BIODIESEL CHAINS

Development of Biodiesel in Belgium : State of the art and prospects

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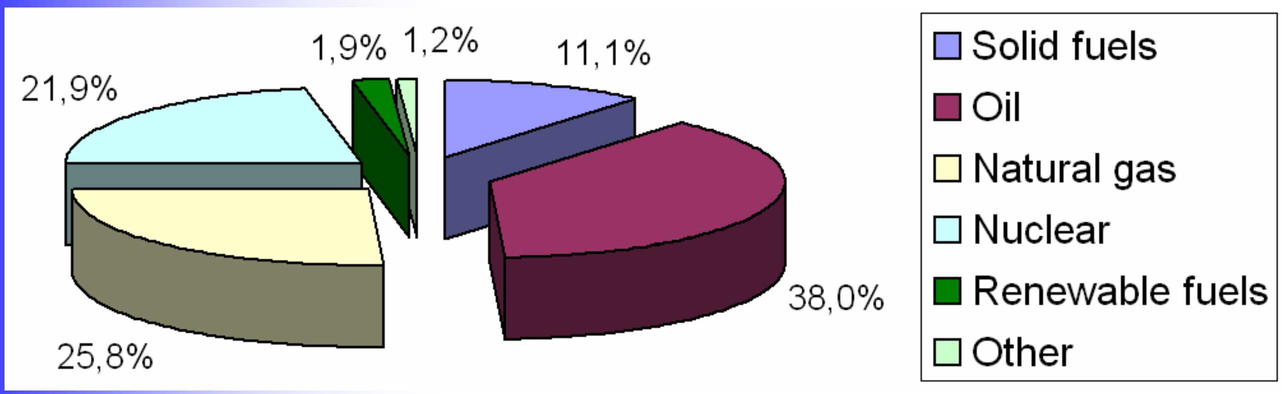
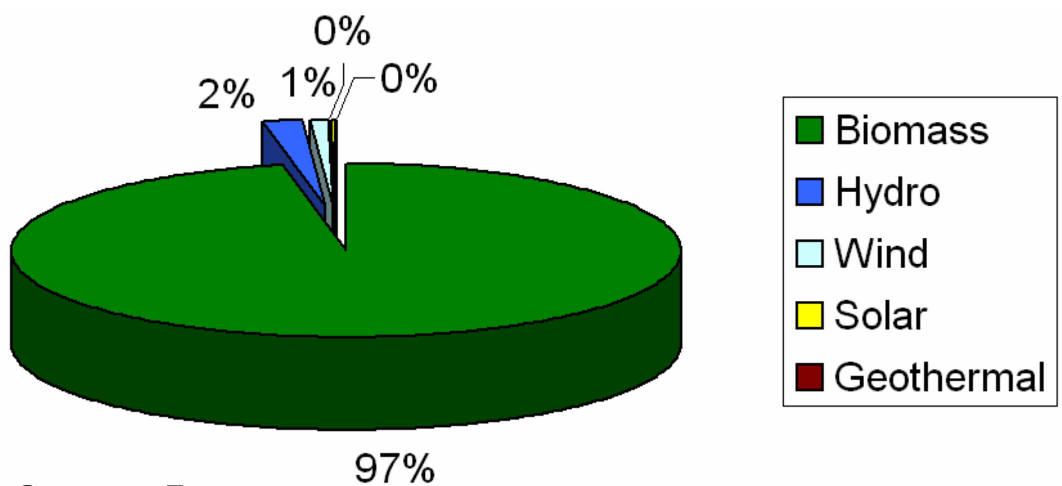
- Belgian energy and GHG pictures
- Procedure for liquid biofuels
- Implementation, tax and production plants
- Discussion and perspectives

The Belgian energy picture

Primary energy consumption in 2003 : 55,8 Mtoe



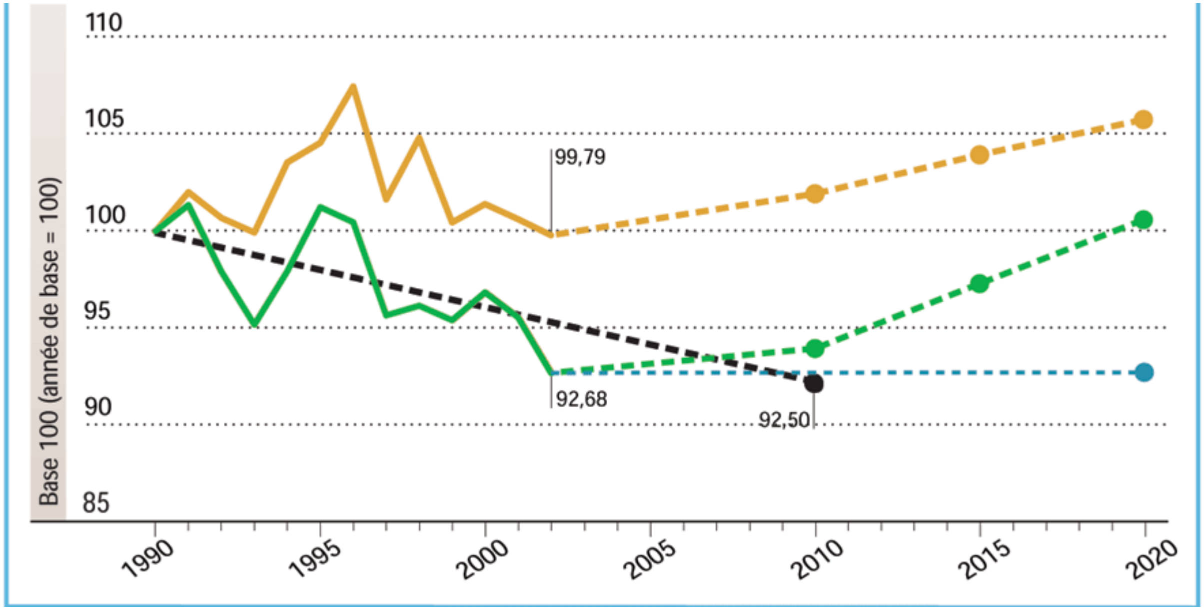
Renewables : 1056 ktoe



Source : Eurostat

The Belgian GHG picture

Emissions of greenhouse gas and projections compared with Kyoto target



Belgium

Belgium with approved measures

Source : MRW - DGRNE

Outlook of procedure

•EU Directives 2003/30 and 2003/96

•Belgian law (published MB 8 March 2005) : set objectives 2% in 2005, + 0,75%/year, up to 5,75% in 2010

•Belgian Law (MB 12 July 05) proposal of tax advantage

•Approval by European Commission (26 Dec 2005)

•Belgian law (MB 20 March 2006) : pure plant oil (PPO) free of tax, starting 3 April 2006

Outlook of procedure

- Belgian law (MB 16 June 2006) : set tax rates, call for tenders with volumes, dates, evaluation committee, criteria for choice
- Official Journal EC (4 July 2006) : European call for tenders for biodiesel and ethanol, deadline 21 August 2006
- Press release (22 Oct 2006) : winners/producers identified for ethanol and biodiesel
- Belgian law (MB 7 Dec 06) : modalities for biofuels without CEN standard (PPO, E85, blends > 5%) and procedure for PPO

Implementation on the Belgian market

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Ethanol :
- → 250 000 m³/y from Oct 2007 to Sept 2013
- → min. 7% (ETBE, possibility for direct blending)

Biodiesel :
- → 380 000 m³/y from Nov 2006 to Dec 2012
- → min. 3,37% for 2006, 4,29% for 2007 and 5% afterwards
- → possibility for higher blends for regional public transport companies

Pure Plant Oil :
- → farmers and cooperatives
- → own rape
- → direct commercialisation

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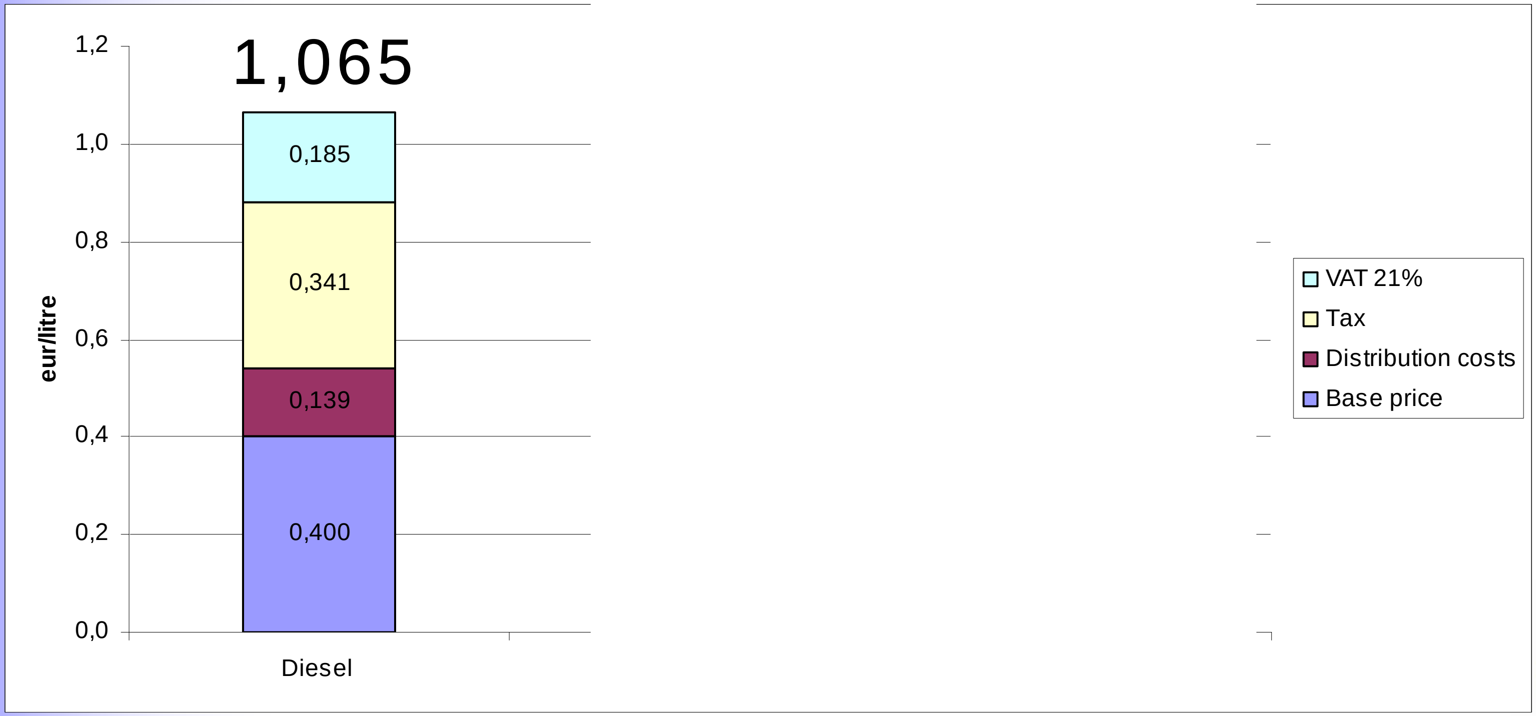
Taxes

➔ Budgetary neutral for Belgium

Diesel consumer price

Before 1 Nov 06



→ Tax reduction of 0,012 €/l ➔ tax advantage of 0,352 €/l biodiesel

→ Exception for public transport (tax reduction for higher %)

Future biodiesel producers

First call Biodiesel (up to Sept 07)

- Oleon : Gent, quota : 72 M litres, cap . 95 000 t
- Neochim : Feluy, quota : 125 M litres, cap. 200 000 t
- Proviron : Ostende, quota : 48.32 M litres
- Flanders Biofuels : Gistel, quota : 40.68 M litres

Second call Biodiesel

- Bioro : Gent, cap. 250 000 t
- Proviron
- Neochim
- Oleon

Biodiesel use

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Transportation fuels evolution and calculated objective

	Gasoline (Ml)	Diesel (Ml)	Total (toe)	Objective BE (%)	Objective BE (tep)
1990	3 698	4 096	6 253 080		
1991	3 673	4 160	6 288 661		
1992	3 886	4 247	6 522 379		
1993	3 793	4 515	6 680 145		
1994	3 787	4 681	6 816 592		
1995	3 776	4 706	6 829 565		
1996	3 647	4 963	6 950 974		
1997	3 372	5 287	7 019 707		
1998	3 339	5 544	7 213 160		
1999	3 179	5 794	7 305 362		
2000	2 978	6 108	7 421 137		
2001	2 898	6 384	7 595 451		
2002	2896	6 899	8 031 732		
2003	2869	7 404	8 439 662		
2004	2683	7 548	8 422 148		
2005	2406	7468	8 146 219	2	162 924
projection 2006	2324	7833	8 395 327	2,75	230 871
projection 2007	2245	8216	8 661 688	3,5	303 159
projection 2008	2169	8618	8 945 975	4,25	380 204
projection 2009	2096	9040	9 248 899	5	462 445
projection 2010	2025	9483	9 571 212	5,75	550 345

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Discussion and perspectives

Call for tenders : best solution ?

+ investments in Belgium

+ no imports from outside EU

- Difficult choice

- No flexibility (producers, quantities)

- Biofuels price increase ?

Tax system : good ?

+ Neutral for state budget

+ Good for rational use of energy

- Should allow tax reduction for high blends

- Advantage for oil companies

Discussion and perspectives

Supply / demand of rape

Belgian biodiesel capacity will probably be above 500 000 t/y while current rape area in Belgium can supply 15 000 t/y.

→Will supply be possible tomorrow in Europe ?

→Imports of rape, soybean oil, palm oil !!

→Change standards

→Certification for imports needed ?

Discussion and perspectives

Market issues

- Obligation necessary for oil companies ?
- Communication strategy is important for consumer acceptance
- Biodiesel in public transportation companies (TEC, De Lijn, STIB)
- Objective beyond 2010 (10% by 2020) ? What biofuels ?

First pump in Belgium with biodiesel

Thank your for your attention

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