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IUCN Academy Gent, 2010: Plenary Session

Agrofuels Law and Policy Pertaining to France and the UK: Ecosystem Friend or Foe?

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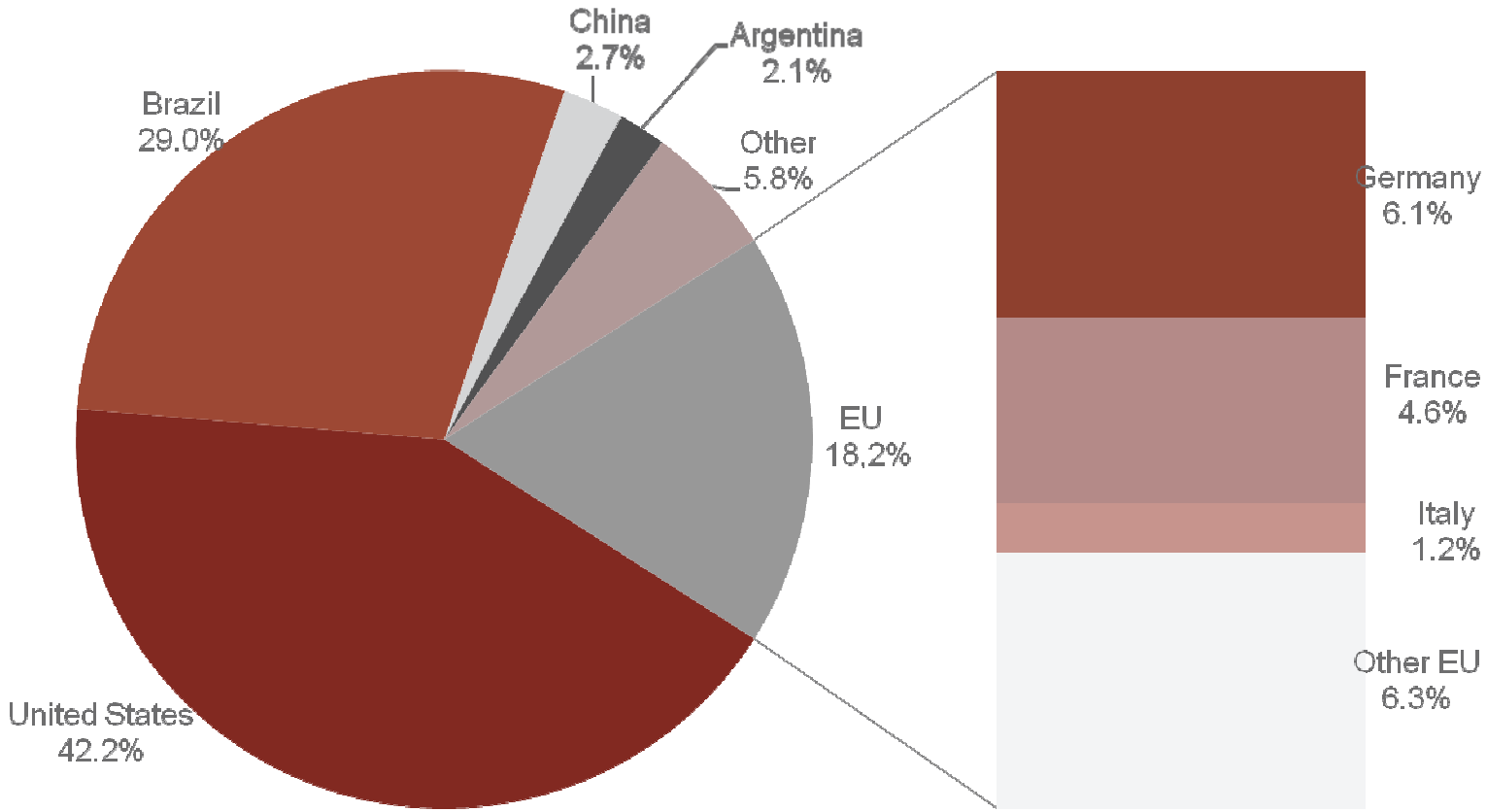
Global Shares of Agrofuel Production in 2008



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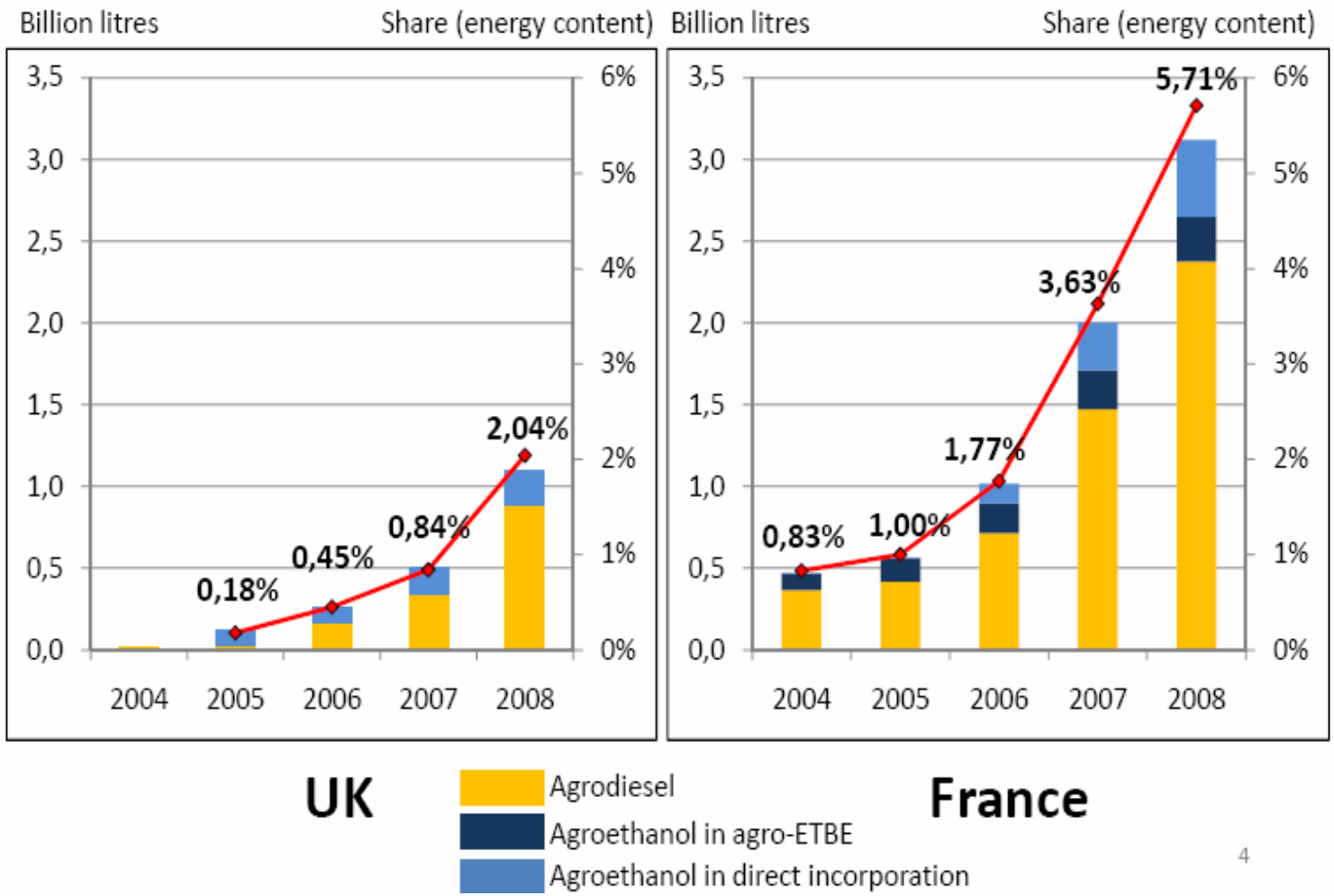
Agrofuel Consumption in UK & France



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EU Biofuels & RES Directives: Binding upon UK & France

- "the Biofuels Directive aims at promoting the use of biofuels or other renewable fuels to replace diesel or petrol for transport purposes in each Member State, with a view to contributing to objectives such as meeting **climate change** commitments, **environmentally friendly security of supply** and promoting **renewable energy sources**"
- The Renewable Energy Sources Directive calls for the use of sustainability criteria (but is ambiguous as to its application to imports into the EU as it has not directly addresses this matter in practice)

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Biofuels Directive 2003/30/EC/ and then Renewable Energy Sources (RES) Directive 2009/28/EC

- Biofuels Directive - Minimum 5.75% biofuels requirement for transport fuels sold (to be replaced by RES Directive – 10 % by 2020)
- RES Directive - The Directive takes into account energy from biofuels and bioliquids. The latter should contribute to a reduction of at least 35 % of greenhouse gas emissions in order to be taken into account. From 1 January 2017, their share in emissions savings should be increased to 50 %.

Renewable Energy Sources Directive (continued)

- Biofuels and bioliquids are produced using raw materials coming from outside or within the Community.
- Biofuels and bioliquids should not be produced using raw materials from land with high biodiversity value or with high carbon stock. To benefit from financial support, they must be qualified as “sustainable” in accordance with the criteria of this Directive.

Renewable Energy Sources Directive (continued)

- Article 17 - “Sustainability” criteria:
  - 35 % minimum greenhouse gas emission saving (compared to fossil fuels – See Annex V for suggested values *not including* land use change emissions)
  - 50% requirement as of 2017 and 60 % for new installations as of 2017
  - No biofuel raw materials from high biodiversity value areas: Forests, designated areas (by national law), high biodiverse grasslands or from high carbon stock lands (wetlands, continuously forested lands)
- Commission to report on national soil, air and water measures every 2 years as of 2012

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Commission Position on Barriers to Trade

- The Commission specifies that between now and 31 December 2011, it will report on whether national schemes have sufficiently addressed the sustainability issues related to the use of biomass from inside and outside the EU and whether these schemes have led to barriers to trade and barriers to the development of the bio-energy sector. It will consider if additional measures such as common sustainability criteria at EU level would be appropriate.

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UK Certification Sustainability RTFO Criterion Principles

- 50% GHG saving for fuel used 2010-11(if compatible with WTO rules)

Voluntary Environmental Principles

- Biomass production will not destroy or damage large above or below ground carbon stocks
- Biomass production will not lead to the destruction or damage to high biodiversity areas
- Biomass production does not lead to soil degradation
- Biomass production does not lead to the contamination or depletion of water sources
- Biomass production does not lead to air pollution

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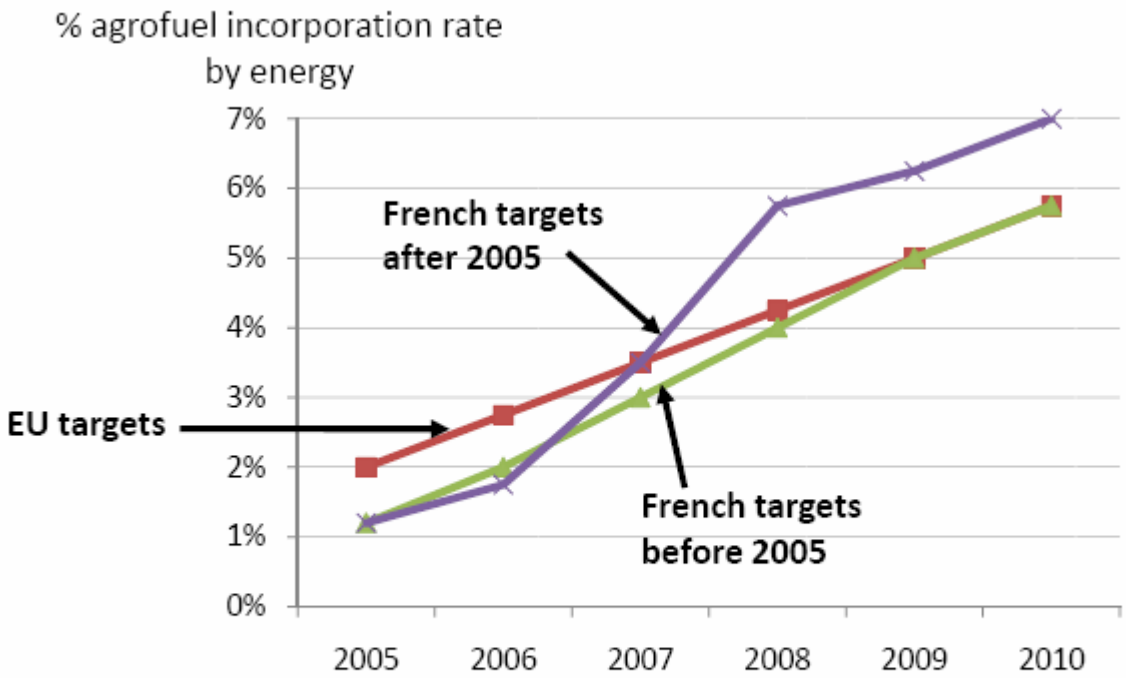
Legislated French Agrofuel Targets: A Comparison



13th September 2005 in Rennes: declaration of Prime Minister Dominique de Villepin to 'accelerate the development of biofuels' together with helps to the French agriculture sector

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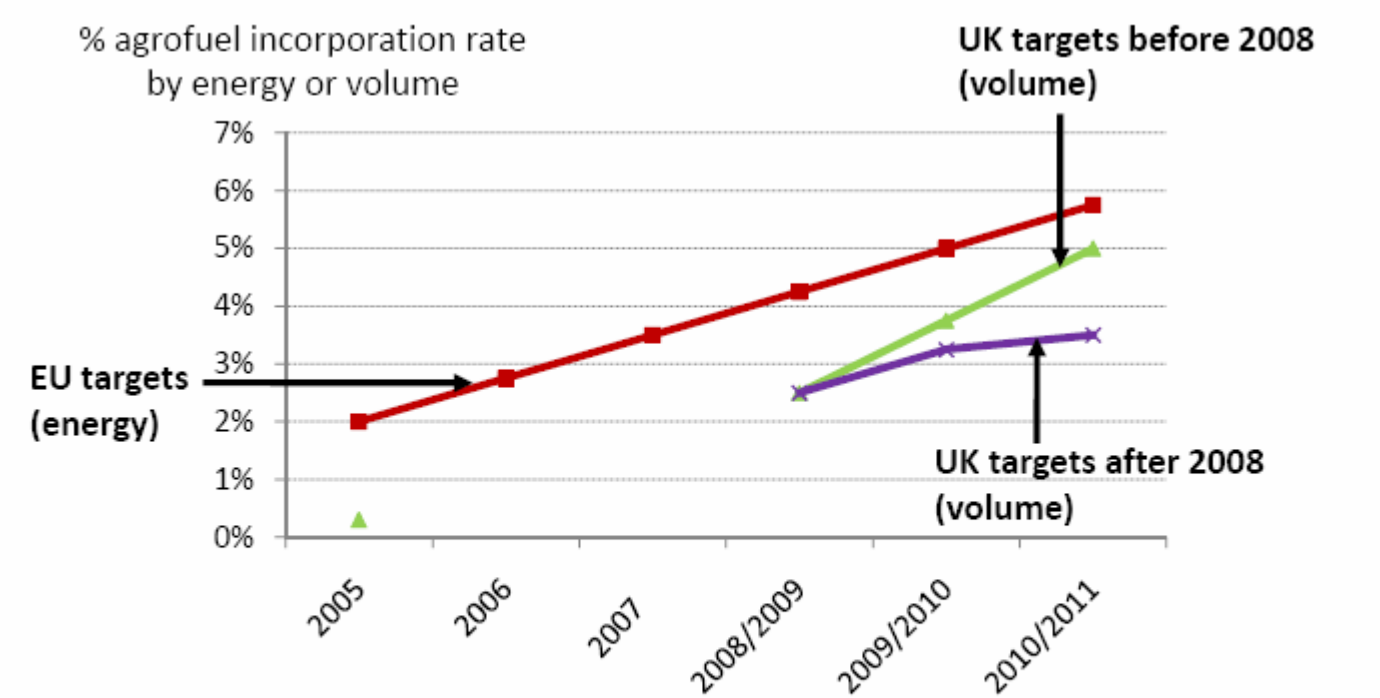
Legislated UK Agrofuel Targets: A Comparison



Release in July 2008 of the 'Gallagher Review' asking for a reduction in the rate of increase in agrofuel targets because of fears of adverse indirect environmental and social impacts associated with agrofuels' development, especially GHG emissions due to indirect Land-Use Change (iLUC)

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From Where are UK and French Agrofuels Sourced?

In 2008/2009, agrofuels consumed in the **UK** mostly came from:

1) Soy oil (mainly from the US, some from Argentina)
2) Rapeseed oil (Germany, UK, Canada, US, France)
3) Sugar cane (Brazil)
4) Palm oil (Malaysia and Indonesia)
5) Tallow (mostly from the US)
6) Sugar beet (from the UK)

91% of agrofuels consumed in the UK come from imported feedstocks

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In 2008, agrofuels consumed in **France** mostly came from:

- Rapeseed oil, sunflower oil, sugar beet, wheat
- Soy oil (Brazil , US), palm oil (Malaysia & Indonesia), sugar cane (Brazil)

The majority of agrofuels consumed in France come from domestic feedstocks but there is no official data

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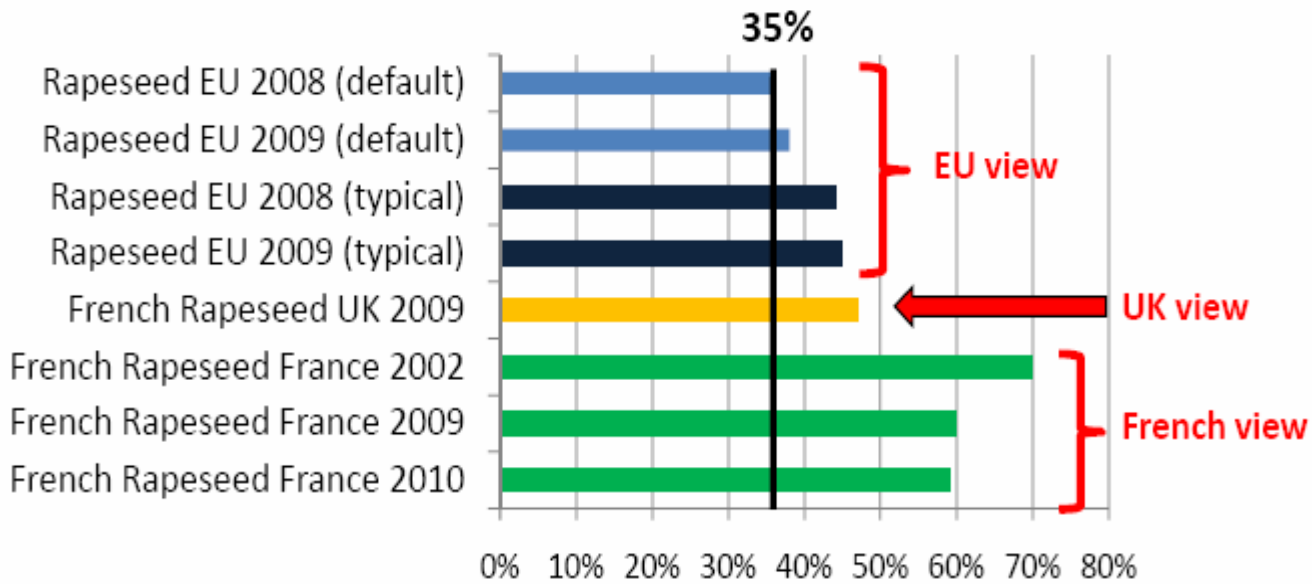
GHG Emissions Reductions: Rapeseed Oil

Based on values from:
- EU proposal for directive (2008) and 2009/28/EC directive (2009)
- UK RFA figures (2009)
- French reports (ADEME/DIREM 2002), then BioIS 2009 (**withdrawn from the web**) and final BioIS 2010 report

GHG emissions from direct and indirect land-use change are not taken into account



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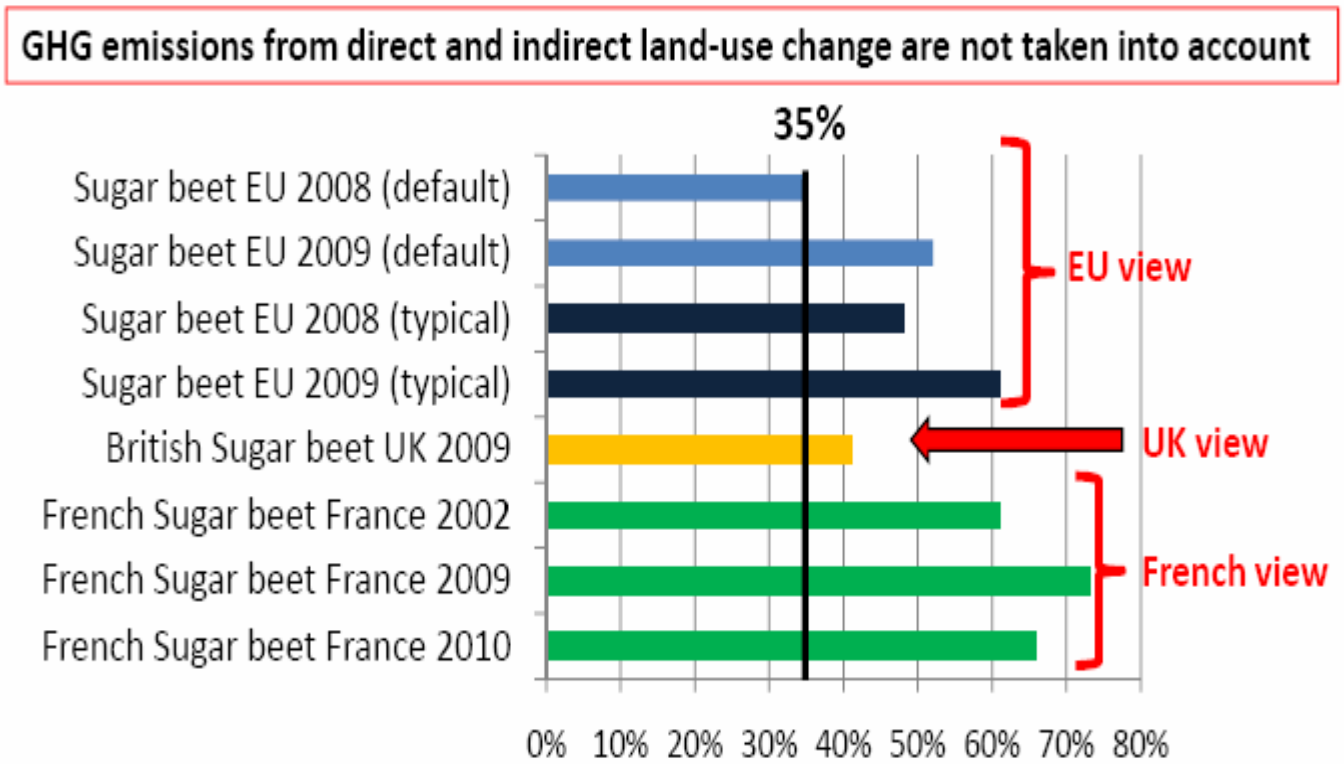
GHG Emissions Reductions: Sugar Beet Ethanol



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UK and French Variation in Regulatory Approach

UK	France
Renewable Fuels Agency	Multiple ministries and organisations
- Lower original targets than EU, further decreased in 2008 - 'Sustainability criteria' - Meta-standard	- Higher targets than EU after 2005 - No 'sustainability criteria' - No standard
GHG emission reductions look more conservative	Very high GHG emission reductions (methodological choices)
Very detailed and transparent data in UK reports	Little transparency in French reports (especially ADEME/DIREM 2002 and BioIS 2009)
iLUC is complex and is associated to imported AND domestic agrofuels	iLUC only happens for imported agrofuels!

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Possible Explanations for Differences in Law and Policy

UK

- 2007 UK environmental NGO Campaign

-Several government reports about the potential adverse consequences of agrofuels

France

- Traditionnaly smaller influence of NGOs in France. Very recently invited for talks in environmental decisions but rarely heard.

- (Grenelle de l'environnement, 26/10/2007) Sarkozy: « need to re-examine the backing of agrofuels but without challenging today's commitments »

- French reports highlight agrofuels potential positive environmental impacts rather than the negative ones

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Other Pertinent Explanations for Differentiation

- The United Kingdom imports approximately 91 % of biofuels and does not regulate the sustainability of imports citing WTO law. The Renewable Fuels Agency states that 80% of agrofuel used is unaccounted for in environmental terms. Still, only 1.6% of transport fuel is renewable.
- UK does not oblige itself legally in this regard preferring non-binding policy guidance instead
- There is widespread French agribusiness support for agrofuels including the agricultural lobby writ large and this has a significant influence on national legislation
- In reference to point 2, we should not forget that the agricultural sector provides a significant majority of agrofuels to the French market

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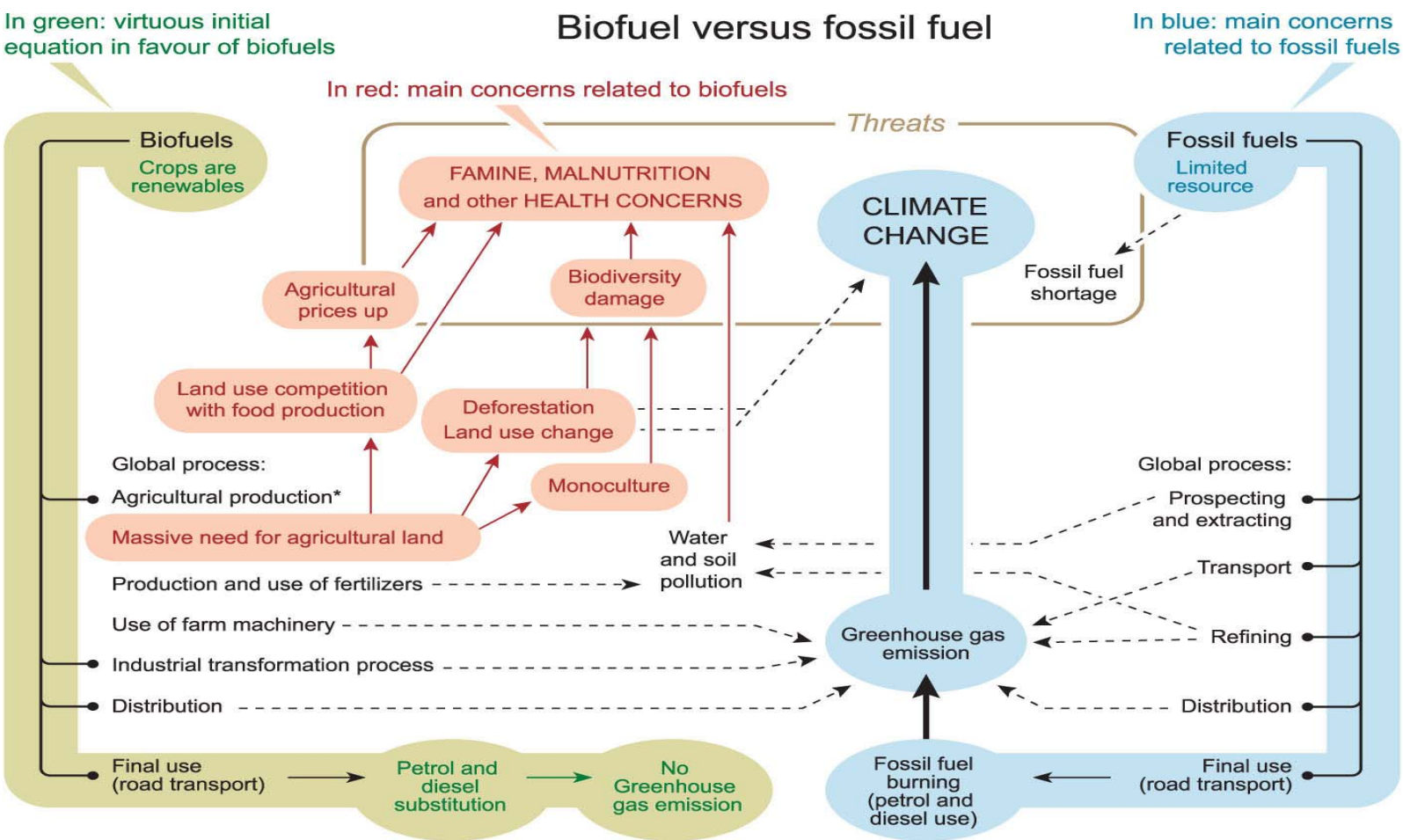
Biofuel versus Fossil Fuel Concerns



* Under the high productivity farming conditions that are prevailing today.

Source: Emmanuelle Bournay, Atlas Environnement du Monde Diplomatique 2007.

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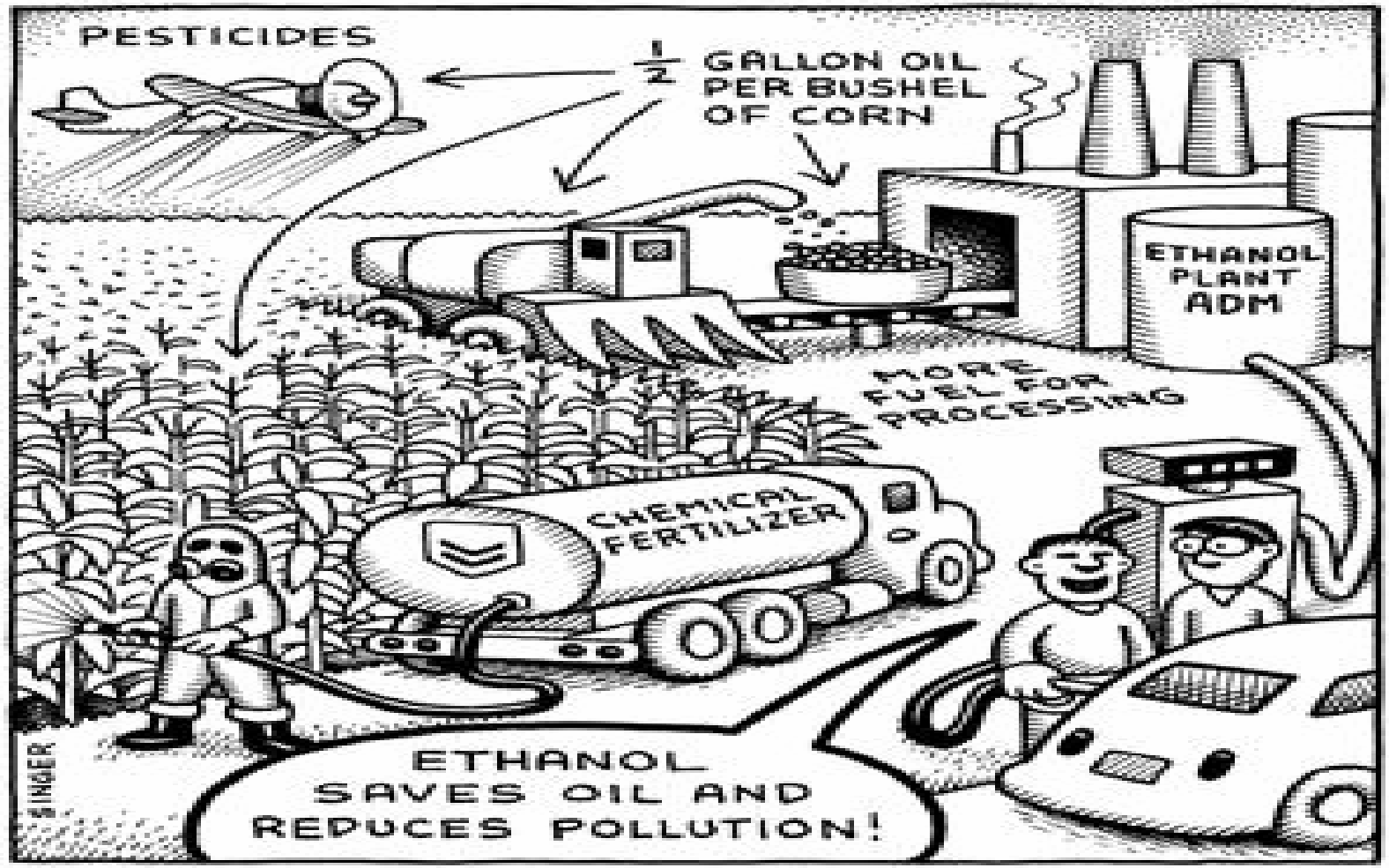
Ethanol Saves Oil and Reduces Pollution (Singer, 2010)?



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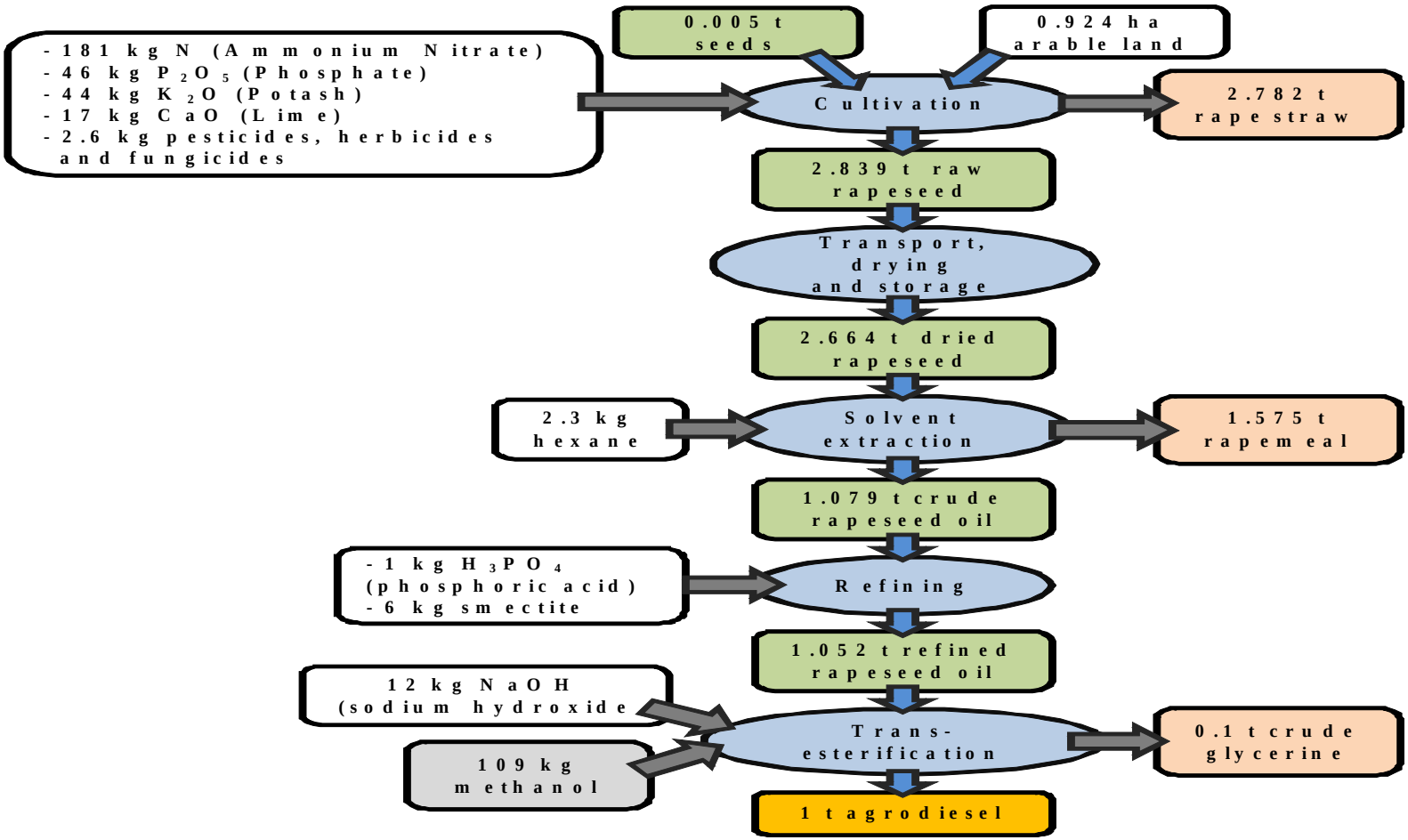
1 Tonne of Rape Methyl Ester (Agrodiesel) – Chemicals!



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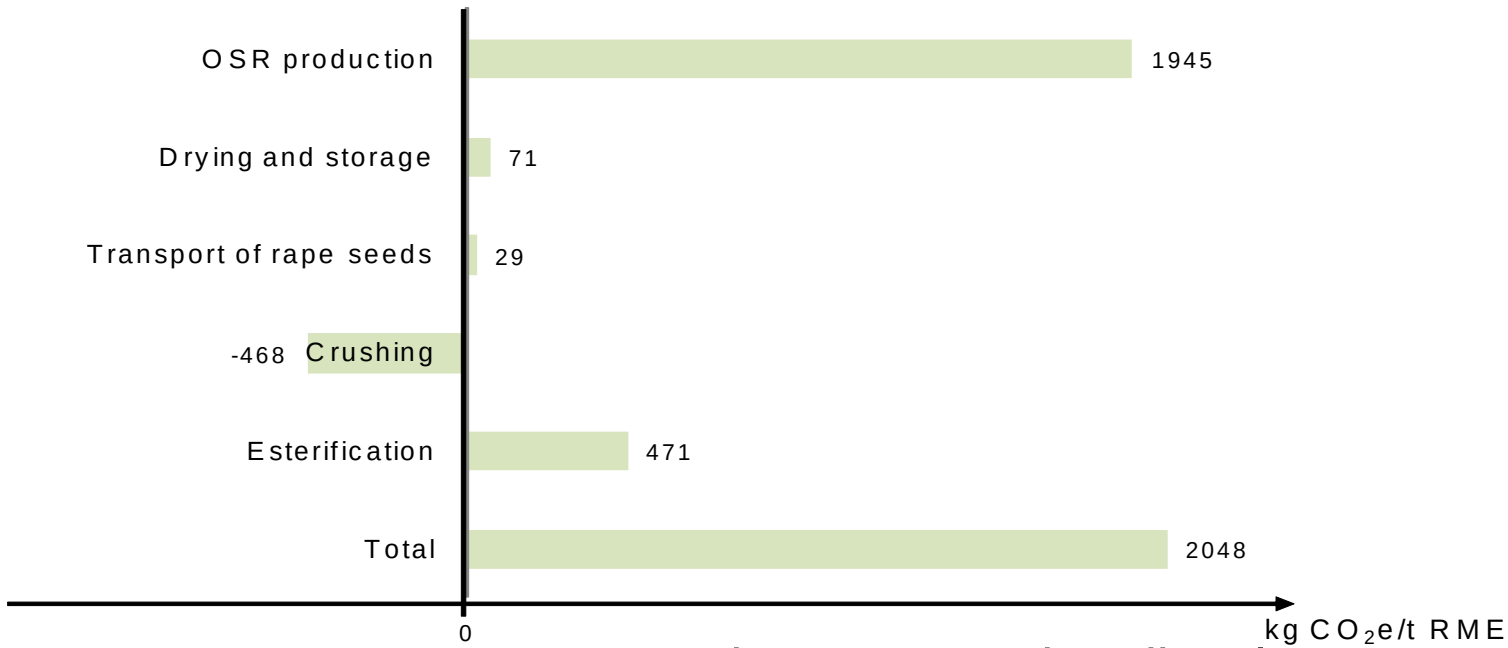
GHG Emissions from Oil Seed Rape (OSR) – UK Estimates



- Represents a 36% GHG saving compared to diesel
- Same formula applied to sugar beat produces a 40% GHG saving compared to diesel
- **BUT ....**

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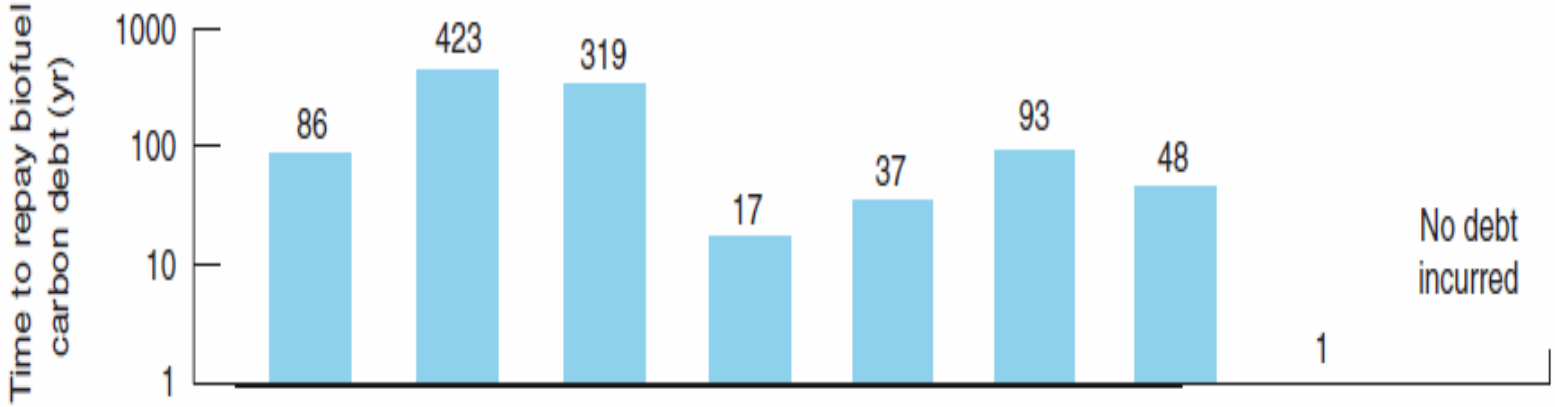
With Land Use Change Factors (Fargione, Science,2008) Remember that the UK Imports 91% of its Agrofuels!



Biofuel	Palm biodiesel	Palm biodiesel	Soybean biodiesel	Sugarcane ethanol	Soybean biodiesel	Corn ethanol	Corn ethanol	Prairie biomass ethanol	Prairie biomass ethanol
Former ecosystem	Tropical rainforest	Peatland rainforest	Tropical rainforest	Cerrado wooded	Cerrado grassland	Central grassland	Abandoned cropland	Abandoned cropland	Marginal cropland
Location	Indonesia/ Malaysia	Indonesia/ Malaysia	Brazil	Brazil	Brazil	US	US	US	US

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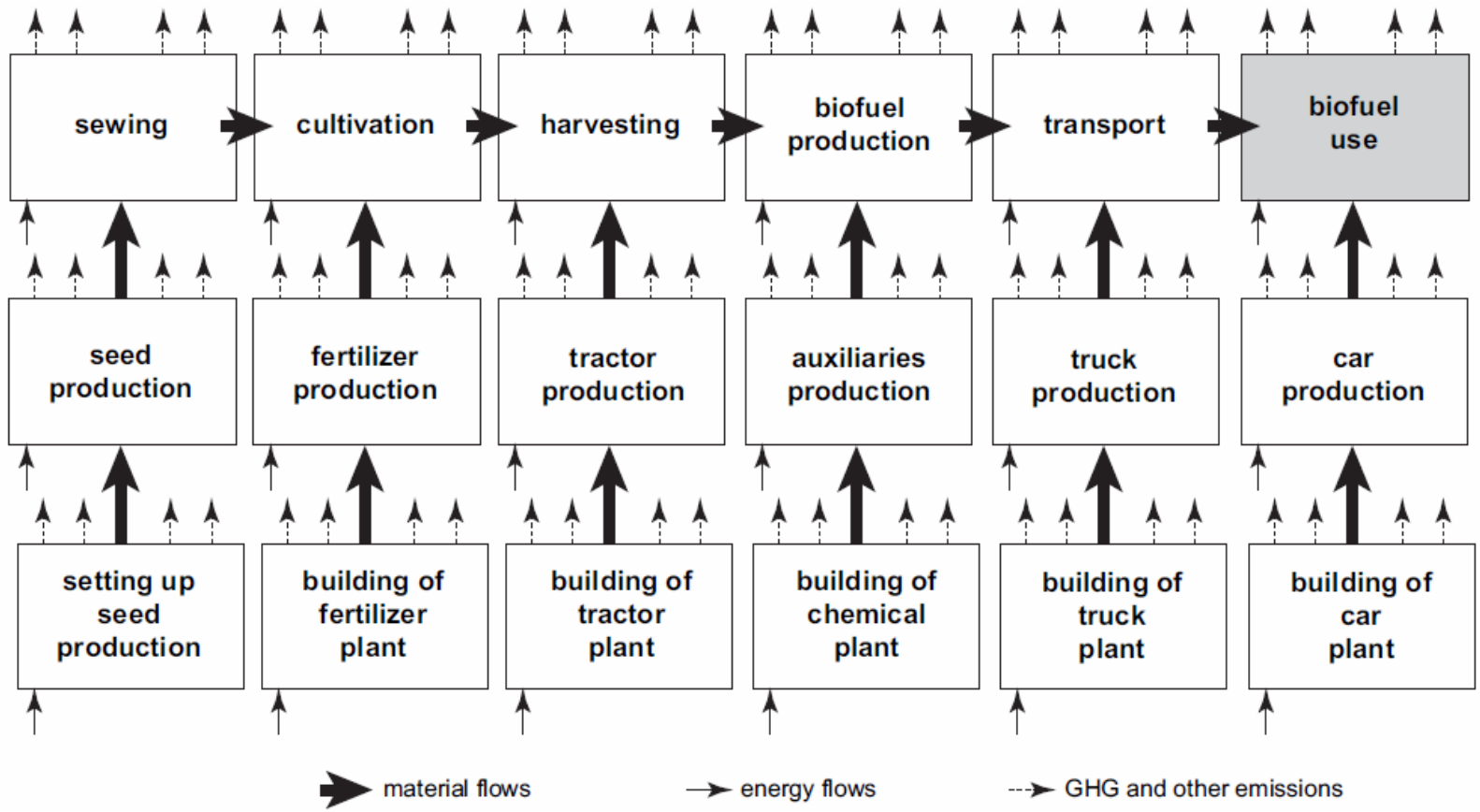
Life Cycle Analysis of Material/Energy Flows and Emissions (Zah, 2009)



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Thank you for Listening

The End