Renewable Fuels in Germany –
Bane or Boom ?

by Jens Kass

POTS 3rd International Palm Oil Trade Fair & Seminar

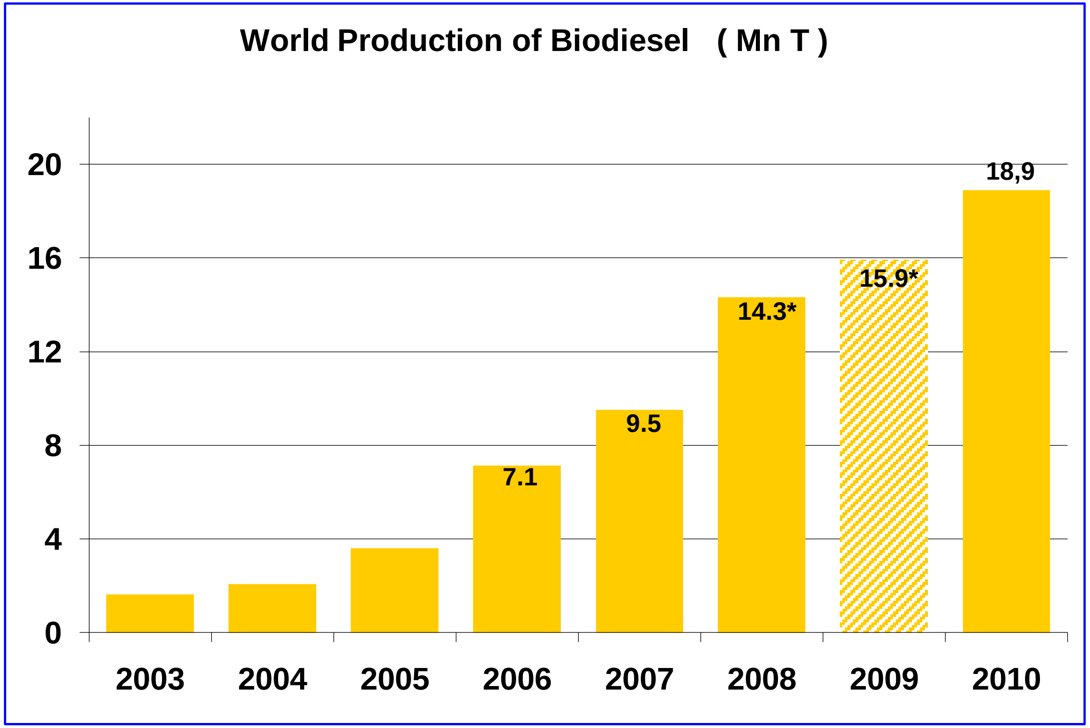
October 2010, Kuala Lumpur

Survey

- Current Situation of Biofuels in Germany
- Current Industry-Structure in Germany
- Traders View
- Investors View
- Situation in Germany:
  Rapeseed or Corn? - Biodiesel or Biogas?
- Legal Frame Conditions
- Task of the EU-Commission and how Germany can reach the 10% Target
- Quo Vadis Biodiesel
- Development of prices
- Palmoil in Germany
- Technical Challenge for Biodiesel Use
- Acceptance of Biofuels in the German Population
- Summary

Biodiesel Output Set to Accelerate in 2010

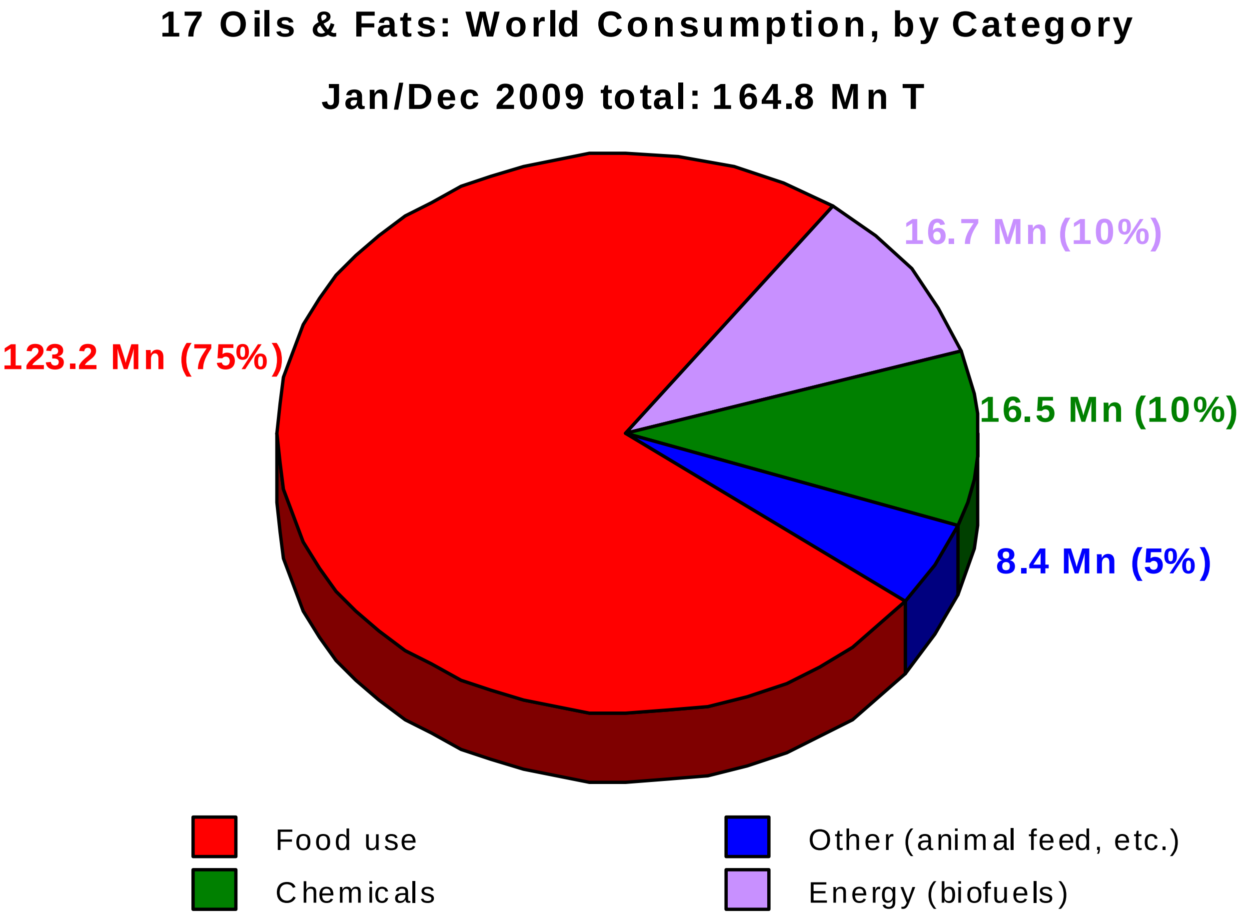
- Sharp increase of 3.0 Mn T likely in Jan/Dec 2010
- Higher usage mandates come into force
- Soya, rape and palm oils are the major feedstocks (1st generation)
- Will become difficult to satisfy demand growth for biofuels in 2011 and in the years ahead

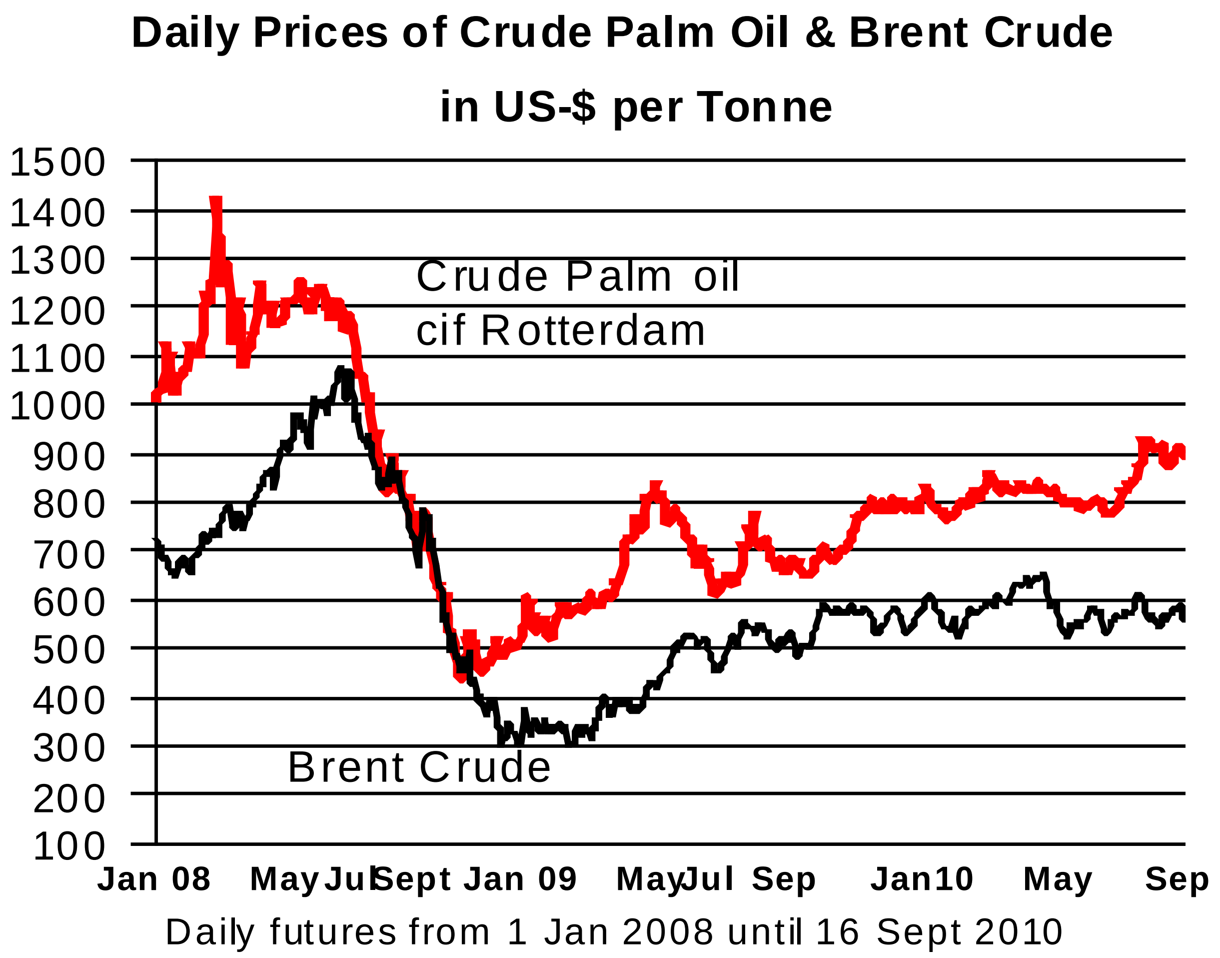


- **World consumption of 17 oils/fats reached 164.8 Mn T in Jan/Dec 2009:**

Of which:

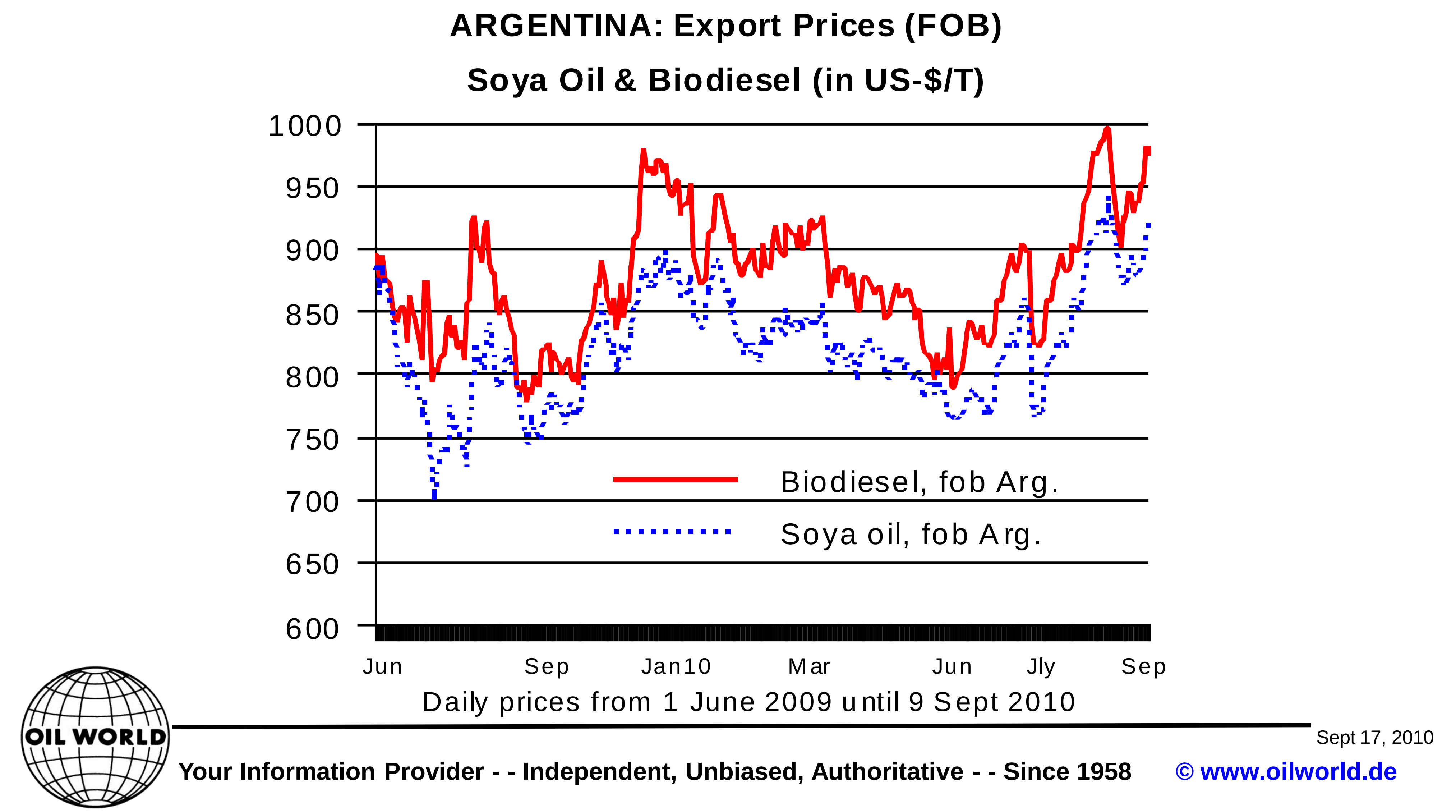
- **Food use 123.2 (75%)**
- **Biofuels (biodiesel & electricity) 16.5 (10%)**
- **Chemical 16.7 (10%)**
- **Other use 8.4 (5%)**





OIL WORLD

Sept 17, 2010


ARGENTINA: Export Prices (FOB)
Soya Oil & Biodiesel (in US-$/T)
1000
950
900
850
800
750
700
650
600
Biodiesel, fob Arg.
Soya oil, fob Arg.
Jun
Sep
Jan10
Mar
Jun
Jly
Sep
Daily prices from 1 June 2009 until 9 Sept 2010
OIL WORLD

Sept 17, 2010

Current Situation Biofuels in Germany
- Sales / Production / Capacities -

- Capacity approx. 5 mio mto (50% utilization in 2009)
- Demand B7 approx. 2,2 mio mto
- Demand B100 approx. O,25 mio mto
- Imports approx. 0,5 mio mto
- Percentage of Biofuels to Total German fuel consumption goes down in 2007: 7,2%, in 2008: 5,9% and in 2009: expectations are at around 5,5%
- Tax in 2008: 15ct/liter Tax in 2009: 18ct/liter
- Petrol stations selling B100 - in 2008: 1900 and in 2009: 200 !!!!!

Current Industry-Structure in Germany
- Biodiesel -

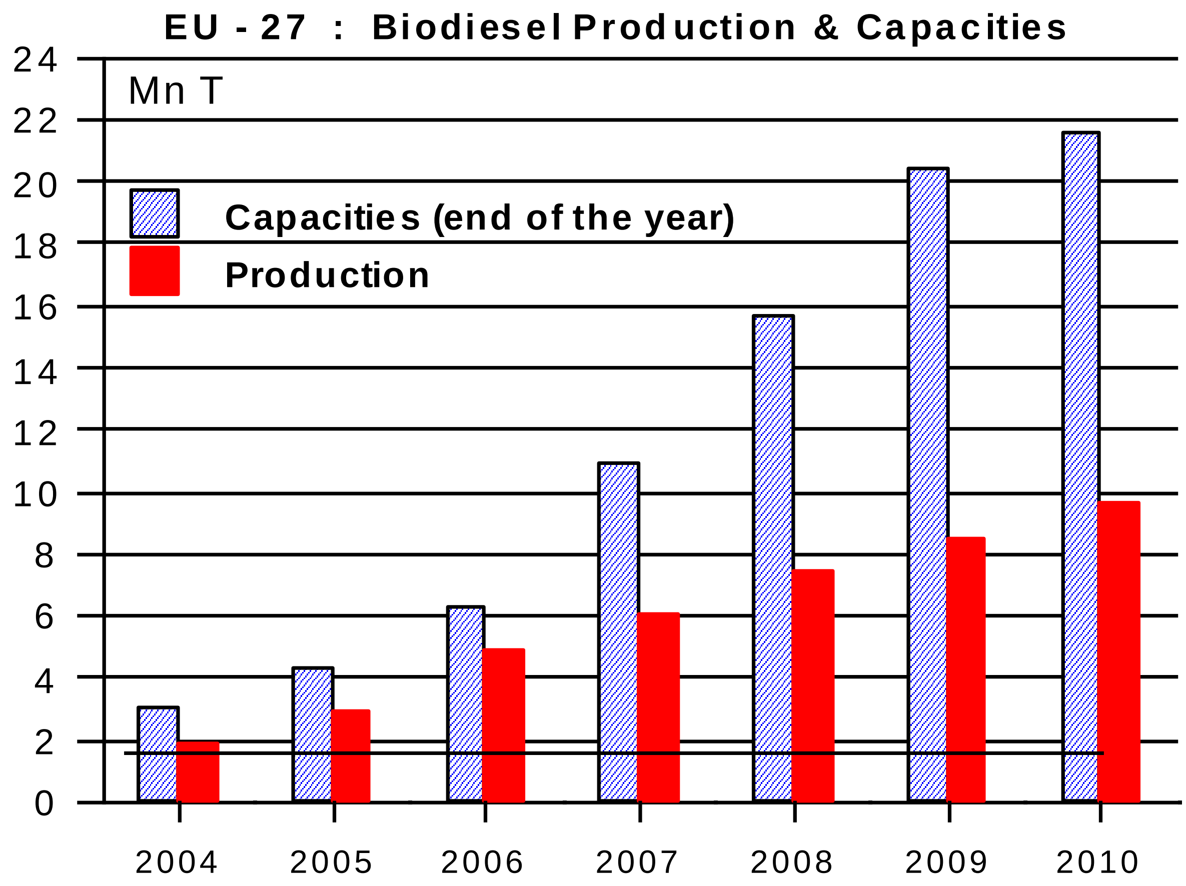
- More integrated BD Facilities (Seedcrush and Refinery)
- Smaller Stand-Alone Producers are under Pressure
- Producer with an international trader mentality and a good monetary backround are in favour compared to „fullcost-calculation“ Facilities.
- More global orientated Players are taking over financially weak local Producers

Traders View

- Difficult to „read the market – development“
- Traders view into their crystal ball is currently very difficult due to a thicker shade of political uncertainty, price violance and other given economic influences

Investors View

- Disappointing
- Biodiesel is not cost-covering since nearly 3 years (positive effects by market – price speculation only)
- CoGen Burning (2009 approx. 450.000 mto Palmoil) is a political- and price related Rollercoaster (2010 expected 225.000 mto)
- Biogas – if you have a good technical concept and your Rawmaterial longterm covered you will survive.
- Private Investors (NO BANKS !!!!) are still interested to invest – in East Europe

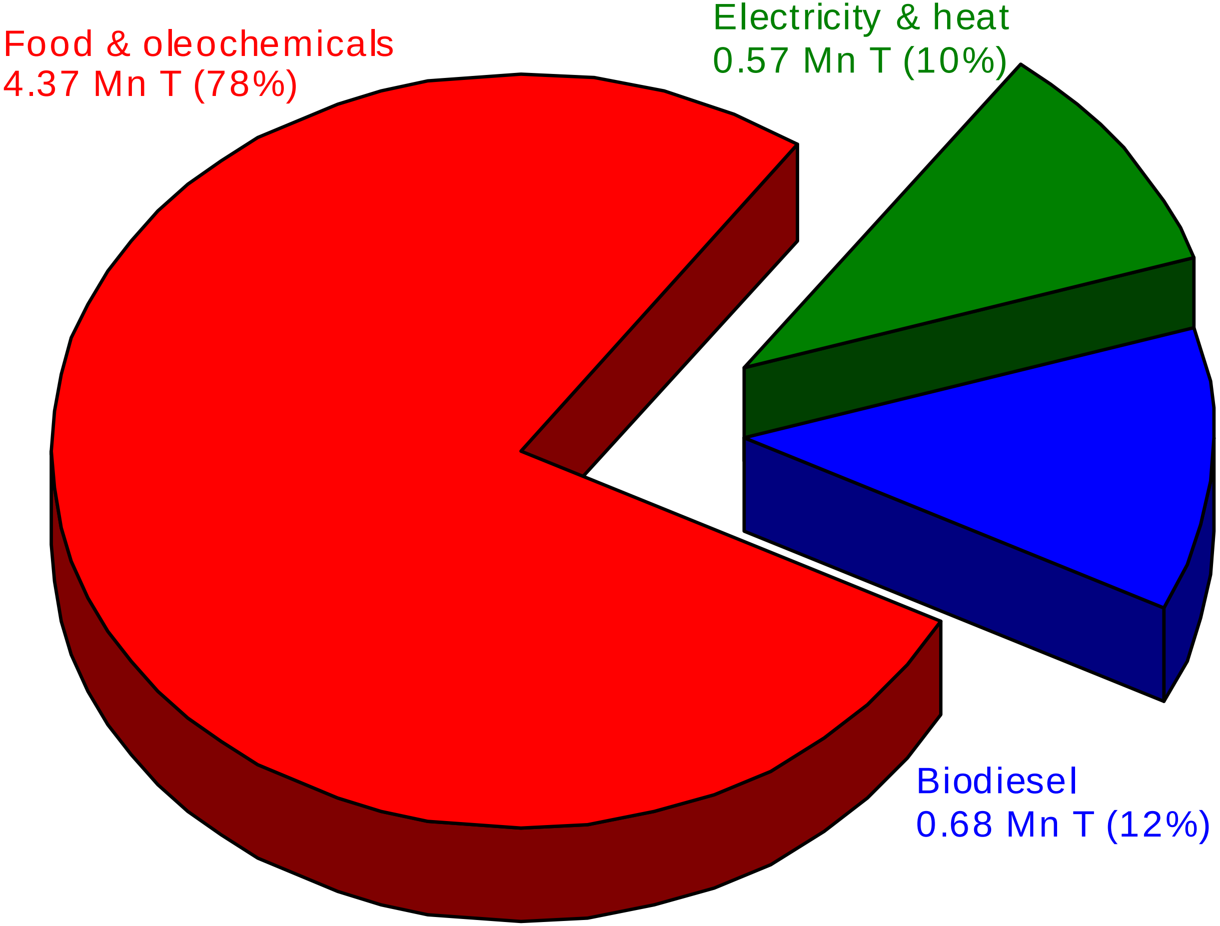

EU - 27 : Biodiesel Production & Capacities
Mn T
Capacities (end of the year)
Production
24
22
20
18
16
14
12
10
8
6
4
2
0
2004
2005
2006
2007
2008
2009
2010

Situation in Germany:

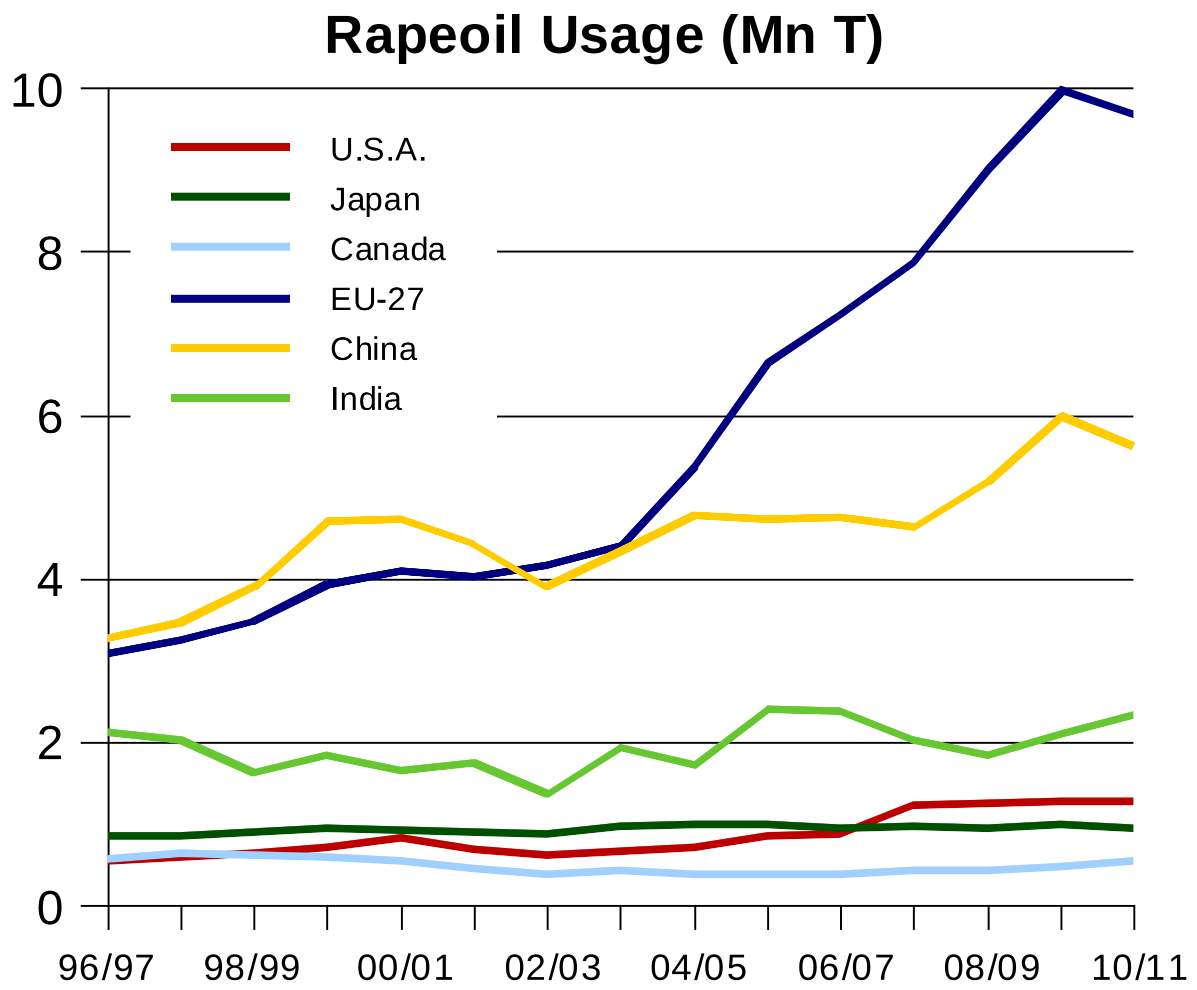
Rapeseed or Corn? - Biodiesel or Biogas?

- We already had a boom for Biogas which has been stopped abrupt in 2008, and political currently reanimated due to our disposal of slurry
- Nowadays we have an anual situation that Rapeseed and Corn are fighting for acres
- Currently the acreage for Rapeseed is stagnating
- For example: if Germany should produce all their sustainable BD with Rapeoil, we need approx. 6,25 mio mto Rapeseed – but Germany`s this years crop is at approx. 5,6 mio mto – and no other Rapeseed-Origin actually is accepted in Germany due to an unclear domestic Sustanability Situation and missing Certification in other Countries.
- Overall Biogas-Producer currently can pay a better prices for Rawmaterials than Biodiesel-Producer with negative Production-Margins.

22% of Total EU Palm Oil Usage (5.62 Mn T) for bio-energy in 2009



- **World rape oil consumption:**
- **Biggest increases in the European Union and in China**



Legal Frame Conditions

- Current German Quota for Biofuels 6,25% = B7 Market (B100 nearly dead)
- B10 is under „construction" in Europe (might last another 15 month before impl.)
- current tax on Diesel is 56 cent/liter = approx. 50% of total Price/liter
- Current tax on gasoline 65,5 cent/liter
- If a liter gasoline costs € 1,50/liter – the German State earns € 0,89 incl. VAT = 60%

Task of the EU-Commission and how Germany can reach the 10% Target

- The EU plays the major role and still is focussed on their 10% Target in 2020

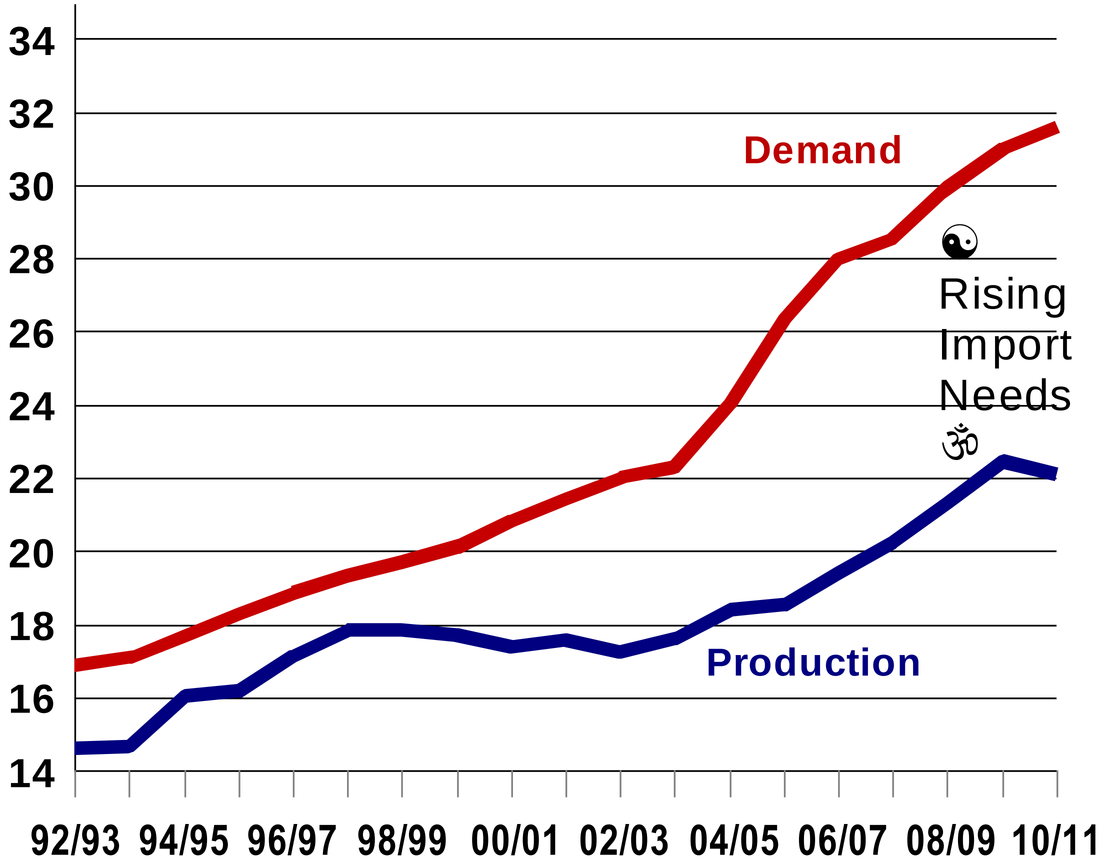
Quo Vadis Biofuels or which Direction Biofuels will go

- Difficult to say due to the fact that the german policy missed a bit it`s own political sustainability
- The current produced Biodiesel is an intermediate Product/maybe even a technical interim solution
- FAME and Hydrotreated VegOils might play a bigger role in future
- Overall Biofuels will stay as part of the total future renewable mix

Development of prices

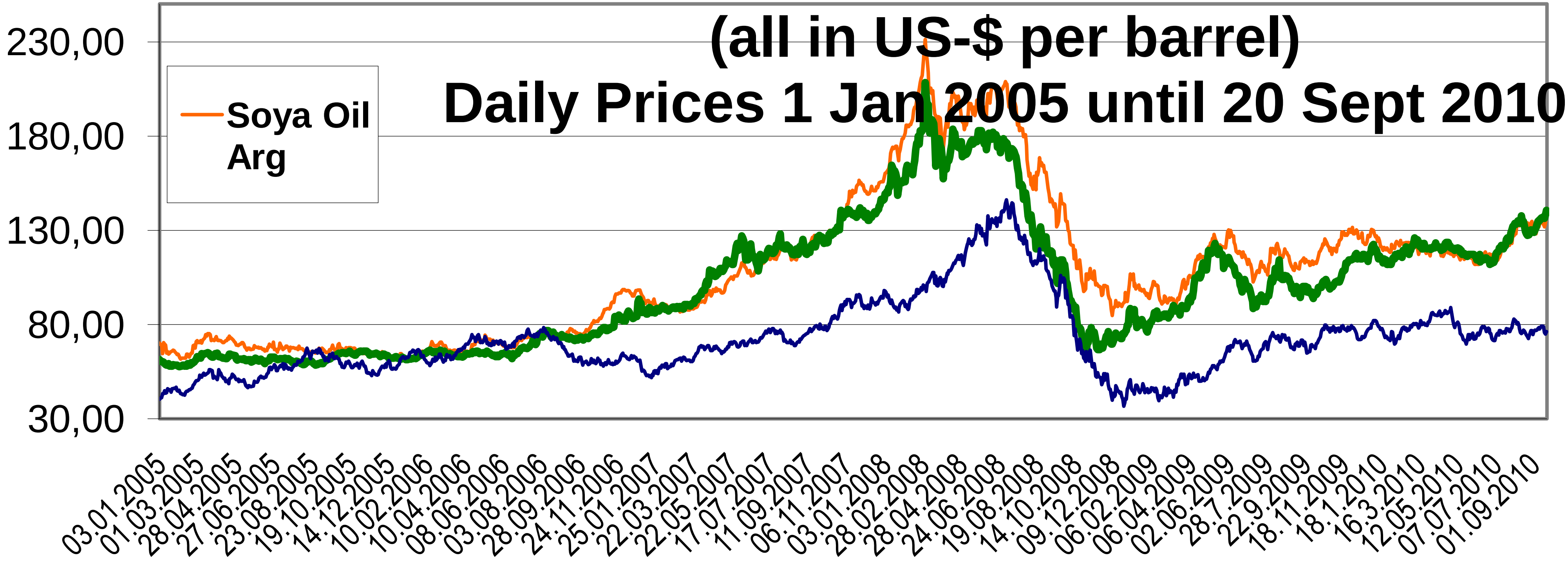
- No real space for a Sustanability Premium at current Price Levels
- Direct Dependence from the Energy- and Agri Markets
- Overall Expectation is a firmer Market

EU-27: Demand & Production of 17 Oils & Fats (Mn T)



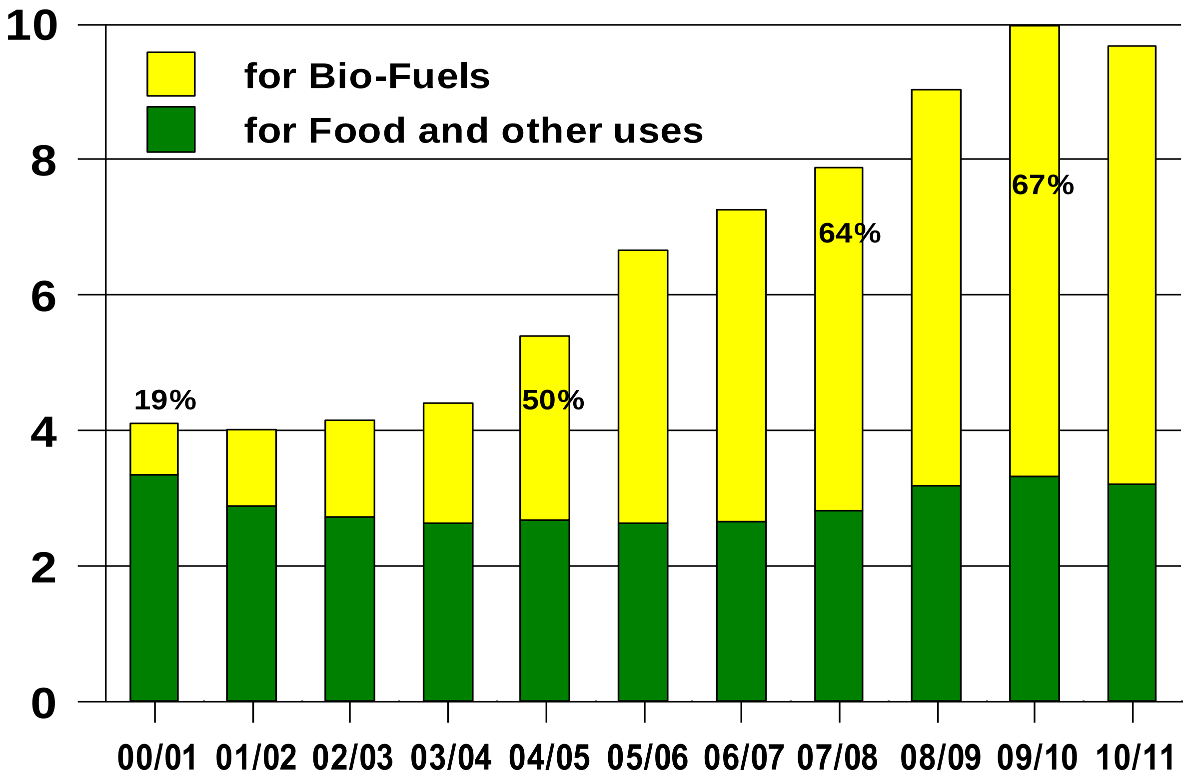
- **In 2010/11 EU-27 consumption details:**
- **Rape oil 9.7 Mn T**
- **Palm oil 6.3 Mn T**
- **Soya oil 2.9 Mn T**
- **Sun oil 3.5 Mn T**

Prices of Crude Mineral Oil Brent & Crude Palm Oil
(all in US-$ per barrel)
Daily Prices 1 Jan 2005 until 20 Sept 2010

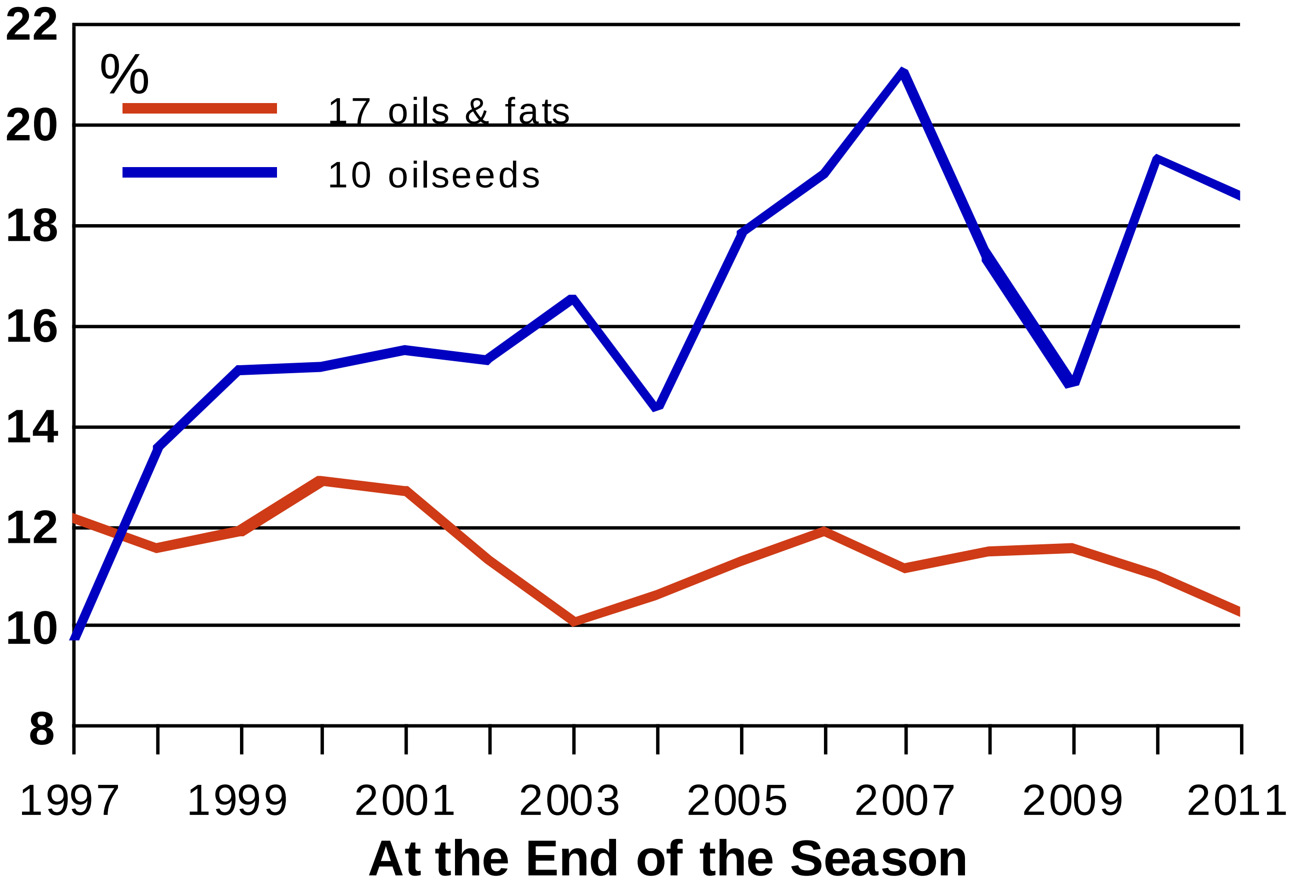


EU-27 : Consumption of Rape Oil

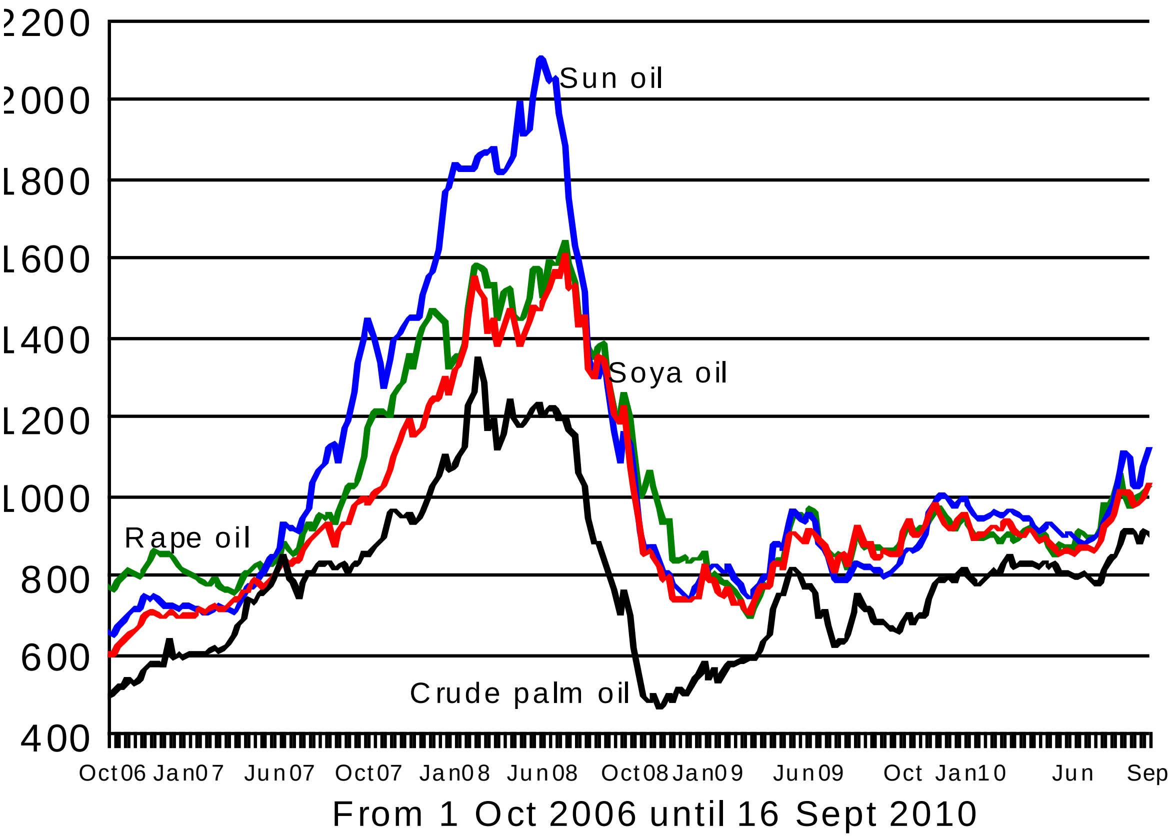
Sharp Increase for Bio-Fuels (Mn T)



World Stocks in Percent of Annual Usage



Weekly Oil Prices in Rotterdam (US-$/T)



OIL WORLD

Sept 17, 2010

Your Information Provider - - Independent, Unbiased, Authoritative - - Since 1958

PRICE FORECASTS & Past Prices for the Leading Commodities - in US-$ /T

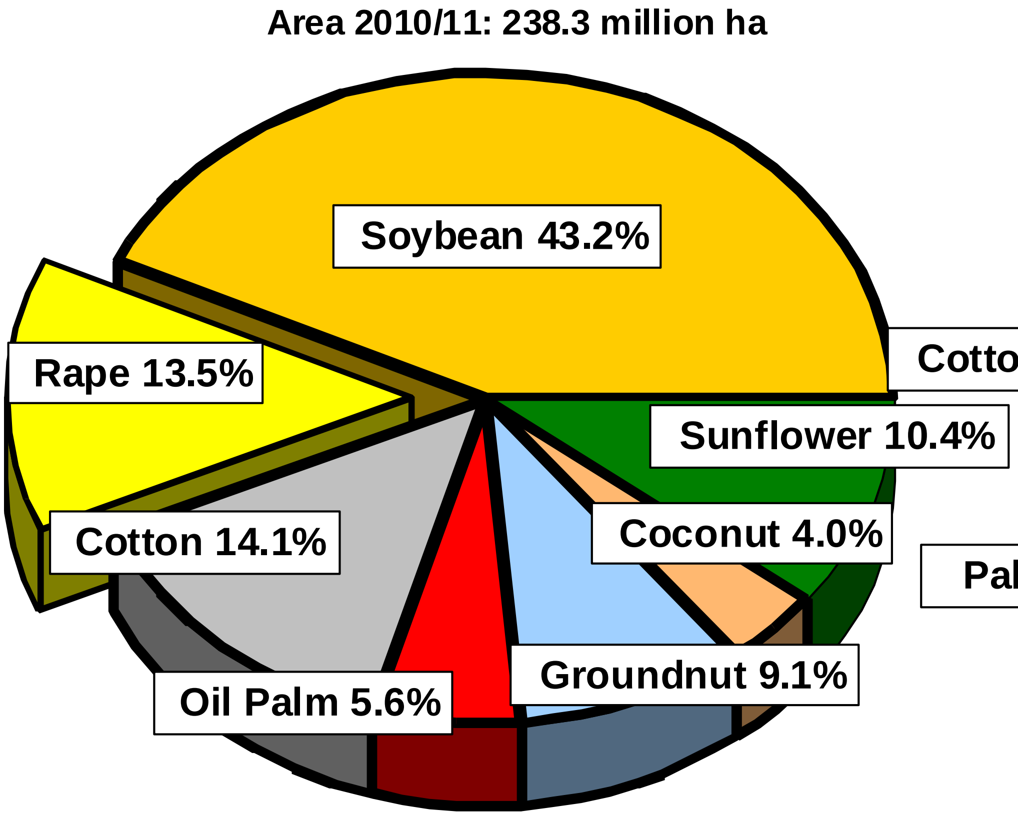
	Jly/Jun 10/11F	Annual Change	09/10	July / June 08/09	07/08	06/07	5-year avg. 05-10
Soybeans, US, cif R'dam	440*	+3%	429	450	507	303	391
Soya oil,Dutch, fob ex-mill	1020*	+14%	893	950	1218	697	863
Soya oil, Arg. fob	940*	+16%	812	827	1105	609	763
Soyapell,44/45%, Arg, Rott	365*	-6%	389	390	410	239	280
Sunseed, EU, Low. Rhine	500*	+19%	420	429	727	341	441
Sun oil, EU fob N.W.Eur. . .	1080*	+20%	898	983	1573	729	965
Sun oil, Arg., fob	1000*	+20%	830	863	1448	643	866
Sun pell,37/38%,Arg, Rott	210*	-2%	215	196	288	154	195
Rapeseed,Europe,cif Hmb	485*	+22%	396	448	604	346	414
Rape oil, Dutch, fob ex-mill	1060*	+19%	893	997	1311	810	948
Rape meal,fob ex-mill Hmb	220*	+7%	205	210	293	161	200
Palm oil crude, cif N.W.Eur	910*	+20%	758	690	1026	602	703
Palm olein RBD, Mal. fob	920*	+22%	755	722	1041	576	702
Palmkernel oil, Mal,cifRott.	1120*	+31%	856	766	1199	679	822
Coconut oil, Phil., cif Rott	1150*	+42%	809	869	1225	731	845

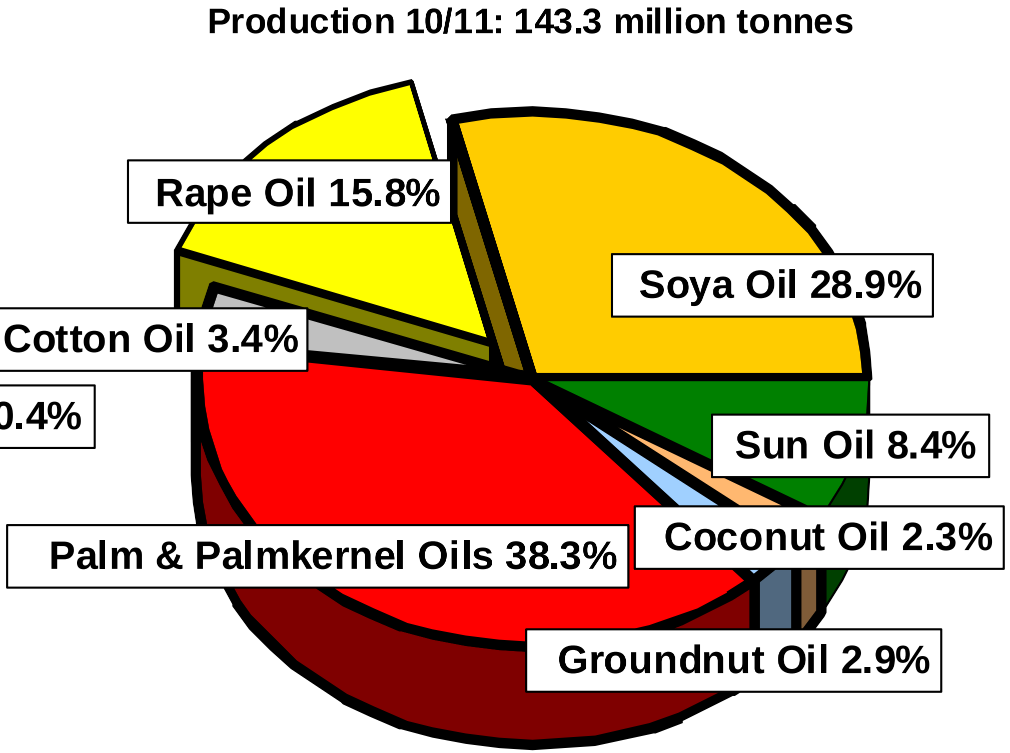
Palmoil in Germany
which role – for Biodiesel – maybe as Direct-Imports?

- Temporary Direct-Imports as BD during the summer months are limited possible
- B100 Demand low (250-300.000 mto mainly Rapeoil)
- Palmoil has a limited Acceptance due to it`s not too positive Image
- Due to uncertain political actions (Sustainability/GHG) in Germany we currently, temporary see less demand
- Due to current too high RBD Palmoil Prices hardly any sales into the CoGen Sector
- Greenpeace Vision by 2050 total German Energy Supply by Renewables, this means

  as well more Biofuels = higher Palmoil Supply !

7 OILSEEDS: World. Harvest. Area & Veg. Oil Output





Technical Challenge for Biodiesel Use

- FAME blends are necessary to reach DIN 14214 Norm (for Palm)
- Negative CFPP Values for PO (technical change possible – but to high costs)
- Sustainability Proof incl. GHG Optimizing
- Decarbonizing from 2015 onwards
- Refusal of Pailmoil as BD Rawmaterial by a few Mineraloil Companies

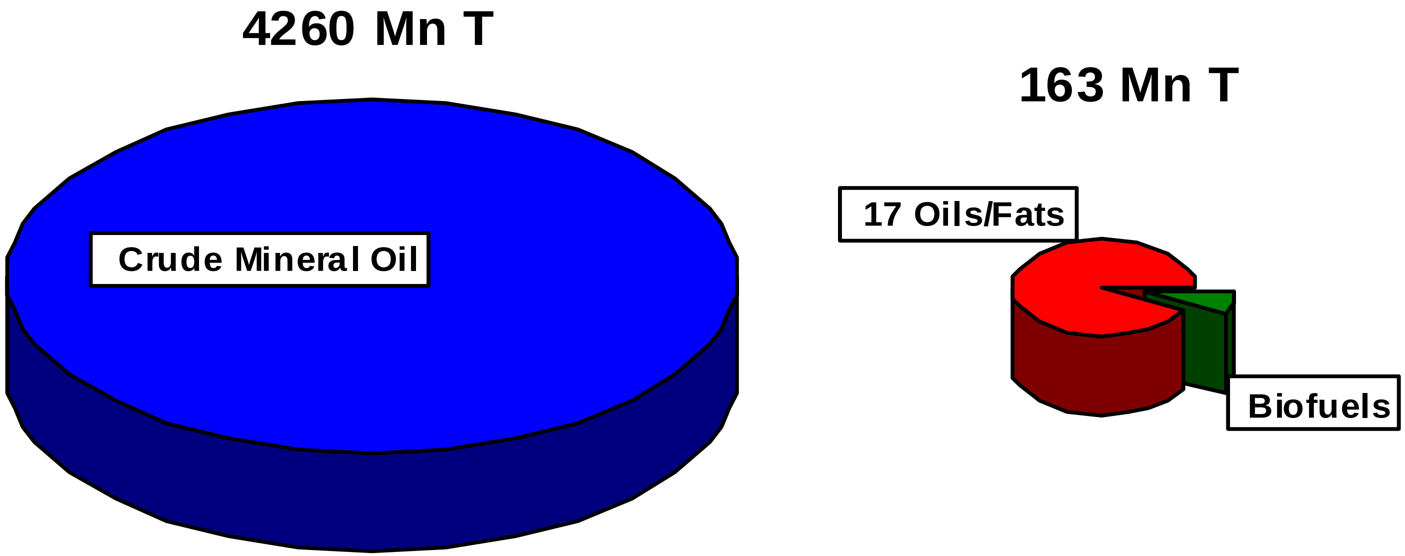
Acceptance of Biofuels in the German Population

- Brilliant Start – now on their way „down south“
- „Plate or Tank“ discussion
- Overall Image Problem – especially for Palmoil
- Constant negative lobbywork of NGO`s - especially for Palmoil
- Hardly any positive effect after „Deep Water Horizon“ – disaster
- Still a long way to go for a positive Acceptance

Biofuels produced from oils & fats CANNOT even partly solve the global energy problems

World Use of Crude Mineral Oil vs.

Veg Oils/ Animal Fats in 2008/09 in Mn T



Summary

- Germany needs Palmoil – but not necessarily for Biofuels directly
- Germany/Europe needs Palmoil basically for Food, Feed and Olechemicals. But to a more and more higher extend to substitute mainly Rapeoil due to it`s demand for Biomass and Fishfeeding
- EU needs to be quick and precise to define a long-term renewables policy
- Need a substantial positive NGO Support
- Palmoil Producers need to react
- Think Global

Thank You for your kind Attention

Jens Kaß (jens.kass@gmx.de)

Renewables –Biomass

Oilseeds – Oils&Fats

Kuala Lumpur October 5th,2010