

The Kyoto protocol



Carbon credit –
What about Hemp ?

EHHA conference nov. 21. - 22. 2006

Mireille Portmann

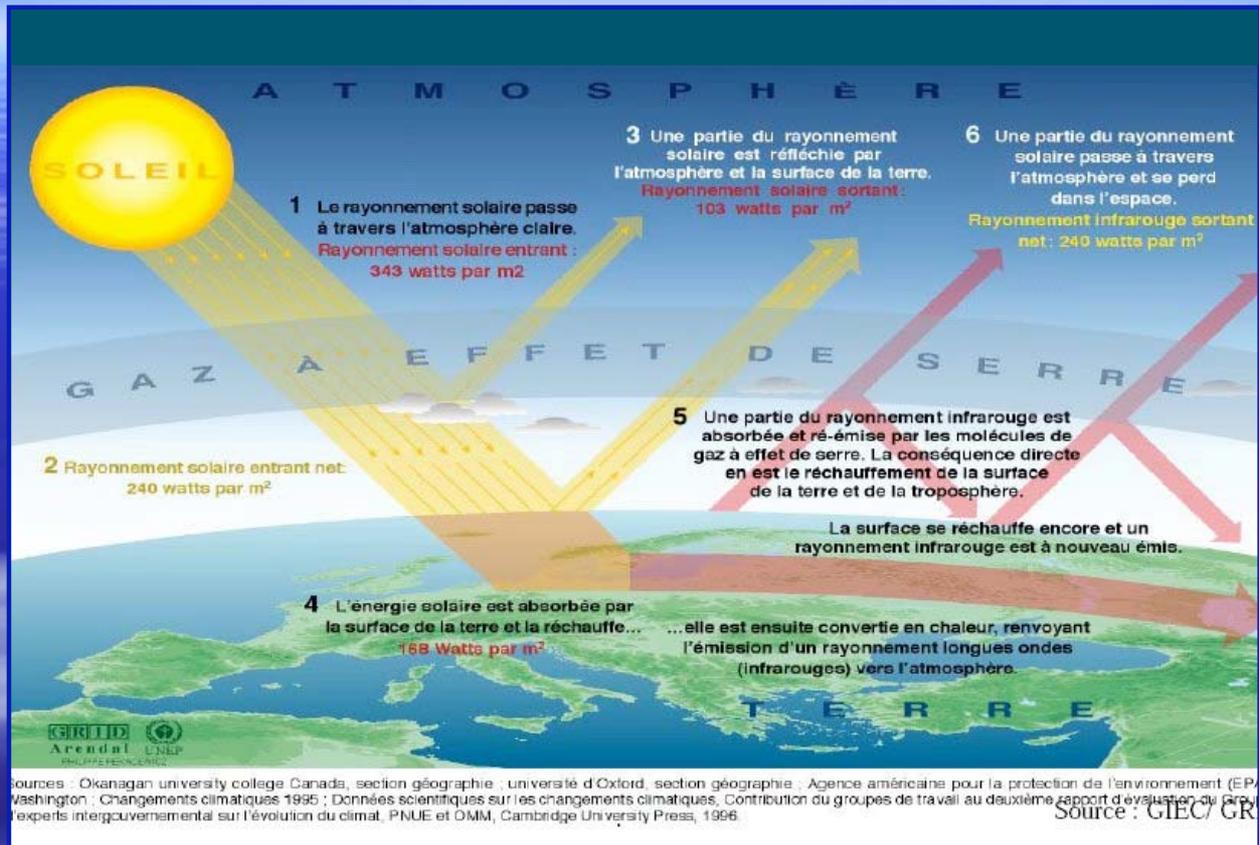


Little chronology

- 1987 Bruntland report : Sustainable development
- 1992 Earth summit in Rio de Janeiro : UNFCCC
- 1997 Kyoto protocol : GHG reduction
- 2005 current entree of the Kyoto protocol
 - Reduction of GHG emission. 35 countries + EU : 1/3 world emission in 1997.
 - 166 countries have signed the KP
 - After Nairobi : emerging countries China, India, Brasil ?

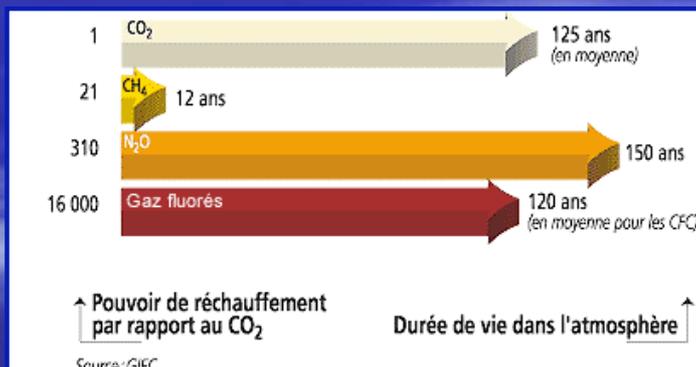


Greenhouse effect

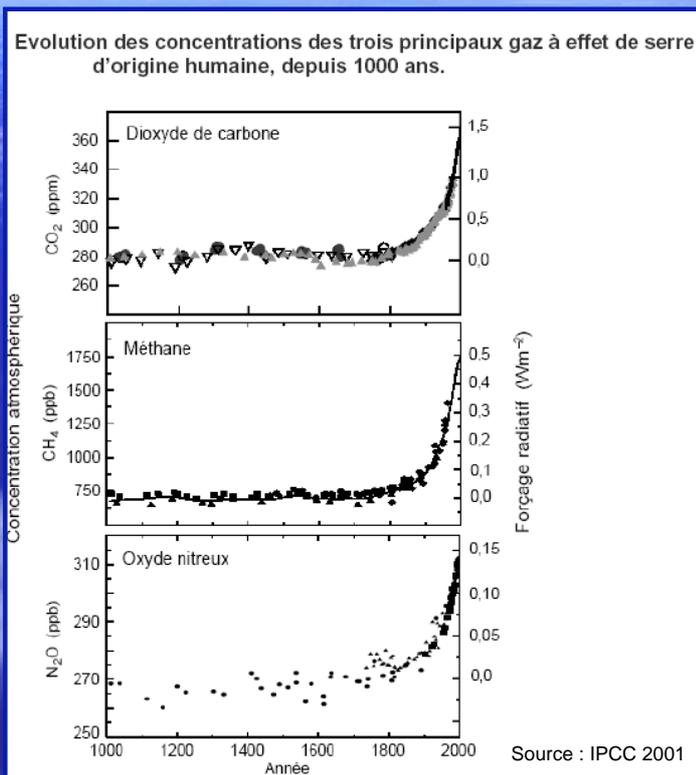


What does it mean

- Global warming is attested
 - 3. report IPCC .
 - Next report in feb. 2007 : shock
 - Reduction of 6 GHG emissions
 - CO₂ : carbon
 - CH₄ : methan
 - N₂O : Az. ox.
 - HFC
 - PFC
 - SF₆
- } fluor



Evolution of the 3 main GHG those last 1000 years



- Industries (energy production, manufacture),
- Transport,
- Agriculture,
- Building.....
-Every body

What does it mean for the future?



« Climat changes may be the most serious threat that ever to face humankind »

« Climat change will threat peace and security ». (Koffi Annan)

What does it mean for the future?

- A lot of risks already visible
 - Higher temperature : dryer regions, more rain
 - Elevation of seas and oceans level
 - Warming of oceans, elevation of their acidity
 - Diminution of ice and snow
 - Changes in agriculture
 - New diseases in our countries
 - 150 million climatic refugees expected (source : ipcc)
 - Increase of human mortality

Objective of the Kyoto Protocol : limit the global warming at 2° for 2060

What can we do ?

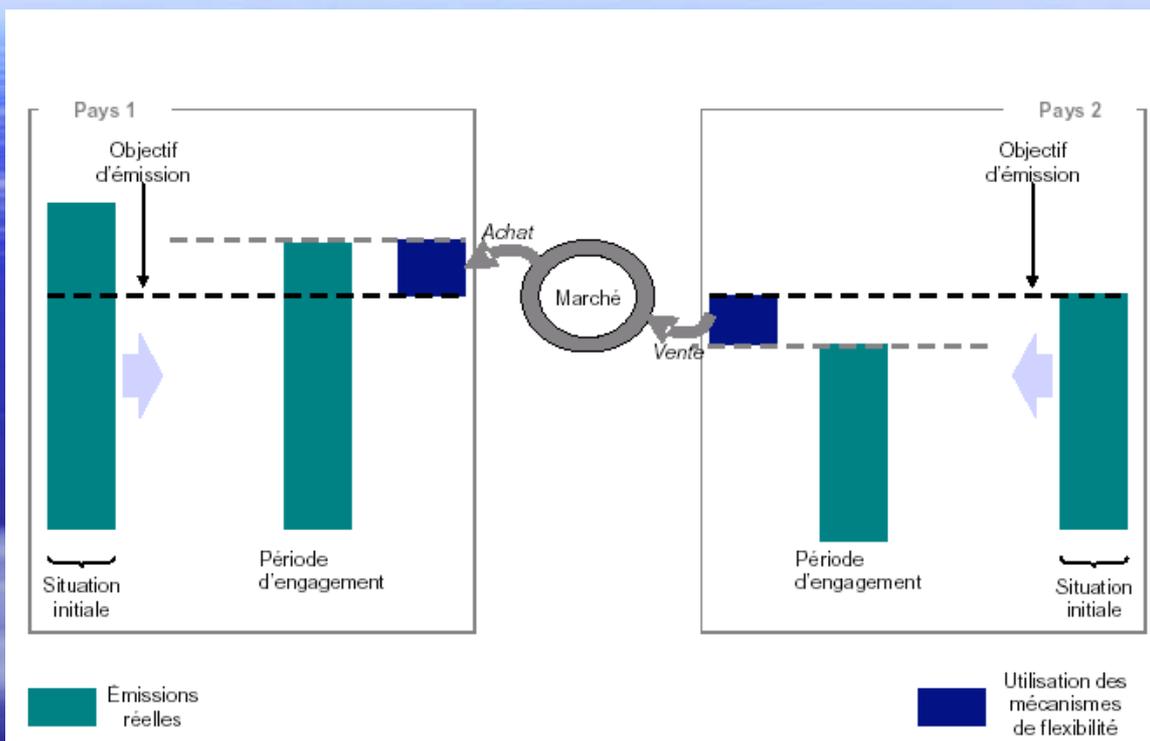
- The Kyoto protocole
 - * Impose binding measures to reduce GHG to 5.2% for 2012, and 50% for 2100
 - Put in place domestic measures
 - * Forsaw flexibility mechanism called
 - CDM
 - JI
 - Carbon Market

The CDM

- The Marrakech agreement 2001
 - First : For the benefit of the southern countries
 - Helps their own development, encourage the sustainable development
 - Encourage North-South cooperation with new technology transfers and knowledge
 - Second : helps the northern countries
 - to reduce their CO2 emission,
 - to earn Carbon units.



The carbon market



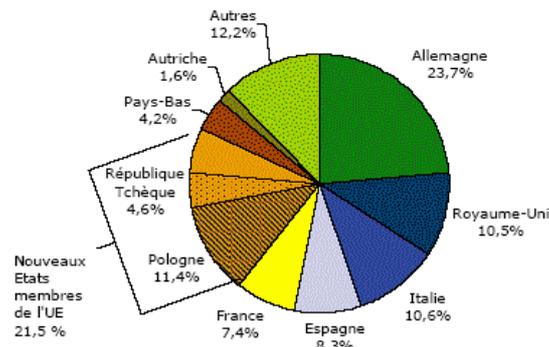
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NPQA

- Ann 1 coutries
 - 1. for 2005-2007
 - 2. for 2008-2012
- Designated national industries have to respect their quotas or pay penalties

- Répartition géographique des quotas pour la première période (2005 – 2007)



Source : PNAQ, DEHSt



Union européenne : PNAQ, registres nationaux et quotas de CO₂

	PNAQ I - 2005-2007		PNAQ II - 2008-2012		
	Nb. de quotas alloués en 2005 MtCO ₂ (incl. réserves)	Part nationale des quotas alloués en Europe	Nb. de quotas alloués par an en MtCO ₂ (incl. réserves)	Evolution de l'allocation annuelle Phase I- II.	Etape du processus au 4 juillet
Allemagne	495,0	23,2 %	482,0 ⁽¹⁾	- 3,4 %	Rendu le 30 juin
Pologne	239,1	11,1 %	279,6 ⁽¹⁾	16,9 %	Rendu le 4 juillet
Royaume-Uni	221,5	10,3 %	238,0 ⁽²⁾	7,4 %	Consultation terminée
France	155,9	7,3 %	149,7 ⁽²⁾	- 4,0 %	Consultation en cours
Pays-Bas	89,0	4,1 %	109,2 ⁽²⁾	22,7 %	Consultation terminée
Grèce	74,4	3,5 %	75,7 ⁽³⁾	1,7 %	Consultation en cours
Belgique	62,9	2,8 %	37,9 ⁽³⁾	- 39,7 %	Consultation en cours
Finlande	45,5	2,1 %	39,6 ⁽³⁾	- 13,0 %	Consultation en cours
Portugal	38,2	1,8 %	33,9 ⁽³⁾	- 11,3 %	Consultation en cours
Irlande	22,3	1,0 %	23,0 ⁽³⁾	3,1 %	Consultation terminée
Estonie	18,9	0,9 %	24,5 ⁽³⁾	29,6 %	Rendu le 30 juin
Lituanie	12,3	0,6 %	11,9 ⁽³⁾	- 2,9 %	Consultation en cours
Lettonie	4,6	0,2 %	6,8 ⁽³⁾	47,8 %	Rendu le 4 juillet
Bulgarie	49,7	Entrée en 2007	56,1 ⁽³⁾	12,9 %	Consultation en cours
TOTAL UE 25	2 151,5	100 %	-	-	-

⁽¹⁾ Source : Commission européenne - ⁽²⁾ Source : Gouvernements nationaux - ⁽³⁾ Source : PointCarbon

Source : Mission Climat - Caisse des Dépôts

N.B: Le périmètre des installations concernées a pu varier entre le PNAQ I et le PNAQ II, avec l'inclusion de nouvelles installations



How to reduce GHG with Hemp concrete

« Grow your house » in the Cape-Town
townships



« Grow your house » in South Africa a CDM application

- Help SA to implement sustainable development by giving work to black communities.
- Help South Africa to develop new technologies in building and agriculture
- Create carbon credit to sell/exchange on the market (EU ETS)
- «Reduce CO₂ emission» for the north



The grow your house project

- Based on the european experience
 - More than 300 houses built with hemp concrete in France per year
- Hemp, hemp concrete have been studied for years and have proved their efficiency
 - House Insulation
 - Carbon sink (plant, fabrication, house)
- CLA for 2 years in the Jura region
- Transfer of Know how and technologies



A house

Building : 30 m²
house = 30 m³
concrete



Running : 30% reduction of CO₂ emission in Europe,
expected : 80-90% in SA

- Hemp concrete, and insulation
- hemp ceilings,
- solar water heaters and
- CFL's (energy efficient lighting)



Thank you for your attention

