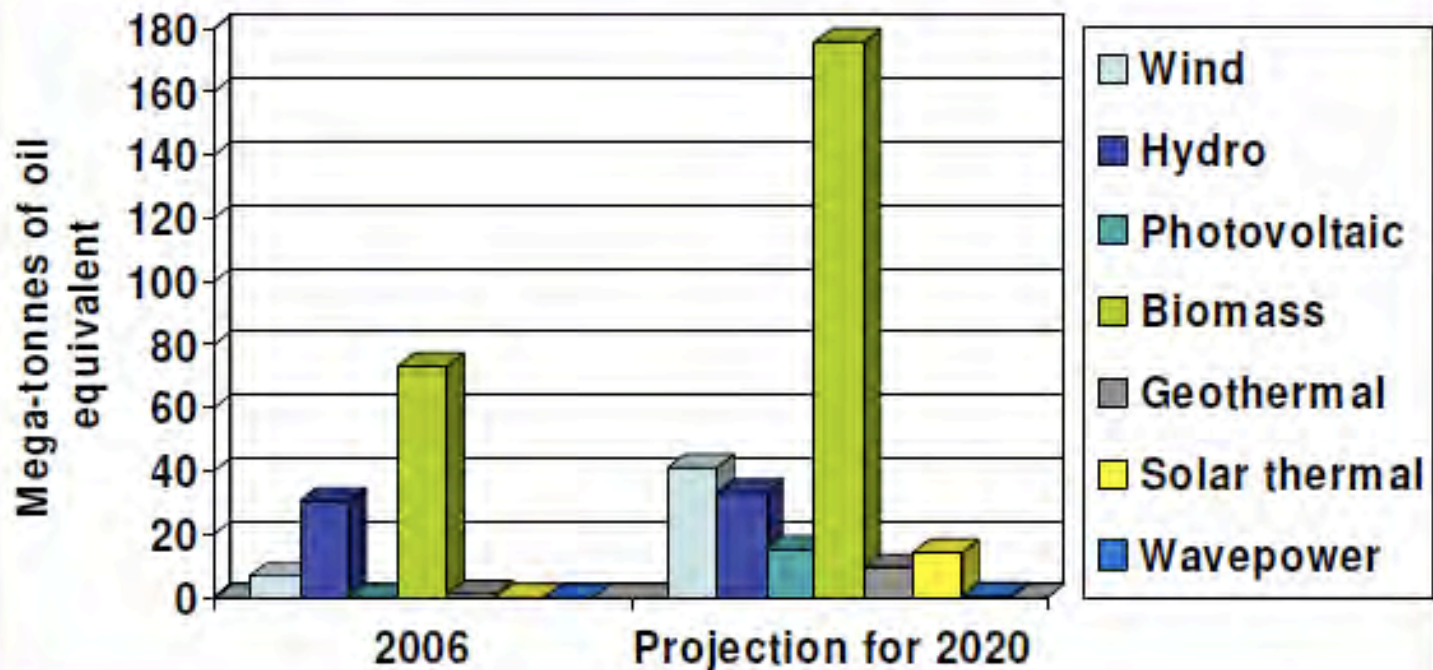# Social Impacts of Climate Change Mitigation: Women and the Bioeconomy
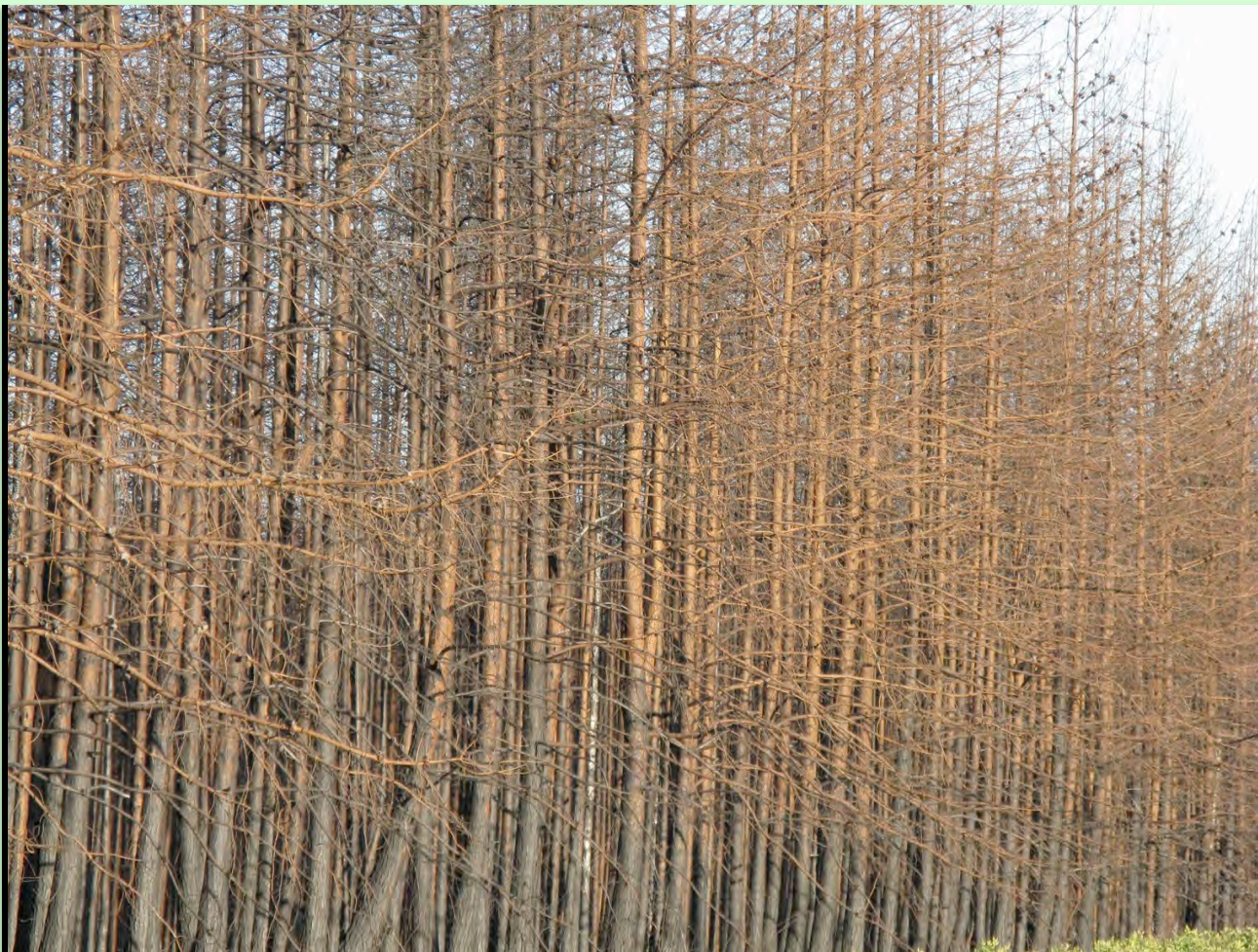
Corporate-driven "Green Economy" Solutions

- Green capitalism = corporations using public concern about a global crisis for increased profit-making
- Public-private partnerships and the sell out of UN policies to corporations (SEFA, the post-2015 agenda) is giving them disproportionate influence over public policy
- Result: False, destructive solutions like the bioeconomy
- Destructive large-scale bioenergy is the majority of 'renewable' energy in continents like Europe and US. Mainly subsidized to support large farmers and energy producers.
- Some coal plants (e.g. Drax, UK) might receive up to 550 million GBP a year in subsidies for co-firing and estimated 7 million ton wood per year under current plans – much of that cut in Southern US wetland and other forests.

Predictions by the European Renewable Energy Council

Popular misperception of renewable energy is that it will primarily mean solar & wind

EREC: The proportion with respect to total energy use from biomass is expected to increase from 6.0% to around 13%
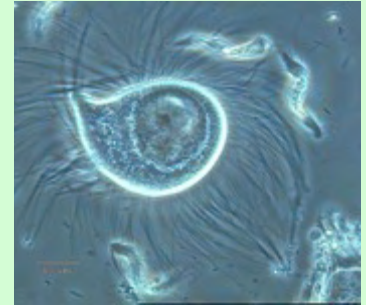
The 'green economy' promotes markets in products based on biomass (the 'bioeconomy') and 'environmental services'

Replacing fossil fuels with biomass requires biotechnologies and massive production of biomass

The bioeconomy agenda is especially attractive to fossil fuel companies who want to be seen pursuing an exit-from-oil or coal strategy, and biotechnology companies desperately in need of a Trojan horse to provide safe passage for risky and unpopular new technologies

- Companies promoting it include:
- Big Energy (Exxon, BP, Chevron, Shell, Total)
- Big Pharma (Roche, Merck)
- Big Food & Agriculture (Unilever, Cargill, DuPont, Monsanto, Bunge, Procter & Gamble)
- Big Chemical (Dow, BASF)
- Actively supported by UN (e.g. Sustainable Energy for All Initiative)

Bioeconomy = new and risky biotechnologies

- Genetically modified organisms, including genetically engineered trees
- Synthetic biology (enables the writing and re-writing of genetic code on a computer creating organisms that would not exist in nature or even trying to reengineer entire biological systems)
- Nanotechnology (manipulation of inert nature)
- Geo-engineering (ocean fertilization / solar radiation management/ large-scale biochar)

There are no international rules for most of these technologies, except for non-binding moratoria

Women suffer more from some health risks due to reproductive health care risks and tasks.

Biomass Monocultures displace women farmers

- Rural women's activities tend to relate to small-scale farming, while men are more involved in monocultures

- 70% of African peasants are female

- For many women, biodiversity is the cornerstone of their work, their belief systems and their basic survival

The Bioeconomy and Land Grabbing

- 59% of all land grabs are triggered by bioenergy

- Women tend to be the main victims of (green) land grabbing as they have less secure land rights

- Rural depopulation impacts them harder, they need schools and other services for their family

- "Degraded and marginal land" is a false concept

Bioenergy requires 400 times more land than the most advanced solar energy.

Every hectare of land = Biomass for bioenergy or other bioeconomy products OR food OR infrastructure OR a (conserved or restored) ecosystem

Biofuels significantly increase food prices triggering hunger and malnutrition

- Biofuels play a key role in driving up food prices, in combination with climate change, increased meat consumption and food speculation.
- Women are often the ones responsible for feeding their families, in North and South, and the ones to eat last or give up other needs
- Deforestation also implies a loss of forest foods – a key alternative

Women in North and South suffer from air pollution biomass plants

- Biomass incinerators are often located in poor neighborhoods

- Wood emits 79 different pollutants (EPA)

- Particularly dangerous for pregnant women

- Women also carry the main burden for family health care (e.g. asthma)

The main problem of industrial biomass exploitation is the <u>quantity</u> needed

- Annual production of US biowaste = 4 days of US air traffic

- The problem is the quantity - so qualitative standards and certification cannot address it

- Wood is only 'renewable' within a certain time space (which we don't have)

Markets in 'environmental services'
By far the largest market are forest carbon offsets – promoted through REDD+

Risks of REDD+

- REDD+ is a neo-liberal, market-driven approach that leads to commodification of life and undermining community values

- Weak land tenure rights and negotiation power of women: Powerful elites will capture the benefits by grabbing forest land and closing false and unfair deals with forest peoples

- Counting how much carbon is stored is expensive – most funds will go to (male) consultants

- Focus on carbon promotes monoculture tree plantations and ignores social and cultural values

- The real causes of forest loss and forest land grabbing will not be addressed

- REDD+ will undermine the climate regime by allowing polluters to continue

Women and the Bioeconomy

Women play a predominant role in non-monetary 'economies of care' because of their reproductive roles and (partly resulting) disadvantageous position in monetary, market-based economies

Should we adapt women and their natural resources to regular market-based capitalist economies

or adapt our economies to nature and the daily realities of women?

Recommendations

- Quick steps: Stop subsidizing destruction!!Redirect subsidies away from bioenergy, carbon offsets, meat consumption, financialization of life

- Respect and promote what works: Indigenous territories and community conserved areas, food, wood and energy sovereignty, buen vivir

- Social protection floor and rights-based public policies (food, education, (reproductive) health, transport)

- Long-term: Change to 'buen vivir' = Change consumption and production and lifestyles, localization

Thank you