petitions for Interim Instream Flow Standard Amendments, and Petitions for Water Reservations for the Waihole Ditch Combined Contested Case Hearing NO. 21309 APPEAL FROM THE COMMISSION ON WATER RESOURCE MANAGEMENT (CASE NO. CCH-OA95-1) AUGUST 22, 2000 www.state.hi.us/jud/21309op.htm

underground water]. ... Under the public trust and the Code, permit applicants have the burden of justifying their proposed uses in light of protected public rights in the resource. [t]he public trust effectively creates this burden through its inherent presumption in favor of public use, access, and enjoyment."

"The 'precautionary principle' appears in diverse forms throughout the field of environmental law. ... As with any general principle, its meaning must vary according to the situation and can only develop over time. In this case, we believe the Commission describes the principle in its quintessential form: at minimum, the absence of firm scientific proof should not tie the Commission's hands in adopting reasonable measures designed to further the public interest. ...

So defined, **the precautionary principle simply restates the Commission's duties under the constitution and Code. Indeed, the lack of full scientific certainty does not extinguish the presumption in favor of public trust purposes or vitiate the Commission's affirmative duty to protect such purposes wherever feasible. ...**

In furtherance of its trust obligations, the Commission may make reasonable precautionary presumptions or allowances in the public interest. The Commission may still act when public benefits and risks are not capable of exact quantification. At all times, however, **the Commission should not hide behind scientific uncertainty, but should confront it as systematically and judiciously as possible** ... We do not expect this to be an easy task. Yet it is nothing novel to the administrative function or the legal process in general.

E) Greenhouse Gas Emissions (Act 234-2007)

"the greenhouse gas emission reduction task force shall prepare a work plan ... shall include but is not limited to the following objectives: ... Recommendations to **minimize "leakage" or a reduction in emissions of greenhouse gases within the State that is offset by an increase in emissions of greenhouse gases outside the State"** ¹⁰

F) BlueEarth Maui Biodiesel LLC (Act 261-2007)

¹⁰ http://www.capitol.hawaii.gov/session2007/bills/HB226_cd1_.htm

"As a condition precedent to the issuance of special purpose revenue bonds under this Act, BlueEarth Maui Biodiesel, LLC, or its affiliates ... shall not import fuel stock that is the product of growth on farms where forests have been cleared to accommodate the growing of such crops. ... BlueEarth Maui Biodiesel, LLC, shall be required to import fuel stock produced only from sustainable sources; provided that BlueEarth Maui Biodiesel, LLC, and its affiliates shall document that sustainable sources are utilized; provided further that the documentation shall be transmitted or otherwise made available to the department of business, economic development, and tourism. The department of business, economic development, and tourism shall certify the documentation submitted" ¹¹

V) NATURE OF OUR SPECIFIC LEGAL INTEREST

Life of the Land's members recreate on the beaches and shorelines and enjoy hiking in Hawai'i's unique ecosystems. The Hawaii Supreme Court has ruled that "group members had standing to invoke judicial intervention of LUC's decision "even though they are neither owners nor adjoining owners of land reclassified by the Land Use Commission in [its] boundary review" (Life of the Land, 63 Haw. at 176-77, 623 P.2d at 441 (1981)) and that our "fundamental policy [is] that Hawaii's state courts should provide a forum for cases raising issues of broad public interest, and that the judicially imposed standing barriers should be lowered when the "needs of justice" would be best served by allowing a plaintiff to bring claims before the court." (Id. at 614-15, 837 P.2d at 1268-69 (citing Life of the Land v. The Land Use Comm'n, 63 Haw. 166, 176, 623 P.2d 431, 441 (1981).

<http://www.state.hi.us/jud/21124.htm>)

VI) THE SPECIFIC DISAGREEMENT

Pressure over increasing use of environmentally damaging palm oil is increasing worldwide, similar to tectonic plates, and when they snap, the impact is similar to the San Andreas Earthquake (San Francisco, April 18, 1906) or the great undersea Sumatra-Andaman earthquake and resulting Indian Ocean Tsunami (December 26, 2004) . Hawai'i serves as a fulcrum in the fight over palm oil. Palm Oil is the worst biofuel in terms of climatic impact, even worse than coal. Hawaiian Electric Company proposes to own the first electric generator in the world running on palm oil. Imperium Renewables Inc proposes to buy and refine that palm oil. Hawai'i-based environmental, cultural, community and faith

¹¹ http://www.capitol.hawaii.gov/session2007/bills/SB1718_cd1_.htm

groups are actively engaged in galvanizing local, national and international pressure to stop this from occurring. Hawaii could soon be the focus of international scorn and even boycotts resulting from the ill-conceived plans to import huge quantities of ecologically devastating palm oil from Southeast Asia.

A) Climate Change

The United Nations (U.N.) Intergovernmental Panel on Climate Change (IPCC) estimates sea level will rise this century by 39 inches. According to the University of Hawai'i's School of Ocean and Earth Science and Technology (SOEST), this will put most of Waikiki underwater as well as the area of Kailua between Kawainui Marsh and the Ocean, the Reef Runway, and the Kahului Wastewater Treatment facility, among others. Our existing beaches will mostly be gone. The worldwide weather phenomenon called El Nino will decrease our total rainfall, but increase the likelihood of intense rainfall, such as Oahu's 43 day storm. Hurricanes are expected to be more intense. The ice sheets over Greenland and Antarctica are the least understood area of climate change. If in addition to other impacts, 15% of Greenland or 2% of Antarctica melts, then downtown Honolulu is submerged.

Fortune Magazine. February 25, 2004. CLIMATE COLLAPSE: The Pentagon's Weather Nightmare. The climate could change radically, and fast. That would be the mother of all national security issues. By David Stipp

Global warming may be bad news for future generations, but let's face it, most of us spend as little time worrying about it as we did about al Qaeda before 9/11.

Like the terrorists, though, the seemingly remote climate risk may hit home sooner and harder than we ever imagined. In fact, the prospect has become so real that the Pentagon's strategic planners are grappling with it. The threat that has riveted their attention is this: Global warming, rather than causing gradual, centuries spanning change, may be pushing the climate to a tipping point. ...

But recently, renowned Department of Defense planner Andrew Marshall sponsored a groundbreaking effort to come to grips with the question. **A Pentagon legend**, Marshall, 82, is known as the Defense Department's "Yoda"-a balding, bespectacled sage whose pronouncements on looming risks have long had an outsized influence on defense policy. Since 1973 he has headed a secretive think tank whose role is to envision future threats to national security. The Department of Defense's push on ballistic-missile defense is known as his brainchild. Three years ago Defense Secretary Donald Rumsfeld picked him to lead a sweeping review on military "transformation," the shift toward nimble forces and smart weapons.

When scientists' work on abrupt climate change popped onto his radar screen, Marshall tapped another eminent visionary, Peter Schwartz, to write a report on the national-security implications of the threat. Schwartz formerly headed planning at Royal Dutch/Shell Group and has since consulted with organizations ranging from the CIA to DreamWorks-he helped create futuristic scenarios for Steven Spielberg's film Minority Report.

Schwartz and co-author Doug Randall at the Monitor Group's Global Business Network, a scenario-planning think tank in Emeryville, Calif., contacted top climate experts and pushed them to talk about what-ifs that they usually shy away from-at least in public.

The result is an unclassified report, completed late last year, that the Pentagon has agreed to share with FORTUNE. It doesn't pretend to be a forecast. Rather, it sketches a dramatic but plausible scenario to help planners think about coping strategies. Here is an abridged version:

A total shutdown of the ocean conveyor might lead to a big chill like the Younger Dryas, when icebergs appeared as far south as the coast of Portugal. Or the conveyor might only temporarily slow down, potentially causing an era like the "Little Ice Age," a time of hard winters, violent storms, and droughts between 1300 and 1850. That period's weather extremes caused horrific famines, but it was mild compared with the Younger Dryas.

For planning purposes, it makes sense to focus on a midrange case of abrupt change. A century of cold, dry, windy weather across the Northern Hemisphere that suddenly came on 8,200 years ago fits the bill-its severity fell between that of the Younger Dryas and the Little Ice Age. The event is thought to have been triggered by a conveyor collapse after a time of rising temperatures not unlike today's global warming. Suppose it recurred, beginning in 2010. Here are some of the things that might happen by 2020 :

Over the past decade, data have accumulated suggesting that the plausibility of abrupt climate change is higher than most of the scientific community, and perhaps all of the political community, are prepared to accept. In light of such findings, we should be asking when abrupt change will happen, what the impacts will be, and how we can prepare-not whether it will really happen. In fact, the climate record suggests that abrupt change is inevitable at some point, regardless of human activity.

The World Bank's Headlines For Friday, October 26, 2007: Save The Planet? It's Now Or Never, Warns Landmark UN Report. ¹²

"Humanity is changing Earth's climate so fast and devouring resources so voraciously that it is poised to bequeath a ravaged planet to future generations, the UN warned Thursday in its most comprehensive survey of the environment. The fourth Global Environment Outlook (GEO-4), published by the UN Environment Program (UNEP), is compiled by 390 experts from observations, studies and data garnered over two decades. ..."

UNEP Global Environment Outlook (GEO-4) ¹³

Earth has experienced five mass extinctions in 450 million years, the latest of which occurred 65 million years ago, says GEO-4. "A sixth major extinction is under way, this time caused by human behaviour."

¹² <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,date:2007-10-26~menuPK:34461~pagePK:34392~piPK:64256810~theSitePK:4607,00.html#Story1>

¹³ <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=519&ArticleID=5688&l=en>

Washington Post: At the Poles, Melting Occurring at Alarming Rate ¹⁴ By Doug Struck. Monday, October 22, 2007

The relentless grip of the Arctic Ocean that defied man for centuries is melting away. The sea ice reaches only half as far as it did 50 years ago. In the summer of 2006, it shrank to a record low; this summer the ice pulled back even more, by an area nearly the size of Alaska. Where explorer Robert Peary just 102 years ago saw "a great white disk stretching away apparently infinitely" from Ellesmere Island, there is often nothing now but open water. Glaciers race into the sea from the island of Greenland, beginning an inevitable rise in the oceans.

Animals are on the move. Polar bears, kings of the Arctic, now search for ice on which to hunt and bear young. Seals, walrus and fish adapted to the cold are retreating north. New species -- salmon, crabs, even crows -- are coming from the south. The Inuit, who have lived on the frozen land for millennia, are seeing their houses sink into once-frozen mud, and their hunting trails on the ice are pocked with sinkholes. ...

What is most alarming to the scientists is the speed at which it is unfolding. A decade ago, melting at the poles was predicted to play out over 100 years. Instead, it is happening on a scale scientists describe as overnight. ...

As the air warms over Canada, Alaska and Siberia, the melting permafrost releases millions of tons of trapped carbon and methane, further accelerating the encroaching disaster. ...

The ice shelves collapsing in western Antarctica bring glacier melting there, pouring as much water into the sea as Greenland. Eventually, the giant frozen continent of eastern Antarctica, so far insulated from the rest of the warming planet, may begin to melt. The thermohaline ocean circulation pattern begins to slow. ...

As the Arctic ice melts and ice shelves collapse in the Southern Ocean, vast areas of open water are exposed. The water absorbs heat from the sun that until now was reflected by the ice. As that heat warms the seas, the treadmill is expected to slow, the IPCC has reported. In the worst case, it could stop. The previous time that happened, 15,000 years ago, the Northern Hemisphere was plunged into a brief and brutal ice age, apparently within decades.

Developed and Developing Countries Agree: Action Needed on Global Warming (September 24, 2007)¹⁵

Large majorities around the world believe that human activity causes global warming and that strong action must be taken, sooner rather than later, in developing as well as developed countries, according to a BBC World Service poll of 22,000 people in 21 countries. An average of eight in ten (79%) say that "human activity, including industry and

¹⁴ <http://www.washingtonpost.com/wp-dyn/content/article/2007/10/21/AR2007102100761.html>

¹⁵ http://www.lifeofthelandhawaii.org/docs/2/Developed_and_Developing_Countries_Agree%20Action_Needed_on_Global_Warming.html

transportation, is a significant cause of climate change.” Nine out of ten say that action is necessary to address global warming. A substantial majority (65%) choose the strongest position, saying that “it is necessary to take major steps starting very soon.” ...

A total of 22,182 citizens in Australia, Brazil, Canada, Chile, China, Egypt, France, Germany, Great Britain, India, Indonesia, Italy, Kenya, Mexico, Nigeria, the Philippines, Russia, South Korea, Spain, Turkey, and the United States were interviewed face-to-face or by telephone between May 29 and July 26, 2007. Polling was conducted for the BBC World Service by the international polling firm GlobeScan and its research partners in each country. In eight of the 21 countries, the sample was limited to major urban areas. The margin of error per country ranges from +/-2.4 to 3.5 percent.

B) Biofuels

Wall Street Journal: The Growing Danger of Ethanol, Biofuels, Dec. 5, 2006, Page A1 ¹⁶

"Among the world's most fabled islands, Borneo --which is divided between Indonesia and Malaysia --is considered by environmentalists to be one of the last great tropical wildernesses. It's home to rare and unusual species, including the wild orangutan, the clouded leopard and the Sumatran rhinoceros. ... Now, the palm-oil boom threatens what's left.

As fires burn deep into the dry peat soil beneath Indonesia's forests, centuries of carbon trapped in the biomass are released into the atmosphere. A study presented last month at a U.N. Climate Change Conference in Nairobi showed that Indonesia is the world's third-biggest carbon emitter behind the U.S. and China, when emissions from fires and other factors are considered."

Jane's Intelligence Review Pursuit of biofuels bring new global security risks (July 16, 2007)

"Jane's Intelligence Review reports that while biofuels offer many advantages for producing countries, the potential long-term environmental degradation and increased competition for land and water resources means it cannot be viewed as a risk-free alternative to non-renewable fuels."

Dr. Tadeusz W Patzek is Professor of Civil & Environmental Engineering, UC Berkeley, and was a researcher studying coal, tar sands, ultra heavy oil, and oil shale at Shell Development's Bellaire Research Center. His background is in physics, chemical engineering, chemistry, biology, and petroleum engineering. LOL sponsored Dr. Patzek as an Expert Witness on Biofuels in a Public Utilities Commission docket.

¹⁶ <http://online.wsj.com/article/SB116501541088338547.html>

"People -- people, especially the so-called pure environmentalists, are loath to accept the fact that what they think religiously -- that is, green is good -- is not necessarily so. And they really have a hard time believing or accepting or -- or thinking that not everything that is green is in fact good."¹⁷

To convert biomass to a finished liquid transportation fuel at an incredibly high fossil energy cost and damage to the environment, and then burn this fuel in a stationary power plant is the most nonsensical proposition I have heard in many years. This proposition is utterly indefensible on scientific and common sense grounds.¹⁸

"It is commonly believed that the greenhouse gas emissions from biofuels are lower than those from fossil fuels. Unfortunately, the opposite is the case for many complex reasons."¹⁹

"I have many, many reasons to be extremely pessimistic about oil, but biofuels from energy crops is not the answer. They have been hyped up out of all proportions."²⁰

Three US-based agricultural commodities giants Archer Daniels Midland (ADM), Bunge and Cargill are responsible for about 60% of the total financing of soybean production in Brazil. With an estimated 13 silos and an illegal port facility already built into the Amazon rainforest, Cargill is leading soybean's invasion of the region spurring the incursion of illegal farms and building infrastructure to deliver Amazon soybean to global markets. Bunge and ADM are following Cargill's lead, with an estimated six and four silos respectively in the Amazon.²¹

Deforestation has been responsible for up to 75% of Brazil's emissions, with 59% coming from Amazon deforestation.²²

So right now, really, if you focus on this, there are two main sources of biodiesel. The first source is soy bean; and there are huge swaths of land ...

Now -- but soy bean is in fact a very, very inefficient way of delivering biodiesel. Its efficiency in terms of crude oil over the last 50 years has not changed a lot at all, and it is roughly now 500 kilograms of crude oil, soy bean oil per hectare. That's really not much. So if you were really serious about burning biodiesel, you have to go to palm oil, because palm oil happens to be about eight to nine times more efficient ways of delivering your fuel than soy beans."²³

"The forest in Indonesia has been cut at an incredible rate for the last 50 years. And that rate, as I say, was -- is increasing exponentially. But by 1997-'98, probably some of you may remember, there was a big El Nino event, where there was a drought condition in Indonesia. And the oil palm companies started about hundred and ninety fires. These fires got out of hand and started burning not only the forest, but also peat. You should understand that when you burn a tree, it releases a relatively small amount of CO2, relative to burning very thick peat layers. And in Indonesia, in fact, you are dealing with very thick peat, you know, up to 20 meters thick. That single event, that single burning at -- in the fall of 1997 and early spring and winter of 1998 released as much CO2 as -- as the entire emissions of

¹⁷ Patzek LOL T-4, Tr. 574:2-8

¹⁸ Patzek LOL T-4, WDT 815-18

¹⁹ Patzek LOL T-4, WDT 312-15

²⁰ Institute of Science in Society (ISIS, www.i-sis.org.uk/) ISIS Magazine Science in Society, Summer 2006

²¹ Patzek LOL T-4, WDT 357-63

²² Patzek LOL T-4, WDT 364-65

²³ LOL T-4 Tr. 540:24-543:13

the United States, CO2 emissions of the United States." ²⁴

USA Today Worldwide backlash hits biofuels ²⁵ By Lynn Hicks, The Des Moines Register (October 27, 2007)

Biofuels appear at the root of examples of environmental and humanitarian abuses around the world:

- Scientist Jane Goodall says the rush to grow biofuels is threatening primate habitat in Uganda and Indonesia.

- Brazil is trying to crack down on near-slave labor conditions that have helped keep down the cost of ethanol production.

- Paramilitary groups are forcing peasants from their land in Colombia to make room for palm oil plantations, raising the specter of "blood biofuels." ...

The problems aren't limited to Third World nations. Corn ethanol production requires the burning of fossil fuels, and threatens water quality and availability, according to a new study by the National Academy of Sciences. "What we do here triggers impacts around the world," including raising the price of grain, said Chad Hart, an agriculture economist at Iowa State University.

BBC News Biofuels 'crime against humanity' ²⁶ By Grant Ferrett (27 October 2007)

A United Nations expert has condemned the growing use of crops to produce biofuels as a replacement for petrol as a crime against humanity. The UN special rapporteur on the right to food, Jean Ziegler, said he feared biofuels would bring more hunger. The growth in the production of biofuels has helped to push the price of some crops to record levels.

International Monetary Fund Biofuel Demand Pushes Up Food Prices ²⁷ By Valerie Mercer-Blackman, Hossein Samiei, and Kevin Cheng (October 17, 2007)

The rise in food prices reflects a combination of factors. Higher biofuel demand in the United States and the European Union (EU) has not only led to higher corn and soybean prices, it has also resulted in price increases on substitution crops and increased the cost of livestock feed by providing incentives to switch away from other crops. ...

Dilemma of biofuels. Using biofuels to supplement transportation fuels at modest blends—under current technology—has its pros and cons. Biofuels can supplement traditional fuels while contributing to rural development. However, until new technologies are developed, using food to produce biofuels might further strain already tight supplies of arable land and water all over the world, thereby pushing food prices up even further.

²⁴ LOL T-4 Tr. 544:1-19

²⁵ http://www.usatoday.com/money/industries/energy/2007-10-27-biofuels_N.htm

²⁶ <http://news.bbc.co.uk/2/hi/americas/7065061.stm>

²⁷ <http://www.imf.org/external/pubs/ft/survey/so/2007/RES1017A.htm>

World Bank World Development Report²⁸ (October 19, 2007)

The latest World Development Report calls for greater investment in agriculture in developing countries and warns that the sector must be placed at the center of the development agenda if the goals of halving extreme poverty and hunger by 2015 are to be realized. ... The report also warns global food supplies are under pressure from expanding demand for food, feed, and biofuels; the rising price of energy; and increasing land and water scarcity; as well as the effects of climate change. This in turn is contributing to uncertainty about future food prices.

Hawaii Biofuels Summit Briefing Book²⁹ (August 8, 2006)

Clarify the water access issue: Water access and availability is clearly a key challenge for biofuels development. Two general methods were identified to carry this issue forward: (1) take legislative action or otherwise change Hawaii laws and regulations to favor agricultural uses of water, and (2) provide sufficient financial and personnel resources to the relevant agencies to execute tasks within the context of existing laws and regulations. However, while most sectors placed a high priority on legislating prioritization of water rights, voting results indicate that this area is a low priority for elected officials.

Hawaii Agriculture Research Center (HARC) Biodiesel Crop Implementation in Hawaii³⁰ By

Michael D. Poteet

Primary constraints for biodiesel production on each island will include land and water availability and the lack of a community of growers with knowledge of the production schemes that must be implemented to successfully produce oilseed crops. The increasing competition for water across Hawaii will drive up costs of production for any agricultural operation, so utilization of marginal lands and crops with low water requirements should be taken into consideration.

C) Final Analysis of Proposed HECO-NRDC Sustainability Criteria

HECO is currently planning to construct a biofuel power plant which may become the largest importer of palm oil in the United States. **The response from reviewers to the proposed HECO “sustainability criteria” and the idea of importing palm oil for use as biodiesel in Hawai`i has been overwhelmingly negative.** Reviewers expressed strong concerns about **environmental destruction, indigenous rights and impacts on forest and rural communities** and the fact that **HECO proposed standards are far weaker than the international standards** negotiated over several years through the Roundtable on Sustainable Palm Oil process and **do not fulfill the Hawai`i state legal requirements** for obtaining the proposed \$59 million bond issue. Some reviewers in Europe were so upset that they alerted people all over the world about the HECO plan. As a result, in late June 2007, **over 7,200 people in 28 countries sent letters to Hawai`i’s Governor** opposing the

²⁸ <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/ESTONIAEXTN/0,,contentMDK:21513382~menuPK:301079~pagePK:2865066~piPK:2865079~theSitePK:301074,00.html>

²⁹ http://www.lifeofthelandhawaii.org/Bio_Documents/Hawaii_Biofuels_Summit_Briefing_Book_2006.pdf

³⁰ http://www.lifeofthelandhawaii.org/Bio_Documents/Biodiesel_Crop_Implementation_In_Hawaii_HARC_2006.pdf

\$59 million bond issue for the proposed plant.

Background Information: “Risky and Problematic” Palm Oil Production

*It's not only industry analysts who are raising red flags. United Nations environment program executive director Achim Steiner last month warned attendees at a global business summit for the environment in Singapore that businesses run the risk of a public backlash if the globally in vogue green business model is **hijacked by industries who engage in environmentally destructive practices. That may have been a veiled reference to the personalities leading Indonesia's biofuel development.** Asia Times, “Who's Who in Indonesian Biofuel”, May 23, 2007*

The Hawaiian Electric Company (HECO) is currently planning to construct biofuel power plants, including one in partnership with Blue Earth, Maui which may become the largest importer of palm oil in the United States. Indonesia and Malaysia supply 85% of the world's palm oil.

A report published in June 2007 by the World Bank, the British aid agency, Department for International Development (DFID), and PT. Pelangi Energi Abadi Citra Enviro, titled *Indonesia and Climate Change: Current Status and Policies*, identifies Indonesia as the third largest emitter of greenhouse gasses on earth, after the United States and China, “largely due to the significant release of carbon dioxide from deforestation.” (page 1)

Noting that “the capacity of the government to implement and enforce laws is weak,” (page 6) the report calls Indonesia's policy of expanding biofuel production “risky and problematic,” noting that “historically, oil-palm production in Indonesia has been a major driver of deforestation.” (page 7)

The report finds that “the tremendous increase of carbon emissions from land use change in Indonesia was mainly caused by forest fires and illegal logging. The World Bank (2000) estimates the rate to be more than 2 million ha [hectares] per year.” (page 14) “Most studies estimate that illegal logging comprises about two thirds of the country's total CO2 emissions.” (page 16)

“While deforestation alone has contributed significantly to the national GHG emissions, fires from peatland make it even worse... In 1997/1998, peatland contributed 60 percent to 90 percent of emissions release from the forest fires. It is also estimated that the fires released 7 percent of the total global greenhouse gasses emission that year and affected the health of 75 million people.” (page 17)

The report describes the impact of Indonesia's post-Suharto “decentralization” program where local provincial level strongmen have taken over the management of activities at regional levels and “many people participate in harvesting forest products either illegally or by abusing the permit that prevents forest management from being conducted as regulated.” (page 62) Noting the “alarming rate” of current forest destruction, the study notes that “regional autonomy and decentralization that have been applied since 2000 apparently has worsened the destruction. Many cases have proven strong involvements of local officials in forest destruction, especially in illegal logging.” (page 62) ...

The recent push towards "cheap biofuels" has been associated with extreme levels of deforestation and violations of indigenous rights in Indonesia, Malaysia and other countries. According to some recent estimates, the demand for palm oil as biofuel may push Indonesia to clear as much as 49 million acres of land for plantations. ...

“Proof” of sustainability?

Indonesia is, according to Transparency International, one of the most corrupt countries on earth. **It is a simple matter to obtain a form stating that a certain forest product is**

"sustainably produced".

As `Ilio`ulaokalani's Isaac Harp, a Hawai'i member of the Indigenous Forum of the U.N. Convention on Biodiversity wrote in testimony submitted to the Governor's office, **"In fact, you or I could probably obtain certificates saying that (1) we owned plantations (2) our "plantations" are sustainable and meet RSPO criteria. "**

British and Dutch energy companies have failed to locate "sustainable" palm oil supplies. The recent documentation by a German filmmaker of false 'sustainability' claims by Indonesian palm oil operations underscores these significant problems. ...

At a United Nations conference in May, Victoria Tauli-Corpuz, chair of the UN Permanent Forum on Indigenous Issues, warned that 60 million indigenous people worldwide are at risk of losing their land and livelihoods because of bioenergy expansion. In March 2007, the Indonesian organization Save Our Borneo warned that the customary land rights of Dayak communities in central Kalimantan are threatened by palm oil expansion plans.

Neither Malaysia nor Indonesia fully recognize customary or indigenous land rights. In West Malaysia and Sarawak, plantations are being established in land claimed by indigenous Orang Asli and Dayak communities. The government plans to develop one million hectares of oil palms in Sarawak, on land under Native Customary Rights.

According to a May, 2007 United Nations report:³¹

"Indonesia is experiencing the biggest rate of increase in terms of forests converted into oil palm plantations. In a period of 30 years (1967-1997) oil palm plantations have increased 20 times with 12 percent average annual increases in crude palm oil (CPO) production.i From 106,000 hectares in 1960 this has increased to 6 million hectares although there were around 18 million hectares of forests cleared purportedly for oil palm in 2006.ii It appears that loggers used oil palm plantations as a justification to harvest the timber.

The government announced new plans, under the Kalimantan Border Oil Palm Mega-Project (April 2006), to convert an additional 3 million hectares in Borneo, of which 2 million will be in the border of Kalimantan and Malaysia. The rapporteurs of this report understands that the area deemed suitable for oil palm includes forests used by thousands of people who depend on them for their livelihoods."

"It is without any doubt that the growth of the oil palm sub-sector has resulted into economic benefits, especially for the key players. However, it comes with serious social and environmental costs which adversely impact on indigenous peoples, forest-dwellers and the tropical rainforests. Out of the 216 million people in Indonesia it is estimated that 100 million, of which 40 million are indigenous peoples, depend mainly on forests and natural resource goods and services. Large areas of forest lands traditionally used by indigenous peoples have already been expropriated."

"In the immediate past, indigenous peoples' territories have been skimmed of their oil, gas and coal deposits inname of development. Now, in the name of saving the world from global warming, their lands are again viewed as a means to providing solutions."

"The social and environmental impacts of logging and plantations on indigenous peoples' lands and territories, particularly in the developing countries, have been extensively documented in various literature and these show the following:

³¹ Victoria Tauli-Corpuz, Parshuram Tamang, *Oil Palm and Other Commercial Tree Plantations, Monocropping: Impacts on Indigenous Peoples' Land Tenure and Resource Management Systems and Livelihoods*, Permanent Forum on Indigenous Issues, United Nations, Sixth session, New York, 14-25 May 2007

the denial of rights to lands, territories and resources, land alienation, forced evictions, the prevention of access and rights which have led to a decline in the population of indigenous peoples, especially in isolated and remote territories' and the destruction of resource management systems. There has also been habitat loss that has led to destruction of livelihoods, cultures and loss of traditional forest-related knowledge. There has been an increase in social conflicts between indigenous peoples and the state and private corporations (divisions are fostered by governments and corporations).

"There has been food insecurity, severe health problems, including increasing malnutrition and increased mortality; changes in disease ecology resulting in high incidences of diseases; increase of rates of sexually transmitted diseases due to increasing prostitution in plantation or logging estates. There have been exploitative and discriminatory working conditions, high rates of injury among forest and plantation workers; creation of dependency resulting in exploitative relations and corrupt patron-client relations between forestry officials and indigenous peoples.

There has been a breakdown of traditional social structures, introduction of new inequalities, undermining customary laws, social support networks and systems of land management. There have been internal conflicts over decision-making, resource allocation leading to further weakening of social cohesion and a shift in balance of power over forests away from forest dwellers which include indigenous peoples, towards logging and plantation industry, political and economic elites which reinforce political patronage and rent-seeking behaviour."

According to Tauli-Corpuz, "The main reason for the dramatic expansion of oil palm plantations, notwithstanding their adverse impacts on people and the environment, is that these provide big profits to domestic and international plantation owners and investors." Said Tauli-Corpuz, "These mega-profits are ensured by cheap labour, low cost of sale or rent of land, ineffective environmental controls, high demand, support from multilateral and bilateral donors and a short growth cycle."

According to Marti Townsend of KAHEA: The Hawaiian-Environmental Alliance, "It is important that HECO understands that the indigenous people of Hawai'i and Indonesia are firmly united in their opposition to the destruction of their forests, lands, and livelihoods. The HECO/Blue Earth project could facilitate acts of cultural genocide, in addition to massive environmental destruction."

The Forest Peoples Programme (FPP) provided the example of Wilmar Trading, one of the world's top four traders in palm oil. Documenting support for this company by the publicly funded World Bank International Finance Corporation, FPP writes:

The company secures its palm oil through purchase on the open market, through long term agreements with independent companies and from its own partially-owned and wholly-owned subsidiary companies, held by Wilmar International.

IFC has supported the Wilmar group through a series of investment projects, including an investment guarantee for US\$33.3 million in April 2003 (Project Number 20348), a loan of US\$17.5 million to Delta-Wilmar CIS in the Ukraine in June 2006 (Project Number 24644) and a further investment guarantee for US\$50 million in December 2006 (Project Number 25532). IFC is also supporting the Wilmar group through a grant of US\$375,000 approved in April 2007 through the IFC's GEF-funded Biodiversity and Agricultural Commodities Project (BACP Project No. 6).³² Concerns about the operations of the Wilmar group have been raised publicly on very many occasions: through previous letters to the IFC in 2004³³ and in 2007³⁴; through publications in 2004,³⁵

³² BACP Project Appraisal Document 12 April 2007

³³ Letter from Milieudefensie and SawitWatch to IFC dated 1 March 2004.

2006³⁶ and 2007³⁷; as well as through media reports and court actions, which are also detailed in these publications.

Our field investigations have uncovered a series of serious social and environmental impacts which are detailed in these reports and only listed here. These include:

- * Illegal use of fire to clear lands
- * Clearance of primary forests
- * Clearance of areas of high conservation value
- * Take over of indigenous peoples' customary lands without due process
- * Failure to carry out free, prior and informed consultations with indigenous peoples leading to broad community support

- * Failure to negotiate with communities or abide by negotiated agreements
- * Failure to establish agreed areas of smallholdings
- * Social conflicts triggering repressive actions by companies and security forces
- * Failure to carry out or wait for approval of legally required environmental impact assessments
- * Clearance of tropical peat and forests without legally required permits.

FPP argues that Wilmar subsidiaries are not complying with laws and agreements with local governments in the following ways:

- * Operating without having carried out an environmental impact assessment
- * Clearing forest without a legal permit
- * Clearance on upstream peat soils over 3 metres deep
- * Use of fire in clearance of vegetation
- * Failing to develop agreed areas of smallholdings

According to FPP:

The majority of the lands being acquired by Wilmar subsidiaries in West Sumatra and West Kalimantan are the customary lands of indigenous peoples referred to as Minangkabau and Dayak respectively. So far as we are aware, Wilmar has not carried out an assessment of the impacts of their plantations on indigenous peoples in terms of this Performance Standard.

³⁴ Letter from Milieudedefensie, Lembaga Gemawan and KONTAK Rakyat Borneo to IFC dated 4 July 2007.

³⁵ Jan Willem van Gelder, 2004, *The Banks of Wilmar: a research paper prepared for SawitWatch Indonesia*, Profundo, Amsterdam; Eric Wakker, Otto Miettinen and Zulfahmi, 2004, *PT Jatim Jaya Perkasa (Wilmar Group) in Riau, Indonesia: field assessment of environmental and social impacts of oil palm plantations*, Aidenvironment, Amsterdam; Jan Willem van Gelder and Eric Wakker, 2004, *Wilmar Trading – IFC Project no. 20348: a briefing prepared on behalf of Milieudedefensie and SawitWatch*, Profundo and Aidenvironment, Amsterdam.

³⁶ Marcus Colchester, Norman Jiwan, Andiko, Martua Sirait, Asep Yunan Firdaus, A. Surambo and Herbert Pane, 2006, *Promised Land: Palm Oil and Land Acquisition in Indonesia – Implications for Local Communities and Indigenous Peoples*, Forest Peoples Programme, Sawit Watch, HuMA and ICRAF, Bogor; Marcus Colchester and Norman Jiwan, 2006, *Ghosts on our own land: oil palm smallholders in Indonesia and the Roundtable on Sustainable Palm Oil*, Forest Peoples Programme and SawitWatch, Bogor.

³⁷ Milieudedefensie, Lembaga Gemawan and KONTAK Rakyat Borneo, 2007, *Policy, Practice, Pride and Prejudice: Review of legal, environmental and social practices of oil palm plantation companies of the Wilmar Group in Sambas District, West Kalimantan (Indonesia)*, Milieudedefensie (Friends of the Earth Netherlands), Amsterdam; Profundo, 2007, *Buyers and Financiers of the Wilmar Group: a research paper prepared for Mileudedefensie*.

No consultations along the lines required by PS7 have been carried out. No Indigenous Peoples Development Plan or equivalent has been shared with the affected communities, much less were they consulted in its elaboration. Moreover the assessment carried out for Project 24644 was not considered to have triggered the IFC's prior Indigenous Peoples policy.

Contrary to these requirements, in West Kalimantan the Wilmar companies PT Wilmar Sambas Plantation, PT Buluh Cawang Plantation and Agro Nusa Investama have commenced clearing indigenous peoples' lands in Sambas District without following the proper land acquisition procedures, and without properly informing and consulting local communities about the plantation projects. Likewise in West Sumatra, PT Permata Hijau Pasaman has been in dispute with Minang communities both about land acquisition and the delayed and diminished allocations of smallholdings.

All four plantation companies are now beset with social conflicts. As a result of the Forest Peoples' Program submittal to the World Bank Group in July 2007, the International Finance Corporation (IFC) is currently carrying out an investigation of Wilmar's practices. On August 13, 2007, HECO signed a biofuels contract with Imperium Renewables which imports palm oil from a Wilmar subsidiary.

4) Well-documented lack of sustainable supplies: industry research, independent field research, documentary film

Analysts in Indonesia and Europe provided detailed documentation regarding the lack of sustainable supplies of palm oil, based on research by power companies hoping to import "sustainable" palm oil as well as governmental agencies.

Despite pressure to replace coal, oil and gas with cleaner fuels, major power companies in Britain and the Netherlands have had to halt palm oil shipments because of a lack of sustainable supplies of palm oil. Last year, the Netherlands State secretary of Environment publicly apologized for spending hundreds of millions of Euros in subsidies to build new palm oil plants given the lack of sustainably produced supplies.

"We spent more than a year investigating the sustainability issues with palm oil," said Leon Flexman, of RWE npower, Britain's largest electricity supplier. The company decided against palm oil because it could not verify all its supplies would be free of the taint of destroyed rain forest or peat bogs, he said.³⁸ Environmental groups in the Netherlands brought charges of false advertising against a power company, Essent, which claimed that their proposed use of palm oil was environmentally sound.

The groups applauded the recent verdict of the Dutch Advertisement Commission, which indicated that Essent misled the public by claiming that palm oil was "green energy." They submitted a copy (in Dutch) of the Advertisement Commission's verdict (Appendix D)

The Indonesian NGO Sawit Watch, which works in 17 Indonesian provinces, submitted written testimony (Appendix E) to the Hawai'i state legislature during hearings on the Blue Earth bill and underscored the extent to which palm oil production for biofuels is increasing social conflicts and undermining land reform in Indonesia. At the time, they noted 350 land conflicts related to oil palm plantation developments in Indonesia. Increasing demand for palm oil will generate new conflicts and worsen the unresolved conflicts, as local communities and indigenous peoples are further displaced from their lands and livelihoods.

According to Rettet den Regenwald, a German group analyzing palm oil production, in

³⁸ *Palm Oil's Luster Fades on Biofuel Scene*, USA Today, 4/1/07

Colombia -- the largest palm oil producer outside South-east Asia -- there are reports of paramilitary and military forces working together to evict indigenous people from their land in order to expand oil palm plantations.

According to Rettet den Regenwald, "Palm oil expansion is the main driver of deforestation in Malaysia and Indonesia. In both countries, deforestation rates have accelerated dramatically in recent years, in parallel to palm oil expansion. Malaysia's deforestation rate went up 86% between the periods 1990-2000 and 2000-2005, whilst oil palm plantations were expanded to 4.2 million hectares. Indonesia now has the fastest rate of rainforest destruction anywhere in the world. Satellite images confirm that rainforests are being destroyed for oil palm plantations throughout

Malaysia and Indonesia, including in supposedly protected 'national parks'. Indonesia plans to convert another 20 million hectares of land – on top of the 6.4 million hectares so far – to palm oil." In previous years, palm oil expansion was driven mainly by the demand for palm oil in food and chemicals. The current expansion of oil palm plantations, however, is driven primarily by the boom in bioenergy, with palm oil prices rising rapidly as demand outstrips supply.

The Malaysian and Indonesian government state that they support this expansion in order to satisfy the growing global demand for bioenergy. Palm oil expansion is causing rainforest destruction in Colombia, Ecuador, Cameroon and in the Brazilian Amazon, too.

Reviewers recommended detailed sources of information regarding the lack of sustainable palm oil supplies from Indonesia, including the studies (below) by Indonesian and indigenous authors and Dr. Marcus Colchester.

Promised Land ***Palm Oil and Land Acquisition in Indonesia: Implications for Local Communities and Indigenous Peoples*** by Marcus Colchester, Norman Jiwan, Andiko, Martua Sirait, Asep Yunan Firdaus, A. Surambo, Herbert Pane 2006
http://www.forestpeoples.org/documents/prv_sector/oil_palm/promised_land_eng.pdf
Ghosts on our Own Land: Indonesian Oil Palm Smallholders and the Roundtable on Sustainable Palm Oil, by Colchester et al

Reviewers found that these studies show that palm oil plantations which comply with the RSPO principles and criteria are virtually non-existent in Indonesia.

A well known German documentary filmmaker, Inge Altemeier, wrote that she has just returned from Indonesia and has made extensive film documentation of the fraud associated with current claims of palm oil sustainability. She went to the sites of palm oil plantations which were claimed to be "sustainable" and operating under RSPO standards on lands claimed to be "wasteland."

What she found, instead, were vast areas of tropical forest and peatlands being cleared to establish plantations, despite claims that this was going to be "sustainably produced" palm oil and that no forests would be harmed. She filmed the spraying of paraquat and documented the high level of social conflicts, including farmers demonstrating to demand the return of their lands seized by a palm oil plantation.

She found that banks supporting the destructive plantations include Germany's KfW, Credit Suisse and HSBC. She filmed some of the largest producers in Indonesia, including the Sinar Mas operation (she indicated that buyers include "Cargill and several groups in Germany"), and Bakrie Group which "supplies the USA market" and which is linked to Indonesian Cabinet minister Aburizal Bakrie. Sinar Mas is the parent company for Asia Pulp and Paper which defaulted on US\$ 14 billion in debt secured during the Suharto years and has been linked to illegal logging.

The Bakrie Group is notorious for its role in triggering one of Java's worst disasters, the Sidoarjo mudflow.¹⁸ Her interviews with indigenous peoples of the area found that "there is only oil 18 On 28 May 2006, PT Lapindo Brantas, under the Bakrie Group, targeted gas in Java drilling a borehole into a thick clay seam and then deeper to about 2,834 m (9,298 feet), after which water, steam and a small amount of gas began to erupt.

Hydrogen sulphide gas was released and local villages observed mud at hot temperature, around 60°C or 140°F.^[6] The most likely cause of hydraulic fractures in the shallowest strata is by the unprotected drill string with a steel casing.^[5] Borehole protection by steel casing has been a common procedure in oil or gas exploration. On 23 November 2006, eleven fatalities were reported from the explosion of a gas pipe, possibly caused by the mud flow.

The accident occurred because the ground subsided 2 m (6.5 feet) due to the significant outflow of mud and water, and a dike collapsed causing the state-owned Pertamina gas pipeline to rupture. The gas sent flames into the sky and according to the local people, they could feel the heat from one kilometer (0.6 miles) away. As of February 2007, the erupted mud pool had an estimated total volume of 0.012 km³ (12 million m³), covered an area of 360 ha (1.4 miles²), was up to 10 m (32.8 feet) thick, buried four villages and 25 factories, displaced at least 11,000 people and the eruption was still ongoing.

It was expected that the mud eruption will last for years to come and the area will experience a significant depression to form a caldera. Infrastructure has been damaged extensively, including toll roads, railway tracks, power transmission systems, gas pipelines and national artery roads. Speaking in front of the People's Representative Council, the house speaker Agung Laksono declared that the state plantation left. Our forest has been cut.

Nowhere to go, nowhere to live for us." This is no surprise to those familiar with Indonesian forestry practices. Altemeier's film about the false "sustainability claims" for palm oil will be released this summer.

A number of reviewers commented on the fact that Sinar Mas is considering the development of perhaps one million hectares of palm oil and biofuel in Indonesia. This is seen as a potential prelude to new pulp mills, which reviewers suspect, could use the tidal wave of Mixed Tropical Hardwood from deforestation associated with planned palm oil plantation establishment.

The following references were recommended for information on the Indonesian paper and pulp industry which is increasingly linked to Indonesian plans for palm oil:

WITHOUT REMEDY: Human Rights Abuse and Indonesia's Pulp and Paper Industry, Human Rights Watch, This report documents the use of Indonesia's notorious Mobile Brigade (Brimob) special forces and various local militias in seizing land from villagers in Riau. 2003³⁹ ...

International analysts commented that the recent push towards "cheap biofuels" has been associated with extraordinary levels of deforestation and violations of indigenous rights in Indonesia and Malaysia. According to some estimates, the demand for palm oil as biofuel may push Indonesia to clear as much as 20 million hectares budget is needed to finance the infrastructure repairs, while PT Lapindo Brantas will be responsible for financing the repairs and also to pay 2.5 trillion rupiah for compensation to the victims.

The Porong-Gempol toll road in East Java province has been significantly damaged by the

³⁹ <http://www.hrw.org/reports/2003/indon0103/>

mud flow and was practically inoperable. Rice fields and fish and shrimp ponds have been destroyed, which further threatened Sidoarjo's status as the biggest shrimp producer in Indonesia after Lampung.[9] The Marine Resources and Fisheries Ministry has estimated a financial loss of 10.9 billion rupiahs (US\$ 1.2 million) to the fisheries business in Tanggulangin and Porong subdistricts. Aburizal Bakrie's family business group, Bakrie Group, one of the owners of PT Lapindo Brantas, had been trying to distance themselves from the Lusi incident.

Afraid of being liable for the disaster, Bakrie Group announced that they would sell PT Lapindo Brantas to an offshore company for only \$2, but Indonesia's Capital Markets Supervisory Agency blocked the sale. A further attempt was made to try to sell to a company registered in the Virgin Islands, the Freehold Group, for US\$1 million, which was also halted by the government supervisory agency for being an invalid sale.

Lapindo Brantas was asked to pay about 2.5 trillion rupiah (about US\$ 276.8 million) to the victims and about 1.3 trillion rupiah as additional costs to stop the flow.[16] Some analysts predict that the Bakrie Group will try any attempts, including the announcement of bankruptcy, to avoid the cost of clean up which could amount to US\$ 1 billion. ...

Palm oil is "cheap" because the lands are often seized by force, compensation is minimal, labor standards and pay abysmal, and land clearing is often by clearcut, massive (carbon sink) peat swamps are drained, followed by arson.

According to Rettet den Regenwald, a German organization:

"Currently, millions of hectares of South-east Asia's peatlands are being drained for oil palm plantations. Those peatlands are one of the world's most important carbon sinks – they store 40-50 billion tonnes of carbon, which is the equivalent of about six years of global fossil fuel emissions.

Once the peat is drained, all the carbon will eventually enter into the atmosphere. This process is greatly accelerated by annual fires, many of them set deliberately by plantation owners. So far, 45% of the peatlands have been drained, but in order to satisfy plans for bioenergy expansion, the remainder is likely to be drained and deforested over the next years. The destruction of those peatlands is one of the most likely reasons behind the recent acceleration in carbon dioxide increases in the atmosphere which, in coming decades, will translate into an acceleration of global warming.

A recent study by Wetlands International, Delft Hydraulics and Alterra suggests that the destruction of those peatlands is responsible for at least 8% of all global carbon dioxide emissions – and this figure does not include the large-scale emissions linked to deforestation for palm oil. Those emissions are considerably greater than any emissions savings from replacing some fossil fuels with palm oil."

6) Certification Scheme Problems

A number of reviewers commented that forest "certification" programs -- which may work well in areas with good governance, transparency, and rule of law -- have been mired in significant levels of corruption in Indonesia and Malaysia which, again, make up 85% of the world's palm oil supply. Reviewers also underscored the fact that "no certification scheme for sustainable palm oil exists."

According to one reviewer: APP is the pulp and paper holding company for Sinar Mas, the ones that defaulted on US\$ 14 billion in debt in 2001 and yet who somehow now have the cash to be making enormous investments in new pulp mills and palm oil and biofuels.

Basically, in 2002 WWF signed MOUs with both APP and APRIL. Initially it seemed that WWF and FOE were playing good cop, bad cop. And it seemed that WWF was trying to play APP and APRIL off against each other -- negotiating as far as they could with one, then

using that to try to get HCVF agreements out of the other. They reached a point in 2004 (I think) when they decided that APP wasn't meeting whatever commitments it had made in its agreement with WWF.

So WWF cancelled the MOU (but did not call for a boycott), and APP turned to SmartWood to fill the void. They strung SmartWood along until earlier this year. At one point, SmartWood even sent their team to Cambodia to do an HCVF assessment in one of APP's supposed concession sites -- but just after they got there, Global Witness and local NGOs started making a stink about the fact that the site directly overlapped with a national park (or some kind of protected area).

So [SmartWood] supposedly got on the phone and told their guy to get out of the country immediately. I think it was still a year or so after that that before they pulled the plug entirely.

Another reviewer stated:

"With regards to your query, the main answer is that no certification scheme for sustainable palm oil exists. The RSPO has agreed to principles and criteria, but no verification methods. It does not certify anything so far. RSPO membership does not imply adherence to the principles. One company, Wilmar International, for example, was, until recently involved in Bidco's application to acquire virgin rainforest land in Uganda for a new palm oil plantation. Fortunately, this has now been shelved, after strong protests. Right now, obtaining palm oil which comes from verified sustainable sources is simply impossible."

Another reviewer commented:

I think the general approach APP is taking is that they are using WWF and SmartWood and any other environmental group (or consultant) they can get to engage with them in a strategy of buying time. It seems to take those groups at least 2 years to figure out that APP is not at all serious about any of its commitments regarding environmental or social standards. Imagine how bad the situation must be if Smart Wood is willing to write such a scathing letter to APP. [Appendix F] ...

8) Dutch Cramer Commission on Sustainable Palm Oil Biofuel Standards: Do Not Import Palm Oil from Southern Countries, Need Structural Solution to Palm Oil Problems in South Prior to Massive Imports from the Region

Given the fact that the RSPO standards do not apply to biofuels and carbon accounting, and given the fact that a major Dutch power company was forced to withdraw claims of "sustainable fuel" from advertising regarding its palm oil imports, the Dutch government set up a commission to explore the requirements for developing sustainable biomass standards (which do not yet exist).

The Dutch Government -- Ministry of Economics, along with Dutch financial institutions, Cargill, Shell and others -- has undertaken a full scale initial study (the "Cramer study") of the requirements for developing sustainable biomass standards. However, they note that their sustainable biomass framework was developed without any stakeholder dialogue with stakeholders in producer countries. They admit that such consultation must occur.

The thinking in international circles is that RSPO Principles and Criteria + Cramer (which includes significant governmental commitment to active monitoring) + additional standards would be necessary to attempt to ensure sustainability -- if it is, indeed possible. With palm oil, evidence to date from Indonesia and Malaysia shows that sustainability may not be possible, given levels of corruption, illegal logging, burning etc.

The Cramer report was released in March 2007 and was provided to us by a member of the Cramer Commission (enclosed). The assessment describes the tremendous amount of oversight and monitoring that will be necessary by the government of any area wishing to

import biofuels -- substantial governmental analysis and monitoring, given the serious threats of social, economic and environmental damage likely to occur in producing countries.

For example, "It may happen that the certificates submitted by the biomass producers meet the basic conditions for companies, but that the changes in land use at the macro level lead to serious deterioration of biodiversity or competition with food production.

The Dutch government plays a special part in this, for it lays down the basic conditions for the use of biomass for a sustainable energy supply in the context of the policy aims it has set to the use of biomass for a sustainable energy supply and stimulates the use of biomass as a result of the ambitions and objectives laid down.

*So it is the task of the Dutch government, if possible on an EU level, to get talking to the government in the production country and together to aim at a responsible planning of the land use. **If the local authorities are not prepared to comply with this, the Dutch government can take action by discouraging the use of biomass from these regions.** "*

Reviewers consider Indonesia and Malaysia to be such regions, lacking "responsible planning of land use". The Cramer study is also flawed in certain ways (in addition to the obvious lack of input by the people most impacted by palm oil production) -- it refers to a "high value conservation" standard which, at least in parts of Indonesia, has been associated with significant deforestation and illegal logging.

The Cramer study was unable to develop standards for palm oil biomass sustainability – all they could do was simply to indicate the key areas where much work remains to be done in order to develop the standards. They conclude with the recommendation -- again a result of work by a committee with Shell, Cargill & Economics Ministry -- that at this point **palm oil should not be imported from "Southern" (non-industrialized) countries and that biomass should be locally produced.**

Cramer Recommendation:

"In the short term, only use biomass from Europe to gain time for a structural solution in the longer term for the sustainable production of biomass in the South. In this way, high volume objectives in the Netherlands and the EU will not put the sustainable production of biomass in the South under unnecessary pressure." (pg 43 of 73 in pdf)

According to reviewers, it would be premature and potentially environmentally devastating (with significant negative impacts likely for indigenous and other forest dwelling peoples) for Hawai'i to commit to imports of foreign palm oil. Making a commitment to import palm oil "until local production is established" is the opposite of the approach recommended by the Cramer Commission.

9) Use Innovation and Technology to Develop Local Energy Sources

"Again, let's use innovation and technology to develop energy sources based on what we have ample supplies of – sun, wind, wave power (if sustainable)."

"If the HECO plant is meant to operate from local sources, let it begin with that first – including provision of a detailed analysis -- year by year – of which land will be brought into production where, what kinds of yields will occur in Year 1, Year 2 , Year 3, Year 4 etc. Again, Blue Earth has no experience with biodiesel and was not even registered as a company when they applied for the revenue bonds.

Many doubt that Hawai'i will ever engage in biofuel production of sufficient amounts and economically competitive with cheap foreign imports. Please do not gamble with the future of the millions of Indigenous Peoples whose lives may be impacted by our efforts. Let us not add, however inadvertently, to the tremendous environmental damage occurring in Indonesian forests."

10) Re Market Signals

The palm oil industry is not new to Indonesia. It has been operating for decades and there have been *no signs of meaningful movement towards sustainability regardless of years of effort put into the development of standards. The government of Indonesia intends to clear millions of acres of additional forest lands in response to market signals from international buyers. We are slated to be a large market signal, likely to trigger massive deforestation.*

Under "normal" circumstances – i.e. in a country where the rule of law exists, where transparency is the norm, and where "market signals" function – such an effort to ensure sustainability might be viable. In a country such as Indonesia, where bribery, corruption and forest-related violence are the norm, and where decentralization has led to the concentration of power in the hands of local strongmen, feigning belief in such a "sustainability" system can be an act of extraordinary negligence.

According to the World Bank, over 60% of the timber in Indonesia is illegally logged. The main timber players are also the major palm oil players. Illegal clearcutting of forested areas is a substantial profit center during oil palm plantation establishment.

11) Credibility Concerns re HECO/NRDC claims of “converting” to Local Agricultural Sources

Hawai`i –based reviewers raised concerns that it is preposterous to claim that Hawaiian agriculture will – *in 3 to 5 years* -- "replace" cheap Indonesian palm oil as the source for the HECO refineries. One reviewer stated: “At the Senate hearings, members of the public continually asked for (1) timing projections – how much Hawai`i agricultural land (and how much product) will be "on line" and supplying the plant in years 1 – 20 (2) cost projections – what will be costs of procuring HI product years 1 - 20

On June 27, the Honolulu Star Bulletin reported that rambutan grown in Hawai`i was purchased from farmers at \$2.51/lb compared to rambutan from Thailand which went for 9 cents/lb – approximately 4% of the cost of Hawai`i-produced fruit. Locally produced palm oil (should it ever be planted) and other Hawai`i grown oils would likely face similar price differences compared to Indonesian palm oil.

At the HECO/NRDC palm oil meeting on O`ahu, a representative of one of the five largest landowners in the state spoke with one of the co-authors of this report and expressed substantial skepticism about the likelihood of developing a Hawai`i farm base for biofuel production on the scale required for the HECO refineries. “Dole was very good – expert – at growing pineapple. They did so for a long time here. Pineapple is a known quantity. Yet, they left. Look at land and labor prices. And this is for a known crop. We are certainly not rushing to put a lot of land, say 20,000 acres, into one of these new crops.”

Can Hawai`i labor and land costs compete with seized Indonesian lands? "free" forest? Virtually free labor?

None of this data has been publicly presented. If the HECO/NRDC proposal is actually about Hawaiian agriculture, where are the numbers, timelines, and explanation of costs showing how Hawaiian oil will compete with cheap imports?” “What seems to be going on here – instead of an innovative exploration of readily available local sources of energy – sun, wind, wave, etc. – along the lines of the Governor’s new Innovation Council -- is the creation of the largest plant in the US, which will likely be a never-ending importer of cheap Indonesian palm oil. This is virtually guaranteed to send a strong market signal to the Indonesian Government to go forward with plans to open up millions of acres of plantations – further harming the environment and rights of indigenous and other peoples.”

“HECO/NRDC has never named any sources of sustainable palm oil – despite being asked for this information during the hearings. If they have identified enough sustainable supplies,

where are they? No other utility plant has found them yet.”

“Committing state resources and setting us on path where we are committing to large infrastructure development which is likely to be locked into a terribly unsustainable source of foreign imported oil, at great expense to indigenous and other forest peoples, is a dangerous move.“

12) Track Record of Indonesian Companies

The Indonesian companies involved in palm oil are some of the biggest debtors on earth – many went "bankrupt" during the Asian financial crisis but were bailed out by the government and still have their assets. Many are owned by long time cronies of deposed General Suharto, beginning to expand business empires a decade after the fall of the dictator. They are apparently still involved in various forms of fraudulent and/or illegal behavior. There is plenty of information about this in Indonesian newspapers.

Reviewers sent detailed documentation in English and Indonesian including a recent article detailing how Indonesia's largest palm oil and logging tycoon has created networks of false front companies to launder palm oil money in order to avoid taxation.

Tempo Magazine (Indonesia's version of Time Magazine) featured an article in its January 15 – 21, 2007 edition titled "Paket Hemat Raja Sawit" (*Palm Oil King's Savings Plan*) which featured copies of documents signed by Sukanto Tanoto, Indonesia's richest man and the head of the Raja Garuda Mas/APRIL company, one of the country's largest forest companies. Tanoto refers to palm oil as "green gold" and , according to the Asia Times, his company "manages more than 26 plantations totaling 160,000 hectares and 19 palm oil mills with a production capacity of more than 1 million tons."

Investigations by local environmental groups in Riau in June 2007, found illegal forest clearing activities associated with the company's operations. The Tempo documents describe "paper companies" for palm oil sales created in Hong Kong, British Virgin Islands and Makau which were "suspected of being fictitious" and which were apparently utilized by the Raja Garuda Mas group in "fictitious payments" [*biaya fiktif*], "fictitious hedging transactions" [*trnasaksi hedging fiktif*], and transfer pricing in order to avoid paying taxes.

Reviewers also provided a copy of the Asia Times' recent article "A Who's Who of Indonesian Biofuel" which chronicles the re-appearance and rise of former Suharto cronies with "highly suspect environmental records." Companies like Sinar Mas/APP "defaulted on billions of dollars worth of loans, equivalent to more than a tenth of Indonesia's total foreign debt" and "their reputations as reliable business partners are still in doubt."

On July 3, 2007, three directors of PT Arara Abadi, a subsidiary of Asia Pulp & Paper (APP), were named suspects by the Riau Police Office over illegal logging practices causing the loss of natural forests in Riau. In another case, two former Riau Forestry Service's heads also named suspects for allegedly issuing unlawful logging licenses and other fake documents.⁴⁰

According to the Asia Times, "Another major player is publicly listed PT Bakrie Sumatera Plantations (BSP), owned by the listed conglomerate PT Bakrie & Brothers, which is 80% owned by the family of Coordinating Minister for People's Welfare Aburizal Bakrie. The family accumulated and defaulted on part of more than \$1 billion in debts at the height of the Asian financial crisis related to a broad range of businesses." Note that the Bakrie Group is a key player in the Sidoarjo mudflow disaster.

⁴⁰ Eyes on the Forests News, Riau. July 3, 2007

According to the Asia Times: "BSP currently has concessions on 53,000 hectares of mixed plantations, the majority of them planted with oil palms. The company recently acquired another 25,500 hectares in Sumatra and expects to boost crude palm oil production to 180,000 tons this year, up from 158,000 in 2006. The company also operates three palm oil refineries in West Java and Sumatra and holds a 70% stake in Bakrie Rekin Bio-Energy, a joint venture with state-owned contractor Rekayasa Industri, with whom it has started building a biodiesel plant in Batam with a capacity of 100,000 tons per year.

The Widjaja and Bakries are not the only ones bidding to rehabilitate their businesses and restore their family fortunes through biofuel-related businesses. For instance, the Salim Group's publicly listed Indofood Agri Resources Ltd, with investments in oil palm plantations, commands a 60% share of Indonesia's cooking oil sector. It recently raised \$275 million in a share sale in Singapore to be partially used for biofuel-related outlays. The group was founded by Liem Sioe Liong, a renowned business associate of former strongman president Suharto."

Another Suharto-era crony is convicted felon Bob Hasan, formerly Indonesia's "timber king." Again, the Asia Times:

"Meanwhile, PT Astra Agro Lestari, owned by Indonesia's giant auto maker Astra International, is the country's largest crude palm oil producer. Founded by Suharto associate and former trade minister Bob Hasan, the company controls some 205,000 hectares of plantation area in Sumatra, Kalimantan and Sulawesi provinces. Hasan was convicted on corruption charges in February 2001 for causing the Indonesian government to lose \$244 million in a fraudulent forest-mapping project. He was released on parole in February 2004. "

The Asia Times reports that "the government has ordered provincial governments to simplify arrangements for land use permits" and "passed a new investment law that gives foreigners control over land for as long as 90 years." There are deep concerns that none of these changes bode well for indigenous peoples and forest dependent communities.

Says the Asia Times: "It's not only industry analysts who are raising red flags. United Nations environment program executive director Achim Steiner last month warned attendees at a global business summit for the environment in Singapore that businesses run the risk of a public backlash if the globally in vogue green business model is **hijacked by industries who engage in environmentally destructive practices. That may have been a veiled reference to the personalities leading Indonesia's biofuel development.**" These are the entities which could be "partnering" with HECO/NRDC on "sustainability" certification systems.

D) Oxfam

Bio-fuelling Poverty Why the EU renewable-fuel target may be disastrous for poor people 1 November 2007 by **Oxfam International**, a confederation of thirteen organizations working together in more than 100 countries to find lasting solutions to poverty and injustice.

The road to sustainable transport?

In January of this year, the European Commission published its Renewable Energy Roadmap, proposing a mandatory target that biofuels must provide ten per cent of member

states' transport fuels by 2020.⁴¹ This target is creating a scramble to supply in the South, posing a serious threat to vulnerable people at risk from land-grabbing, exploitation, and deteriorating food security. It is unacceptable that poor people in developing countries bear the costs of emissions reductions in the EU. To avoid this, the Commission must include social standards in its sustainability framework, and develop mechanisms by which the ten per cent target can be revised if it is found to be contributing to the destruction of vulnerable people's livelihoods.

The target was agreed in principle by the Council in March, on the condition that it is reached *sustainably*. In response, the Commission launched a consultation in the spring, proposing a definition of sustainability that included some environmental principles but no social principles.⁴² Finally, in September, the European Parliament provided an opinion calling for a mandatory certification scheme which would ensure that biofuels 'do not cause, directly or indirectly...social problems such as rising food prices and the displacement of people'.⁴³ The Commission is now in the process of drafting its legislative proposal, expected on 5 December, that will specify how 'sustainable' biofuels will be defined, and what support measures they will qualify for.

Ten per cent, but from where?

Biofuels are liquid fuels manufactured from organic matter; in the vast majority of cases, crops. They are typically blended with fossil fuels for use in conventional cars. Ethanol can be used as a substitute for petrol, and is produced from starch or sugar crops such as corn and wheat or sugarcane and sugar beet. Biodiesel can be used as a substitute for diesel, and is usually derived from oilseeds such as rapeseed or oil palm.

The EU's stated reason for increasing biofuel use is to reduce greenhouse gas (carbon) emissions. The actual carbon savings of biofuels vary considerably however, and depend on the type of feedstock, agricultural practices, the production pathway, and the effects of land use change. Life-cycle analyses taking into account these factors show that biofuels produced from feedstocks grown in tropical regions offer better carbon savings and cost efficiencies than those grown in Europe.⁴⁴ Despite this, the EU favours domestically grown feedstocks through a framework of incentives, subsidies, tariffs, and technical rules.⁴⁵ This has resulted in recent criticism questioning the sustainability of current EU biofuels policies and the motives behind them.⁴⁶ Currently around one per cent of EU transport-fuel needs

⁴¹ This is on an energy content basis – meaning that ten per cent of transport *energy* should come from biofuels, not ten per cent of transport fuel volume. Because biofuels have a lower energy density than fossil fuels, this means that the volume of biofuels required to meet the target will be more than ten per cent.

⁴² 'Biofuels issues in the new legislation on the promotion of renewable energy', public consultation exercise, April–May 2007, Energy and Transport Directorate-General, Brussels: European Commission, 2007.

⁴³ 'Report on the Roadmap for Renewable Energy in Europe', Committee on Industry, Research and Energy, Rapporteur: Britta Thomsen, Brussels: European Parliament, 2007.

⁴⁴ 'An Examination of US and EU Government Support to Biofuels: Early Lessons', International Food and Agricultural Trade Policy Council, Washington: IPC, 2007. 'Biofuels – at what cost? Government support for ethanol and biodiesel in the European Union', prepared by the Global Subsidies Initiative, Geneva: International Institute for Sustainable Development, 2007. 'Transport Biofuels', Postnote number 293, Parliamentary Office of Science and Technology, London: 2007. Note that when tropical feedstock production triggers land-use change such as deforestation or destruction of wetlands, the resulting biofuels will not have a positive impact on emissions reduction. See Note 19.

⁴⁵ 'An Examination of US and EU Government Support to Biofuels: Early Lessons', *ibid.* 'Biofuels – at what cost? Government support for ethanol and biodiesel in the European Union', *ibid.* 'Biofuels: is the cure worse than the disease?', discussion document prepared for the Round Table on Sustainable Development, Paris: OECD, 2007. 'EU and U.S. Policies on Biofuels: Potential Impacts on Developing Countries', The German Marshall Fund of the United States, Washington: 2007.

⁴⁶ 'Biofuels: is the cure worse than the disease?', *ibid.* And for a succinct summary of recent criticism

are met by biofuels.⁴⁷ The 2020 target therefore represents a major increase in biofuel demand, firstly because it means increasing the *proportion* of biofuel in the total transport mix by a factor of ten, and secondly because this total is on an upward trend.⁴⁸ To close this gap, the EU will have to import from developing countries where much more efficient biofuel feedstocks such as sugarcane and palm oil can be grown.⁴⁹ Among the countries best placed to plug the gap are:

- Malaysia and Indonesia, which account for about 80 per cent of global palm-oil production, and hope to have achieved a 20 per cent share of the European biofuel market by 2009;⁵⁰ and
- Brazil, which accounts for about half of all international ethanol exports, and which expects to increase sugarcane production by 55 per cent over the next six years to meet anticipated demand for ethanol from the EU and US.⁵¹

Many other poor countries also appear to be investing in biofuels in the hope of winning a slice of the 'EU biofuel pie'. Southern Africa has been described as having the potential to become the 'Middle East' of Biofuels.⁵² Recent reports assessing the biofuel potential of Tanzania estimate that nearly half of the country's land area is suitable for biofuel production;⁵³ meanwhile, the government is courting investment from European biofuels companies such as the UK's Sun Biofuels.⁵⁴ In Mozambique, nearly 33 million hectares – about 40 per cent of the country's land area – has been identified as suitable for growing biofuels, with Europe singled out as a potential market.⁵⁵

see: www.ipsnews.net/news.asp?idnews=39515; and <http://gristmill.grist.org/story/2007/10/10/112525/55>

⁴⁷ 'Biofuels Progress Report: Report on the progress made in the use of biofuels and other renewable fuels in the Member States of the European Union', Brussels: European Commission, 2007.

⁴⁸ Between 1994 and 2004, emissions from transport in the EU 25 increased by 32.2 per cent, based on analysis by the European Federation for Transport and Environment of data submitted to the UNFCCC, available at http://www.transportenvironment.org/docs/Publications/2006/2006-07_ghg_emissions_transport_eea_analysis_2004.pdf Energy consumption from transport in the EU under a business as usual scenario is expected to increase from 332 Mtoe in 2005 to 405 Mtoe by 2020. See 'Communication from the Commission: Action Plan for Energy Efficiency: Realising the Potential', Brussels: Commission of the European Communities, 2006.

⁴⁹ Trade Commissioner Peter Mandelson recently indicated that the EU will not meet its target through domestic production www.euractiv.com/en/trade/eu-eyes-imports-quenched-biofuels-thirst/article-165289. A recent paper by the Commission estimated that, assuming second-generation technologies become available at commercial scale, the EU will need to import 20 per cent of its feedstocks. However, if second-generation technology does not become available, this rises to 50 per cent. (See 'The impact of a minimum 10% obligation for biofuel use in the EU-27 in 2020 on agricultural markets', European Commission: Brussels, 2007.) This analysis assumes the continuation of existing trade policies which restrict access to the EU for producer countries through tariffs, subsidies, incentives, and technical rules. The final extent to which producer countries in the South are able to supply European demand for biofuels depends massively on how these policies evolve.

⁵⁰ 'Indonesia: concern grows over palm oil production', Oxford: Oxford Analytica, 2007

⁵¹ 'Brazil's ethanol slaves: 200,000 migrant sugar cutters who prop up renewable energy boom', *The Guardian*, 9 March 2007.

⁵² Andrew Owens, CEO of Greenergy at Biofuels Markets Africa Conference, 30 November–1 December 2006, Cape Town.

⁵³ For example, 'Liquid Biofuels for Transportation in Tanzania: Potential and Implications for Sustainable Agriculture and Energy in the 21st Century', German Technical Cooperation (GTZ), 2005.

⁵⁴ See www.sunbiofuels.com for details. At the start of this year, the Tanzanian government announced that it is negotiating with 11 foreign companies over investment in biofuels. See 'Dar to grow bio-fuel crops', *Daily News*, 12 April 2007. Available at www.dailynews-tsn.com/page.php?id=6364

⁵⁵ 'The performance of EU-Africa Energy Partnership', presentation given by the Minister of Energy for Mozambique, at the International Business Roundtable, 'Business Perspectives on the Africa-Europe Energy Partnership', 27–29 June 2007, Hamburg. Available at

Sustainable for whom?

Under the right conditions, biofuels offer important opportunities for poverty reduction by stimulating stagnant agricultural sectors, thus creating jobs for agricultural workers and markets for small farmers.⁵⁶ The first biodiesel co-operative was launched in Brazil in 2005: employing sustainable agricultural methods, it has provided improved livelihoods for around 25,000 families.⁵⁷ Locally produced biofuels can also increase access to energy for marginalised communities – for example the Brazilian social biodiesel programme targets fuel production for off-grid electricity generation.⁵⁸

Unfortunately such conditions, including national and corporate policies with clear pro-poor, environmental, and social objectives, are not evident in the emerging agro-industrial model. Instead, a scramble to supply the European market is taking place in the South, and poor people are getting trampled.

Destruction of livelihoods

The clearance of critical ecosystems, such as rainforests, to make way for biofuel plantations has rightly raised serious concerns from an environmental perspective.⁵⁹ But millions of people also face displacement from their land as the scramble to supply intensifies. Those most at risk are some of the poorest and most marginalised in the world. The chair of the UN Permanent Forum on Indigenous Issues recently warned that 60 million indigenous people worldwide face clearance from their land to make way for biofuel plantations.⁶⁰ Five million of these are in the Indonesian region of West Kalimantan (see box below). In Colombia paramilitary groups are forcing people from their land at gunpoint, torturing and murdering those that resist, in order to plant oil palms, often for biofuels,⁶¹ contributing to one of the worst refugee crises in the world.⁶² Many of these violent acts occur in the traditional territories of indigenous peoples and afrodescendent communities, directly affecting the most vulnerable groups in the country. In Tanzania, reports are already emerging that vulnerable groups are being forced aside to make way for biofuel plantations.⁶³

Once people lose their land, they lose their livelihoods. Many will end up in slums in search of work, others will fall into migratory labour patterns, some will be forced to take jobs – often in precarious conditions – on the very plantations which displaced them.

Case study: land dispute in Indonesia

The land in Indonesia under palm-oil cultivation is set to expand from its current six million

www.energypartnership.eu/business/session%201/Minister%20Namburete.ppt

⁵⁶ 'Sustainable Bioenergy: A Framework for Decision Makers', New York: UN-Energy, 2007.

⁵⁷ 'Agribusiness and biofuels: an explosive mixture', GT Energia do FBOMS, Amigos da Terra Brasil and Fundação Heinrich Böll, Rio de Janeiro: Amigos da Tera Brasil, 2006.

⁵⁸ 'The Emerging Biofuels Market: Regulatory, Trade and Development Implications', New York and Geneva: UNCTAD, 2006.

⁵⁹ The advance of feedstock plantations may also result in the destruction of biodiversity and natural carbon sinks such as rainforests or wetlands, actually contributing to carbon emissions. See www.unep-wcmc.org/climate/mitigation.aspx for a discussion of these impacts and further references.

⁶⁰ <http://mwcnews.net/content/view/14507/235/>

⁶¹ 'The flow of palm oil Colombia-Belgium/Europe: a study from a human rights perspective', Fidel Mingorance, Brussels: Coordination Belge pour la Colombie, 2006. 'Massacres and paramilitary land seizures behind the biofuel revolution', *The Guardian*, 5 June 2007.

⁶² Colombia has the second largest population of internally displaced people in the world after Sudan, see <http://www.unhcr.org/publ/PUBL/4444d3ce20.html>

⁶³ 'Agrofuels in Africa: the impacts on land, food and forests', the African Biodiversity Network, 2007.

hectares to 20 million by 2020 – an area nearly five times the size of the Netherlands. Oxfam partner Sawit Watch estimates that there are currently about 400 communities involved in palm-oil-related land conflict. One of the regions experiencing the greatest expansion in oil-palm plantations is West Kalimantan.

Forty-three-year-old Margaretha Yuniar from the village of Kampuh in West Kalimantan is a teacher, and wants her three children to have a good education. Knowing that this would be expensive, in 1996 she and her family decided to earn some income by using their small plot of land to grow oil palms. So they gave palm-oil company PT Ponti Makmur Sejahtera (PMS) their 7.5 hectare plot. In return they were to receive back two hectares to grow oil palms on, and PT PMS was to keep five hectares from which it would pay Yuniar and her family five per cent of the net profit each year. The remaining half-hectare was for housing.

It was not until six years later, in 2002, that Yuniar was given not two but one and a half hectares, and not from the land she originally handed over. To make matters worse, this plot was claimed by its original owner, who would not let Yuniar and her family harvest any palm oil from it. In the meantime, Indonesia had been hit by a crippling economic crisis, and PT PMS had been forced to merge with a Malaysian company, Austral Enterprises Berhad, to form PT Mitra Austral Sejahtera (PT MAS). Golden Hope, one of the largest oil-palm plantation owners in Indonesia, took over the operations of PT MAS in 2005.

In June this year, 800 farmers marched to the office of the *bupati*, the district governor, who is normally responsible for granting companies the land concessions.

‘There were about 50 women farmers on the demonstration’, says Yuniar. ‘We came with our children. From our village of Kampuh, nine of my women friends came on the march.’

Despite meetings and new offers from Golden Hope, the problem of the ownership of the land has not been resolved.

Even if people manage to hold on to their land, their livelihoods may still be threatened by unsustainable practices on plantations which harm the surrounding water, air, and soil. Irrigation systems increase water scarcity, making it harder for nearby communities to farm the surrounding lands. Soils and waterways can become polluted from mill effluents and chemical run-offs, with devastating results for those downstream of plantations;⁶⁴ air may become poisoned by agrochemicals or burning practices.⁶⁵

Indecent work

Labour standards on plantations can be horrific. Sugarcane plantation workers in Brazil are paid according to how much sugarcane they cut – they may earn a little over one dollar per tonne. This piece-rate system systematically discriminates against women who are usually unable to cut as much as men. Workers can live in squalid conditions without access to clean water, and may be forced to buy their food and medicine from the plantation at inflated prices. In some cases, the resulting spiral of debt bonds the workers to the estate, effectively resulting in slave labour.⁶⁶ Shifts can last for 12 hours in temperatures over 30°C – 14

⁶⁴ ‘Agribusiness and biofuels: an explosive mixture’, *ibid.* ‘Greasy Palms: the social and ecological impacts of large-scale oil palm plantation development in South East Asia’, Friends of the Earth, 2005.

⁶⁵ In Brazil, 80 per cent of sugarcane is harvested after burning, and the resulting fumes cause serious respiratory problems for local populations and municipalities – in one area of São Paulo, hospitalisations of children and adolescents with respiratory problems increases by over 20 per cent during burning (‘Agribusiness and biofuels: an explosive mixture’, *ibid.*).

⁶⁶ In a recent raid on a sugarcane plantation near Belem, the Brazilian government freed over 1,000 men and women from bonded-labour in inhumane conditions. Despite the government’s efforts, the International Labour Organization (ILO) estimates that between 25,000 and 40,000 men and women still work in slave-like conditions in Brazil. See http://news.monstersandcritics.com/americas/news/article_1325583.php/Slave_w and www.ilo.org/global/About_the_ILO/Media_and_public_information/Press_releases/lang--

cutters reportedly died of exhaustion during the harvests of 2004/05 and 2005/06.⁶⁷

On oil-palm plantations in Indonesia, women are often drawn into unpaid work in order to help their husbands meet production quotas.⁶⁸ This comes in addition to other responsibilities such as child care, food production, and collecting firewood and water, which, due to the sheer scale of plantations, they must travel much further to find. Indonesian women workers are also routinely discriminated against: estates often pay them lower wages than men simply because they are said to have easier work.⁶⁹ In Malaysia, women make up about half the workforce on plantations, and are typically recruited as sprayers of dangerous herbicides and pesticides. All too often, proper training and safety equipment are lacking, with serious implications for long-term health.⁷⁰

Often workers are unable to secure better conditions for themselves because the right to organise or create labour associations is effectively denied. In Colombia, palm-oil trade unionists have been tortured and murdered.⁷¹ Across other parts of Latin America, effective unionisation is thwarted through obstructive union legislation, intimidation, and a lack of worker rights.⁷²

In Indonesia, although the right to form a union is recognised by law, the International Trade Union Confederation notes that in practice trade-union rights are seriously weakened by intimidation and lengthy mediation processes which force unions to resort to wildcat strikes.⁷³ In this context Musim Mas, an Indonesian palm-oil company, last year fired over 700 union members in retaliation for a strike, forcibly evicting the workers and 1,000 family members from their homes, and expelling their children from school.⁷⁴

Exploitation of smallholders

About 30 per cent of Indonesian palm oil is produced by smallholders, supporting up to 4.5 million people. Most of these are drawn from local communities and indigenous peoples that lost their land to the advancing plantations and were 'rewarded' with a two-hectare plot on which to grow oil palms. These smallholders are bonded to the palm oil companies that provide the credit with which the land is prepared and the seedlings procured. This debt accumulates over the first eight years before the oil palms become profitable, and farmers are obligated to sell to the companies to which they are indebted. This, and the fact that the harvested product must be processed within 48 hours, means that smallholders have no choice to whom they sell – they are price takers. As a result, the payment they receive for their product bears little or no resemblance to the market price, is often late, and is frequently subject to various opaque deductions.⁷⁵

en/WCMS_069168/index.htm The ILO office in Brazil uses the term 'slave labour' to refer to a crime that restricts the freedom of workers through i) retention of documents, ii) the presence of armed supervisors or 'gatos', iii) through debt bondage, or iv) due to a remote geographical location from which escape is impossible.

⁶⁷ 'Agribusiness and biofuels: an explosive mixture', *ibid.*

⁶⁸ 'Greasy Palms: the social and ecological impacts of large-scale oil palm plantation development in South East Asia', *ibid.*

⁶⁹ 'The impacts of oil palm plantations on women', *Down to Earth* No. 74, August 2007.

⁷⁰ 'Oil Palm: From Cosmetics to Biodiesel Colonization Lives On', World Rainforest Movement, Montevideo: 2006.

⁷¹ 'The flow of palm oil Colombia-Belgium/Europe: a study from a human rights perspective', *ibid.*

⁷² 'Annual Survey of violations of trade union rights', International Trade Union Confederation, ITUC: Brussels, 2007. Available at <http://survey07.ituc-csi.org/getcontinent.php?IDContinent=0&IDLang=EN>

⁷³ 'Annual Survey of violations of trade union rights', *ibid.*

⁷⁴ See coverage by the International Union of Food workers (IUF), for example: www.iuf.org/cgi-bin/dbman/db.cgi?db=default&uid=default&ID=3043&view_records=1&ww=1&en=1; and www.iuf.org/cgi-bin/dbman/db.cgi?db=default&uid=default&ID=3106&view_records=1&ww=1&en=1

⁷⁵ 'Ghosts on our Own Land: Indonesian Oil Palm Smallholders and the Roundtable on Sustainable Palm Oil', Forest Peoples Programme and Sawit Watch, 2006.

Food security

Biofuel production creates competition for resources with food and other agricultural products. A recent report by the Food and Agriculture Organization and the Organisation for Economic Co-operation and Development predicted global food-price increases during the next decade in the region of 20 per cent to 50 per cent, compared to recent years, citing biofuels as one of the main drivers.⁷⁶ Of course, higher agricultural commodity prices could be a boon for some of the millions of poor farmers who have suffered from decades of stagnation in global commodity markets.⁷⁷ But others will lose out.

At the household level, poor people with limited capacity to take advantage of the biofuels market and associated livelihood opportunities are at risk of increased food insecurity. At the national level, low-income countries that rely on food imports are most at risk. The FAO lists 82 countries as Low Income Food Deficit Countries (LIFDCs), over half of which are in Africa. Between them, LIFDCs account for nearly two-thirds of the world's population. The reasons these countries rely on imports to meet their food needs are varying. Some export tropical commodities (such as palm oil) and import food staples. In countries such as these, rising export prices due to biofuel demand may compensate for a growing import bill. But, within these countries, those unable to share in the benefits of rising agricultural export prices will still feel the squeeze of higher food prices.

Other LIFDCs simply cannot produce enough food to support themselves for reasons such as conflict, poor infrastructure, geography, and climate. For countries such as these, biofuels offer no opportunities, only threats.

Perhaps more of a threat than rising food prices is increasing price volatility, as poor people, who may spend upwards of 50 per cent of their income on food, are less able to adapt to shocks. As demand for biofuels grows, food and oil prices are becoming more closely linked. This will result in increasing fluctuations in food prices as volatility is transmitted from energy to food markets.⁷⁸ Biofuel consumption mandates, such as the ten per cent target of the EU, will only exacerbate volatility by making demand less responsive to price shocks.

Conclusion: social principles urgently needed

Biofuels need not spell disaster for poor people in the South – they should instead offer new market and livelihood opportunities. But the agro-industrial model that is emerging to supply the EU target poses little in the way of opportunities and much in the way of threats. Without the right policies in place among companies, producer governments, and importing governments, the kinds of negative social impacts outlined above will only get worse as the scramble to supply intensifies. The steps the EU must take in order to play its part are set out below.

More flexibility

Ensuring sustainability must come before achieving the ten per cent target, which should not be set in stone. A formalised process, based on annual impact assessments and reviews of food security, must be introduced so that the target can be revised if it is not being achieved sustainably.

⁷⁶ 'OECD-FAO Agricultural Outlook 2007-2016', Organisation for Economic Co-operation and Development and the Food and Agriculture Organization of the United Nations, Paris and Rome: 2007.

⁷⁷ This assumes that international price increases are successfully transmitted to poor farmers in developing countries. There are reasons to suppose that this may not in every case occur, for example due to imperfect local markets, corporate concentration in supply chains, intermediaries absorbing price rises etc.

⁷⁸ 'Sustainable Bioenergy: A Framework for Decision Makers', *ibid.*

Social standards

In addition to environmental standards, the EU must develop social standards which apply to *all* biofuels irrespective of their origin, such that:

- 1 All workers, men and women, enjoy decent work as defined by the International Labour Organization.
- 2 Feedstock cultivation does not adversely impact on local communities or indigenous peoples.
- 3 Men and women smallholders are treated fairly and transparently.
- 4 The right to food is preserved.⁷⁹

Underlying principles and criteria for biofuels production should be developed as part of an inclusive process involving producer countries and organisations representing those most affected by social standards: men and women plantation workers and smallholders, local communities, and indigenous peoples. These standards should also provide means by which smallholders can seek certification, such as group- certification schemes.

The EU must ensure that transport emissions reductions do not come at the expense of poor people's livelihoods. To do so, it must include the above measures in any legislation. If not, it must accept that the ten per cent target will not be reached sustainably, and therefore should not be reached at all.

http://www.oxfam.org/en/files/bn_biofuelling_poverty_0711.pdf/download

E) Imperium Renewables Inc

"We plan to use significant amounts of palm oil from Southeast Asia, primarily Indonesia and Malaysia, in the production of biodiesel."⁸⁰

"We will continue to use palm oil as a feedstock for biodiesel production and will gladly defend this decision to critics who refuse to look at the true problems facing our world and who instead focus on excluding an extremely versatile and efficient crop for reasons more to do with ignorance and protectionism than reality."⁸¹

Environmental Assessment (Question #24 by LOL, Response by IRI). "The DEA states that: 'Palm oil has received a disproportionate amount of negative publicity due to its perceived reliance on environmentally unsound practices as the industry expands.' As the palm oil industry expands, has there been significant environmentally unsound practices? Response 24: Imperium is not familiar with any significant environmentally unsound practices elsewhere."

⁷⁹ The right to food is the right of every person to have access to sufficient, nutritionally adequate and culturally acceptable food for an active healthy life, which both the state and the international community are obligated to protect.

⁸⁰ S-1/A Filing with U.S. Securities and Exchange Commission September 13, 2007

⁸¹ Draft EA

Imperium Renewables Inc (IRI) Form S-1/A filed with the U.S. Securities and Exchange Commission: First Amended and Restated Financing Agreement (July 27, 2007) which cites contracts with Wilmar International Limited and Cargill International Trading Pte, Ltd
www.secinfo.com/d14D5a.u56qh.b.htm (Excerpts)

Imperium Renewables Inc (IRI) Form S-1/A filed with the **U.S. Securities and Exchange Commission: First Amended and Restated Financing Agreement (July 27, 2007)** by and among **IMPERIUM GRAYS HARBOR, LLC**, as **the Borrower**,

WHEREAS, the Borrower is currently a purchaser of Pure Biodiesel from KemOleo PTE LTD, **a subsidiary of Wilmar International Limited** ("KemOleo"), under Sales Contracts No. S0600534 and S0700004 dated November 13, 2006 and December 28, 2006, respectively, originally by and between the Sponsor and KemOleo (together with the parent guaranties by Wilmar International Limited related thereto, collectively and, in each case, as amended, modified or supplemented, the "KemOleo Agreements");

ARTICLE 1 AMENDMENT; DEFINITIONS Section 1.1 Amendment. The Original Financing Agreement is hereby amended and restated in its entirety by this Financing Agreement and, from and after the date hereof, all Loans and Letters of Credit outstanding under the Original Financing Agreement will be governed by this Financing Agreement.

Project Documents*

11 Contract No. S0600534, by and between **Imperium Renewables, Inc.** and KemOleo Pte Ltd., **a subsidiary of Wilmar International Limited**, dated November 13, 2006, assigned to and assumed by the Borrower pursuant to the Imperium Assignment Agreement.

12 Letter of Parent Guaranty by **Wilmar International Limited**, in respect of Contract No. S0600534, by and between **Imperium Renewables, Inc.** and KemOleo Pte Ltd, assigned to and assumed by the Borrower pursuant to the Imperium Assignment Agreement.

13 Contract for the Supply of RBD Palm Olein, by and between **Imperium Renewables, Inc.** and **Cargill International Trading Pte, Ltd.**, dated November 22, 2006, assigned to and assumed by the Borrower pursuant to the Imperium Assignment Agreement.

14 Contract No. S0700004, by and between **Imperium Renewables, Inc.** and KemOleo Pte Ltd., **a subsidiary of Wilmar International Limited**, dated December 28, 2006, assigned to and assumed by the Borrower pursuant to the Imperium Assignment Agreement.

15 Letter of Parent Guaranty by **Wilmar International Limited**, in respect of Contract No. S0700004, by and between **Imperium Renewables, Inc.** and KemOleo Pte Ltd, assigned to and assumed by the Borrower pursuant to the Imperium Assignment Agreement.

www.secinfo.com/d14D5a.u56qh.b.htm

F) Complaint to International Finance Corporation (IFC) re Wilmar

Forest Peoples Programme. 1c Fosseyway Business Centre, Stratford Road, Moreton-in-

Marsh GL56 9NQ, UK tel: +44 (0)1608 652893 fax: +44 01608 652878
info@forestpeoples.org www.forestpeoples.org

The Forest Peoples Programme is registered as a non-profit NGO in the UK and Netherlands. The Programme was originally established by the World Rainforest Movement and works to secure the rights of forest peoples to control their lands and destinies.

Mr Robert B. Zoellick
President
The World Bank
1818 H Street, NW
Washington, DC 20433 USA
Fax: +1-(202) 477-6391
18 July 2007

Dear Mr Zoellick,

Violation of RSPO rules and procedural irregularities and standards violations in IFC support for Wilmar Trading

The undersigned in our capacity of membership of the Roundtable on Sustainable Palm Oil (RSPO) are writing to you to express concerns about the IFC's financing of the palm oil trading company Wilmar Trading / Wilmar International through a series of three investment projects, and a GEF grant. As explained in detail in our letter to the IFC CAO (please see attached), we believe the IFC is contravening its responsibilities as a member of RSPO, and is in violation of its own procedures and standards.

Detailed field assessments show that, through the operations of its wholly-owned subsidiaries, Wilmar is party to long-term negative social and environmental impacts which are at odds with the IFC's standards. These include the taking over of indigenous peoples' land without due process. We contend that the IFC is making these investments without full compliance with its own operating procedures and requirements for due diligence. IFC is also making false claims about Wilmar's compliance with the standards of RSPO, contrary to its responsibilities as an RSPO member. We ask that you look into these issues and take urgent remedial action.

With reference to the RSPO Code of Conduct for members (para 2.1.) we bring this matter urgently to your attention. We will send a copy of this letter to the IFC CAO and the management of Wilmar Trading / Wilmar International, and we look forward to receiving your response.

Yours sincerely

Dr. Marcus Colchester, Director, Forest Peoples Programme, (Ordinary member RSPO)
Rudy Lumuru, Executive Director, SawitWatch (Ordinary member RSPO)
Johan Verburg, Policy Advisor, Novib and Oxfam International (Ordinary member RSPO)
Paul Wolvekamp, Deputy Director, Both ENDS (Ordinary member RSPO)

G) Office of the Compliance Advisor Ombudsman (CAO), the independent recourse mechanism for: International Finance Corporation (IFC)- the private sector investment arm of the World Bank Group; and Multilateral Investment Guarantee Agency (MIGA)- the multilateral risk mitigation arm of the World Bank Group.⁸²

⁸² <http://www.cao-ombudsman.org/>

Issue: A complaint signed by representatives of 20 Indonesian and International NGOs was filed in July 2007 regarding a series of IFC investments in companies of the Wilmar Group—a major agribusiness conglomerate specializing in production and trade of palm oil. The complaint raises a number of concerns about the social and environmental impacts of Wilmar Group’s operations, including compliance with national laws, compliance with IFC procedures and standards, and claims regarding the company’s compliance with certification protocols of the Roundtable on Sustainable Palm Oil.

Background: IFC’s support of the Wilmar Group includes an investment guarantee for \$33.3 million in April 2003; a loan of \$17.5 million in June 2006, and additional guarantee for \$50 million in December 2006 to Delta-Wilmar CIS in the Ukraine; and an April 2006 grant of \$375,000 through the Global Environment Facility-funded Biodiversity and Agricultural Commodities project.

CAO Findings: The complaint meets the required criteria for CAO assessment: 1) it pertains to an IFC/MIGA project, 2) the issue(s) raised in the complaint address the environmental and social impacts of IFC/MIGA investments, and 3) the complainant(s) would be affected if the social and/or environmental impacts raised in the complaint occurred.

Current Status: The CAO Ombudsman has initiated an assessment to help the parties determine whether the complaint is amenable to resolution. A CAO field visit with the parties is scheduled for mid-September 2007.

H) Department of Transportation

Barry Fukunaga, Director, Department of Transportation (The Environmental Assessment Accepting Agency) told the State House during the Superferry hearings that in considering the need for an EA, the DOT only looks at impacts within the harbor.

VII) OUTLINE OF SPECIFIC ISSUES TO BE RAISED

1. Whether the Board of Land and Natural Resources must consider the public trust doctrine in issuing the lease?
2. Whether the Board of Land and Natural Resources must consider the precautionary principle in

⁸³ http://www.cao-ombudsman.org/html-english/ombudsman_complaint_indonesia.htm

issuing the lease?

3. Whether the Board of Land and Natural Resources must consider greenhouse gas emissions in issuing the lease?

4. Whether the Board of Land and Natural Resources must consider Article IX of the Hawai`i State Constitution, and in particular, Sections 1, 6, 7, 9 of Article XI in issuing the lease?

5. Whether the Board of Land and Natural Resources must consider State Environmental Policy (HRS 344) in issuing the lease?

6. Whether the Board of Land and Natural Resources must consider external (outside the State) environmental, cultural, justice, and climate impacts caused by issuing the lease?

7. Whether the proposal by Imperium Renewables Inc is supported by or runs contrary to the State Constitution, Hawai`i Revised Statutes, and Hawai`i Administrative Rules?

8. Whether a state agency with jurisdiction over state natural and cultural resources should grant a lease to an entity that may or will significantly negatively impact those resources?

VIII) RELIEF SOUGHT

As a condition for getting a lease from the State, Imperium Renewables Inc should be required to use sustainable feed stock, as certified by DBEDT.

IX) The above-named person hereby requests and petitions the Board of Land and Natural Resources for a contested case hearing in the matter described above.

Because a Petition for a Contested Case Proceeding has been filed, no action can be taken by the Board of Land and Natural Resources. The Board of Land and Natural Resources must first decide whether Intervenors' Petition to Intervene should be granted. Only after action has been taken on this Petition to Intervene may the Board proceed to the merits of the issues raised in the Petition.

Certificate of Service

I hereby certify that I have this date served the original and three copies of this filing with the Board of Land and Natural Resources, as specified in HAR 13-1-12 (Filing of documents ... Unless otherwise specifically provided by a particular rule or order of the board, an original and three copies of all papers shall be filed). I have also hand delivered a copy to Imperium Renewables Inc and mailed a copy to the State of Hawai'i Department of Transportation. I have also emailed a copy to dlnr@hawaii.gov.

Laura H. Thielen
Chair, Board of Land and Natural Resources
Kalanimoku Building
1151 Punchbowl Street
Honolulu, HI 96813

David Leonard, Chief Operating Officer
Imperium Renewables Hawaii LLC
1099 Alakea Street, Suite 1800
Honolulu, HI 96813

Glenn Abe, Supervising Property Manager
State of Hawai'i Department of Transportation,
Harbors Division, Hale Awa Ku Moku Building,
79 South Nimitz Highway, Honolulu,
Hawai'i 96813-4898

Signed: _____

Dated: _____

Henry Q Curtis
Vice President for Consumer Affairs
Life of the Land