



# NO to CO<sub>2</sub>lonialism!

This guide can be downloaded at: <http://www.earthpeoples.org/CLIMATE CHANGE/Indigenous Peoples Guide-E.pdf>



## Indigenous Peoples' Guide FALSE SOLUTIONS TO CLIMATE CHANGE







Our planet is heating up at an alarming rate, threatening our very survival. What needs to be done is simple: The pollution and destruction of Earth must be stopped immediately. But instead, there is a lot of greed, false solutions and lies about how to save our future. It seems that leaders of the world are more concerned about making money than solving the climate crisis.

You have in your hands a quick guide to the truth about false solutions to climate change. These market-based scams allow polluters to avoid reducing their pollution, continue to destroy nature and make millions while they are at it. The United Nations, the World Bank, industry, multinationals, governments and even some NGOs promote this climate fraud. Could it be that crimes against humanity and the planet are being committed and nobody knows?

## But what does all this have to do with Indigenous Peoples?



Unfortunately, most of these false solutions are violating not only the law of nature but also Indigenous Peoples' rights. Many of these so-called "solutions" to Climate Change are grabbing our land and devastating our territories. Indigenous Peoples need to know what's going on so that we can fight back.

*"Capitalism is in deep crisis, but it still has a green card to play. Rather than taking effective action against climate change - which would mean a radical reduction of industrialized countries' emissions and questioning the forced growth of the capitalist system itself - they are reaping mega profits from biofuels and carbon trading. These market mechanisms and techno fixes will be a disaster for the poor, and will result in a new form of colonialism. They are already privatizing the atmosphere and subsidizing enormous corporate land grabs of peoples' lands and forests in the Global South. Instead of business as usual, emissions must be drastically reduced, which means that fossil fuels must stay in the ground."* Oliver Demarcus, Youth Climate Advocate

## THREE TYPES OF FALSE SOLUTIONS:

### THE CARBON MARKET

MAKING MONEY FROM PRIVATIZING THE AIR - BUYING AND SELLING PERMITS TO POLLUTE

#### **CLEAN DEVELOPMENT MECHANISM – CO<sub>2</sub>LONIALISM**

North buys permits to pollute from projects in the South

#### **REDD – CO<sub>2</sub>LONIALISM OF FORESTS**

Uses forests and plantations to generate permits to pollute

### DIRTY 'CLEAN' ENERGY

WHAT GOT US INTO THIS MESS IN THE FIRST PLACE

#### **NUCLEAR ENERGY – RADIOACTIVE NIGHTMARE**

#### **MORE FOSSIL FUELS: "CLEAN" COAL**

#### **NATURAL GAS**

#### **HYDROGEN**

#### **BIG DAMS – CHOKER THE RIVERS & RELEASE EMISSIONS**

#### **AGROFUELS – FEED CARS NOT PEOPLE**

### PLAYING GOD

REAL WORLD SCIENCE FICTION -PRIVATIZING AND PERVERTING LIFE

#### **GEO-ENGINEERING – WEATHER CONTROL FREAKS:**

Ocean Fertilization, Ocean Pumps, Carbon Capture & Storage, Biochar

#### **MAD SCIENTISTS: GMOS**

#### **SYNTHETIC BIOLOGY**

#### **EXTREMOPHILES**

### ANNEX

TREE TALK: THE UN THINKS GMO TREE PLANTATIONS ARE FORESTS

UN CARBON MARKET PROJECTS VIOLATE INDIGENOUS RIGHTS

INDIGENOUS PEOPLES PROTEST THE UNPFII CLIMATE CHANGE REPORT

A DECADE OF INDIGENOUS PEOPLES' OPPOSITION TO THE CARBON MARKET

KEEPING IT REAL –TRUE SOLUTIONS TO CLIMATE CHANGE

## SUMMARY OF THE THREE FALSE SOLUTIONS:

**THE CARBON MARKET** buys and sells permits to pollute called "carbon credits". It claims to solve the climate crisis but really just allows polluters to buy their way out of reducing their emissions. This multibillion-dollar pollution trading mechanism privatizes the air and commodifies the atmosphere. The International Indigenous Peoples' Forum on Climate Change opposes the carbon market. "We cannot condone activities that **defile the sacredness** of Mother Earth...Carbon trade-induced conflicts...**endanger our survival**..."

Northern polluters can also get permits to pollute through projects in the South like a dam or a tree plantation under the **Clean Development Mechanism** (CDM). The International Indigenous Peoples' Forum on Climate Change calls the CDM "**a new form of colonialism**." Permits to pollute could also soon be generated by promising not to cut down forests and plantations that absorb pollution. This is called Reducing Emissions from Deforestation and Degradation (REDD). The International Indigenous Peoples' Forum on Climate Change says "**REDD will not benefit Indigenous Peoples, but in fact, will result in more violations of Indigenous Peoples' Rights**...Under REDD, States and Carbon Traders will **take more control over our forests**."



*"Some of the biggest threats to indigenous peoples are the efforts to stop global warming"*<sup>1</sup> Cultural Survival



**DIRTY "CLEAN" ENERGY** (Nuclear Energy, "Clean" Coal, Natural Gas, Dams, Agrofuels and Hydrogen) - What got us into this mess in the first place is certainly not what's going to get us out! Fossil fuels and other energy sources that cause environmental devastation and violate human rights are being green-washed, labeled "clean" and wrongly called solutions to climate change. Indigenous Peoples worldwide have suffered from nuclear energy and nuclear testing, fossil fuel extraction, big dams and plantations. Now comes **more destruction in the name of saving the climate**.

**PLAYING GOD** - Let's dump tons of iron filings in the ocean, spray the stratosphere with banned sulfates, genetically modify trees and wrap the deserts in white plastic! Is that a way to save your children's future? Crazy schemes that sound like comic book science fiction are being implemented to sell permits to pollute and to try to modify the weather. Needless to say, **these climate change mitigation strategies corrupt the sacred**.



# THE CARBON MARKET

Making Money from Privatizing the Air

## FALSE SOLUTION

## CARBON MARKET

includes:

Carbon Trading  
Carbon Offsets  
Emissions Trading  
Cap and Trade  
United Nations Kyoto Protocol  
Voluntary Market  
Clean Development Mechanism (CDM)  
REDD



## WHAT IS IT?



## IMPLEMENTED OR NOT?

## WHY IS THIS A DISASTER FOR THE ENVIRONMENT?

### The Climate Fraud and Cover-up

- Buys and sells permits to pollute
- Claims to solve the climate crisis but really just allows polluters to buy their way out of reducing their emissions
- Trades “carbon credits” = permits to emit carbon dioxide (CO<sub>2</sub>), a gas that causes global warming
- Makes money from the climate crisis
- Commodifies the Atmosphere & Privatizes the Air
- Business as Usual = hides that destructive production and consumption patterns are not changing

**Yes.** Carbon credits are traded between states, companies or individuals on exchanges in London, New York and Chicago and through the United Nations

Pretends to be a solution but is not. All False Solutions **increase climate change & global warming** because they **allow polluters to avoid cutting their emissions** at source and to keep polluting.<sup>2</sup>

- Fossil fuels continue to be burned
- Greenhouse gas emissions increase
- Makes money instead of cutting emissions
- Pushes the Amazon, Arctic and Antarctic to their “tipping point” = collapse from which they cannot recover<sup>3</sup>

## PROBLEMS FOR INDIGENOUS PEOPLES

Indigenous Peoples are on the front lines of climate change.

THE CARBON MARKET AND OTHER FALSE SOLUTIONS:

- **do not reduce emissions**
- **intensify climate change** and cause conflicts thus **threatening the survival** of many of our peoples
- **Destroy the future**
- Violate the principle of the Seventh Generation
- Violate our birthright to life and a clean environment
- **Corrupt the Sacred**
- Hinder Mother Earth’s efforts to heal herself
- Violate UN Declaration on the Rights of Indigenous Peoples

## HEAR THIS



### International Indigenous Peoples’ Forum on Climate Change:

“We oppose the development of the carbon market... Carbon trade-induced conflicts... **endanger our survival**.”<sup>4</sup>

### The Wall Street Journal:

Carbon trading makes “money for some very large corporations, but don't believe for a minute that this **charade** [will] do much about global warming.”<sup>5</sup>

### Financial Times:

Carbon trading and offsets are merely a “**carbon smokescreen**.”<sup>6</sup>

European Commissioner for Energy: “A failure.”<sup>7</sup>

## MORE INFO

*Carbon Trade Watch* [www.carbontradewatch.org](http://www.carbontradewatch.org)

*Indigenous Environmental Network* <http://www.ienearth.org/carbontrading.html>

*Sommerfilms VIDEOS:* Indigenous Elders from the North “Carbon Trading not Ethical”: <http://www.youtube.com/watch?v=tYlwAs3wOLO>

Indigenous Peoples “2nd MAY REVOLT” at the UN PFII:

<http://www.youtube.com/watch?v=UtORVi7GybY>

*Larry Lohmann PDF:* Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power [www.thecornerhouse.org.uk/subject/climate](http://www.thecornerhouse.org.uk/subject/climate)

<sup>2</sup> Interview with Tom B.K. Goldtooth, *REDD-Monitor*: <http://www.redd-monitor.org/2009/01/14/interview-with-tom-bk-goldtooth/>

<sup>3</sup> Director of NASA as quoted in *The Guardian*: <http://www.guardian.co.uk/environment/2008/jun/23/climatechange.carbonemissions>

<sup>4</sup> *Society for Threatened Peoples International*: Decade Long Struggle of Indigenous Peoples against the Carbon Market <http://www.earthpeoples.org/blog/>

<sup>5</sup> *Wall Street Journal*, March 3, 2007 <http://online.wsj.com/home-page>

<sup>6</sup> *Financial Times*, April 25, 2007 [www.financialtimes.net](http://www.financialtimes.net)

<sup>7</sup> *Channel 4* [www.channel4.com/news/articles/society/environment/eu+climate+change+plants+a+failure/281657](http://www.channel4.com/news/articles/society/environment/eu+climate+change+plants+a+failure/281657)



## FALSE SOLUTION

## Clean Development Mechanism (CDM)

### WHAT IS IT?



### CO<sub>2</sub>lonialism<sup>8</sup>

- Created under the **United Nations Kyoto Protocol**
- Claims to compensate for pollution in the North with projects in the Global South that generate carbon credits
- CDM projects include tree **plantations**, large **dams**, destroying laughing gas<sup>9</sup> and reducing cow and pig farts (no joke); very few on renewable energy; most have no effect on fossil fuel use
- **Outsources pollution** reduction of rich countries to poor countries
- **Pollution Shell Game**
- A North-South Carbon Offset

### IMPLEMENTED OR NOT?

**Yes**, under the Kyoto Protocol. There are over 4000 projects in the CDM pipeline.<sup>10</sup>

### WHY IS THIS A DISASTER FOR THE ENVIRONMENT?

Many CDM projects:

- **Destroy biodiversity**
- **Pollute**
- **Release Emissions**
- Dam rivers
- Flood ecosystems
- Promote industrial monoculture tree **plantations**
- Do no reduce fossil fuel use

## PROBLEMS FOR INDIGENOUS PEOPLES



Indigenous Peoples are not only suffering from climate change but also from climate change mitigation strategies.

Some CDM projects have resulted in:

- **Armed conflict**
- **Forced relocation**
- **Servitude**
- **Repression**
- **Human rights violations**
- **Loss of land and territory**
- Loss of cultural identity
- Violation of the right to free, prior and informed consent
- **Violations of the UN Declaration on the Rights of Indigenous Peoples** especially Articles 10, 26, 27, 28, 29, 30, 32

## HEAR THIS

### International Indigenous Peoples' Forum on Climate Change:

"a worldwide strategy for **expropriating our lands, seas and territories** and violating our rights that would culminate in **a new form of colonialism**...lose our right to manage traditionally our lands and **become slaves of the carbon trade**." Statement to United Nations Framework Convention on Climate Change<sup>11</sup>

### Newsweek:

"**It isn't working**" . . . [and represents] "**a shell game**" which has transferred "**\$3 billion to some of the worst carbon polluters** in the developing world."<sup>12</sup>

## MORE INFO



### Carbon Market & the CDM violate Indigenous Peoples' Rights:

- In Panama, the **Kuna, Embera, Ngöbe Bugle and Naso Peoples** oppose carbon market projects and CDM **dams** and suffer. "...Dams and associated development have already caused **armed conflict**" See **Inter-American Human Rights Commission** Petition<sup>13</sup>
- **Climate of Terror:** Since 1998, more than **200 Indigenous Wayúu** have been **assassinated** to clear their territory for 8 mega-projects including **World Bank-funded CDM project**, the Jepirachi Wind Farm in Colombia<sup>14</sup>
- **Displaced Pygmy Batswa People** suffer **Servitude** on **World Bank-funded Tree Plantation**<sup>15</sup>
- See CDM chart in this brochure: **Snapshots of CO<sub>2</sub>lonialism**

<sup>8</sup> See Landmark Case Study on Carbon Colonialism in Uganda; *Norwatch* [www.norwatch.no/download-document/19-co2lonialism.html](http://www.norwatch.no/download-document/19-co2lonialism.html)

<sup>9</sup> *Wall Street Journal*, p.1, July 23, 2008 [www.wsj.com](http://www.wsj.com) Plantations cause social & environmental devastation [www.wrm.org.uy](http://www.wrm.org.uy)

<sup>10</sup> *IINFP* - CDM Project Pipeline [www.cdmpipeline.org](http://www.cdmpipeline.org)

<sup>11</sup> *STPI* - Indigenous Peoples' Decade Long Struggle against the Carbon Market <http://earthpeoples.org/blog/?p=278>

<sup>12</sup> *Newsweek* [www.ienearth.org/falsetoreal.html](http://www.ienearth.org/falsetoreal.html)

<sup>13</sup> *IAHRC* [www.internationalrivers.org/eb/latin-america/panama/iahrc-petition-ngobe-indigenous-peoples](http://www.internationalrivers.org/eb/latin-america/panama/iahrc-petition-ngobe-indigenous-peoples)

<sup>14</sup> *Wayúu News* - List of Victims [www.notiwayuu.blogspot.com/search?q=Jepirachi](http://www.notiwayuu.blogspot.com/search?q=Jepirachi) <http://victimaswayuu.blogspot.com/>

<sup>15</sup> *International Alliance* [www.international-alliance.org/documents/Climate%20Change%20-%20DRC.pdf](http://www.international-alliance.org/documents/Climate%20Change%20-%20DRC.pdf) (p. 57-58)





## FALSE SOLUTION

## REDD (Reducing Emissions from Deforestation and Degradation)



## WHAT IS IT?

CO<sub>2</sub>lonialism of Forests<sup>16</sup>

- Created under the United Nations Framework Convention on Climate Change funded by the World Bank,<sup>17</sup> governments, companies & NGOs; UN-REDD program and other REDD initiatives are in the works.
- Generates permits to pollute or “carbon credits” by promising not to cut down forests and plantations
- Includes forests in the carbon market
- Commodifies and privatizes forests —carbon traders will require legal title to the carbon in the forests or to the land
- Profits for loggers, deforesters & polluters<sup>18</sup>
- Reduces forests to mere carbon sequestration

## IMPLEMENTED OR NOT?

**Yes.** Pilot projects are underway in at least 9 countries including war zones (DRC). Thirty countries are preparing Readiness Plans.

<sup>16</sup> Palm oil's diffusion threatens native people, UN says <http://en.greenplanet.net/food/research/414-palm-oils-diffusion-threatens-native-people-un-says.html>

<sup>17</sup> See protest against the World Bank Forest Carbon Partnership Facility <http://www.globaljusticeecology.org/gallery.php>

<sup>18</sup> REDD-Monitor: World Bank REDD “Poster Child would Reward Forest Destroyers” [www.redd-monitor.org](http://www.redd-monitor.org)

## WHY IS THIS A DISASTER FOR THE ENVIRONMENT?



## PROBLEMS FOR INDIGENOUS PEOPLES



## HEAR THIS



## MORE INFO



The United Nations defines forests in such a way that it includes plantations.<sup>19</sup>

- Monoculture tree **plantations** that were created by **destroying biodiversity, clear-cutting or burning forests** could be eligible for REDD money. Large monoculture tree plantations cause environmental and social **devastation**.
- The United Nations accepts the use of **GMO trees**<sup>20</sup> in plantations **Criminalize indigenous agriculture and lifestyles** for carbon credits

Most of world's forests are on Indigenous Peoples' land.

REDD could result in:

- Massive land grabs** in the name of saving the climate
- Violations of the UN Declaration** on the Rights of Indigenous Peoples especially Articles 10, 26, 27, 28, 29, 30, 32
- United Nations admits REDD could:**<sup>21</sup>
- Violate Indigenous Peoples' rights**
- Result in the **loss of access to land**
- “Marginalize the landless”

International Indigenous Peoples' Forum on Climate Change:

“REDD will **not benefit Indigenous Peoples**, but in fact, it will result in more violations of Indigenous Peoples' Rights. It will increase the **violation of our Human Rights**, our rights to our lands, territories and resources, steal our land, cause **forced evictions**, prevent access and threaten indigenous agriculture practices, destroy biodiversity and culture diversity and cause social conflicts. Under REDD, **States and Carbon Traders will take more control over our forests.**”<sup>22</sup>

**REDD Myths Exposed:** “REDD could unleash **a devastating wave** of further **forest loss, land grabbing, corruption, cultural destruction and conflict.**” Indigenous Peoples “risk displacement, violence and lost of livelihoods.”<sup>23</sup>

- UN admits REDD program threatens Indigenous Peoples**

<http://www.huntingtonnews.net/political/080929-staff-politicalclimatechange.html>

- World Bank REDD would Reward Forest Destroyers**

[www.REDD-Monitor.org](http://www.REDD-Monitor.org)

- REDD Brochure** (Portuguese, Spanish, English):

**“Human Rights & Environmental Disaster”** [www.earthpeoples.org/blog](http://www.earthpeoples.org/blog)

<sup>19</sup> FAO - See page UN definition of forest allows plantations since it does not mention biodiversity [www.fao.org/docrep/004/Y1997E/y1997e00.htm](http://www.fao.org/docrep/004/Y1997E/y1997e00.htm)

<sup>20</sup> UNFCCC COP9 decision to allow GE trees [http://unfccc.int/cop9/latest/sbsta\\_127.pdf](http://unfccc.int/cop9/latest/sbsta_127.pdf)

<sup>21</sup> UN-REDD Framework Document, p4-5, [www.undp.org/mdtf/UN-REDD/docs/Annex-A-Framework-Document.pdf](http://www.undp.org/mdtf/UN-REDD/docs/Annex-A-Framework-Document.pdf) Poverty Environment Partnership (PEP) Policy Brief [www.povertyenvironment.net/?q=filestore2/download/1874/PEP-REDD-policy-brief-Oct-08.pdf](http://www.povertyenvironment.net/?q=filestore2/download/1874/PEP-REDD-policy-brief-Oct-08.pdf)

<sup>22</sup> REDD Statement to United Nations [www.international-alliance.org/documents/IFIPCC%20Statement%20on%20REDD.doc](http://www.international-alliance.org/documents/IFIPCC%20Statement%20on%20REDD.doc)

<sup>23</sup> REDD: Critical questions and myths exposed *Friends of the Earth International Summary* [www.foei.org/publications](http://www.foei.org/publications)

# DIRTY “CLEAN” ENERGY

What got us into this mess in the first place



FALSE SOLUTION

NUCLEAR ENERGY

### WHAT IS IT?



### Radioactive Nightmare

Nuclear energy is released by the splitting (fission) or merging together (fusion) of the nuclei of atom(s).<sup>24</sup>

- Emits less CO<sub>2</sub> but causes cancer
- **Currently 400 nuclear reactors** in the world; proposed **increase to 17,000** to “combat climate change”

### WHY IS THIS A DISASTER FOR THE ENVIRONMENT?



Nuclear energy increases **nuclear weapon proliferation**, the arms race and nuclear bomb testing.

- More **Nuclear Accidents & Meltdowns** like Chernobyl & Three Mile Island
- Lethal **Nuclear Waste** for **100,000 years**
- Radioactive **contamination** of people, land, water & crops
- Irresolvable problem of **radioactive waste, storage & transportation**
- **Unsafe sites** of reactors and waste storage i.e. faults prone to earthquakes

### PROBLEMS FOR INDIGENOUS PEOPLES



Indigenous Peoples have suffered the most from nuclear bomb testing, uranium mining, radioactive waste dumps and have even been subjected to experiments with radioactive material without their informed consent.<sup>25</sup>

- **700 nuclear bomb tests** detonated on Western Shoshone territory
- **70% of uranium mines** are on **indigenous land**<sup>26</sup>
- Death, **cancer, birth defects & radiation sickness**
- Violates our birthright to a healthy life and a clean environment
- Corrupts the Sacred & **Disrupts the Balance**
- **Violates UN Declaration** on the Rights of Indigenous Peoples


### HEAR THIS

The Jakarta Post:  
“**Nuclear power is a false solution to climate change**”<sup>27</sup>

<sup>24</sup> *No Nukes*, [www.nonukes.org](http://www.nonukes.org) No Solution to Climate Change [www.nirs.org/mononline/nukesclimatechangereport.pdf](http://www.nirs.org/mononline/nukesclimatechangereport.pdf)  
<sup>25</sup> The Peoples’ Charter for a Nuclear Free and Independent Pacific <http://www.converge.org.nz/pma/pacchar.htm> or <http://uriohau.blogspot.com/2009/03/nuclear-free-and-independent-pacific.html> *Mirrarr Nation Opposes Jabiluka Uranium Mine:* [www.mirrarr.net](http://www.mirrarr.net)  
<sup>26</sup> Fact Sheet on Indigenous Peoples and Nuclear Energy [www.reachingcriticalwill.org/technical/factsheets/indigenous.html](http://www.reachingcriticalwill.org/technical/factsheets/indigenous.html)  
<sup>27</sup> *The Jakarta Post* [www.thejakartapost.com/news/2008/07/15/nuclear-power-a-false-solution-climate-change.html](http://www.thejakartapost.com/news/2008/07/15/nuclear-power-a-false-solution-climate-change.html)

## FALSE SOLUTION: MORE FOSSIL FUELS

### “Clean” Coal” – Greenwash the Biggest Contributor to Global Warming

WHAT IS IT?	Environment	Indigenous Peoples	HEAR THIS
<ul style="list-style-type: none"><li>• A <b>fossil fuel</b></li><li>• <b>Coal:</b></li><li>• Biggest contributor to global warming</li><li>• Largest source of CO<sub>2</sub></li><li>• <b>Pollutes more than oil</b>, natural gas &amp; gasoline</li><li>• <b>“Clean” Coal:</b></li><li>• Gasifies coal &amp; burns gas</li><li>• Installs filters on chimneys</li></ul>	<ul style="list-style-type: none"><li>• Emits less sulfur than “unclean” coal but same amount of CO<sub>2</sub> &amp; mercury</li><li>• Air Pollution &amp; smog</li><li>• <b>Mercury Poisoning</b></li><li>• Acid Rain</li><li>• Devastates ecosystems</li><li>• Strip Mining</li><li>• Mountain-top removal</li><li>• Toxic Waste &amp; Spills</li><li>• <b>Wastes Water</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Displacement</b><sup>28</sup></li><li>• <b>Death</b> from pollution - Coal-fired power plants lead to 24,000 deaths in US</li><li>• <b>Asthma</b>, heart disease, emphysema, <b>lung cancer</b>, mercury poisoning, childhood leukemia</li><li>• Rips the liver out of Mother Earth</li></ul>	<ul style="list-style-type: none"><li>• Coal-fired power plants are “<b>death factories</b>”<sup>29</sup></li><li>• Coal mining is “<b>destroying our lives</b>”<sup>30</sup></li><li>• Coal is the “<b>dirtiest energy source</b>”<sup>31</sup></li></ul> 

### Natural Gas – Methane is Ten Times Worse for the Climate than CO<sub>2</sub>

<ul style="list-style-type: none"><li>• A <b>fossil fuel</b></li><li>• Mostly <b>methane</b></li><li>• Mostly found in oilfields, coal beds, natural gas fields &amp; landfills</li></ul>	<ul style="list-style-type: none"><li>• Devastation of fossil fuel exploitation</li><li>• Methane is a <b>10 times</b> more <b>potent greenhouse gas</b> than CO<sub>2</sub></li><li>• When burned, emits CO<sub>2</sub> emissions (less than coal or oil)</li><li>• When drilled, the CO<sub>2</sub> pumped out is released into the atmosphere</li><li>• Explosions</li></ul>	<ul style="list-style-type: none"><li>• Same problems as <b>fossil fuel</b> exploration and exploitation</li><li>• Natural gas flares are part of <b>genocide</b> against Ogoni People in Niger River Delta</li><li>• Some <b>Gas Flares</b> have burned for more than 30 years<sup>32</sup></li><li>• Oil is the blood of Mother Earth</li></ul>	<ul style="list-style-type: none"><li>• “<b>Threatens Indigenous Peoples in Voluntary Isolation</b>”<sup>33</sup></li><li>• Movement for the Survival of the Ogoni People: “More gas is flared in Nigeria than any other place in the world.”<sup>34</sup></li></ul>
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### Hydrogen – Dirty, Expensive and Inefficient (in experimental phase)

<ul style="list-style-type: none"><li>• Hydrogen is separated by “<b>reforming</b>” natural gas, a <b>fossil fuel</b> or extracting it from agrofuel or water</li><li>• Hydrogen is stored in fuel cells</li><li>• It takes 3,000 times more storage space than gasoline</li></ul>	<ul style="list-style-type: none"><li>• Mostly from <b>fossil fuels</b></li><li>• Hydrogen might take more energy to extract &amp; deliver than it actually supplies</li><li>• Dangerous to store &amp; transport</li><li>• Hydrogen gas is <b>invisible – even when it is on fire</b></li></ul>	<ul style="list-style-type: none"><li>• Same problems as fossil fuel exploration and exploitation:<sup>35</sup></li><li>• <b>Loss of Land</b></li><li>• <b>Threatens Cultural Survival</b></li><li>• <b>Human Rights Violations</b></li></ul>	<ul style="list-style-type: none"><li>• In the US, “<b>95% of hydrogen</b> is produced <b>from</b> natural gas, a <b>fossil fuel</b>”</li><li>• A <b>hydrogen car costs \$1 million</b></li><li>• To extract hydrogen from water wastes 4 times the amount of electricity than what the hydrogen yields<sup>36</sup></li></ul>
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<sup>28</sup> Indigenous Peoples displaced by world’s largest coal mine [www.columbiajournal.org/colombia\\_coal.htm](http://www.columbiajournal.org/colombia_coal.htm)  
<sup>29</sup> *The Guardian*, <http://www.guardian.co.uk/commentisfree/2009/feb/15/james-hansen-power-plants-coal>  
<sup>30</sup> *Cesáreo Panapaera*, Indigenous leader of 32 Yupka communities [www.venezuelanalysis.com/analysis/1044](http://www.venezuelanalysis.com/analysis/1044)  
<sup>31</sup> *Coop America* [www.coopamerica.org/programs/climate/dirtyenergy/coal/whydirty.cfm](http://www.coopamerica.org/programs/climate/dirtyenergy/coal/whydirty.cfm)  
<sup>32</sup> *Friends of the Earth* [www.foei.org/images/gas-flares/children-in-rumuekpe-nigeria-look-on-to-a-shell/viewww](http://www.foei.org/images/gas-flares/children-in-rumuekpe-nigeria-look-on-to-a-shell/viewww)  
<sup>33</sup> Camisea Natural Gas Project threatens Indigenous Peoples in Voluntary Isolation in the Amazon [www.amazonwatch.org/amazon/PE/camisea/index.php?page\\_number=5](http://www.amazonwatch.org/amazon/PE/camisea/index.php?page_number=5)  
<sup>34</sup> Ogonis at the United Nations [www.unpo.org/content/view/full/5062/86/](http://www.unpo.org/content/view/full/5062/86/) Oil and Gas Flares in Nigeria: [www.eration.org](http://www.eration.org)  
<sup>35</sup> *Oilwatch* [www.oilwatch.org](http://www.oilwatch.org)  
<sup>36</sup> *Energy Justice* [www.energyjustice.net](http://www.energyjustice.net)



## FALSE SOLUTION

## BIG DAMS

## WHAT IS IT?

## Choke Rivers and Release Emissions

- Claim to reduce emissions but are actually **Sources of Emissions** because CO<sub>2</sub> and methane are released when organic material in reservoirs rots and when water goes through turbines and travels downstream; especially in hot climates<sup>37</sup>

## WHY IS THIS A DISASTER FOR THE ENVIRONMENT?

50,000 large dams choke more than half of the world's major rivers. So much water is dammed that it has **changed the axis of the planet.**

- Source of Emissions**
- 25% of human-caused methane emissions are from dams
- Destroys Biodiversity**
- Destroys freshwater systems

## PROBLEMS FOR INDIGENOUS PEOPLES



## HEAR THIS

## MORE INFO



Indigenous Peoples throughout the world struggle against large hydroelectric projects because they often cause:

- Displacement** and **Forced Relocation**
- Loss of land** and **flooding of territory**
- Violence including **massacres** and **armed conflict**<sup>38</sup>
- Loss of livelihood**, food & income
- Loss of sacred places** & cultural identity
- Human rights violations including violations of UNDRIPs

International Herald Tribune & Associated Press:

**“The climate does not gain, but loses.”**

**444 Mayans were massacred** by the military for resisting construction of the **Chixoy Dam**, Guatemala, 1982, [www.internationalrivers.org/featured/444/461](http://www.internationalrivers.org/featured/444/461)

- “International Rivers Network [www.internationalrivers.org](http://www.internationalrivers.org)
- “Latin American Network against Dams [www.redlar.org](http://www.redlar.org)



<sup>37</sup> See *International River Network* Report "Flooding the Land, Warming the Earth." [www.internationalrivers.org/](http://www.internationalrivers.org/)

<sup>38</sup> *Inter-American Human Rights Commission* Petition: "... dams and associated development have already caused armed conflict" <http://www.internationalrivers.org/eh/latin-america/panama/ahrc-petition-probo-indigenous-peoples>

## FALSE SOLUTION

## AGROFUELS or BIOFUELS

## WHAT IS IT?

Feeds Cars not People<sup>39</sup>

- Makes ethanol or diesel **from food** crops, plants, GMOs and trees
- “First generation agrofuels” are made from plants (like corn, soy, sugar, and switchgrass). “Second generation agrofuels” are made from from trees (wood or cellulose)

## IMPLEMENTED OR NOT?

**Yes**, for first generation agrofuels. Second generation agrofuels are still in the experimental phase.

## WHY IS THIS A DISASTER FOR THE ENVIRONMENT?

Promotes massive monoculture **plantations.**

Plantations are a leading **driver of deforestation** and **destroy biodiversity.**

- More emissions than fossil fuels**<sup>40</sup>
- Agro-toxins** contaminate water and deplete soil
- GMOs** are used
- Wastes Water**<sup>41</sup>

## PROBLEMS FOR



Plantations are notorious for causing human rights abuses.

Agrofuel plantations have resulted in:

- Forced relocation**
- Slave Labor** in Brazil
- Social Conflicts** and **violence**<sup>42</sup>
- Less land for food crops**, **higher food prices**, hunger, less food relief for starving<sup>43</sup>
- Violations of the UN Declaration on the Rights of Indigenous Peoples
- If wood-based agrofuels are commercialized, **these abuses will increase.**

## HEAR THIS

International Indigenous Forum on Biodiversity

**“We reject genetically modified seeds, biofuels, marine fertilization experiments, monoculture tree plantations** & other climate change mitigation and adaptation models because they **destroy our lands**, territories and resources and cause the **displacement** & **forced relocation** of our peoples.”<sup>44</sup>

The New York Times:

**“Biofuels** deemed **a Greenhouse Threat**”<sup>45</sup>

Friends of the Earth

**Sustainability certification** is a **sham**<sup>46</sup>

<sup>39</sup> “A tank full of biofuel for a big western car uses as much corn as a family would eat in a year.” *The Guardian*, May 31, 2008, p.15

<sup>40</sup> *The New York Times* <http://www.nytimes.com/2008/02/08/science/earth/08wbiofuels.html?pagewanted=1&r=1&hp>

<sup>41</sup> It takes 1000 gallons of water to produce 4 cups of sugar cane ethanol <http://aquaforia.com/archives/category/biofuels>

<sup>42</sup> More than 500 plantation-related conflicts in Indonesia alone. <http://www.biofuelwatch.org.uk/UKFG/downtoearth.pps> *Sawitwatch* [www.sawitwatch.org.id](http://www.sawitwatch.org.id) Plantations & Paramilitary in Colombia [www.hre.org](http://www.hre.org) [www.globaljusticeecology.org/globalwarming.php](http://www.globaljusticeecology.org/globalwarming.php)

<sup>43</sup> *The New York Times*, front page [www.nytimes.com/2007/09/29/world/29food.html](http://www.nytimes.com/2007/09/29/world/29food.html)

<sup>44</sup> *International Indigenous Forum on Biodiversity*, Closing Statement to Convention on Biological Diversity COP9, May 30, 2008 [www.earthpeoples.org/blog](http://www.earthpeoples.org/blog)

<sup>45</sup> *The New York Times* <http://www.nytimes.com/2008/02/08/science/earth/08wbiofuels.html?pagewanted=1&r=1&hp>

<sup>46</sup> *Friends of the Earth* Sustainability is a Smokescreen Report [www.foeurope.org/agrofuels/sustainability/smokescreen.html](http://www.foeurope.org/agrofuels/sustainability/smokescreen.html)





# PLAYING GOD

Real World Science Fiction: Privatizing & Perverting Life

## FALSE SOLUTION: GEO-ENGINEERING

Geo-Engineering – Weather Control Freaks			
WHAT IS IT?	Is this really happening?	Environment	Indigenous Peoples
Pretends to combat the effects of climate change by: <ul style="list-style-type: none"><li>• <b>Modifying weather systems</b></li><li>• <b>Macro-manipulation of environmental systems</b></li></ul>	<b>Yes</b> , research attempted by the private sector, NASA and research institutes	Proposals include: <ul style="list-style-type: none"><li>• Ocean Fertilization</li><li>• Launching millions of <b>tiny mirrors into space</b> to reflect sunlight</li><li>• <b>Wrapping deserts in white plastic</b></li><li>• <b>Spraying banned sulfate</b> aerosols into the stratosphere</li></ul>	<ul style="list-style-type: none"><li>• <b>Nobel Laureate predicts 500,000 deaths</b> from increased particulate pollution if sulfate aerosols used<sup>47</sup></li><li>• Indigenous Peoples who depend on a geo-engineered ecosystem, like the ocean or the sky could be very adversely impacted</li><li>• <b>Corrupts the Sacred</b></li></ul>
Ocean Fertilization – Poison the Sea			
<ul style="list-style-type: none"><li>• Generates carbon credits by <b>dumping tons of iron filings</b> or urea (<b>piss</b>) <b>into the ocean</b> to promote algae blooms that supposedly absorb CO<sub>2</sub> and eventually sink to the bottom of the ocean</li></ul>	<b>Yes</b> , Dump in Scotia Sea off of Argentina (2009) <ul style="list-style-type: none"><li>• New dumps planned in Australia and US</li><li>• Experimental dumps blocked in Ecuador and the Philippines</li></ul>	<ul style="list-style-type: none"><li>• <b>Alters acidity of the ocean</b></li><li>• Could increase <b>red tides</b></li><li>• Could increase ocean “<b>dead zones</b>”</li><li>• Unknown impacts on marine ecosystems, fish and mammals as well as fishing and coasts</li></ul>	<b>International Indigenous Forum on Biodiversity</b> “ <b>We reject...marine fertilization experiments</b> ” <sup>48</sup> <ul style="list-style-type: none"><li>• Current <b>dumps violate global moratorium</b> agreed to Convention on Biological Diversity<sup>49</sup></li><li>• Corrupts the Sacred</li></ul>
Ocean Pumps - Vacuum the Ocean			
<ul style="list-style-type: none"><li>• Generate carbon credits by tethering <b>100 million vertical pipes across the ocean to pump</b> nutrient rich water to the surface</li><li>• Claims that the nutrients would fertilize algae that capture CO<sub>2</sub></li></ul>	<b>Experimental</b> phase	<ul style="list-style-type: none"><li>• Nutrient-rich water from the sea’s depths are also CO<sub>2</sub>-rich and <b>could result in emissions</b></li><li>• Its chief proponent admits that it <b>could make matters worse</b>. “...CO<sub>2</sub> is released into the atmosphere”<sup>50</sup></li></ul>	<ul style="list-style-type: none"><li>• Indigenous Peoples who depend on the ocean for their livelihood could be very adversely impacted</li><li>• <b>Corrupts the Sacred</b></li></ul>

<sup>47</sup> Paul Crutzen as quoted in “Hoodwinked in the Hothouse” [www.risingtidenorthamerica.org/special/fsbooklet.pdf](http://www.risingtidenorthamerica.org/special/fsbooklet.pdf)

<sup>48</sup> Closing Statement to Convention on Biological Diversity COP9, May 30, 2008

<sup>49</sup> Ocean Fertilization Dumps Violate Global Moratoria [www.etcgroup.org/en/materials/publications.html?pub\\_id=719](http://www.etcgroup.org/en/materials/publications.html?pub_id=719)

<sup>50</sup> *New Scientist* [www.newscientist.com/article/dn12698](http://www.newscientist.com/article/dn12698)

## FALSE SOLUTION: GEO-ENGINEERING


Carbon Capture and Storage (CCS) – Pump Pollution into Rocks			
WHAT IS IT?	Is this really happening?	Environment	Indigenous Peoples
<ul style="list-style-type: none"><li>• <b>Compresses CO<sub>2</sub></b> and tries to <b>store it</b> in the sea bed, empty aquifers, mines, drill sites, caves and peridotite mantle rock</li></ul>	<b>Experimental</b> phase	<ul style="list-style-type: none"><li>• <b>New toxic waste dumps</b> underground</li><li>• Threat of leakage and escape of <b>CO<sub>2</sub>, hazardous gases, toxic metals</b> &amp; contamination of soil, water, sea</li><li>• Other environmental impacts unknown</li></ul>	Institute of Science in Society: “CCS is certainly <b>not a solution</b> for mitigating climate change.” <sup>51</sup> <ul style="list-style-type: none"><li>• Exposure to toxic <b>hazardous flue gases</b></li><li>• <b>Toxic contamination</b></li><li>• Other impacts for humans unknown</li></ul>
Biochar – Burn Trees & Bury Charcoal			
<ul style="list-style-type: none"><li>• <b>Charcoal</b> created by burning biomass (mostly wood) in an oxygen-free vacuum <b>is buried in the earth</b></li><li>• Claims to increase soil productivity and soil’s capacity to store carbon dioxide thus generating carbon credits</li><li>• Plans to be done <b>on a massive scale (over half a billion hectares of tree plantations)</b> and to use a by-product of second generation <b>agrofuel</b> production</li><li>• Could <b>include soils in carbon trading</b> and offset mechanisms</li></ul>	On small, local scale only; <b>not on large scale yet</b>	<ul style="list-style-type: none"><li>• Requires enormous amounts of biomass (mostly from trees)</li><li>• Vast areas of land would have to be converted to monoculture <b>plantations</b> to produce enough biomass</li><li>• Could speed up <b>agrofuel</b> production, a leading <b>driver of deforestation</b> and ecosystem destruction</li></ul>	Chair of Board <b>International Biochar Initiative</b> : “...there are <b>no long-term experiments</b> to suggest that biochar actually sequesters any carbon in the ground or that it makes soil more fertile.” <sup>52</sup> BEST Energies “We are well positioned to win the <b>current land grab</b> in next-generation fuels” <b>Could result in:</b> <ul style="list-style-type: none"><li>• <b>Forced Relocation</b> and Displacement</li><li>• <b>Loss of land</b>, livelihood &amp; culture</li><li>• <b>Human rights abuses</b></li><li>• Favors plantation, forestry and “bio-energy” companies</li></ul>

### MORE INFO

- Primer on Geo-Engineering [www.etcgroup.org/en/materials/publications.html?pub\\_id=608](http://www.etcgroup.org/en/materials/publications.html?pub_id=608)
- Bogus Solutions to Climate Change Report - Hoodwinked in the Hothouse <http://www.risingtidenorthamerica.org/special/fsbooklet.pdf>
- Global Civil Society Opposes Charred Earth Policy [http://www.etcgroup.org/en/materials/publications.html?pub\\_id=735](http://www.etcgroup.org/en/materials/publications.html?pub_id=735)

<sup>51</sup> Institute of Science in Society <http://www.i-sis.org.uk/CCSAFalseSolution.php>

<sup>52</sup> Biochar is “a very dangerous false solution” Its promoters blatantly disregard the human rights abuses that are occurring as a result of global expanded demand for biomass ” [www.globaljusticeecology.org/stopbiochar\\_news.php?ID=159](http://www.globaljusticeecology.org/stopbiochar_news.php?ID=159)

GMOs – Pervert, Privatize & Patent Life			
WHAT IS IT?	Is this really happening?	Environment	Indigenous Peoples
<ul style="list-style-type: none"><li>• <b>Perverts &amp; Privatizes Genetic Material</b> <b>GMO = Genetically Modified Organisms</b> = Genetically Engineered</li><li>• <b>Alters the genetic material of living beings</b> in ways that could not happen in nature.</li><li>• Some GMOs are created by transferring genetic material from one species to another (i.e. inserting fish genes in strawberries)<sup>53</sup></li><li>• <b>Commodifies &amp; Patents Life</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Yes</b></li><li>• GMOs in 75% of US packaged food</li><li>• <b>No labeling</b></li><li>• Monsanto tries to criminalize seed saving<sup>54</sup></li><li>• Animals have been genetically engineered and cloned including sheep<sup>55</sup></li></ul>	<ul style="list-style-type: none"><li>• Threats to food, agriculture &amp; environment</li><li>• <b>GMO contamination</b> i.e. GMO corn contamination in Mexico, the center of origin or “birthplace” of this sacred grain<sup>56</sup></li><li>• <b>Kills other species</b> (i.e. monarch butterflies killed by GMO corn pollen)<sup>57</sup></li><li>• Impacts of GMOS on humans not well known</li></ul>	<ul style="list-style-type: none"><li>• <b>Biocolonialism:</b></li><li>• Biopiracy, bioprospecting, patenting &amp; perverting genetic resources of Indigenous Peoples including blood</li><li>• Corrupts Sacred</li><li>• <b>Resistance:</b></li><li>• <u>Indigenous Peoples Council on Biocolonialism</u><sup>58</sup></li><li>• Mayan Traditional Doctors and Midwives <b>kick US biopirates out of Chiapas</b> <sup>59</sup></li></ul>
GMO Seeds – Frankenstein Seeds aka “Climate Ready” Crops			
<ul style="list-style-type: none"><li>• <b>Perverts &amp; Privatizes Seeds</b></li><li>• <b>Claims to deal with climate change by genetically engineering seeds</b> to be resilient to extreme environmental conditions, drought, flood, etc.</li><li>• <b>Increases corporate power</b> of seed companies like Monsanto</li><li>• <b>“Terminator”</b> Technology=Seeds that are genetically modified to be sterile could be applied to “climate ready” crops</li></ul>	<ul style="list-style-type: none"><li>• <b>Yes</b></li></ul> 	<ul style="list-style-type: none"><li>• Privatizing stress-resistance in crops could <b>restrict farmers</b> trying to adapt their crops locally to changing conditions, thus <b>causing crop failure &amp; hunger</b></li><li>• Other threats to food, agriculture and the environment including GMO contamination</li></ul>	<ul style="list-style-type: none"><li>• <u>International Indigenous Forum on Biodiversity</u> (IIFB) “We also call for the termination of terminator and genetic modification technologies. We urge Parties and international organizations . . . to outlaw the patenting of knowledge and seeds.”<sup>60</sup></li><li>• <b>Corrupts Sacredness of Seeds and Food</b></li></ul>
GMO Trees – Frankenstein Trees aka “Second Generation Agrofuels”			
<ul style="list-style-type: none"><li>• <b>Perverts &amp; Privatizes Trees</b></li><li>• <b>Claims to deal with climate change by genetically engineering trees for agrofuel production</b> (&amp; perhaps soon for carbon sequestration)</li><li>• Claims to genetically engineer trees for a variety of traits including faster growth, cold tolerance, less lignin and to manufacture wood-based agrofuels</li><li>• When the carbon market uses GMO trees, <b>Privatization of the Sky intersects with Privatization of Life</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Yes.</b> Field trials in over 15 countries. China commercialized GMO trees, US and Brazil hope to soon.</li><li>• <b>UNFCCC</b> accepts the use of <b>GMO trees in plantations for carbon credits</b></li></ul>	<ul style="list-style-type: none"><li>• GMO trees can <b>contaminate</b> native trees over <b>1,000 kilometers away</b> with highly destructive and unnatural traits (like the ability to kill insects). This impacts the wildlife that depends on those insects (such as songbirds) in an ever-widening circle of destruction.</li><li>• Some GMO trees can contaminate <b>for more than 100 years.</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Could devastate native forest ecosystems globally</b></li><li>• Escape of GMO tree seeds or pollen into the wild, which is considered inevitable if they are commercialized, is <b>irreversible.</b></li><li>• Due to the low-lignin GMO trait, contaminated trees would be <b>useless as shelter or firewood</b></li><li>• Sterile GMO trees produce <b>no fruit or nuts</b></li><li>• <b>Corrupts Sacredness of Trees</b></li><li>IIFB: “We reiterate our call for a <b>moratorium on GMO trees.</b>”<sup>61</sup></li></ul>

<sup>53</sup> Fish-Gene Strawberries and Tomatoes <http://www.geo-pie.cornell.edu/media/fishberries.html> *Sierra Club* Report <http://www.sierraclub.org/biotech/report.asp>

<sup>54</sup> *Monsanto’s* bill, HR 875 <http://ronpaulnews.net/2009/03/monsantos-dream-bill-hr-875.html>

<sup>55</sup> *The Guardian* <http://www.guardian.co.uk/gall/0,627251,00.html>

<sup>56</sup> “GMO Contamination in Mexico’s Cradle of Corn”; Researchers “worry about the possible loss of corn as a food.” <http://www.truthout.org/121208D>

<sup>57</sup> *Science News*, “Bt-Corn Pollen Can Kill Monarchs” [http://www.sciencenews.org/sn\\_arc99/5\\_22\\_99/fob1.htm](http://www.sciencenews.org/sn_arc99/5_22_99/fob1.htm)

<sup>58</sup> Indigenous Peoples Council on Biocolonialism [www.ipcb.org](http://www.ipcb.org) IBM and *National Geographic* fund “The Vampire Project 2”

<sup>59</sup> *COMPITCH* triumphs over biopiracy [http://www.etcgroup.org/en/materials/publications.html?pub\\_id=232](http://www.etcgroup.org/en/materials/publications.html?pub_id=232)

<sup>60</sup> *International Indigenous Forum on Biodiversity*, Convention on Biological Diversity, [www.antenna.nl/~nciv/engels/Documents/OpeningStatementCOP9.htm](http://www.antenna.nl/~nciv/engels/Documents/OpeningStatementCOP9.htm)

<sup>61</sup> *International Indigenous Forum on Biodiversity* Closing Statement to Convention on Biological Diversity COP9, May 30, 2008

Nano Technology & Nano Trees – Frankenstein Molecules			
WHAT IS IT?	Is this really happening?	Environment	Indigenous Peoples
<ul style="list-style-type: none"><li>• <b>Perverts &amp; Privatizes atoms and molecules</b> which are the building blocks of nature</li><li>• <b>Manipulates natural materials on the scale of atoms and molecules to change their physical characteristics and essence</b></li><li>• Claims to deal with climate change by <b>reducing energy needs</b> with nano solar cells and batteries, water purification systems, lighter planes, etc.</li></ul>	<ul style="list-style-type: none"><li>• <b>Yes</b></li><li>Nanomaterials are <b>on the market</b> as ingredients <b>in foods &amp; cosmetics</b></li><li>Nanomaterials are <b>not labeled</b></li><li>Nanotech is experimented with in <b>trees</b><sup>62</sup></li></ul>	<ul style="list-style-type: none"><li>• <b>Impacts</b> on the environment <b>unknown.</b> Scientific research suggests nano tech could be harmful for the environment.</li><li>Nanomaterials <b>can move</b> in the environment and in our bodies in <b>unpredictable ways</b></li><li>May produce <b>a new kind of pollution</b> that we can’t see, track or measure.</li></ul>	<ul style="list-style-type: none"><li>• <b>Impacts</b> on humans <b>unknown</b></li><li>Scientific research suggests nano tech could be harmful for human health</li><li>• <b>Corrupts the Sacred</b></li><li>Nano in Food, Agriculture &amp; Skin Creams<sup>63</sup></li></ul>
Extremophiles – Patents Power Source			
<ul style="list-style-type: none"><li>• <b>Privatizes &amp; Patents microorganisms</b></li><li>• Claims to harness power generated by <b>micro-organisms</b> found in extreme environments such as volcanoes and hot sulfur vents on the ocean floor<sup>64</sup></li></ul>	Experimental phase, Bioprospecting in process	• Potential <b>impacts unknown</b>	<ul style="list-style-type: none"><li>• <b>More bioprospecting &amp; patenting</b></li><li>Potential impacts unknown</li></ul>
Synthetic Biology – Land Grab for Fake Oil			
<ul style="list-style-type: none"><li>• Uses <b>engineered bacteria to ferment plant sugars to make petroleum</b>, pharmaceuticals and plastics</li><li>• <b>Patents synthetic life</b></li></ul>	Experimental phase	<ul style="list-style-type: none"><li>• Could create a colossal demand for plant-based sugars leading to an unprecedented plant-grab (and <b>land-grab</b>)</li><li>• Could repeat the debacle of first-generation agrofuels and worsen the climate and water crisis by intensifying industrial agriculture</li></ul>	<ul style="list-style-type: none"><li>• <b>Could:</b></li><li>• <b>Endanger livelihoods</b> and human rights</li><li>• <b>Drive up food prices</b></li><li>• <b>Displace</b> small farmers and indigenous peoples</li><li>• <b>Increase commodification of life</b></li><li>• Make a mockery of biosafety</li></ul>
<b>Coming Soon? Patents on Traditional Knowledge on Climate Change and Adaptation</b> There is a lot of interest in Indigenous Peoples’ traditional knowledge systems on climate change and adaptation. Efforts to collect this traditional knowledge, put it in databases, patent it and sell it may be afoot. Look sharp!			

MORE INFO

GMOs: Indigenous Peoples’ Genetic Engineering Primer [www.ipcb.org/publications/primers/index.html](http://www.ipcb.org/publications/primers/index.html)

GMOs Seeds: “Climate Ready” Crops Report [www.etcgroup.org/en/materials/publications.html?pub\\_id=687](http://www.etcgroup.org/en/materials/publications.html?pub_id=687)

GMO Trees: STOP GE TREES CAMPAIGN [www.nogetrees.org](http://www.nogetrees.org) Global Justice Ecology Project [www.justiceecology.org](http://www.justiceecology.org) Canadian Biotechnology Action Network [www.cban.caa](http://www.cban.caa)

Nano Tech: Nano Technology Primer [www.etcgroup.org/en/materials/publications.html?pub\\_id=651](http://www.etcgroup.org/en/materials/publications.html?pub_id=651)

Extremophiles: ETC Group [www.etcgroup.org/en/materials/publications.html?pub\\_id=120](http://www.etcgroup.org/en/materials/publications.html?pub_id=120) p. 7

Synthetic Biology: ETC Group [http://www.etcgroup.org/en/materials/publications.html?pub\\_id=707](http://www.etcgroup.org/en/materials/publications.html?pub_id=707) p.34

<sup>62</sup> On Nano Trees see *Global Justice Ecology Project* [www.globaljusticeecology.org](http://www.globaljusticeecology.org)

<sup>63</sup> Nano Tech in Food and Agriculture [www.foe.org/healthy-people/no-nano-food-and-agriculture](http://www.foe.org/healthy-people/no-nano-food-and-agriculture)





# TREE TALK

## WARNING:

### GENETICALLY ENGINEERED TREE PLANTATIONS A FALSE SOLUTION THAT THREATENS FORESTS & FOREST PEOPLES



The **United Nations definition of forests** comes from the United Nations FAO Forest Resources Assessment of 2000. According to the FAO, a forest consists of tree canopy cover of 10% or more. The trees should be able to reach a minimum height of 5 meters at maturity. There is no mention of biodiversity. This means that a **monoculture tree plantation can be considered a forest**.

*Forest Resource Assessment (FRA) 2000 was the first global forest assessment to use a common definition for all forests worldwide. Previous assessments used a minimum canopy cover threshold of 10 percent for developing countries and 20 percent for industrialized countries to define forests, based in part on past forest inventory practices in the two domains. When the results of FRA 1990 were reviewed, a number of experts suggested that the next global assessment should use a common forest definition for all regions. Following a consensus recommendation of the IPF, it was decided that FRA 2000 would use the **10 percent minimum canopy threshold for all countries**. (That is, when observed from above, at least 10 percent of the land area is covered by forest canopy. "Other wooded land" has a canopy cover between 5 and 10 percent).<sup>65</sup>*

Furthermore, in COP9, the UNFCCC decided that **genetically modified trees** can be **used in plantations for carbon credits**. Reforestation is planting trees where there were trees previously and afforestation is planting trees where there were no trees previously (usually on grassland). Both **reforestation and afforestation can be plantations** and do not have to have to include forest ecosystems or biodiversity.

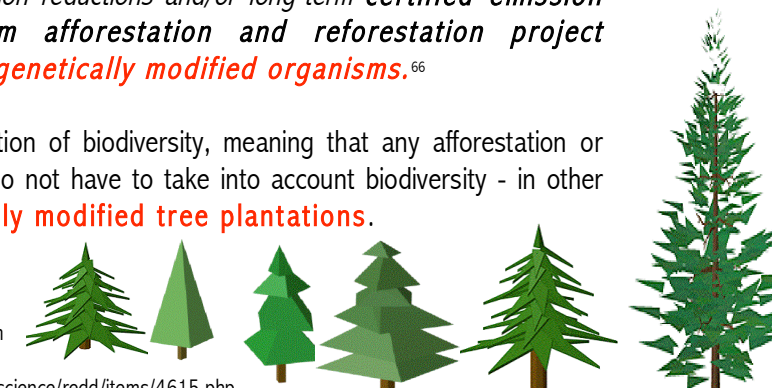
*Recognizing that host Parties evaluate, in accordance with their national laws, potential risks associated with the use of genetically modified organisms by afforestation and reforestation project activities and that Parties included in Annex I evaluate, in accordance with their national laws, the use of temporary certified emission reductions and/or long-term **certified emission reductions generated from afforestation and reforestation project activities that make use of genetically modified organisms**.<sup>66</sup>*

In the REDD decision,<sup>67</sup> there is no mention of biodiversity, meaning that any afforestation or reforestation efforts taken under **REDD** do not have to take into account biodiversity - in other words, REDD "forests" **can be genetically modified tree plantations**.

<sup>65</sup> <http://www.fao.org/docrep/004/Y1997E/y1997e00.htm>

<sup>66</sup> [http://unfccc.int/cop9/latest/substa\\_127.pdf](http://unfccc.int/cop9/latest/substa_127.pdf)

<sup>67</sup> REDD Decision2/CP.13 p.8. [http://unfccc.int/methods\\_science/redd/items/4615.php](http://unfccc.int/methods_science/redd/items/4615.php)



SNAPSHOTS OF CO<sub>2</sub> LONIALISM:

Carbon Market & UN Clean Development Mechanism Projects violate Indigenous Peoples’ Rights

HUMAN RIGHTS VIOLATIONS INCLUDE: KILLINGS, SERVITUDE, FORCED RELOCATION, ARBITRARY DETENTION, LOSS OF LAND & TERRITORY, LOSS OF INCOME, LIVELIHOOD AND FOOD, DESTRUCTION OF HOMES & CROPS, AND THREATS TO CULTURAL SURVIVAL.

Bayano Dam Hydroelectric Expansion & Upgrade Project, Panama		
Project Status	Environmental Impacts	Problems for KUNA & EMBERA PEOPLES <sup>68</sup>
Clean Development Mechanism Project CDM status: at validation <sup>69</sup> Dam already built	•Dams, especially in tropical countries are actually sources of emissions because CO <sub>2</sub> and methane are released when organic material in reservoirs rots and when water goes through turbines and travels downstream, especially in the tropics <sup>70</sup> •Releases CO <sub>2</sub> and Methane •Destroys biodiversity & aquatic life •Destroys river ecosystems •Caused deforestation •“Non additional” = would have been built regardless of the CDM	•Forced Relocation •Flooded 80% of Kuna central Territory •Illegal Invasion of non-flooded lands by peasants •Loss of Livelihood •Waterborne Illnesses •No Free, Prior Informed Consent (FPIC) •Inter-American Commission on Human Rights hearing •Non-compliance with World Commission on Dams guidelines
Chanquinola Dam Hydroelectric Project (Chan 75), Panama Mesoamerican Biological Corridor, La Amistad International Park		
Project Status	Environmental Impacts	Problems for NGÖBE BUGLE PEOPLE <sup>71</sup>
Clean Development Mechanism Project CDM status: at validation <sup>72</sup> Dam under construction	•Potential Source of Emissions (see above) •Endangers Biodiversity Hotspot •Endangers UNESCO World Heritage Site •Destroys river & forest ecosystems •Disrupts food chain •Blocks fish and shrimp migration from San San Pondsak Ramsar Wetlands site •To offset AES coal-fired power plant in USA. <sup>73</sup> Coal-fired power plants are infamous for being sources of mercury poisoning, acid rain, asthma, lung cancer, CO <sub>2</sub> emissions and global warming.	•Armed Repression from police & company •Forced Relocation of more than 1,000 •Arbitrary Detention & Beatings •Public Humiliation, Intimidation & Coercion •Loss of Livelihood for 4,000 •No FPIC & Coercion (Persons who do not read or write forced to sign documents in foreign language) •Illegal Destruction of homes & crops •Denounced by UN Rapporteur on the human rights and fundamental freedoms of Indigenous Peoples •Fraud in CDM Documents •CDM registration could intensify repression

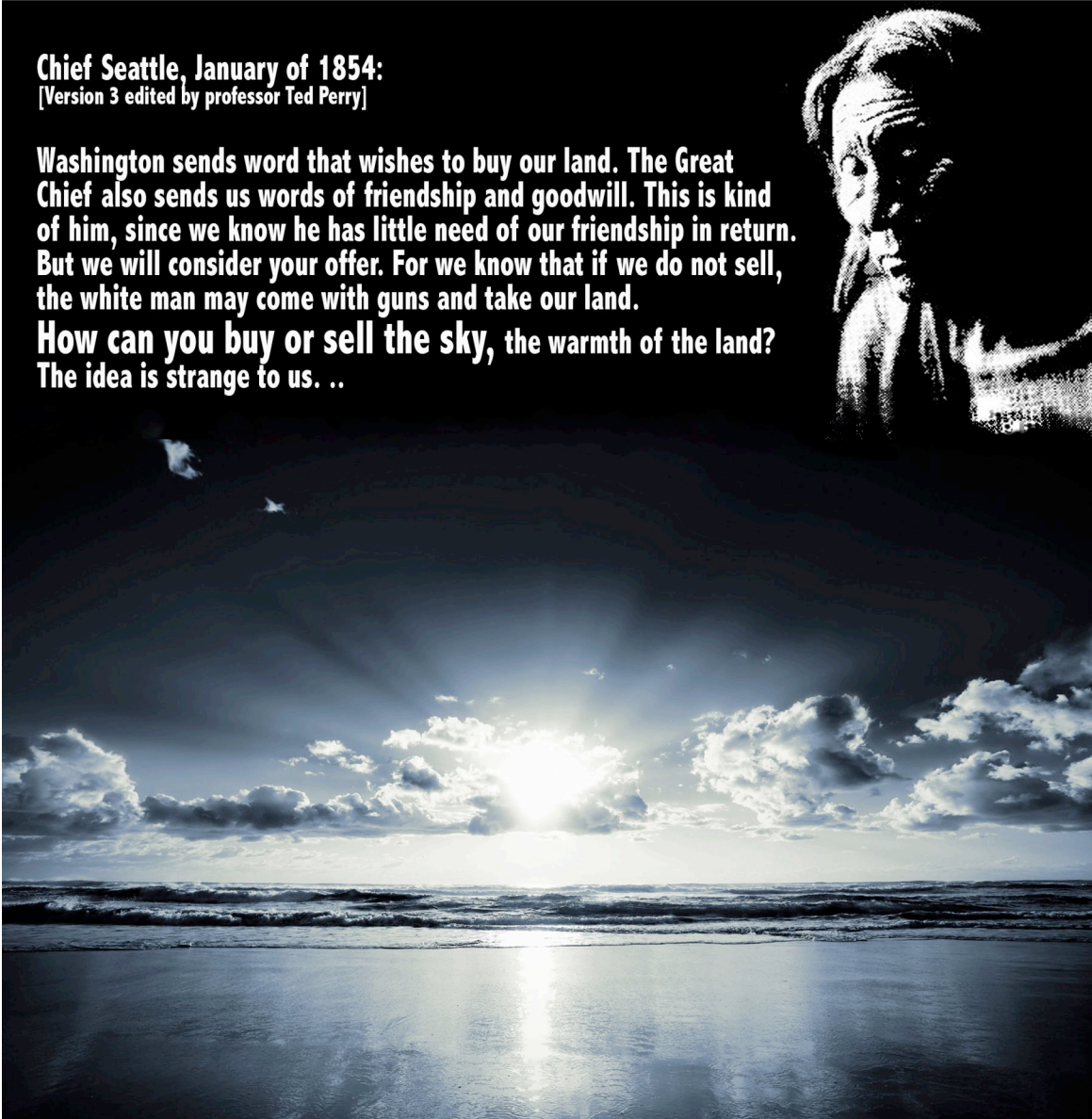
<sup>68</sup> BAYANO: <http://internationalrivers.org/en/global-warming/carbon-trading-cdm/international-rivers-comments-bayano-large-hydro-project-panama>[www.guardian.co.uk/environment/2008/jun/16/endangeredhabitats.conservation](http://www.guardian.co.uk/environment/2008/jun/16/endangeredhabitats.conservation)  
<sup>69</sup> See CDM Pipeline [www.cdmpipeline.org](http://www.cdmpipeline.org)  
<sup>70</sup> IPS article: <http://domino.ips.org/ips/eng.NSF/vwWEBMainView?SearchView&Query=%28Flooding+the+LAnd%29+%&SearchMax=100&SearchOrder=3>  
<sup>71</sup> CHANQUINOLA [www.internationalrivers.org/en/print/3215](http://www.internationalrivers.org/en/print/3215) <http://www.internationalrivers.org/en/latin-america/panama/iahrc-petition-ngobe-indigenous-peoples>  
[www.redlar.org/noticias/2009/12/23/comunicados/comunicado-de-la-comunidad-ngobe-afectada-por-el-chan-75/](http://www.redlar.org/noticias/2009/12/23/comunicados/comunicado-de-la-comunidad-ngobe-afectada-por-el-chan-75/)

Bonyic Dam Hydroelectric Project, Panama		
Project Status	Environmental Impacts	Problems for NASO PEOPLE <sup>74</sup>
Clean Development Mechanism CDM status: Submission Pending Dam under construction	•Potential Source of Emissions •Will destroy biodiversity •Will harm two watersheds •(See above for other dam impacts)	•Armed Conflict •Threatens endangered Indigenous People (There are only approx. 3,000 Naso.) •Police occupation & harassment •Traditional political structure & decision-making process not respected •Community divided by project •Leaders persecuted, arrested & jailed •Threatens Cultural Survival •Will flood 3,500 acres •Land rights not recognized
Jepirachi Wind Power Farm, Colombia		
Project Status	Environmental Impacts	Problems for WAYÚU PEOPLE <sup>75</sup>
Clean Development Mechanism CDM status: Registered UNFCCC reference number: 0194	•Very few Wayúu communities have electricity. <sup>77</sup> Much of the energy generated from the wind farm is for the world’s largest open-pit coal mine, El Cerrejón, a source of emissions. •Coal is the dirtiest fossil fuel •Coal is a major contributor to global warming •Coal causes: acid rain, mercury poisoning, toxic waste, toxic spills, air pollution & illnesses •Coal mining devastates ecosystems and wastes water	•Climate of Terror: Since 1993, more than 200 Wayúu have been assassinated to clear Wayúu territory for 8 mega-projects including the World Bank-funded Jepirachi Project. <sup>78</sup> •Paramilitary groups are active in Wayúu Territory and Wayúu leaders still receive death threats. <sup>79</sup> •In October 2008, the Mayor of Uribia denounced that “the Kasiwoluin community where the wind farm is located still does not have electricity.” •Much of the energy generated from the wind farm is for El Cerrejón, the world’s largest open-pit coal mine. (which has a terrible record of human rights abuses including forced displacement and environmental destruction and is itself a source of emissions). <sup>80</sup>
World Bank Prototype Carbon Fund: Cited as implemented with “good results” by UN Permanent Forum on Indigenous Issues <sup>76</sup>		

<sup>72</sup> See CDM Pipeline [www.cdmpipeline.org](http://www.cdmpipeline.org)  
<sup>73</sup> AES press release <http://newsroom.aes.com/phoenix.zhtml?c=202639&p=irol-newsArticle&ID=897732&highlight=>  
<sup>74</sup> BONYIC <http://www.internationalrivers.org/node/2404> and [www.guardian.co.uk/environment/2008/jun/16/endangeredhabitats.conservation](http://www.guardian.co.uk/environment/2008/jun/16/endangeredhabitats.conservation)  
*Sommerfilms* VIDEOS Inter-American Human Rights Commission (IAHRC) hearing: <http://www.youtube.com/watch?v=a6LEWONA118>  
[www.youtube.com/watch?v=TpXW4vgjqbl](http://www.youtube.com/watch?v=TpXW4vgjqbl) and [www.youtube.com/watch?v=8C1bNvfV51Q](http://www.youtube.com/watch?v=8C1bNvfV51Q)  
<sup>75</sup> JEPIRACHI - *Fuerza de Mujeres Wayúu*. Community Workshop to Evaluation of the World Bank’s Operative Policy in the Jepirachi Wind Farm in April 2009 [www.notiwayuu.blogspot.com/search?q=Jepirachi](http://www.notiwayuu.blogspot.com/search?q=Jepirachi)  
<sup>76</sup> UNEP See CDM Pipeline [www.cdmpipeline.org](http://www.cdmpipeline.org) United Nations E/C.19/2008/10 [www.un.org/Docs/journal/asp/ws.asp?m=E/C.19/2008/10](http://www.un.org/Docs/journal/asp/ws.asp?m=E/C.19/2008/10) p.17  
<sup>77</sup> Mayor Cielo Beatriz Redondo Mindiola as quoted in *El Informador* <http://www.el-informador.com/resubusqueda.php?id=38990>  
<sup>78</sup> *Wayúu News* - List of Victims <http://victimaswayuu.blogspot.com/>  
<sup>79</sup> Death Threats, March 2009 <http://notiwayuu.blogspot.com/2009/03/personas-mencionadas-en-panfletos-de.html>  
<sup>80</sup> *Colombia Journal* [www.colombiajournal.org/colombia\\_coal.htm](http://www.colombiajournal.org/colombia_coal.htm) Tabasco was bulldozed to expand the mine. Tabasco’s 700 residents were violently evicted. <http://thenphoenix.com/Boston/News/48183-dirty-story-behind-local-energy/?page=1>







Chief Seattle, January of 1854:  
[Version 3 edited by professor Ted Perry]

Washington sends word that wishes to buy our land. The Great Chief also sends us words of friendship and goodwill. This is kind of him, since we know he has little need of our friendship in return. But we will consider your offer. For we know that if we do not sell, the white man may come with guns and take our land.

How can you buy or sell the sky, the warmth of the land? The idea is strange to us. ..

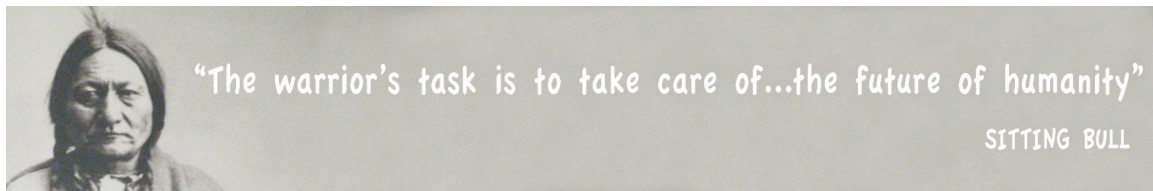
# The Sky is Sacred

## INDIGENOUS PEOPLES’ DECADE LONG STRUGGLE AGAINST THE CARBON MARKET

THE FOLLOWING CHART IS A HISTORIC RECORD OF THE DECADE LONG OFFICIAL OPPOSITION OF THE INTERNATIONAL INDIGENOUS PEOPLES’ FORUM ON CLIMATE CHANGE (IIPFCC) AGAINST THE CARBON MARKET. IIPFCC IS THE CAUCUS OF INDIGENOUS REPRESENTATIVES FROM ALL REGIONS OF THE WORLD IN THE UN CLIMATE CHANGE NEGOTIATIONS UNDER THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) AND THE KYOTO PROTOCOL.

UN Meeting	International Indigenous Peoples’ Forum on Climate Change
United Nations Framework Convention on Climate Change (UNFCCC), SBI and SBSTA Lyon, France 2000	<b>“We oppose the development of the carbon market.”</b> <b>“We cannot condone activities that defile the sacredness of Mother Earth.”</b> “Our philosophy and cosmovision require us to <b>condemn the inclusion of sinks in the Clean Development Mechanism</b> (CDM). Sinks in the CDM would constitute a <b>worldwide strategy for expropriating our lands, seas and territories and violating our rights</b> that would culminate in <b>a new form of colonialism</b> . Through sinks projects, we would lose our right to manage traditionally our lands and <b>become slaves of the carbon trade</b> . Carbon trade-induced conflicts, such as violence for access to basic resources would <b>endanger our survival as peaceful peoples of the land.</b> ”
UNFCCC COP6 The Hague, The Netherlands 2000	“...coal and uranium mining, logging, nuclear and large hydroelectric power station and oil and gas extraction... <b>contribute to climate change and the destruction of our territories.</b> ”
UNFCCC COP6bis press release Bonn, Germany 2001	“Indigenous Peoples Condemn Carbon Sinks in the Kyoto Protocol as a <b>New Form of Colonialism and Genocide</b> ” “These negotiations have churned out more than 5 million words of text but do not even mention Indigenous Peoples’ rights.”
UNFCCC COP7 Marrakech, Morocco 2001	“...some climate change mitigation strategies could <b>threaten the survival of our peoples</b> and communities. The inclusion of carbon sinks in the Clean development Mechanism (CDM) will constitute a dangerous tool for the expropriation of our lands and territories and culminate in <b>a new form of colonialism.</b> ”
UNFCCC COP8 New Delhi, India 2002	“We <b>affirm our previous declarations</b> of the First International Forum of Indigenous Peoples on Climate Change at Lyon, France in September 2000, Declaration of the Second International Indigenous Peoples on Climate Change, The Hague, November 2000, and the Indigenous Peoples’ Statement at Seventh Conference of the Parties at Marrakech, Kingdom of Morocco, 5 <sup>th</sup> November 2001...”
UNFCCC COP9 Milan, Italy 2003	“Sink projects do not contribute to climate change mitigation or sustainable development...The modalities and procedures...under the CDM <b>do not respect and guarantee our right to our lands, territories and self determination.</b> ”
UNFCCC COP10 Buenos Aires, Argentina 2004	“We are in crisis. We are an accelerating spiral of climate change increasingly getting worse due to the <b>conditions that industry, multinationals and governments impose</b> on our communities and the world.”
UNFCCC COP11 Montreal, Canada 2005	“The modalities and procedures for activities under the Clean Development Mechanisms (CDM) <b>do not respect and guarantee our right to lands, territories, and self-determination</b> . CDM and sinks projects do not contribute to climate change mitigation and sustainable development...Indigenous Peoples have experienced systematic and repeated violations by oil, gas, mining and energy industries infringing on our inherent right to protect our traditional lands. <b>We reaffirm previous Indigenous climate declarations.</b> ”
UNFCCC COP12 press release Nairobi, Kenya 2006	“Indigenous Peoples are <b>concerned about the impacts of carbon sinks projects</b> in the Clean Development Mechanism on our lands and communities... projects in indigenous territories must respect our fundamental rights...”
UNFCCC COP13 Bali, Indonesia 2007	“We demand that the Conference of Parties...refrain from adaptation and mitigation schemes and projects ...that <b>devastate Indigenous Peoples’ lands and territories and cause more human rights violations, like market based mechanisms, carbon trading, agrofuels</b> and especially avoided deforestation ( <b>REDD</b> ).”
UNFCCC SBSTA Statement on REDD Bali, Indonesia 2007	<b>“REDD [forests in the carbon market]</b> will not benefit Indigenous Peoples, but in fact will result in more violations of Indigenous Peoples’ rights. It will <b>increase the violation of our Human Rights, our Rights to our lands, territories and resources, steal our land, cause forced evictions</b> , prevent access and threaten indigenous agricultural practices, destroy biodiversity and cultural diversity and cause social conflicts. <b>Under REDD, States and Carbon Traders will take more control over our forests.</b> ”
UNFCCC COP14 High Level Segment Poznan, Poland 2008	“...stand by our demand for <b>an immediate suspension of all REDD initiatives and carbon market schemes</b> . ...“human rights violations caused by the CDM and other carbon trading and offset regimes... <b>Cut emissions at source – No REDD</b> ... The CDM and the carbon market are instruments that commodify the atmosphere...It <b>is not just “carbon” or pollution that is being traded, but people’s lives.</b>





# KEEPING IT REAL

True Solutions to Climate Change

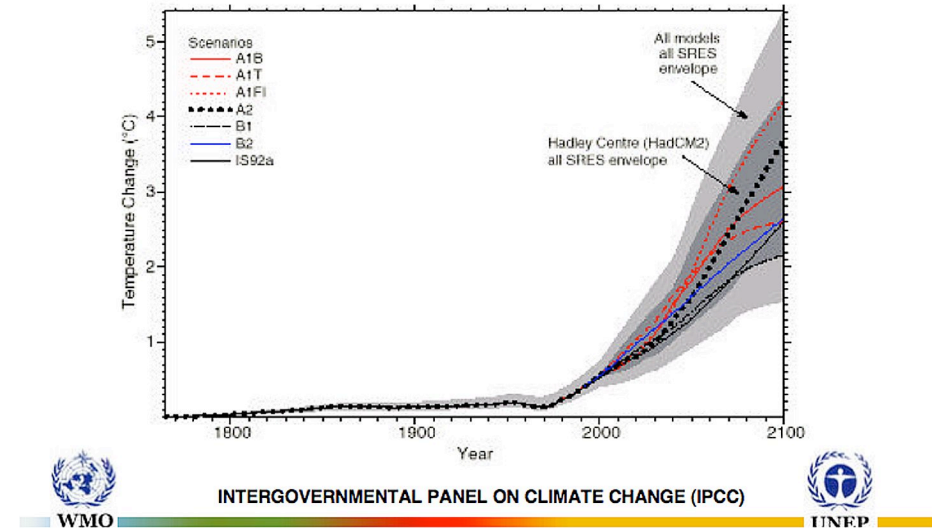
## Real Solution: Honor the Earth & the Sky

- Drastically Cut Emissions at Source<sup>89</sup>
- Transition to sustainable models of production, consumption & development
- Promote sustainable family farming, organic faming, perennial pastures
- Promote a paradigm shift
  - Planet and People not Profits
  - Ethical Leadership instead of corruption and thievery
  - Honor the Earth and Sky & Respect the Law of Nature
- Leave fossil fuels in the ground
  - Swiftly phase out fossil fuel exploration & extraction
  - Cut \$200 billion/year subsidies to coal & oil
- Promote renewable energy
- Scale down: Promote local sustainable energy solutions
- Reduce, reuse, recycle
- Phase out extractive industries
- Redirect military budgets; Stop war; Promote peace
- Pay ecological debt and cancel foreign debt to address climate crisis
- Promote peoples' sovereignty over energy, forests, land and water
- Ensure rights-based resource conservation
- Implement the UN Declaration on the Rights of Indigenous Peoples
- Demarcate and protect Indigenous Peoples' territories
- Promote food sovereignty and food security
- End deforestation and its underlying causes
- Promote energy-efficient modes of transportation and specifically public transportation

How emissions are cut is just as important as any percentages that are thrown around. There is no substitution for huge emissions cuts at source. So-called emissions cuts that allow for carbon market mechanisms, false solutions and "cooking the books" emissions accounting do not result in real emissions reductions. According to the United Nations "Intergovernmental Panel on Climate Change in 1990, in order to stabilize atmospheric concentrations at a level less than double that of pre-industrial times, greenhouse gas emissions would have to be reduced by 60-80%." The Kyoto Protocol purports to cut GHG only 5.2% but it has such giant loopholes that it may represent a net GHG increase.

<sup>89</sup> Larry Lohmann, Carbon Trading: A Critical Conversation on Climate Change Privatization and Power p.8 and The Durban Group Declaration on Carbon Trading p.358 [www.thecommerhouse.org.uk/subiect/climate](http://www.thecommerhouse.org.uk/subiect/climate)

## Global Temperature Chart



## United Nations Framework Convention on Climate Change =

# WTO of the Sky

*Establishing a robust global regime for addressing climate change is... comparable to the creation of the international trade regime under the World Trade Organization.<sup>90</sup>*

Michael Zammit Cutajar  
Ex-Executive Secretary of UNFCCC



<sup>90</sup> See IIS United Nations Association archives at <http://www.unisa.org>