

Recent development of liquid biofuels in the European Union

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Content

- Directives 2003/30 and 96
- Biomass Action Plan
- EU strategy for biofuels
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- Standards
- Overview of market developments



Directive 2003/30

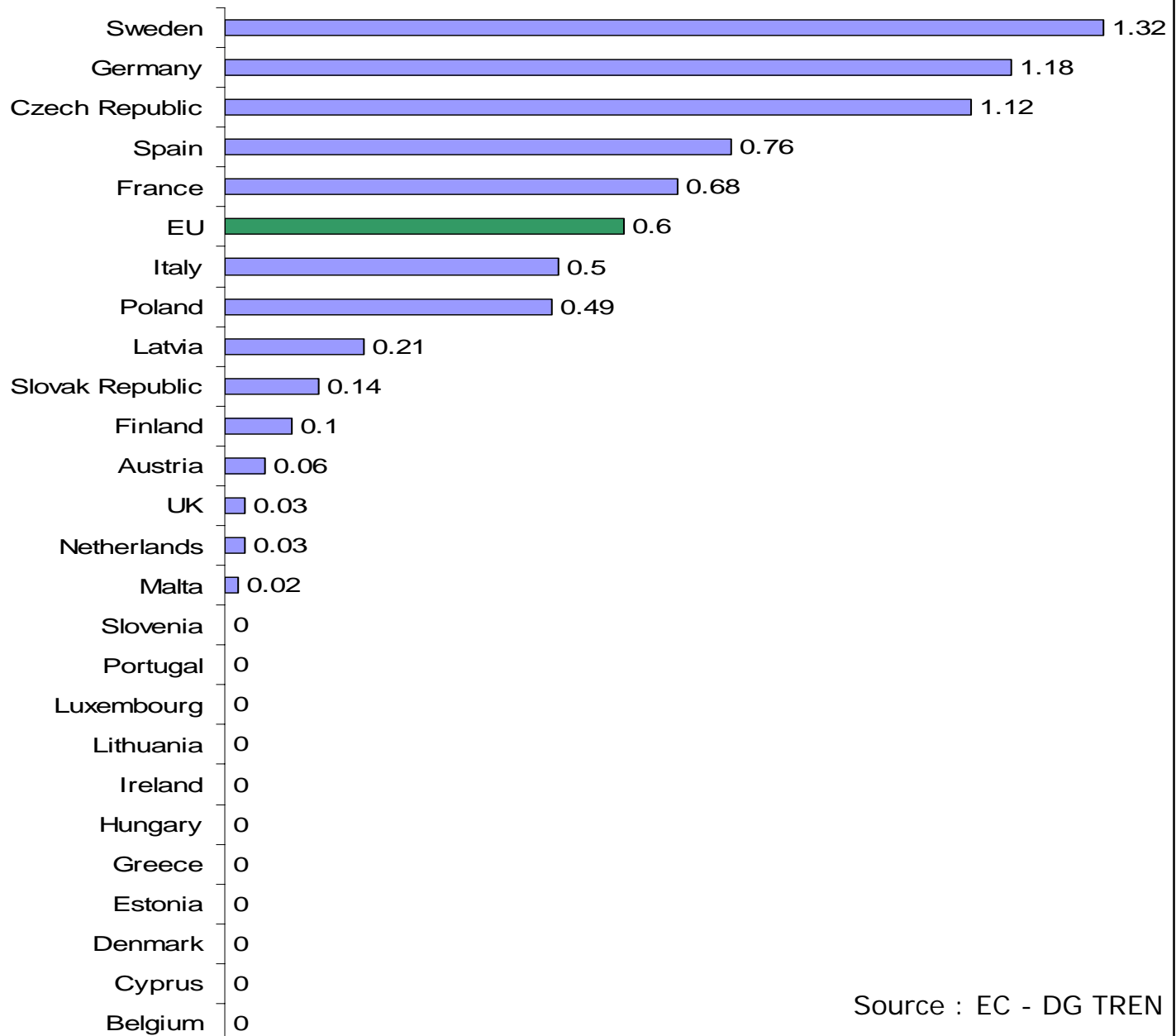
- Objectives : 2% in 2005 → 5,75% in 2010
- National indicative targets and reports
- Review of the directive by the end of 2006

Directive 2003/96

- Minimum taxes on diesel, gasoline, etc.
- Possible reduction for 6 years
- No overcompensation



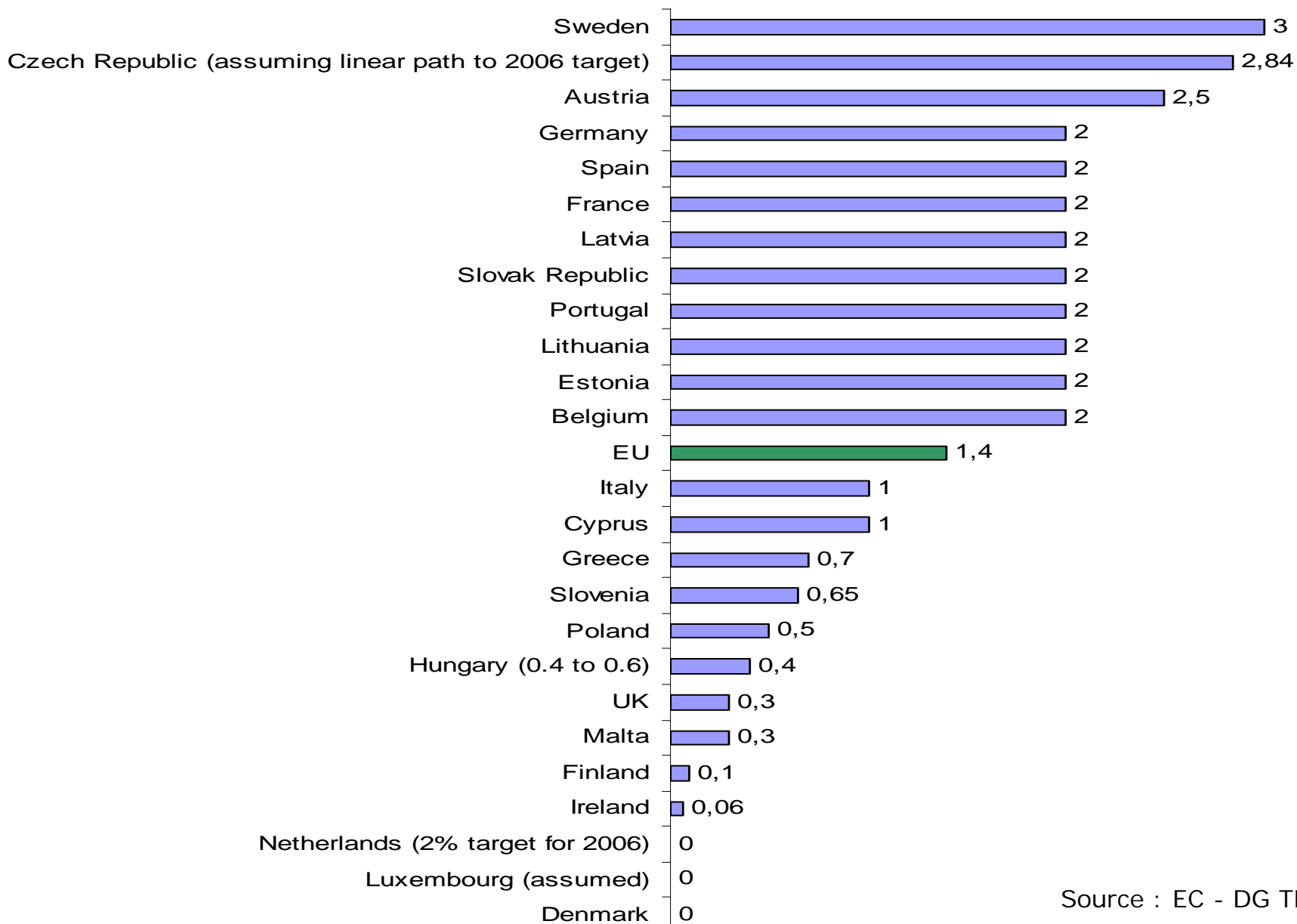
Figure 1 - Market share of biofuels in EU member states, 2003 (energy content, %)



Source : EC - DG TREN

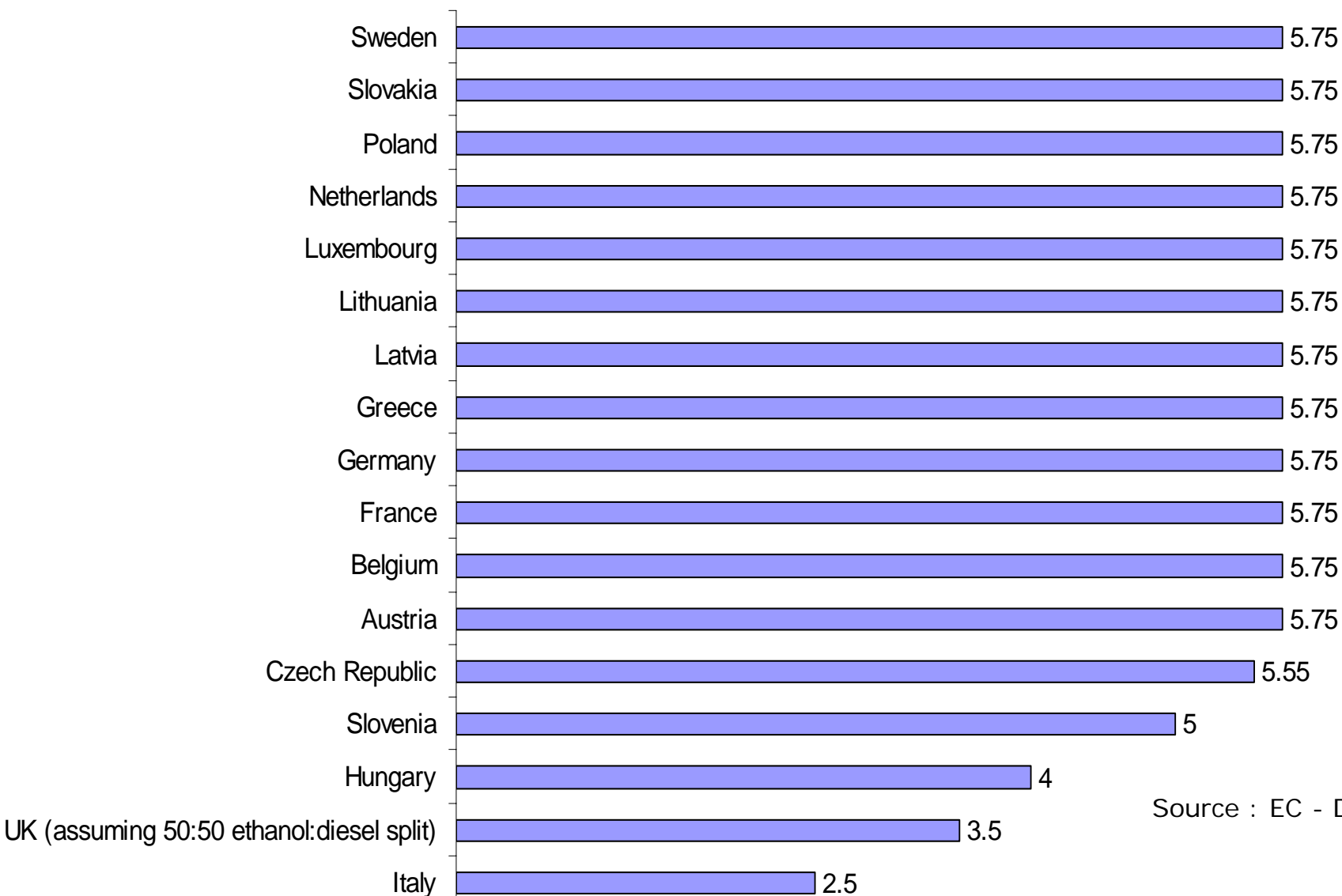


National indicative targets for biofuel market share in EU member states, 2005 (%)



Source : EC - DG TREN

National indicative targets for biofuel market share in EU member states, 2010 (%)



Source : EC - DG TREN

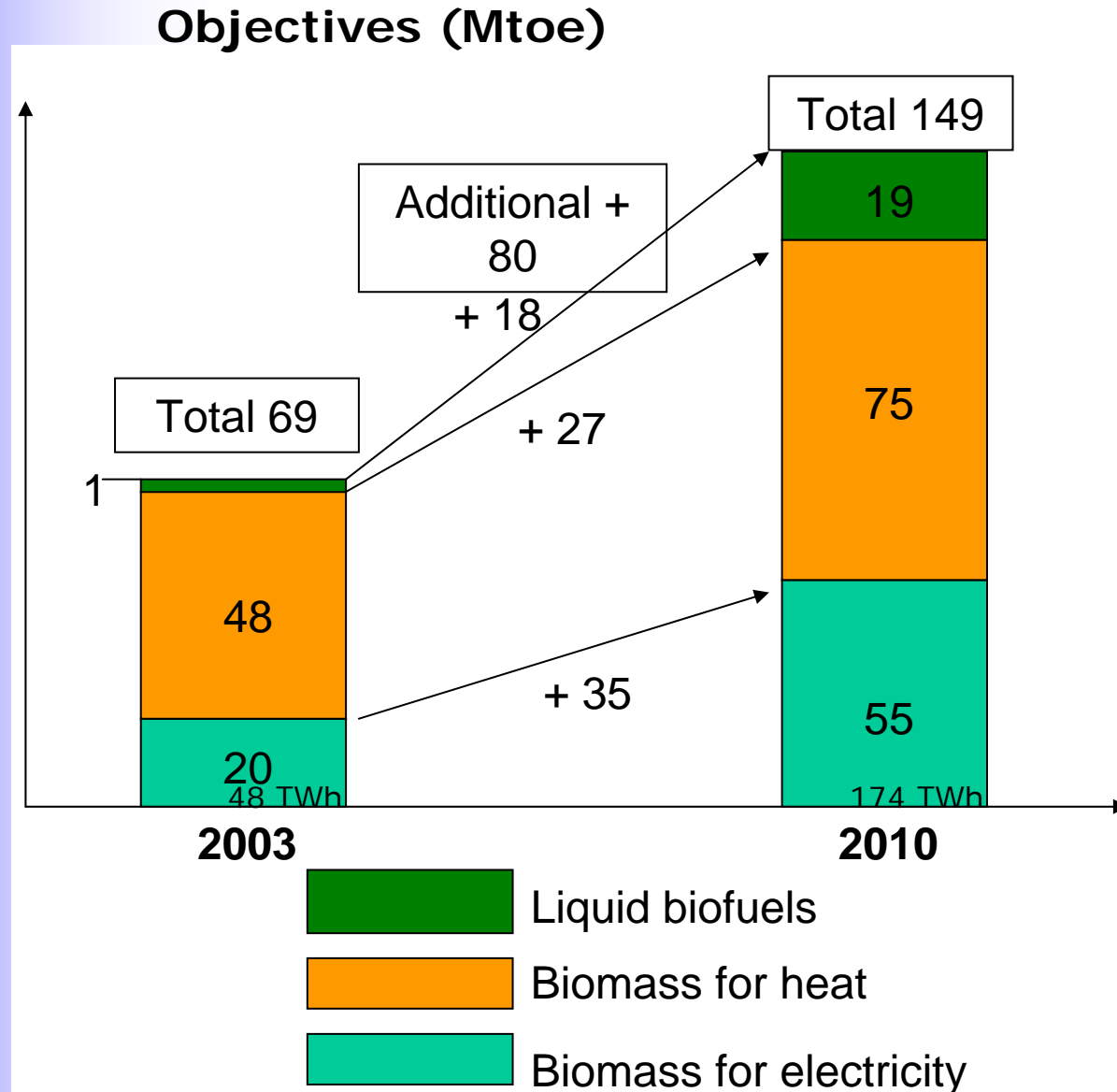
Not yet fixed (need not fix until 2007): Cyprus, Denmark, Estonia, Finland, Ireland, Malta, Portugal, Spain

Incentives

- Fiscal advantage : 25 – 64 c€/l biodiesel, 29 – 75 c€/l ethanol (FR, DE, IT, AT, PO, SP, SE, UK, BE)
- Based on market or through call for tenders (FR, BE)
- Future → biofuels obligations ?



Biomass Action Plan COM(2005)628



Biomass Action Plan COM(2005)628

- Revision of the biofuels directive
- Encourage second generation biofuels
- Public procurement of clean vehicles
- Biofuels – CO₂ reduction targets for cars
- Balanced approach for imports
- Amend the biodiesel standard (type of oil, ethanol)
- Review the fuel quality directive (VP - ethanol, % biodiesel)
- Communication



EU Strategy for Biofuels COM(2006)34

7 policy axes

1. Stimulating demand
2. Capturing environmental benefits
3. Developing the production and distribution of biofuels
4. Expanding feedstock supplies
5. Enhancing trade opportunities
6. Supporting developing countries
7. Supporting research and development



BIOFRAC and European Biofuels Technology Platform

Biofuels Research Advisory Council : Vision
for 2030, demand, resource, supply → 25%
biofuels by 2030

Roadmap : 1st generation → 2nd generation
→ Integrated refinery concept

Creation of European Biofuels Technology
Platform (June 06)

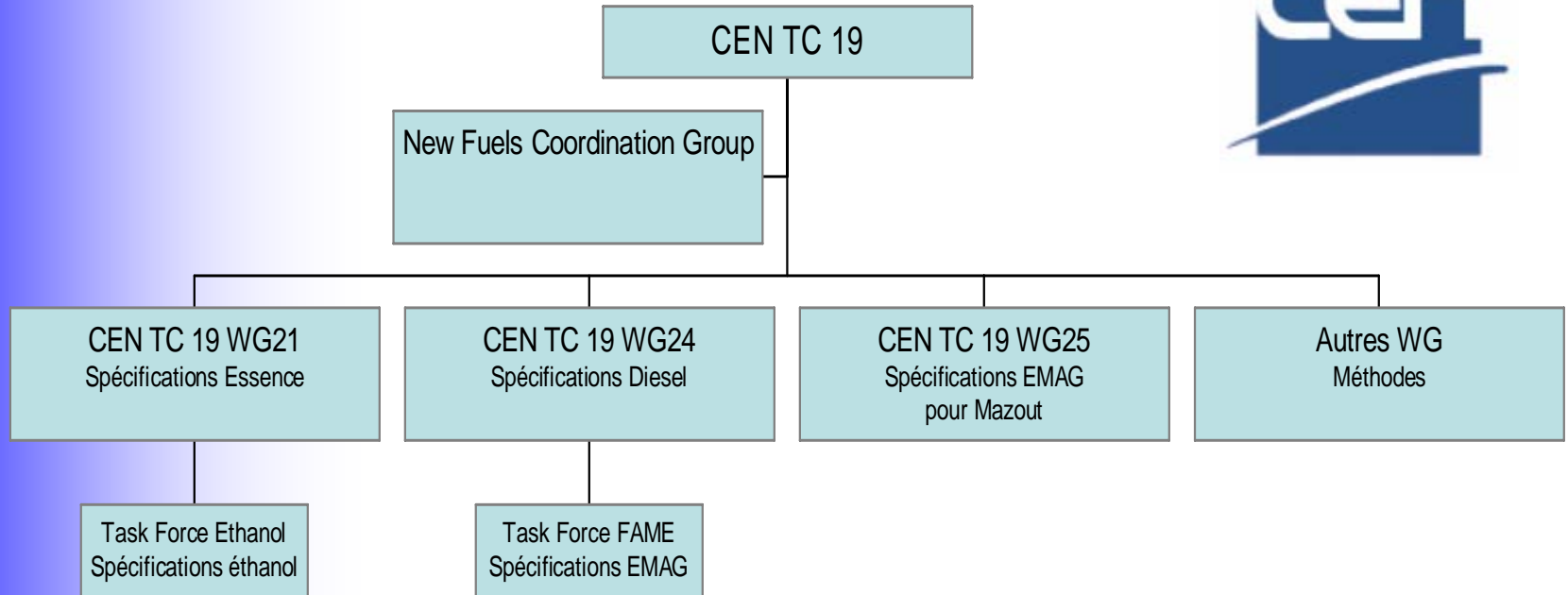


Standards



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Standards



Standards

Existing

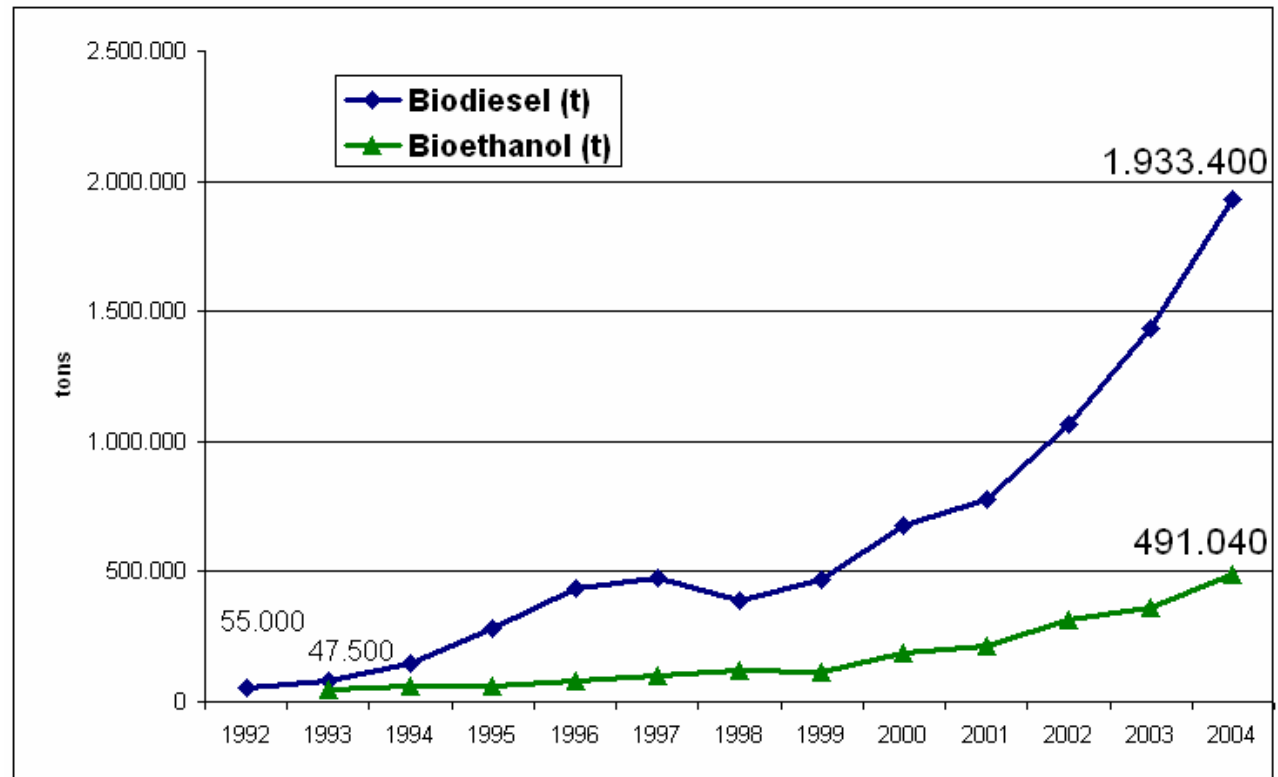
- EN 590 for diesel, 5% biodiesel allowed
- EN 228 for gasoline, 5% ethanol allowed
- EN 14214 for biodiesel
- E85 treated separately (CWA 15293)

Priorities for future

- Fatty Acid Ethyl Ester - FAEE (inside EN14214)
- Revision of EN590 for 10% biodiesel
- Ethanol 10% (depending on dir 2003/17)
- Later : BTL, B>10, PPO



Market development

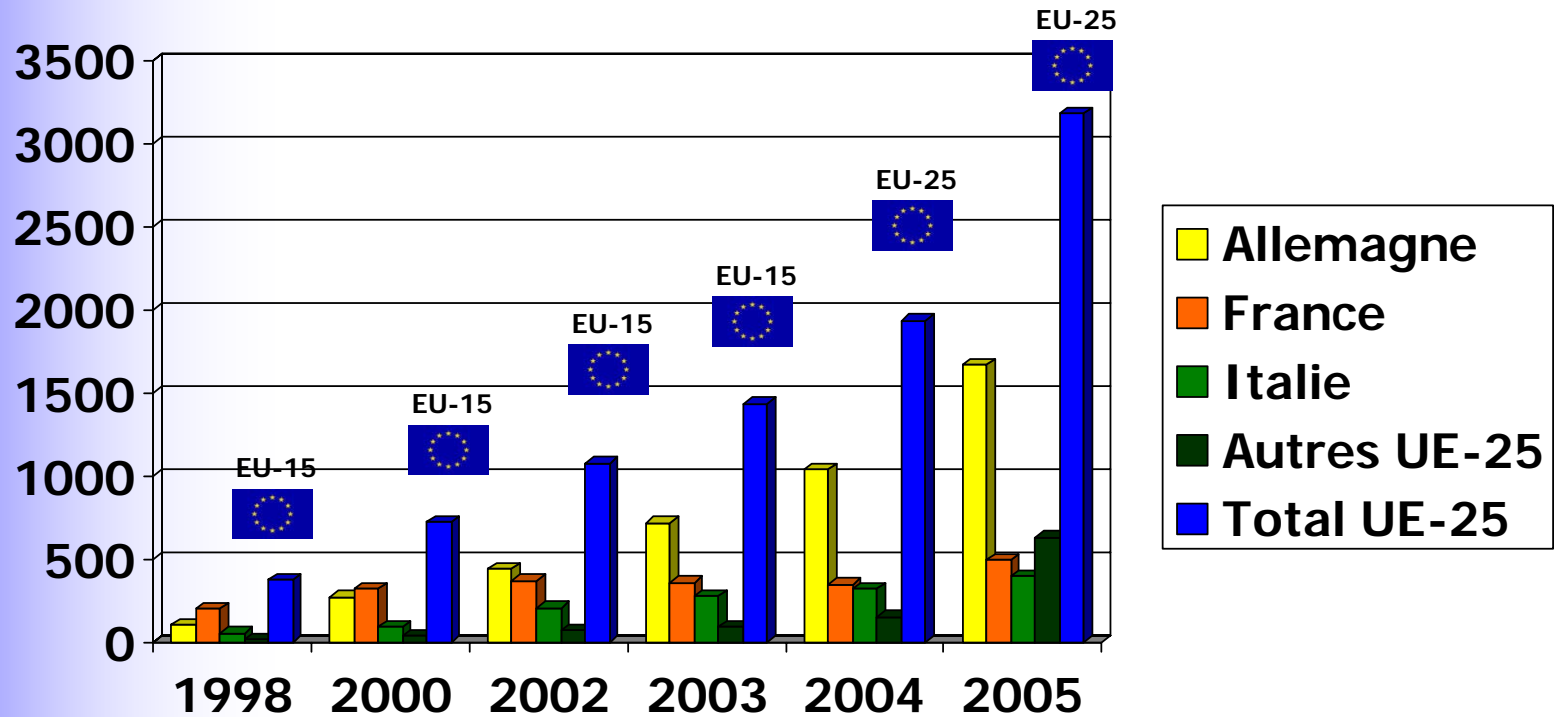


- ~ 70 plants biodiesel
- ~ 30 plants éthanol
- ~ 8 plants ETBE



Market development

Biodiesel



Source EBB



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Market development

Biodiesel

In Germany biodiesel is used pure by captive fleets, through 2000 pumps, and in blending (< 5%)



In France half of the refineries are incorporating biodiesel (< 5%). Busses in 30 cities are fuelled with 30% biodiesel blends.



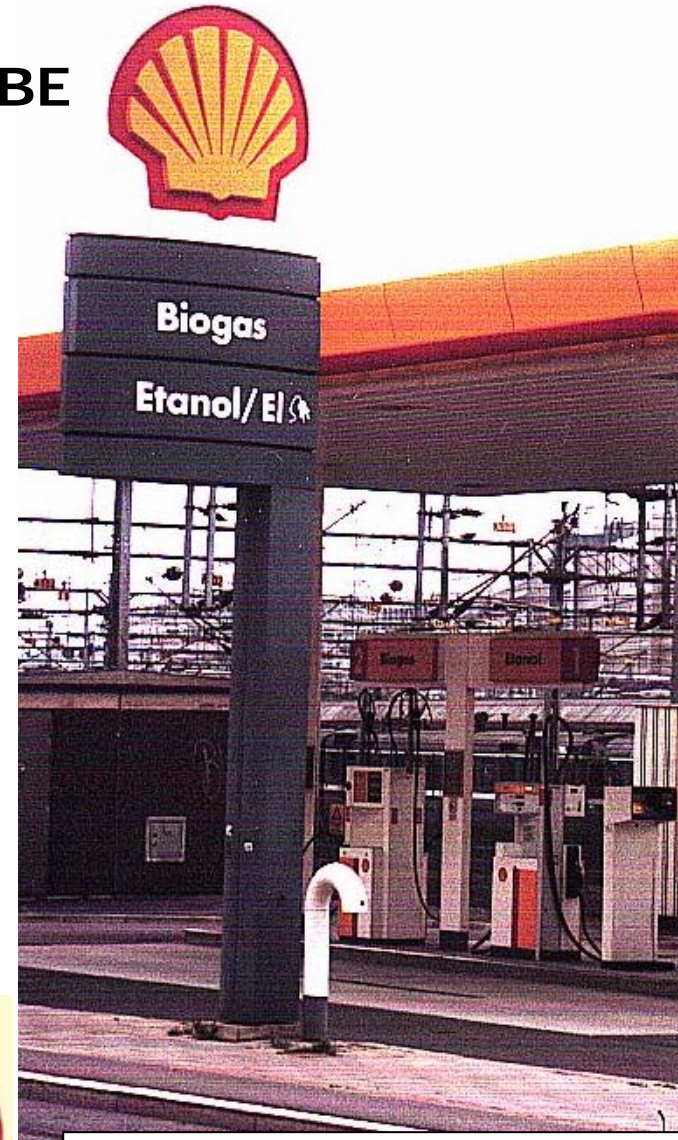
Market development

Ethanol et ETBE

3 plants have started ethanol production in Germany in 2005, for example in Zeitz, 300 000 m³ /year



Flexi-fuels vehicles (can run on 85% ethanol) have started market penetration in Sweden (15000 units). Projects for Germany and France



In Sweden, 300 pumps are distributing Ethanol 85%

Market development

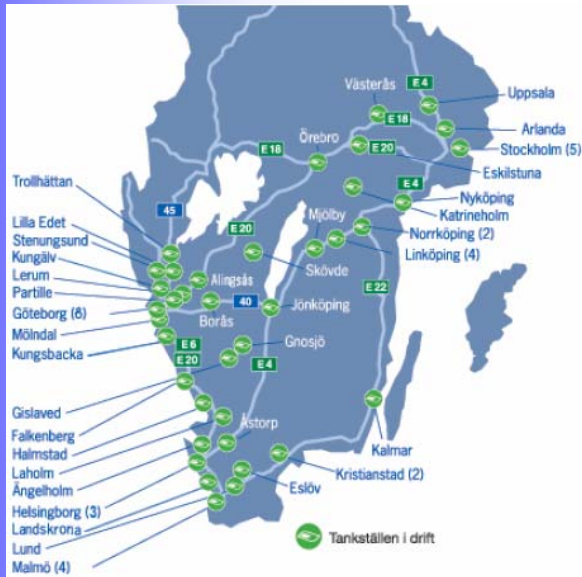
Pure vegetable oil

In Germany more than 200 small units are producing rapeseed oil for direct use in modified engines



Market development

Biogas



In Sweden biogas starts its development with 60 gas tank stations



Thanks for your attention

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