

# An agrofuel moratorium in temperate countries ?

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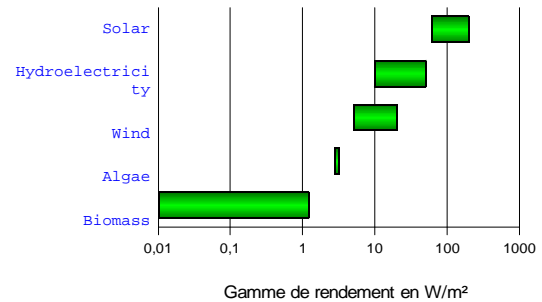
ETOS - Institut Télécom - Evry, France

## A MULTIRISKS STRATEGY

- An ambitious strategy: France target 10% of transport fuel in 2015, the US 20% in 2017 and the EU around 10% in 2020.
- AF policies were designed as a multi-risk strategy to address three major risks: social, climatic & strategic.
- This multi-risk strategy faces unexpected challenges. AF's weakest ratio of conversion of solar energy: it requires vast expanses of land and exacerbates the competition for land.

## AF: THE WEAKEST RATIO OF CONVERSION OF SOLAR ENERGY

- (Data from Smil, V., 2003, Energy at the Crossroads, MIT Press, Cambridge, Ma).

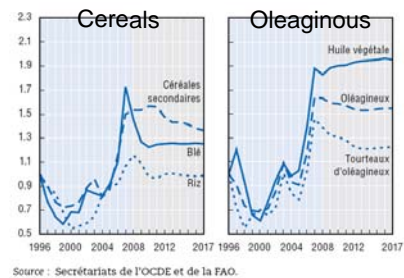


## FOOD CROPS DIVERSION: FOOD PRICES RISES

- AF would use some 37,7% of the US grain crops in 2015. In the EU, 129,3% of vegetable oil production would be required in 2015, or 19,6% of the world production.
- Substitution implies that uncultivated lands are converted into cultivation.
- Land-use changes and its negative effects on climate change and biodiversity are the main reason behind the pro-moratorium stand of the scientific committee of the European Environment Agency.

## CEREALS AND OLEAGINOUS PRICES RISES

- From 2004 till 2007, half of the prices rises have been pinned down on AF production (OECD-FAO Agricultural Outlook 2007-2016, OECD Publications, Paris).



## REALLOCATING SUBSIDIES: CLIMATE POLICIES BENEFITS

- In France, AF subsidies were around 600 million Euros in 2009. Allocated to tramways infrastructures, it would allow the construction of 60 km/year in large cities or 120 km/year in medium sized cities.
- Or the development of 1 800 km cycling tracks a year.
- Or the deployment of 18 000 wind domestic generators a year.

## GHG SAVINGS AT A VERY HIGH RATE

Transfers per GHG emissions reduced (US\$ per metric tone of CO2 equival.)	ETHANOL	AGRODIESEL
United States	450	250-600
European Union	700-5500	260-1000