

STRENGTHENING CAPACITY ON STANDARD SETTING IN THE AREA OF SUSTAINABILITY AND BIOENERGY

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Workshop on Strengthening Institutional Capacity on
Sustainability Criteria for Bioenergy

Kathmandu, Nepal, 19 – 21 April 2011



WHY IS TODAY WORKSHOP IMPORTANT ?



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MESSAGES FROM ASIA CHIEF EXECUTIVE OFFICERS OF NATIONAL STANDARDS BODIES (ASIA CEO NSB) MEETING IN BALI , MARCH, 2011



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General Issues for Standard Bodies in Developing Countries

- **Human Resource Capacity**
- **Less participation in international standard development**
- **Testing and certification Infrastructure**
- **Awareness on the importance of standards**

Strengthening Capacity on Setting Standards

- **Identify and coordinate experts**
- **More active in ISO drafting,**
- **Exchange of information among developing countries**
- **Enhance research on owned resources, and lead the standard process**

OUR THREE DAY WORKSHOP IS ABOUT :

1. **Strengthening Capacity**
2. **Standard Setting**
3. **in the Area of Sustainability and**
4. **Bioenergy**

World Energy Council on Sustainability Criteria

“... Defining the sustainability criteria for biofuels is a **complex task** which may have **crucial implications** for market development. Broad stakeholder involvement and comprehensive consultation are necessary for a **balanced and feasible outcome** of the process...”

Source : World Energy Council 2010, Biofuels: Policies, Standards and Technologies



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Biofuels Diversification

FIRST GENERATION

1. Derived from sugar, vegetable oil, or animal fats
2. Through a complex process using wheat, corn, sugar beets and sugar cane
3. Competes with food growing capacity and forested areas
4. Release carbondioxide

SECOND GENERATION

Uses biomass consisting of the residual non-food part of crops still needs crops (or crop waste)

THIRD GENERATION

From algae (or algaeoleum) or bacteria (new development). High productivity per acre, short harvesting cycle, can also be grown on land which is not suitable for other established crops
climate (or CO2) neutral
Cost is high



PALM KERNEL SHELL

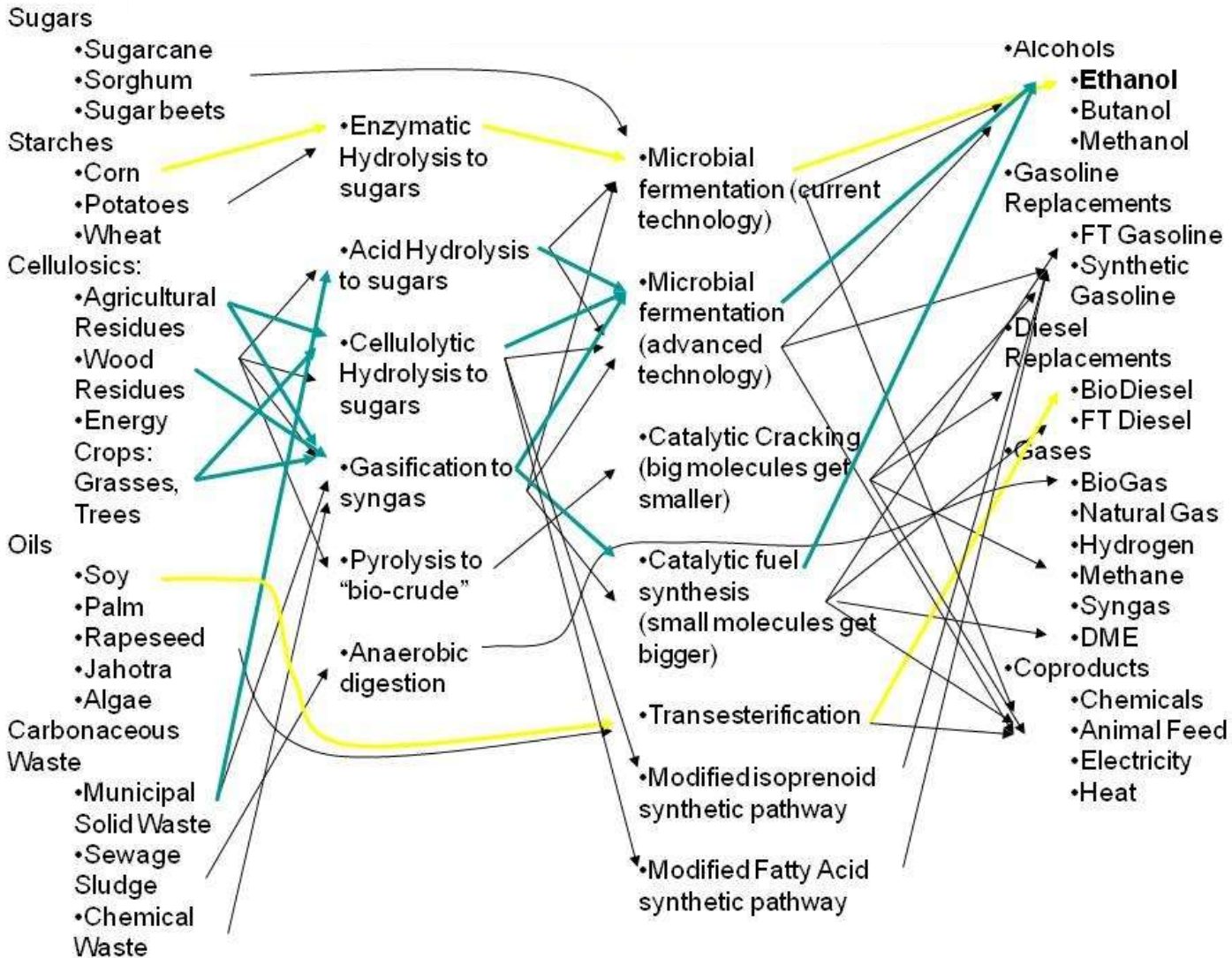


RICE HUSK



CORNCOB

Bio energy Technology



Risks of bioenergy production

- Food security
Competition with other land uses, price effects

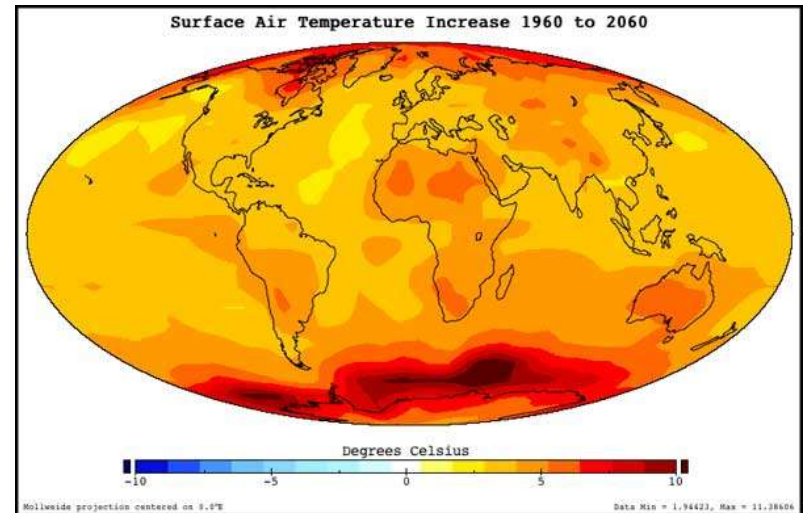
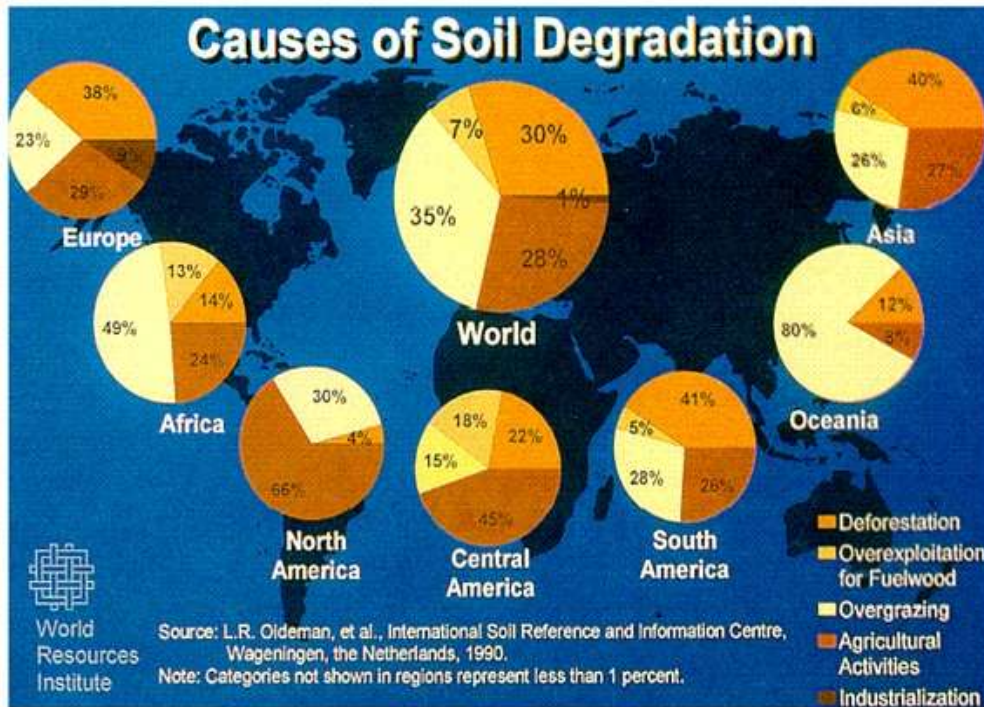
Biodiversity
Monocultures, deforestation



Risks of bioenergy production

- Soil and water Degradation, over-exploitation

Climate Change
GHG emissions
due to land-use
changes



Massive destruction beyond N2O - Agrofuels are accelerating climate change



**Fires to clear land for palm oil,
Kalimantan**

Photo by Nordin, Save our Borneo



**Deforestation for oil palms,
Colombia**

Peat drainage and destruction

Drainage

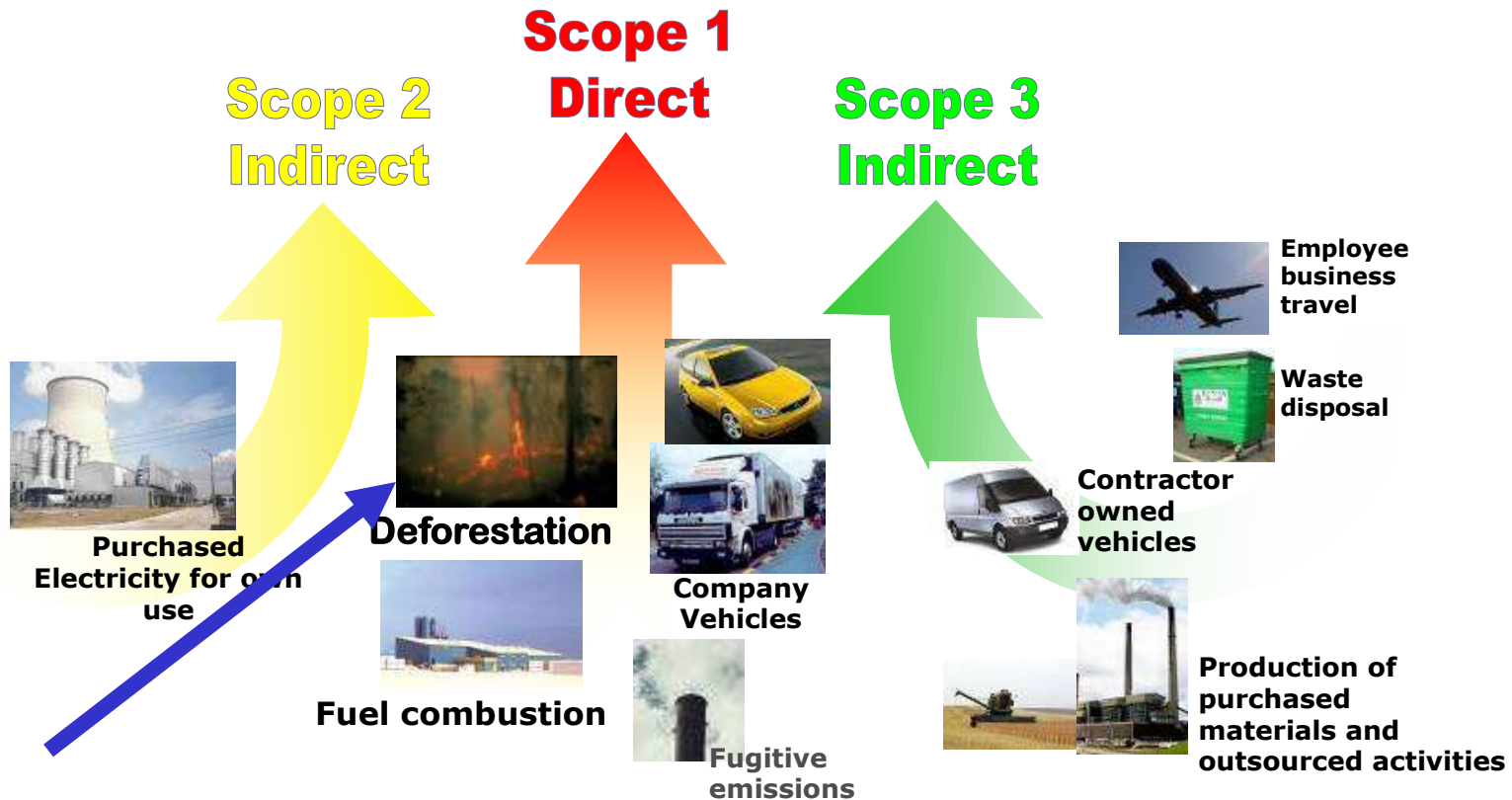
- Dry peat - oxidises and, over time, emits all its carbon as CO₂. 42-50 billion tonnes of carbon stored in those SE Asian peatlands.

Fires

- Many set by plantation companies, greatly accelerate the loss of carbon.
- Of the 27.1 million hectares of peatland in South-east Asia, 12 million hectares are deforested and mostly drained.



CO₂ CH₄ N₂O HFCs PFCs SF₆



Source: GHG Protocol Initiative, 2004
and Deforestation

Proposal for deforestation and desertification standards

- June 2009, ISO/TC 207 16th Plenary Meeting in Cairo, Egypt
Proposal for deforestation and land degradation was approved by Ad Hoc Group of Desertification Forum
- November 2009, “Climate Change, Trade and Standardization – In Development Perspective” Conference in Stockholm
Indonesia presenting the importance of international standard on calculation of GHG emission from deforestation
- 31 May – 1 June 2010, “Climate Change-Deforestation And Standardization” Conference in Bali
The outline of proposed standards were established and to be submitted to ISO
- 11 – 17 July 2010, ISO/TC 207 17th Plenary Meeting in Leon, Mexico
interested member bodies to consider submitting a new work item proposal based on Ad hoc Group on Desertification conclusions.
- 10-11 Januari 2011, ISO/TC 207 Chair’s Advisory Group (CAG) di Hanoi, Vietnam
New Work Item Proposal (NWIP) Land Degradation/Desertification was approved

**WHO ELSE IS WORKING ON
GLOBAL INITIATIVES FOR
SUSTAINABILITY STANDARDS AND
CRITERIAS
FOR
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Initiatives for Sustainability Standards (global)

- **Roundtable on Sustainable Biofuel (RSB):** Version 2 out, further discussion on GHG reduction targets
- **Global Bio Energy Partnership (GBEP):** ongoing work of Sustainability Task Force on indicators, draft list expected May 2011
- **Global Environment Facility (GEF):** ongoing study, some results in 2011
- **feedstock-specific: RSPO, RTRS, FSC...**

Sustainability Standards (EU, USA)

- **EU Renewable Energy Directives (RED)**: no social requirements, none for air/soil/water (reporting only); ongoing work on high-biodiverse grassland and ILUC (indirect land use case);
- **USA**: EPA on federal level (RFS2) regulates GHG emissions (incl. ILUC), but no biodiversity or other criteria; Californian **LCFS** also ILUC factor, and to consider other sustainability requirements (biodiversity, soil, water, food security); more to be expected in 2011

Why are we here ?

- “ We clearly need biomass as a sources of renewable energy. We can not do without the contribution to climate protection made by sustainable and ecologically produced biomass. But we have to make sure there is no conflict of aims”

Angela Merkel

German Chancellor

At the 9th Conference of the Parties

Thank You

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