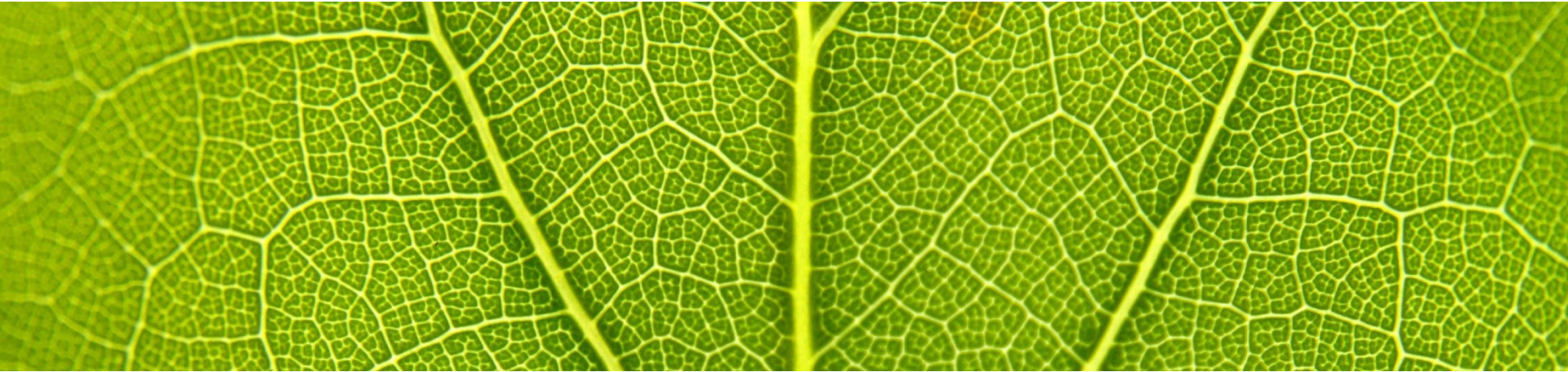


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Palm oil in Biodiesel – Status in Germany and the EU

MPOC Seminar, 1st March 2012, Berlin

13/03/2012 Matthias Spöttle, Patrick Lamers

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1. Introduction

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Ecofys – Facts & figures

- 1984: Founded as Spin-off University Utrecht
- 1999: Start of Ecofys Germany GmbH
- Branches
 - Germany: Berlin, Cologne
 - International: Utrecht, NL (HQ)
London, UK
Peking, China
Portland, USA
- Number of Employees
 - Germany: 70
 - International: 220



Ecofys – Areas of expertise

Energy & Carbon Efficiency	Renewable Energy	Energy Systems & Markets	Energy & Climate Policy
Supply Chains	Wind	Integrated Energy Systems	Policy Design & Evaluation
Buildings	Bio	Power Systems & Markets	Market-based Mechanisms
Industrial Processes	Solar	Fossil & Nuclear Energy	International Climate Policies
Sustainable Transport	HSE for renewables		
Carbon Capture & Storage			

Our services – Bioenergy

- Sustainability
 - Leading consultancy for public and private sector
 - Guiding role in the discussion on criteria for biomass on European and national level
 - Significantly involved in the development of standards (UK, NL, D)
- Biomass-Sourcing and Trade
- Market- and Feasibility studies
- Due Diligence



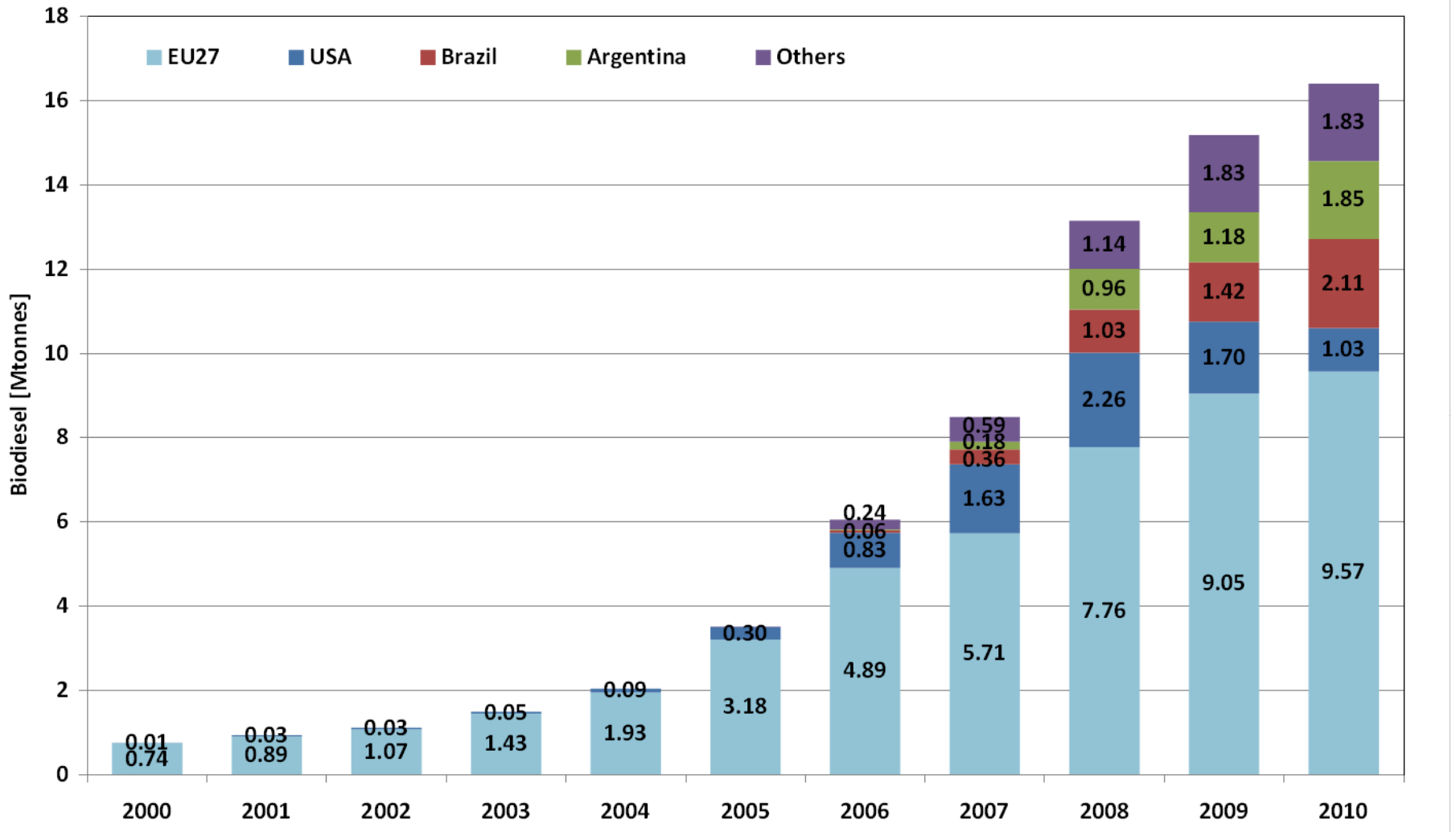
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1. Introduction

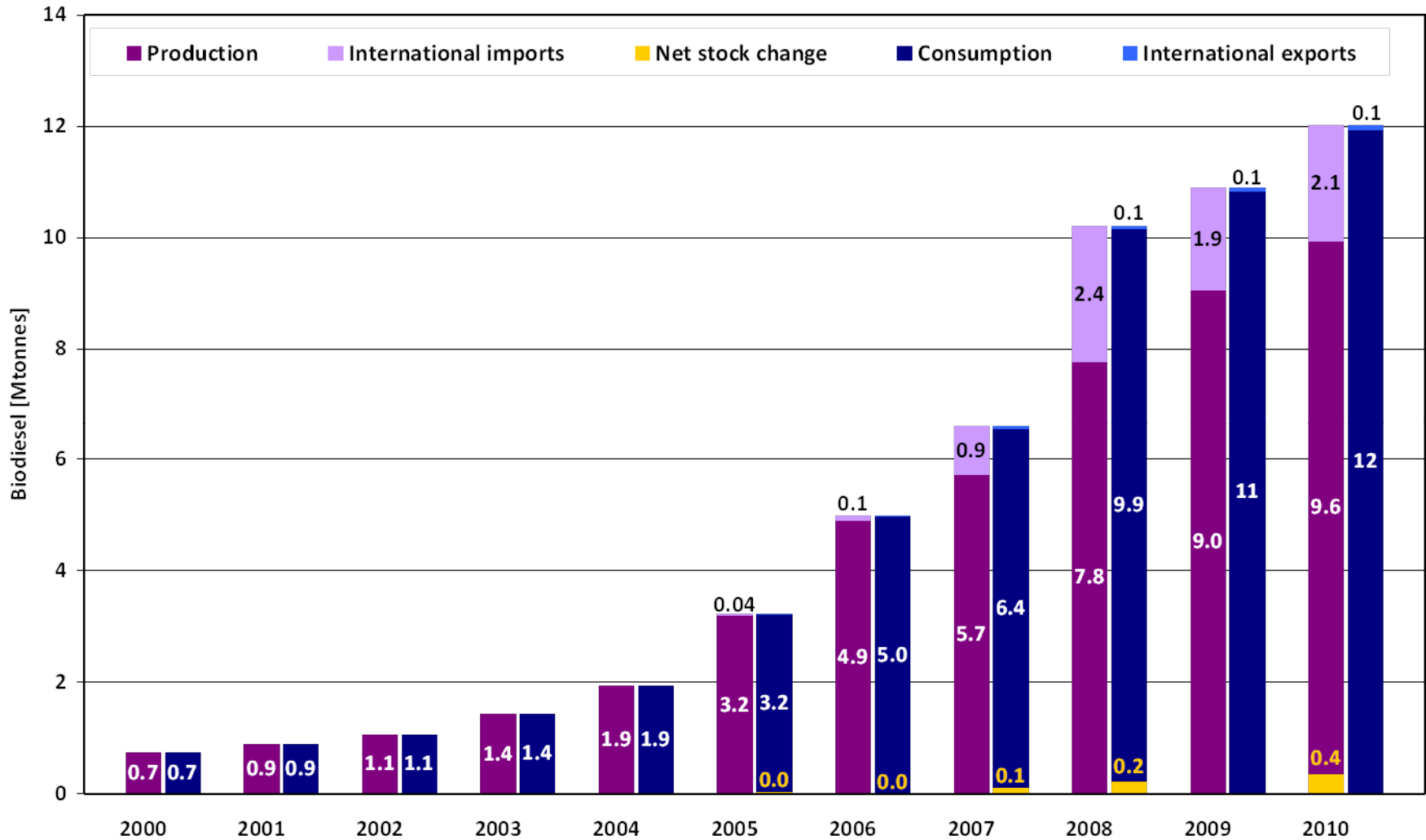
2. Biodiesel and Vegetable Oil Trade

3. Palm oil in Germany and the EU

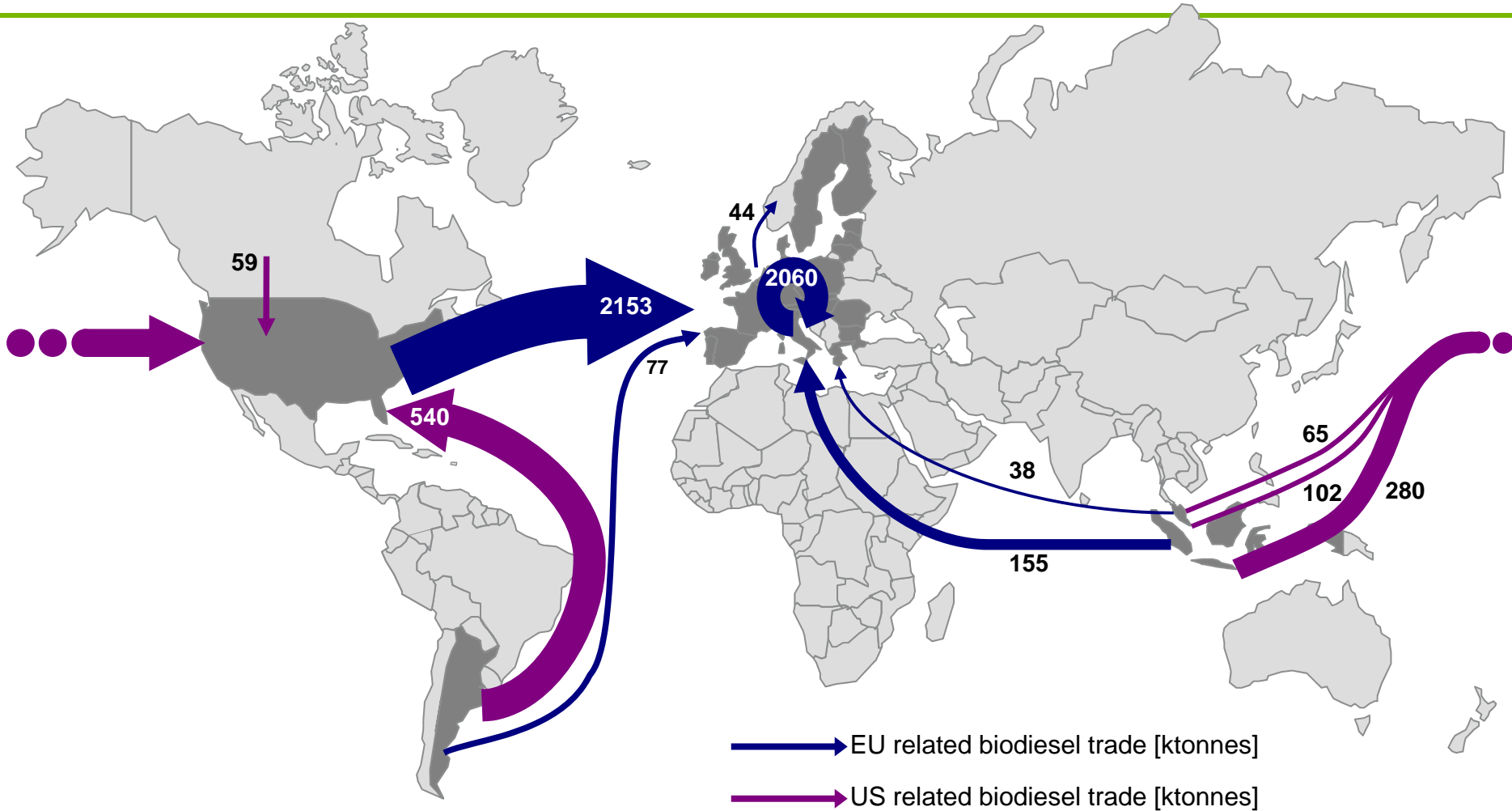
Global production biodiesel



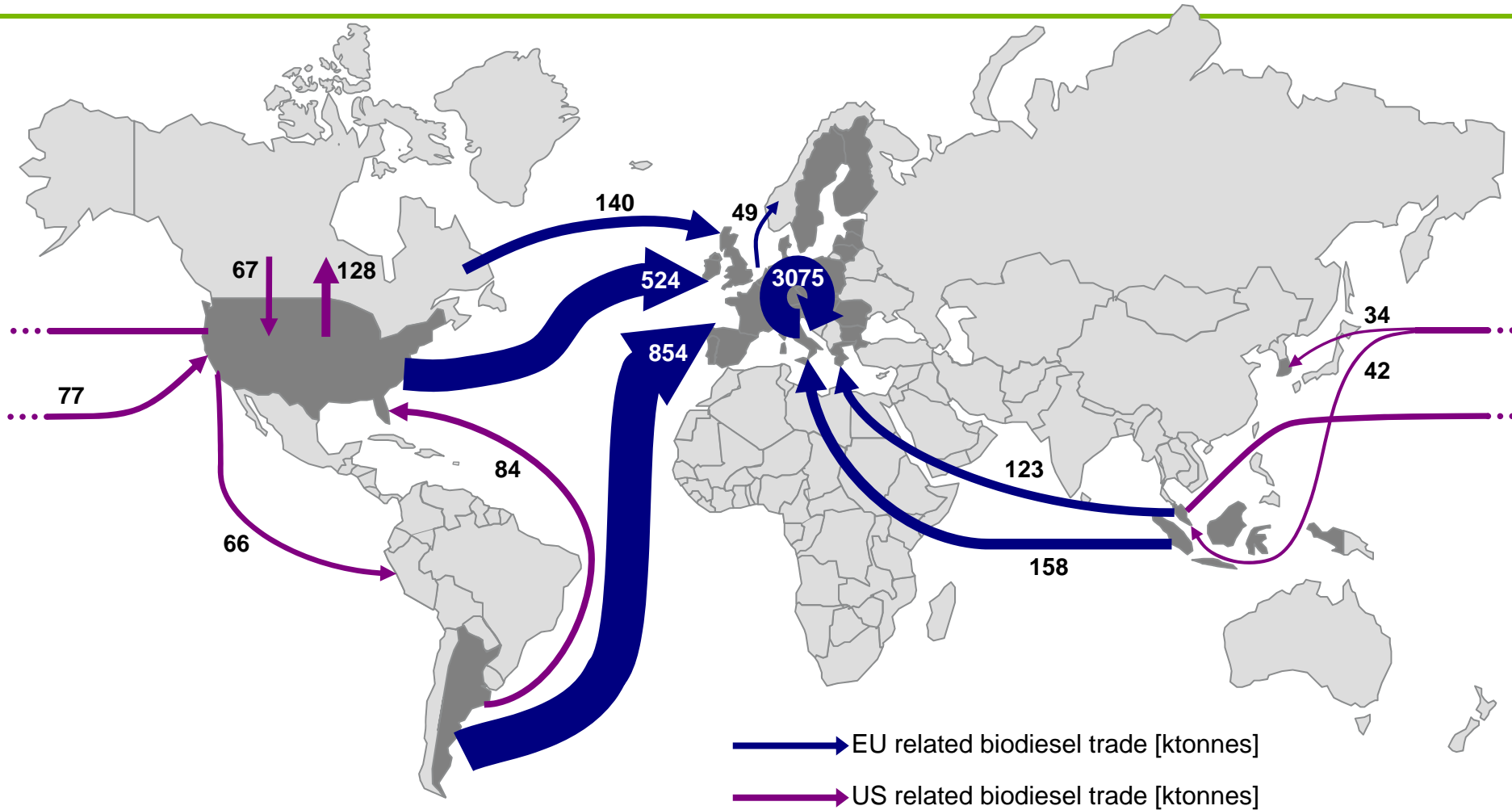
EU biodiesel trade balance



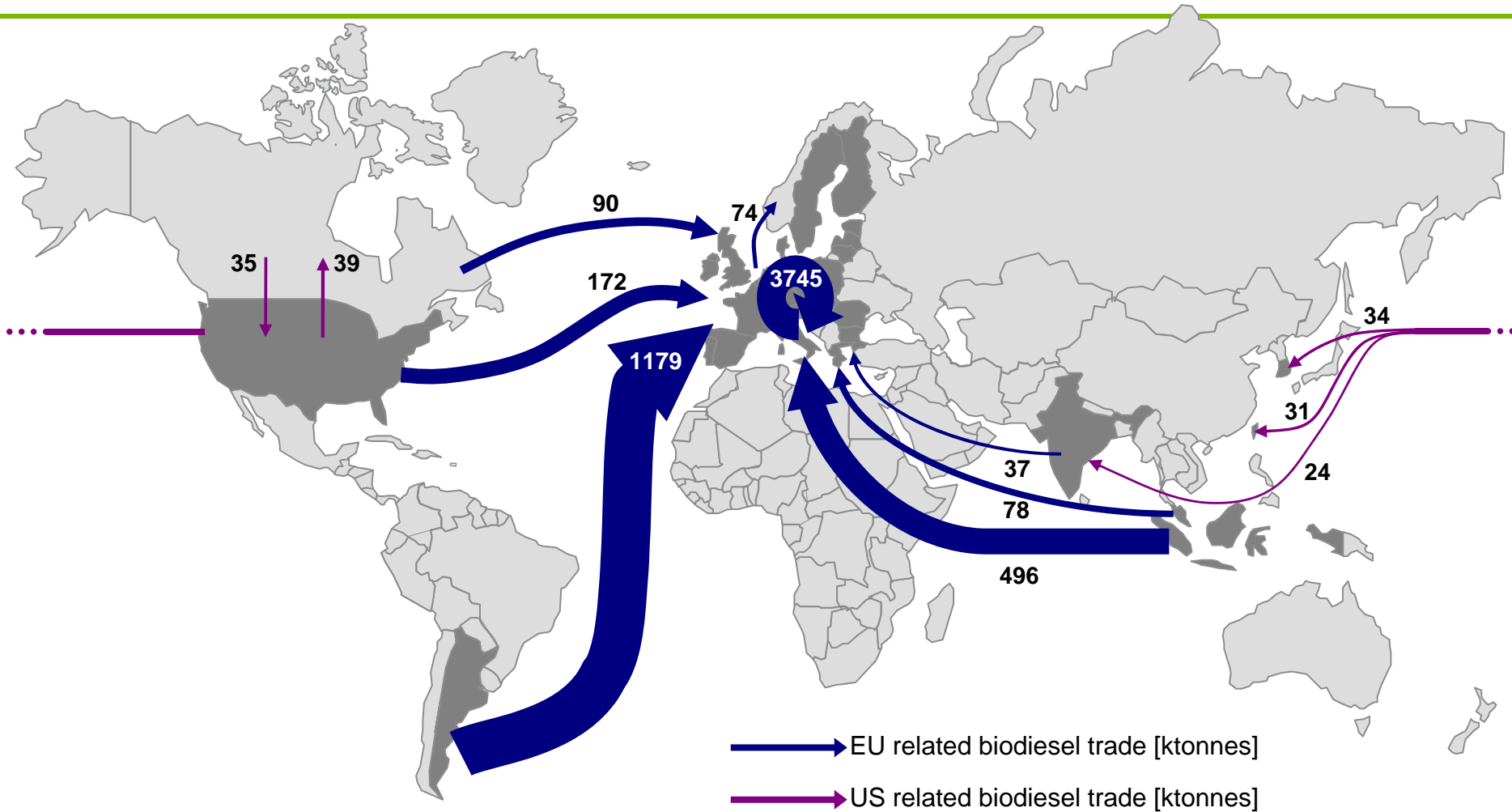
2008: Biodiesel trade streams (> 30 ktonnes)



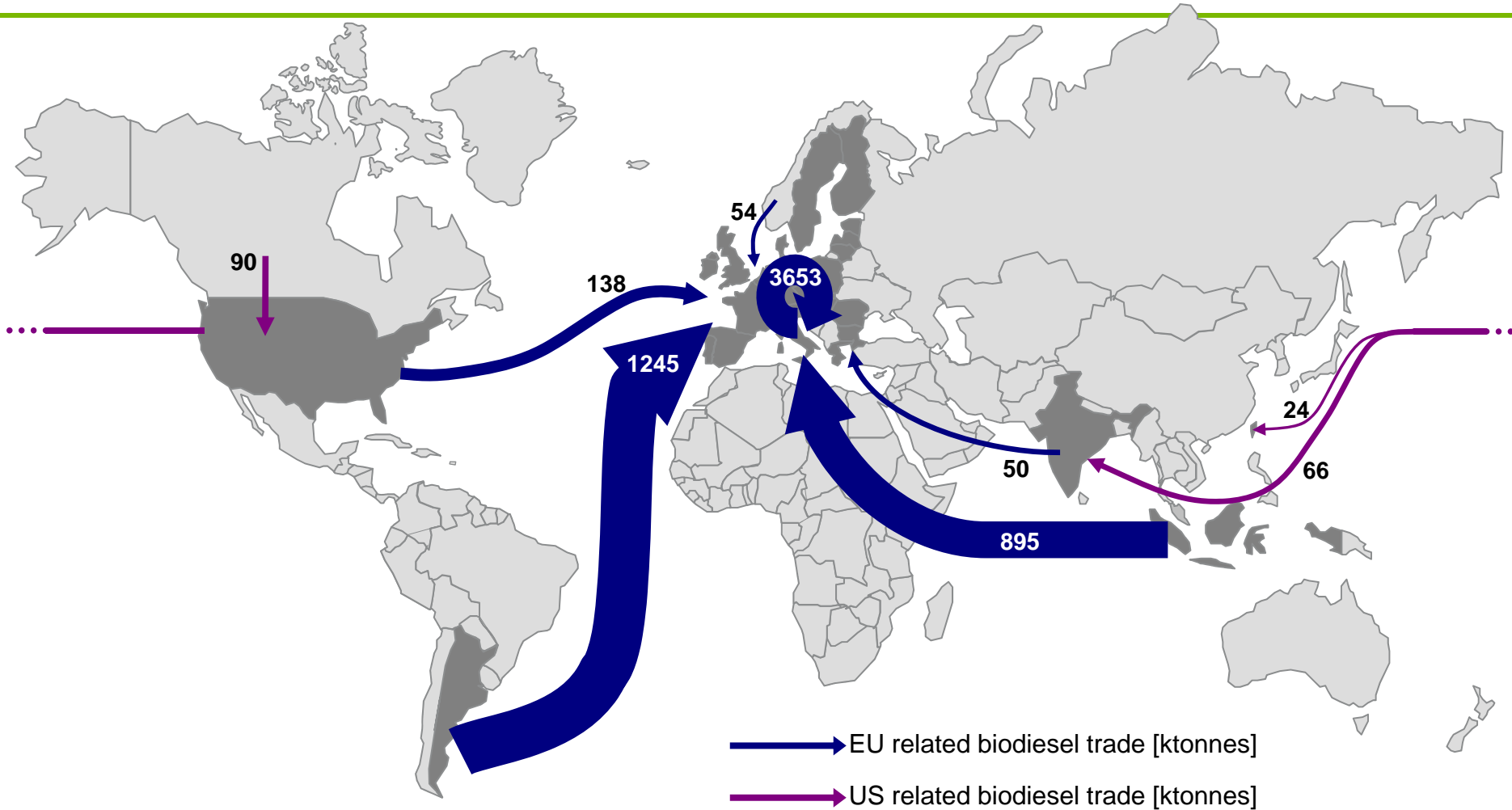
2009: Biodiesel trade streams (> 30 ktonnes)



2010: Biodiesel trade streams (> 30 ktonnes)



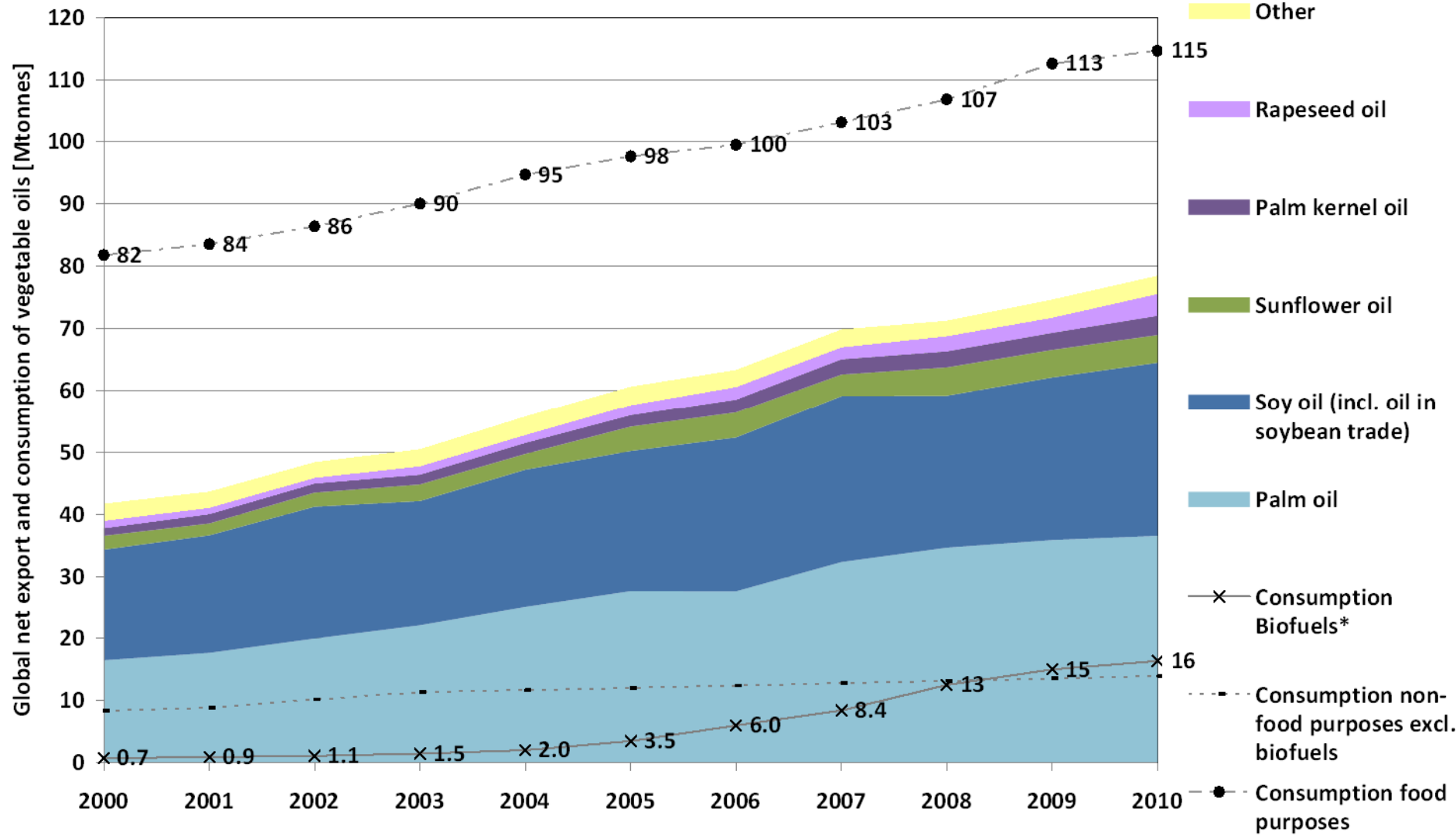
2011: Biodiesel trade streams (> 30 ktonnes)



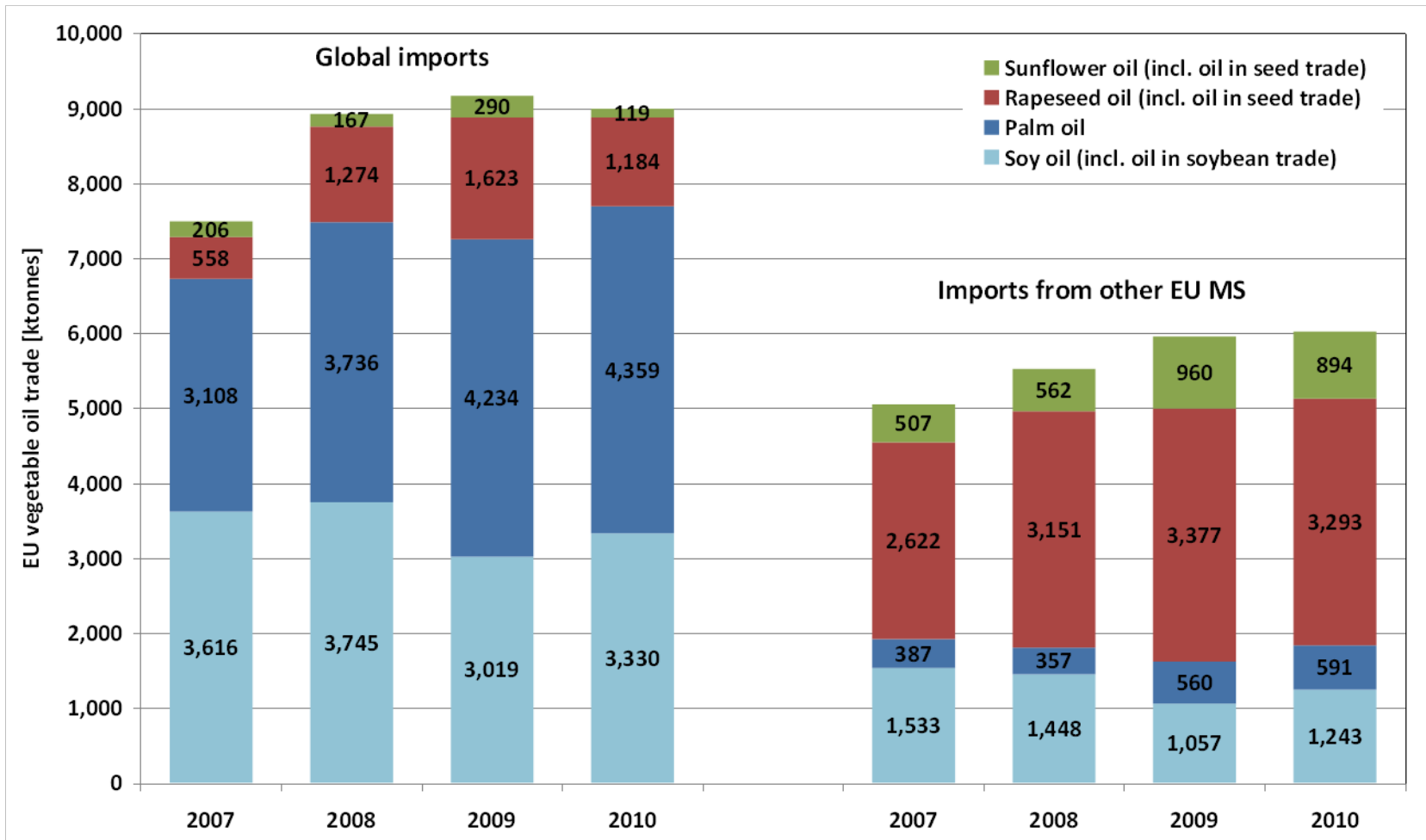
Biodiesel trade - Findings

- Biodiesel market has shown an exponential growth in production and trade across the past decade
- Markets and trade developments are still strongly linked to support and trade policies
- Interaction of domestic policies steered over the past decade global trade streams towards different markets, in particular in connection to underlying trade policies and additional market forces
- Biodiesel production is dominated by the EU

Vegetable oil: consumption and trade



Vegetable oil trade: differentiation international EU Imports vs intra EU trade



Despite its small share in global vegetable oil trade, rapeseed oil is very relevant in the EU context

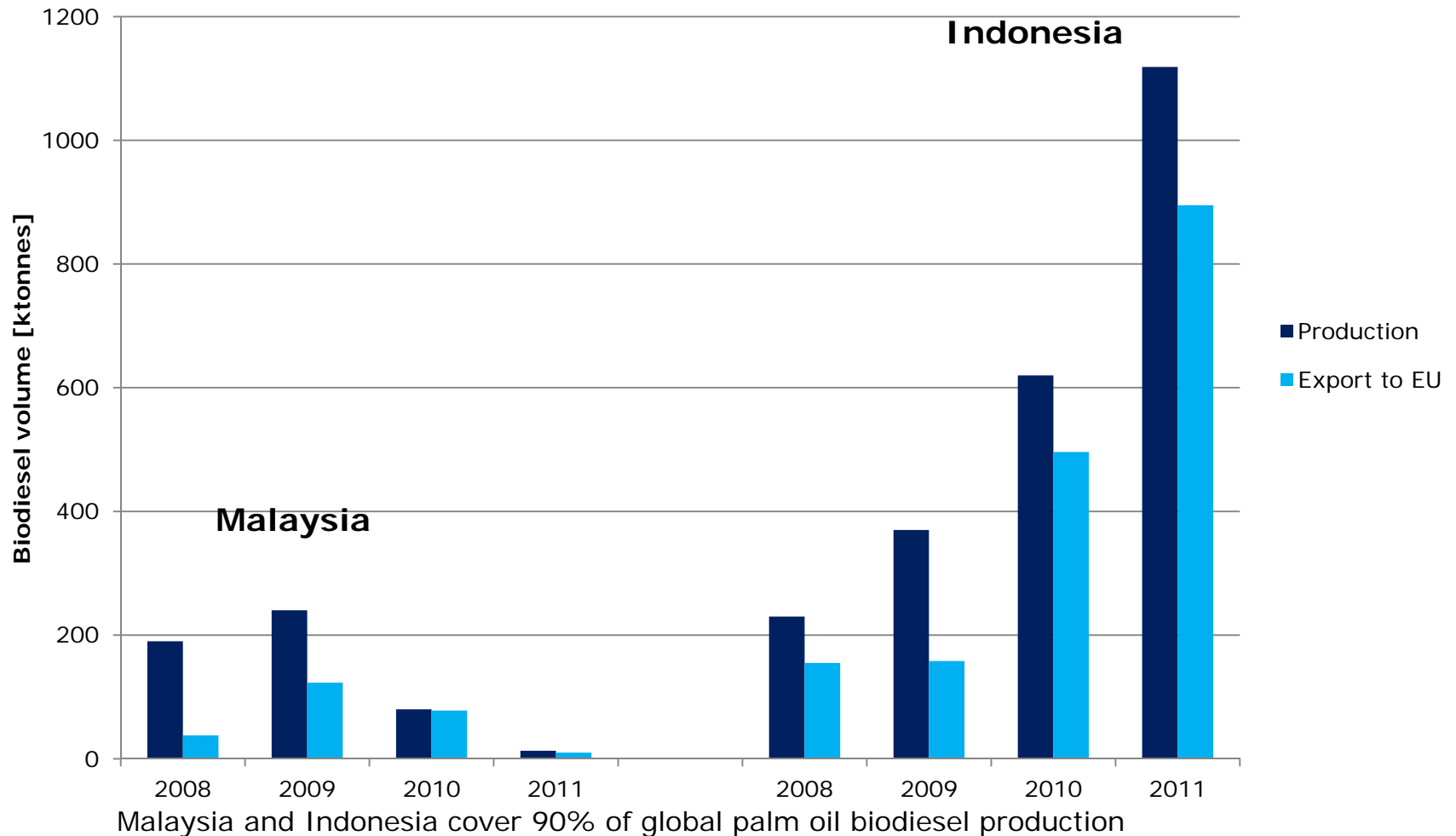
Vegetable oil trade related to biodiesel

- Due to its comparatively low international market price, palm oil has grown fastest and now amounts to the largest trade volumes (90% of Indonesian & Malaysian palm oil primarily exported to China, India, Pakistan, the EU, and the Middle East)
- Introduction of biofuel mandates and price competitiveness of soy & palm oil in comparison to rapeseed oil → increase in their relative share in EU biodiesel production (Palm oil enters the EU duty free)

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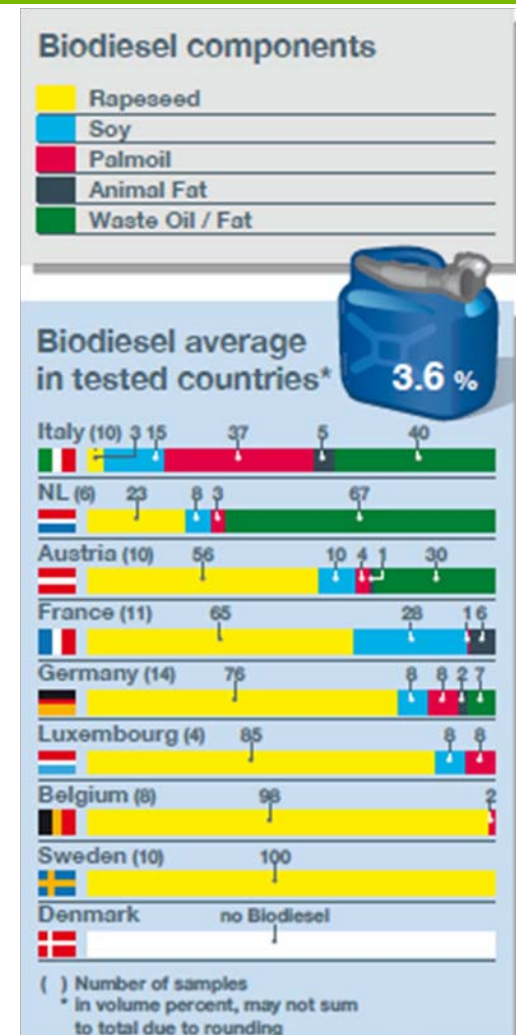
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Palm oil based biodiesel production



Palm oil in biodiesel – EU examples

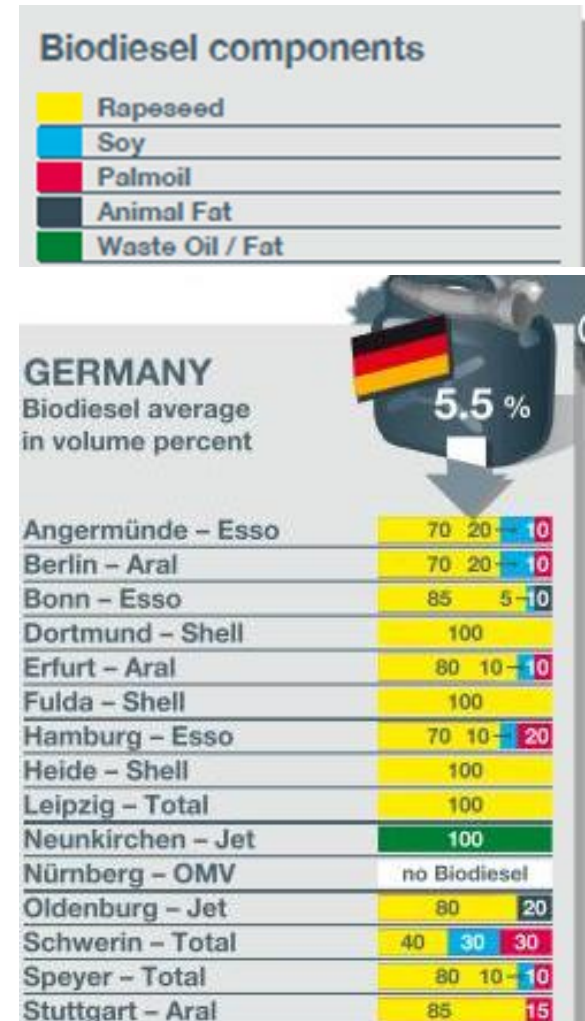
- Technical limitations (EU biodiesel standard EN 14214) cap the possible fraction of soy and palm oil biodiesel → particularly in the northern, relatively colder EU Member States
- Palm oil based biodiesel is mainly consumed close to big hubs in the Netherlands, Italy and Spain



(source: Greenpeace investigation on biodiesel, 2011)

Palm oil in biodiesel – Germany

- Overcapacity of biodiesel production in Germany: 58% utilization in 2011
- Biodiesel production volume 2,33 Mio. t in 2011
- **Palm oil only covers 0,5% of German biodiesel production.** Rapeseed covers the largest share (87,3%) as it is competitive and player are already certified against RED
- Strong public concern on the sustainability of palm oil production



(source: Greenpeace investigation on biodiesel, 2011)

Palm oil based biodiesel trade streams

- Indonesia and Malaysia have started to play an important role in international biodiesel trade
- Lack of local subsidies for the Malaysian biodiesel industry
- Indonesia subsidizes biodiesel production at around 0.166 €/liter (raise in 2012 to 0.201-0.241 €/liter); differentiated export tax for crude palm oil to palm oil derived methyl-ester (PME): price difference estimated at 90-100 €/t of PME as compared to crude palm oil
- Palm oil is not primarily traded for biodiesel production but differentiated tax system promotes local conversion into biodiesel whereas otherwise this process step would be made in European conversion plants

Thanks for your attention!



More information in the
biodiesel market study on:

www.ufop.de

www.ecofys.de

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