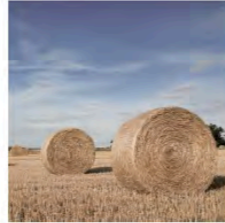
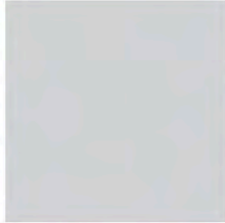




ePURE
european renewable ethanol



Policy framework for advanced biofuels in Europe

The way forward


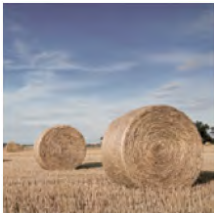



Rob Vierhout

Secretary-General
ePURE

European Biofuels Technology Platform
4th stakeholder Plenary Meeting
Brussels, 14-15 September



Outline






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- ◊ About ePURE
 - ◊ Benefits of cellulosic ethanol
 - ◊ National Renewable Energy Action Plans (NREAPs)
 - ◊ Present support measures
 - ◊ New instruments needed
 - ◊ Summary

About ePURE

- 🍃 Voice of the European renewable ethanol industry
- 🍃 Formed end of 2010 merging eBIO and UEPA
- 🍃 Represents ethanol production for all end-uses, e.g. potable, fuel, industrial
- 🍃 Currently, ePURE members account for 80% of installed production capacity in the EU
- 🍃 Main objective: ensure EU policies that promote the production and use of renewable ethanol



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Significant benefits for Europe



Energy security

- 🌿 New domestic energy resource
- 🌿 Compatible with existing fleet and infrastructure
- 🌿 Usable in adapted vehicles to up to 95%
- 🌿 Contributing to enhanced energy security



Jobs

- 🌿 Job creation in rural areas with high unemployment rates and under-employment
- 🌿 By 2020 up to 1 million jobs in Europe*
- 🌿 Creation of skilled jobs in R&D and engineering



Economy

- 🌿 Reduced oil import bill
- 🌿 Diversifying revenues for farmers
- 🌿 Enhance European technology leadership
- 🌿 Positive effect on economic development



Environment






- 🌿 Massive GHG emissions reductions: Cellulosic ethanol typically saves 87% GHG emission**
- 🌿 No impact on availability of arable land: Agricultural residues and energy crops on degraded land

*Bloomberg New Energy Finance (2010)

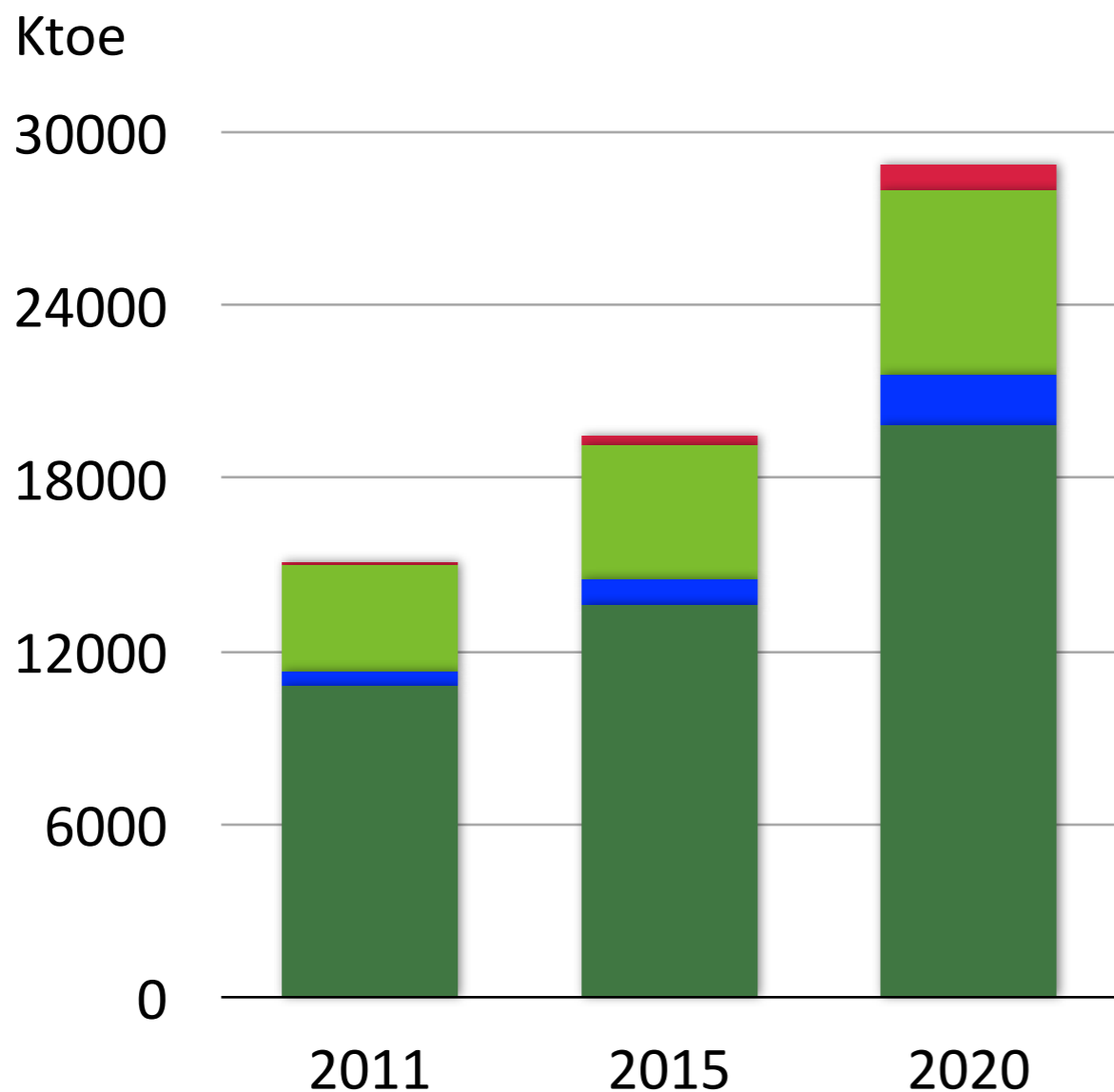
**Directive 28/2009/EC (RED).



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NREAP - marginal role for cellulosic ethanol




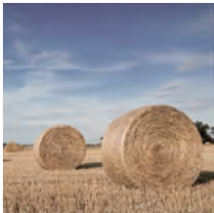



- ⦿ Biodiesel dominant in fulfilling the 10% obligation
- ⦿ Cellulosic ethanol foreseen to only play an insignificant, despite its very high sustainability score
- ⦿ EU & MS should reconsider their policies/ incentives and promote cellulosic ethanol more strongly



Source: National Renewable Energy Action Plans.



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Present support measures are insufficient...

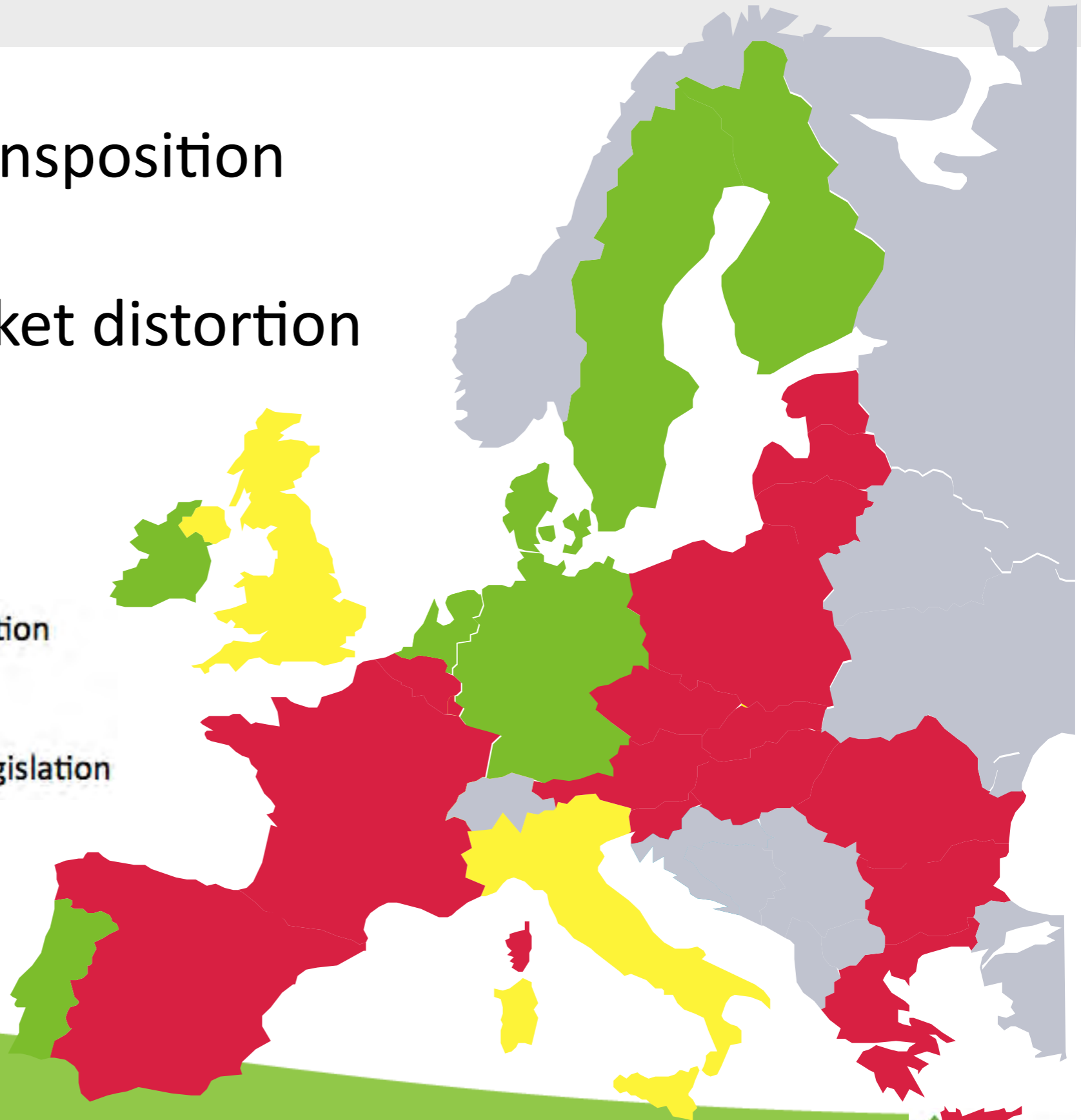
- ◊ Double counting mechanism (Art. 21 §2 of Directive 2009/28)
 - ▶ Value highly uncertain for investors and market operators
 - ▶ Nice for Member States but also for developing 2G ethanol ?
- ◊ Art. 7a of the Fuel Quality Directive (2009/30):
 - ▶ Objective to reduce 6% GHG emissions from fuels
 - ▶ Value for 2G highly uncertain
- ◊ Member states incentives:
 - ▶ 2G plays no or little role in plans and policies
 - ▶ Generally no special incentives

Double counting for advanced biofuels in the EU

No uniform transposition
across Europe

➔ risk of market distortion

- No or incomplete transposition
- Pending transposition
- Transposed into national legislation




Source:

Issues arising from double counting ...

- Background for double counting: Recital 89 RED: “...encourage the use of biofuels which give additional benefits (like **diversification** of feedstock) (...) by taking due account of the **different costs of producing** (...) those biofuels (...)”
- No EU harmonization in definition of residues/waste and diverging implementation --> risk of market distortion stemming from varying definitions in different member states
- in general for cellulosic ethanol the effectiveness of double counting depends on the price of petrol and ethanol and is therefore highly variable, unstable and unpredictable

Double counting: is it the right tool ?






- 
- ⦿ **Perverse effect 1:** the absence of a common (EU) approach (clear principles and/or definition, positive or negative list) will result in market distortion and abuse of the measure by Member States
 - ⦿ **Perverse effect 2:** allowing double counting for biofuels that have the same production cost as 1G biofuel will undermine the development of those biofuels that are much more expensive to develop and produce and thus need support in form of higher market value provided by the DC.
 - ⦿ **So,** double counting must be used restrictively and in light of higher production costs of advance biofuels otherwise it is distorting and not suit for purpose.



Double counting is a sub-optimal mechanism. Other support measures are needed and (hopefully) more promising


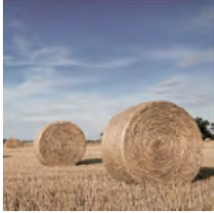





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... a mix of new support measures is needed

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- Specific mandatory target for cellulosic ethanol, but not within the 10% 2020 target; additional (**RED reporting 2012: Art. 23§5e, review 2014: Art. 23§8**)
 - Support measures (e.g. grants, loan guarantees) for production plants
 - Tax incentives for cellulosic ethanol (**Energy Taxation Directive**)
 - Production support (Feed-in tariff / fixed premium)
 - Incentives for the collection of feedstock and its use for ethanol production (**CAP reform**)

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Summary

- ⦿ Advanced biofuels provide many benefits to Europe and its citizens but this potential is not recognized by NREAPs
- ⦿ Present support measures are insufficient to promote advanced biofuels successfully
- ⦿ double counting is presently the only instrument specifically designed to support advanced biofuels
- ⦿ double counting will not provide the hoped for incentive and is ineffective
- ⦿ A mix of support measures is needed to help commercialize advanced biofuels

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ABENGOA BIOENERGY

