

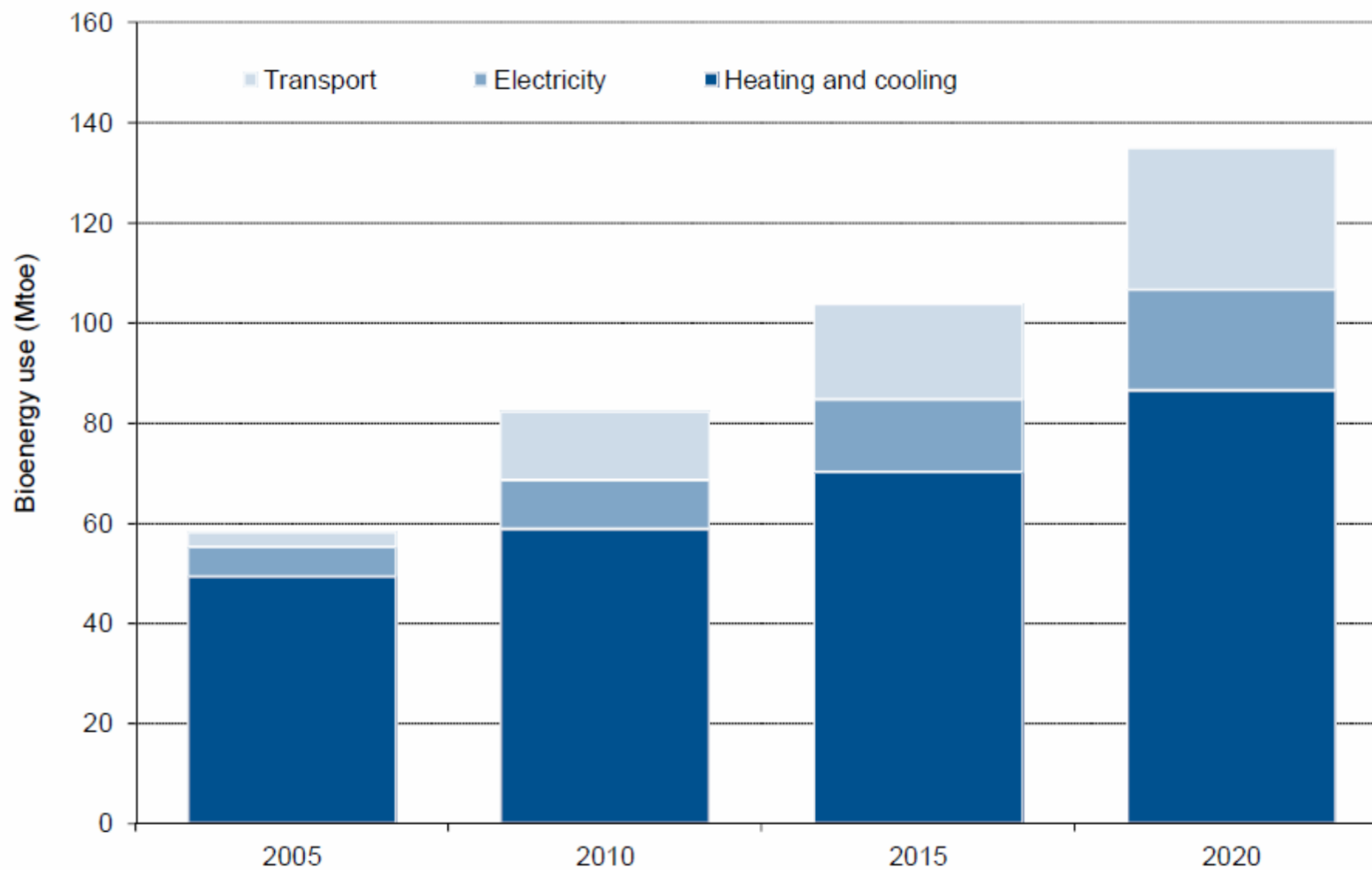


Biomass sustainability and biomass availability

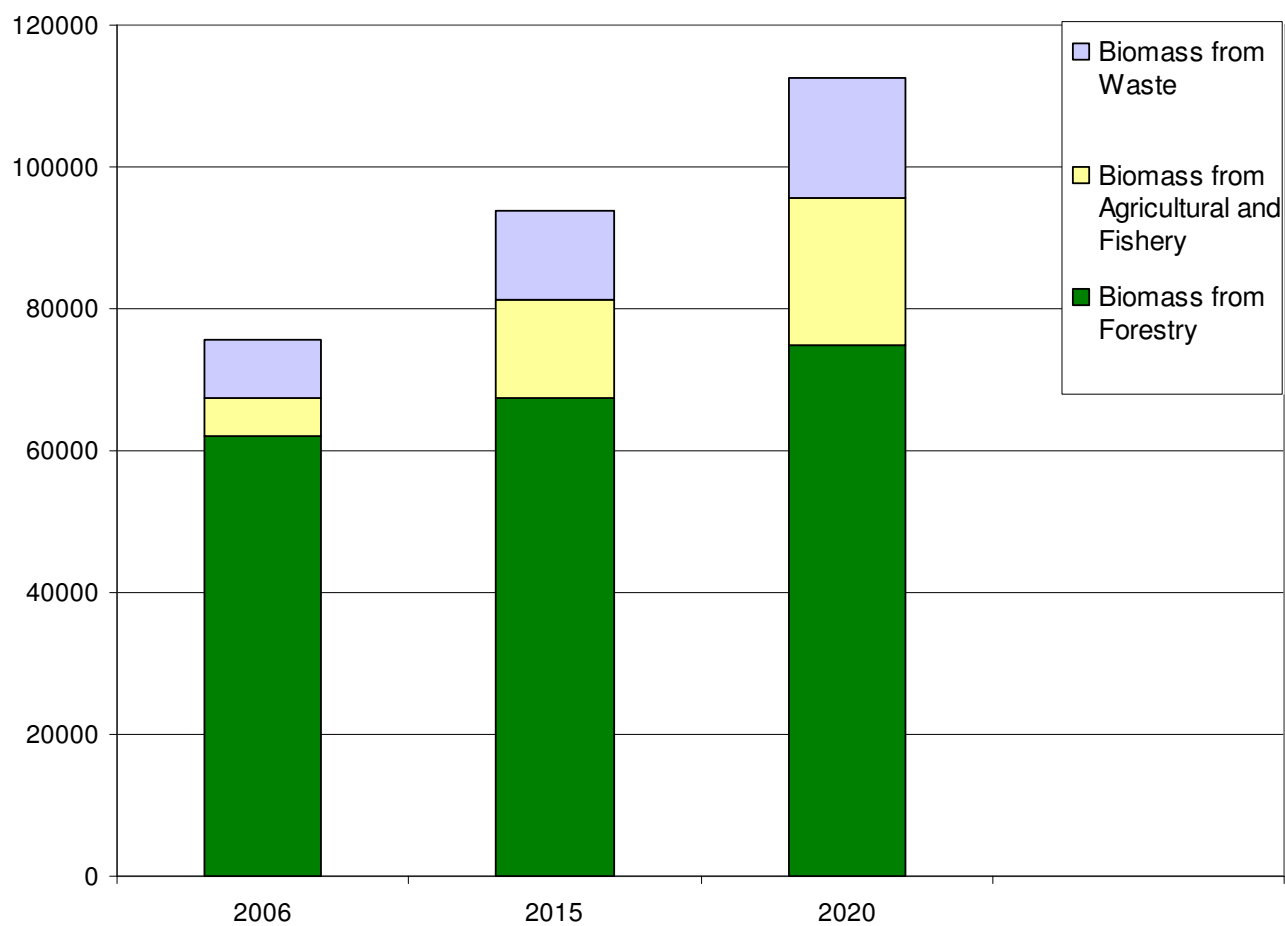
*Fanny-Pomme LANGUE
Renewables and CCS policy
DG Energy, European Commission*



Bioenergy projections for 2020 (NREAPs)

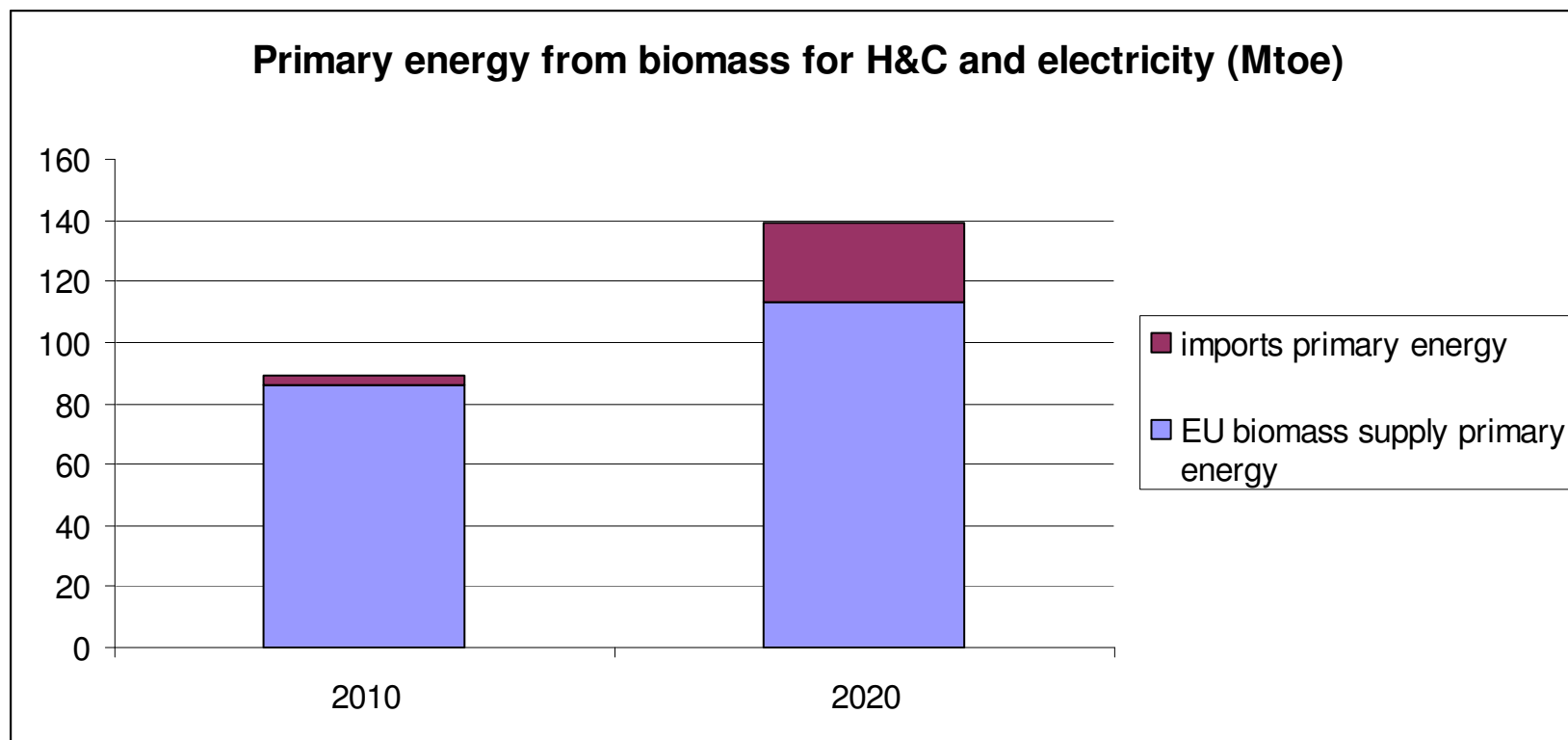


Domestic biomass supply for H&C and power (primary energy – ktoe)



Source: estimates based on 26 NREAPs

Biomass imports projections for 2020



Sources:

2010 data: Biomass benchmark study

2020 data: NREAPs data for 26 MS



Sustainability of biofuels/bioliquids

Mandatory criteria to be met in order to:

- Count toward the targets (10% and the '20%')
- Count toward obligations (put on suppliers)
- Be eligible for financial support (for their consumption)

GHG saving criteria

- At least 35% lifecycle savings (50%-60% from 2017/18) compared to fossil fuel

No conversion of land with high carbon stock

- Densely forested areas, wetlands, peatlands

No raw material from land with high biodiversity value

- Primary forest, nature protection areas, highly biodiverse grasslands





Sustainability of solid and gaseous biomass

- **2010 EC recommendations:** Member States should introduce national sustainability criteria similar to those applying to biofuels
- **GHG accounting methodology** includes end-use conversion
- **Small generators** (below 1 MW) to be exempted
- **End-use conversion efficiency** to be promoted by MS
- **Biomass origin in small scale uses** to be monitored by MS
- **Effectiveness** of this non-binding approach to be assessed, report to be published soon





Stakeholders' view on biomass sustainability

- **Biomass imports** from third countries will increase, which may lead to higher sustainability risks
- **National sustainability schemes** are likely to have negative impacts on biomass trade and costs
- **EU mandatory sustainability criteria** for biomass supported by vast majority of stakeholders
- **Concerns about deforestation, forest certification requirements**, concerns about 'carbon debt' issue - NGOs concerns.
- **Forest-rich governments/forest owners** worried about administrative burden and undue costs of EU criteria





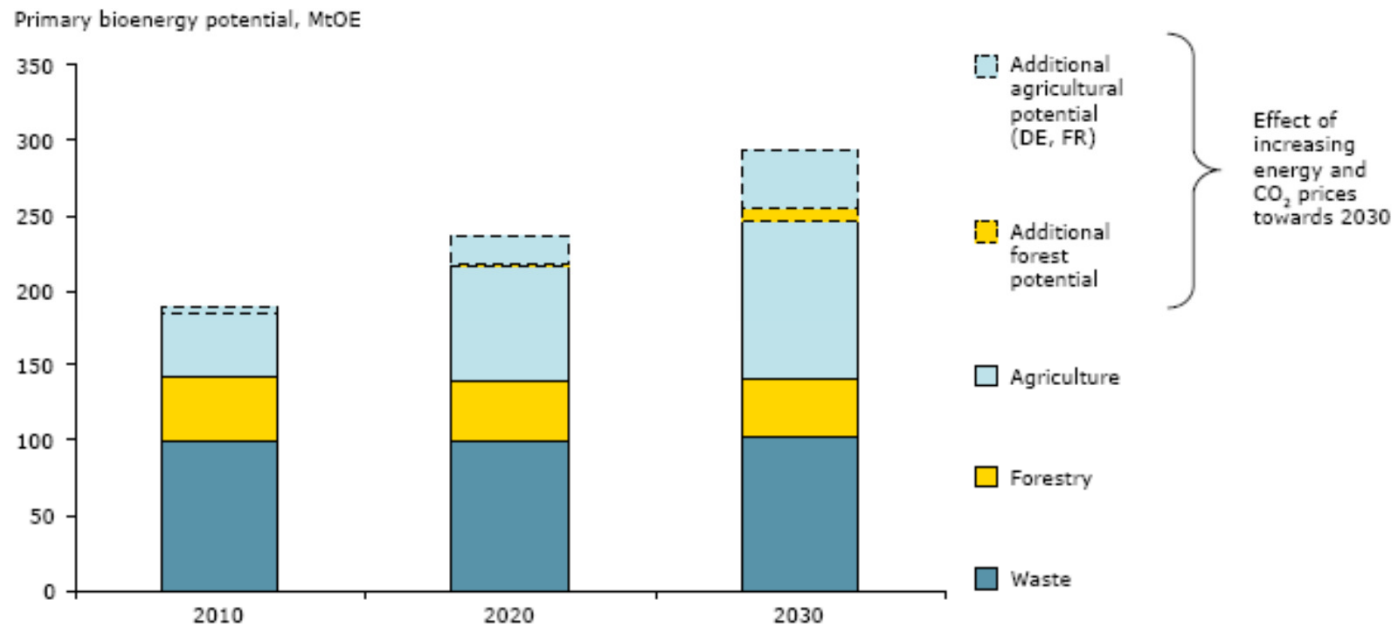
Issues at stake

- The increase of biomass mobilisation should not take place at the expense of **environment protection**.
- Increasing and diverging national regulations on biomass sustainability (Biomass benchmark external study):
potential obstacle to trade of biomass and distortion on the internal market
- Commercial operators will play a major role to meet the RES 2020 target. To this end, they need a **clear and stable regulatory framework**
- ❖ Private voluntary initiatives under development: WPBI, Pellcert





Biomass availability: EEA study



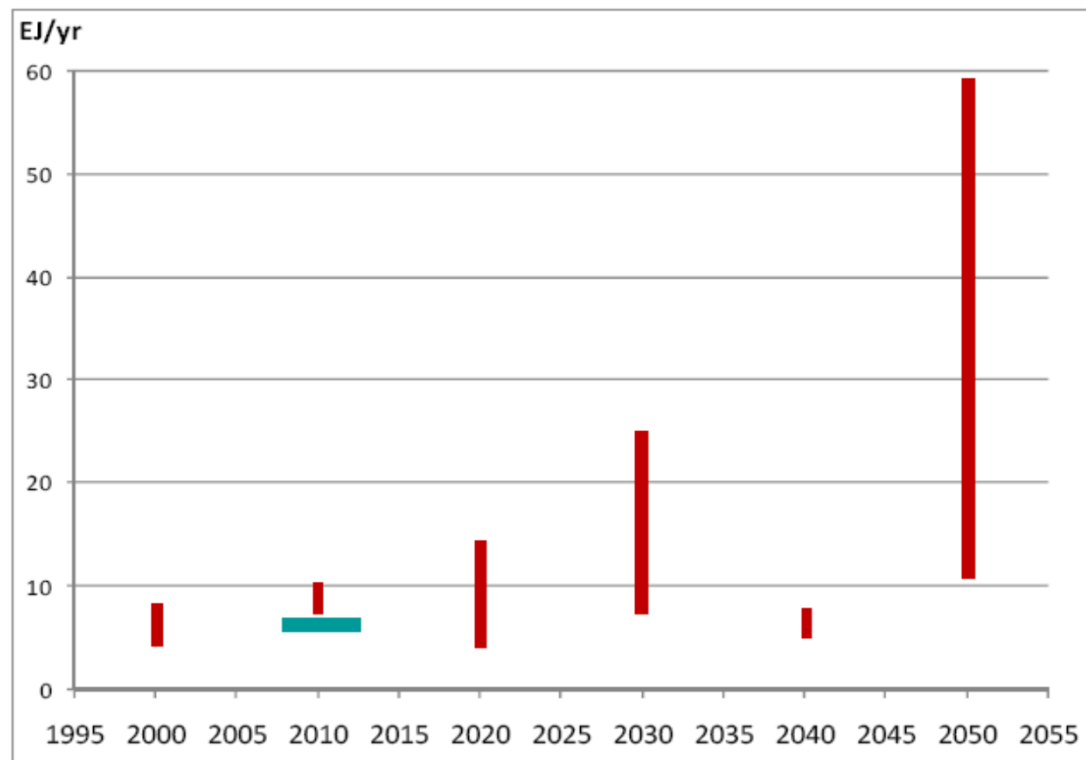
- 235 Mtoe available for EU-25 in 2020 without harming environment





Biomass availability: BEE study

- **Biomass Energy Europe** (FP 7, March 2008 to Nov 2010)
- Contribute to an increase of the accuracy and reliability of biomass resource assessments
- Example: Estimated total biomass energy potentials for EU27: summary of sector focusing studies - (nb = 15Ej = 350 Mtep)





Biomass availability (Wood)

- **Euwood study**

http://ec.europa.eu/energy/renewables/studies/doc/bioenergy/eu_wood_final_report.pdf

Aim: improve knowledge on the woody biomass demand and supply situation, analyse the future development of biomass, document and provide recommendations for policy processes

- **UNECE, European Forest Sector Outlook Study II**

- <http://www.unece.org/forests/welcome.html>

Aim: present possible futures for the European forest sector up to 2030 based on differing assumptions about priorities and policy choices (maximising biomass carbon, promoting wood energy, priority to biodiversity, fostering innovation and competitiveness)

- **Ongoing EC study on the wood raw material supply and demand for the EU wood processing industry**





Sustainability and availability

- According to several studies, the EU biomass potential is theoretically sufficient to reach the 2020 RES targets
- EU sustainability criteria established for biofuels and bioliquids aim at excluding worst practices. They do not eliminate any type of biomass listed in the theoretical potential and do not prevent any biomass sources from being used for biofuels / bioliquids projections as long as good practices are respected
- Therefore: sustainability criteria for biofuels do not directly impact biomass availability
- Sustainability criteria can affect the production costs, which than can impact the overall biomass supply





fanny.langue@ec.europa.eu

http://ec.europa.eu/energy/renewables/index_en

