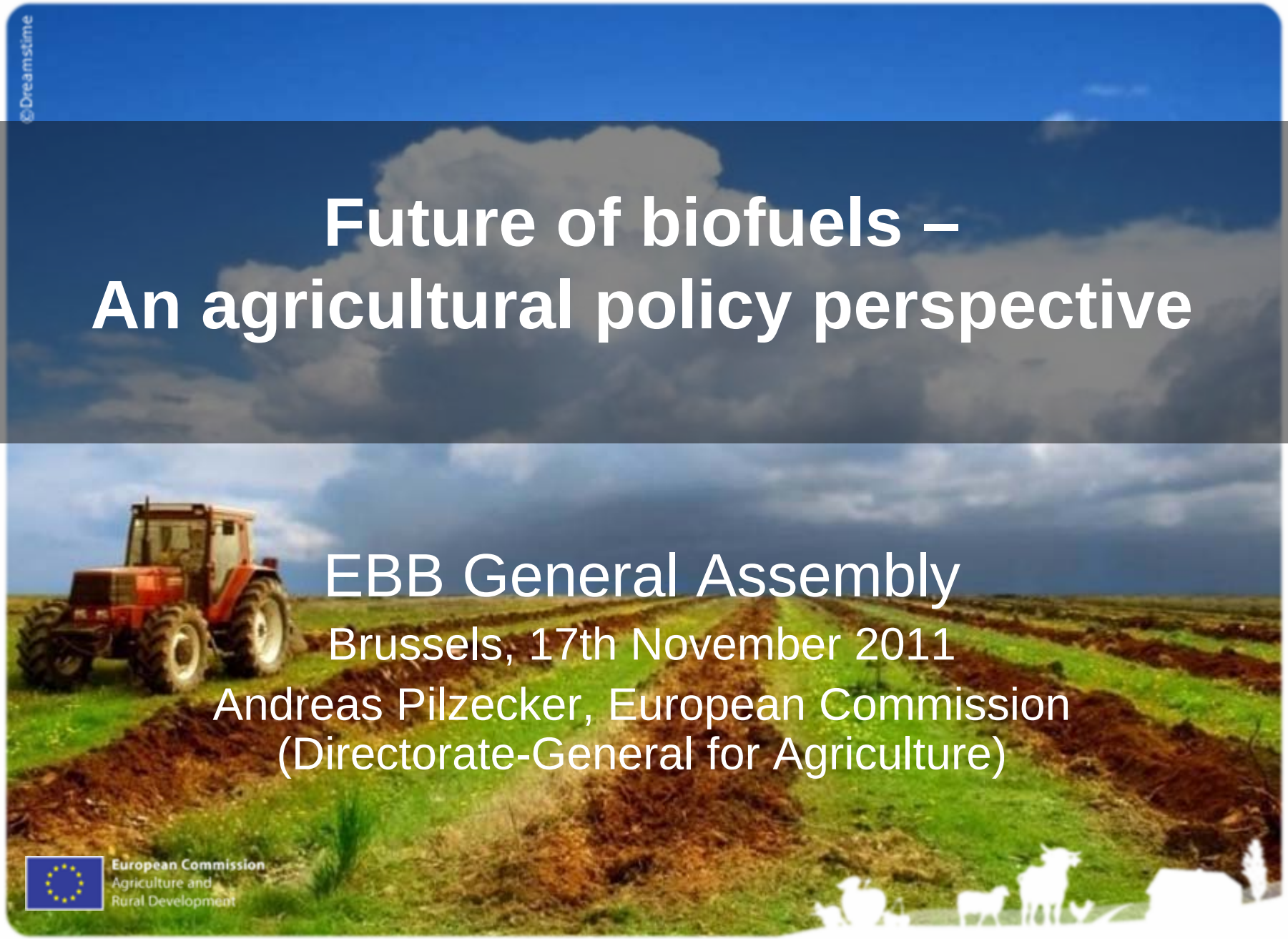


Future of biofuels – An agricultural policy perspective

EBB General Assembly

Brussels, 17th November 2011

Andreas Pilzecker, European Commission
(Directorate-General for Agriculture)

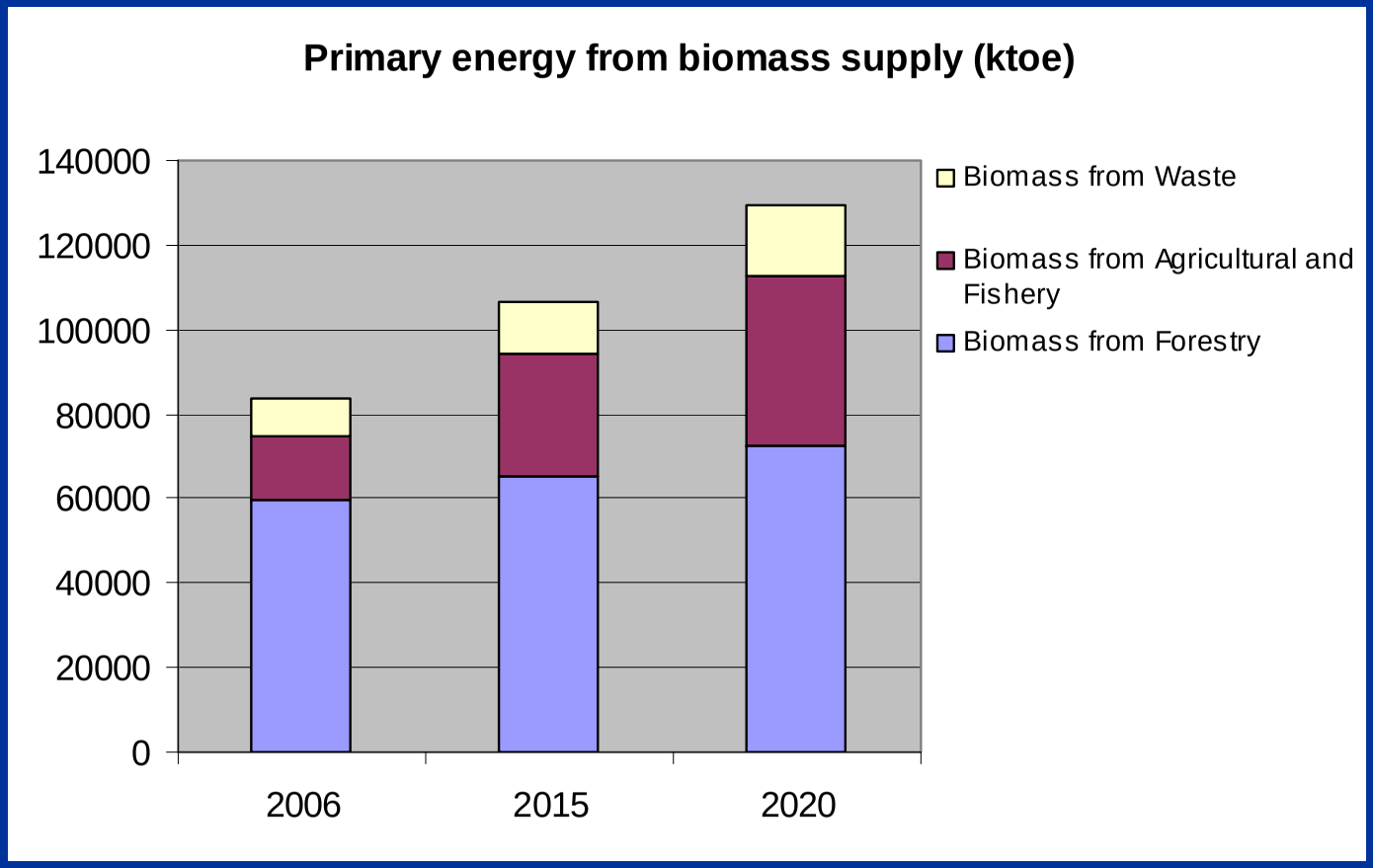
Outline

- Role of agriculture for bioenergy – Perspectives 2020 and 2050
- The CAP 2014-2020 proposals: Links to biofuels?
- Further challenges and opportunities

Key role of agriculture

- wood system potential is basically fixed
- same for organic waste
- genuinely new potential from dedicated crops/waste&residues from agriculture
- but uncertainty is very high

NREAPS: Expected biomass sources



NREAPS: Biomass sources(II)

- Whereas about half of total agricultural bioenergy in 2020 will come from the subcategory "energy crops", mainly driven by the 10% RE target for transport...
- ...the other half will come from the second subcategory "agricultural waste and residues" which is expected to grow even faster than the former

Low-carbon Economy 2050

- Biofuels are important to decarbonise transport, although most of the reductions in emissions will be delivered by improved efficiency and electrification.
- Around 46 Mtoe of biofuels (or 25% of total energy used in road transport) used for road transport in 2050.
- In the aviation sector electrification is not an option, resulting in biofuel use in 2050 at around 25 Mtoe (or 42% of total energy used in aviation)

EU Biomass production (Mio toe)			
	2005	2030	2050
•Crops	5	53	134
•Of which 2nd generation crops	0	40	127
•Agricultural residues (including black liquor)	17	32	49
•Forestry	40	51	59
•Waste	25	63	87
•Import	2	12	26
Total	90	212	356

The CAP 2014-2020 proposals: Links to biofuels?

European Commission
Agriculture and
Rural Development

Challenges

Respond to the future challenges for agriculture and rural areas and to meet the objectives set for the CAP:

1) viable food production;

2) sustainable management of natural resources and climate action; and

3) balanced territorial development.

(Communication on the CAP towards 2020)

Budgetary Aspects

- The MFF proposal provides that a significant part of the EU budget should continue to be dedicated to agriculture.
- CAP proposal: EUR 317.2 billion allocated to Pillar I (direct payments and market measures) and EUR 101.2 billion to Pillar II (rural development, EAFRD) over the 2014-2020 period.
- The Pillar I and Pillar II funding is complemented by additional funding of EUR 17.1 billion, thereof EUR 5.1 billion for research and innovation.
- EU Funds (incl. EAFRD) are placed under the Common Strategic Framework

Direct Payments

- Single scheme
- Cross-compliance re-inforced and simplified
- « green » element
- Limited voluntary (coupled) direct payments
- Limited young farmer payment
- Simplified for small farmers

Direct Payments

Thirty percent of direct payments tied to greening, ensure that all farms deliver environmental and climate benefits through:

- the retention of soil carbon and grassland habitats associated with permanent pasture,
- the delivery of water and habitat protection by the establishment of ecological focus areas and
- improvement of the resilience of soil and ecosystems through crop diversification.

- A voluntary coupled support scheme is provided for specific types of farming or specific agricultural systems which are experiencing certain difficulties and which are particularly important for economic and/or social reasons
- support is provided to the extent necessary to maintain current levels of production (up to 5% of annual national ceiling with the possibility to go beyond this in particular cases)

Rural Development

- Rural development policy retains the long-term strategic objectives of contributing to the competitiveness of agriculture, the sustainable management of natural resources and climate action and the balanced territorial development of rural areas.
- In line with the Europe 2020 strategy, these objectives are given more detailed expression through six EU-wide priorities.
- These priorities should be the basis of programming, i.e. the process of organisation, decision taking and allocating the financial resources intended to implement, on a multi-annual basis, the joint action by the Union and the Member States.

Priorities for Rural Development

- fostering knowledge transfer and innovation
- enhancing competitiveness
- promoting food chain organisation and risk management in agriculture
- restoring, preserving and enhancing ecosystems
- promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy
- promoting social inclusion

“Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy”

(a) increasing efficiency in water use by agriculture;

(b) increasing efficiency in energy use in agriculture and food processing;

(c) **facilitating the supply and use of renewable sources of energy, of byproducts, wastes, residues and other non food raw material for purposes of the bio-economy;**

(d) reducing nitrous oxide and methane emissions from agriculture;

(e) fostering carbon sequestration in agriculture and forestry;

Measures relevant to bioenergy

- Knowledge transfer and information actions (Art 15)
- Investment in physical assets (Art 18)
- Farm and business development (Art 20)
- Afforestation and creation of woodland (excl. SRC and fast growing trees for energy production) (Art 23)
- Setting up of producer groups (Art 28)
- Co-operation (including clusters, networks and pilot projects) (Art 36)

Conclusions: CAP

- Focus on food production and food security
- No support to biofuels in the first pillar of the CAP (dismantling of sugar quotas helps the bioeconomy)
- EAFRD: Support to non-food crops reduced (?), stronger focus on non-land using biomass, all non-food uses treated equally, much stronger focus on « software » (knowledge, cooperation)

Further challenges and opportunities

Land use

- The EU renewable energy target for transport increases crop area globally by 5.2 mio ha or 0.7%
- Although there may be ample idle land on this globe: Fertile arable land is not a renewable resource.

Roadmap to a Resource Efficient Europe

"Milestone: By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050"

Food versus Non-Food

- JRC(2010): The EU renewable energy target for transport increases cereal prices by about 6-10%
- Low-carbon economy: Crop prices in a « climate action » scenario are 50% higher than in the baseline.
- Resource efficiency/food waste: At least one third of the calories get lost from field to plate.

Agricultural issues

- Stronger growth expected for ethanol than for biodiesel
- Reduction of food-crop based and land-using biofuels
- Balanced approach: Ethanol vs biodiesel, food crop-based vs non-land using biofuels, biofuels vs other new RE transport technologies
- Sustainability comes first – technology-neutral approach

Agricultural issues

- Agriculture and forestry will play an important role in providing renewable electricity and fuels, incl. biomethane and (maybe) renewable hydrogen
- The introduction of new RE technologies in transport creates opportunities.