

# **RED II sustainability criteria – the viewpoint of ETIP Bioenergy**

Lisbon, 27<sup>th</sup> May 2019

**ADVANCEFUEL WS** 

Optimising value chains and ensuring the sustainability of advanced lignocellulosic biofuels with effective sustainability criteria and verification

Patrik Klintbom, RISE and Chair SC ETIP Bioenergy





### Outline

## **1.** The European Technology and Innovation Platform

- 2. REDII Recognizing the position of biofuels within the Renewable Energy Directive
- 3. How to get involved





## **ETIP Bioenergy has the role...**

- to bring together relevant actors from academia, industry and civil society engaged in the development of sustainable bioenergy and competitive biofuel technologies
- to represent the unbiased, united, and consolidated view of the biofuels and bioenergy industry in Europe
- to act as the main interlocutor for DG RTD to implement the Strategic Energy Technology (SET) Plan in the field of biofuels and bioenergy





## **ETIP Bioenergy Mission**

- to develop cost-competitive world-class bioenergy and biofuel value chains,
- to create a healthy bioenergy industry with well articulated goals as well as links to societal challenges and industrial transformation,
- to accelerate the sustainable deployment of biofuels and bioenergy in the EU,
- to promote knowledge based research, technology development and demonstration in the field of bioenergy, and
- to assist in joint coordination of research and technology development for low carbon technologies





### **Organisation of ETIP Bioenergy**







### **Stakeholders of the ETIP Bioenergy**







## **ETIP- Bioenergy- SABS 2**

The H2020 funded support project for the ETIP Bioenergy Platform

Project title: European Technology and Innovation Platform – Support of Renewable Fuels and Advanced Bioenergy Stakeholders 2

Duration: 36 months

Consortium:

<b>FNR</b> – Fachagentur Nachwachsende Rohstoffe e.V., Germany	Fachagentur Nachwachsende Rohstoffe e.V.
BE2020 – BIOENERGY 2020+ GmbH, Austria	bio <mark>energy</mark> 2020+
<b>ETA</b> – Energia, Trasporti, Agricoltura Srl, Italy	etaflorence ** renewable energies
<b>INCE</b> – CEI – Iniziativa Centro Europea, Italy	CENTRAL EUROPEAN INITIATIVE
<b>RISE</b> - RISE INNVENTIA AB, Sweden	RESE





## **Overall Objectives**

- Engagement with stakeholders as to better understand the actor perspective and the socio-technical aspects of technology development and implementation, with a special focus on support for outreach and engagement of actors in the civil society
- Assistance to the European Commission and Member States in defining research programmes, financial instruments, while addressing lower TRL research need as well as advancing close to market technologies.





#### Outline

- 1. The European Technology and Innovation Platform
- 2. **REDII Recognizing the position of biofuels within the Renewable Energy Directive**
- 3. How to get involved



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

## AMBITION IN RENEWABLES

- The increased 2030 targets (20% to 32% and from 10% to 14%) for renewables are welcome
- Renewables have an important role to play in the energy decarbonisation and transition.
- $\rightarrow$  However, the ambition will need to be increased to meet the targets set by the Paris Agreement in 2015.



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

### INCREASING ROLE FOR BIOFUELS

- Renewable fuels and especially biofuels are key to help reducing the carbon footprint in transport segments (that will continue to rely on internal combustion engines)
- They are complementary to new mobility modes and are expected to make a significant market impact
- →An integrated bio-based technology development strategy (and exploiting synergies in combining biomass BtX and electricity/power PtX based technologies) can help to stay on track to reach targets in time.



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

#### AN EU-WIDE DETERMINATION

- The EU should encourage Member States (MS) :
  - to take an overall harmonized approach
  - to strive for the highest share possible (within the 7% limit) of sustainable conventional biofuels
  - to refrain from using the option to decrease the 14% target, (if conventional biofuels share is below 7%).
- There will be a certain flexibility for each MS, to which extent different biofuels will be used to reach this target
- → All efforts are needed to reduce emissions in line with the Paris Agreement!





#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

#### STRONG R&I STRATEGY FOR ADVANCED BIOFUELS

- To reach the deployment of advanced biofuels and other renewable fuels, an integrated approach of strong policy measures, research, innovation and improved financing solutions are necessary.
- The future focus should not only consider e-mobility and electricity for the transport sector.
- The combustion engine will be part of the energy transition for the next decades and therefore sustainable biofuels as well.



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

#### A ROBUST SUSTAINABILITY IS MANDATORY

- In addition, strong sustainability criteria for biofuels and their feedstocks are essential
- R&D efforts are needed to properly assess the sustainability of biofuels (which includes the low-ILUC concept development).
- Concerning sector coupling, well-to-wheel (WTW) approaches should be considered when assessing GHG emission reduction, e.g. REDII for renewable fuels linked to CO2 fuel regulations for vehicles.



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

### DELEGATED REGULATIONS for ILUC risk feedstock:

- The delegated act is an important step forward for the implementation of the RED II
- *it addresses key issues in the public debate on sustainable biofuels, among which the sustainability of palm oil is the most controversial one,* says Patrik Klintbom at RISE Research Institutes of Sweden, Chair of ETIP Bioenergy Steering Committee.
- ETIP Bioenergy acknowledges
  - the stricter criteria for small holders regarding farm size and economic independence;
  - the refined calculation methods considering different annual and perennial crops;
  - the stricter definition of land eligible for low-ILUC-risk crops, restricted to "abandoned" and "severely degraded land" instead of unused land.



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

#### DELEGATED REGULATIONS for ILUC risk feedstock:

- Biofuels produced from palm oil accounts for the highest ILUC emissions among biofuel feedstocks followed by soybean oil
- article 3 sets the criteria for determining the high indirect land-use change-risk feedstock for which a significant expansion of the production area into land with high carbon stock is observed
- ETIP Bioenergy acknowledges the numerical values introduced in this article and the methodology based on crop-specific productivity factors for calculating production expansion



#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

#### DELEGATED REGULATIONS for ILUC risk feedstock:

- Articles 4 to 6 is uncertain if they introduce sufficiently detailed and scientifically sound criteria, to guarantee the adoption of best practices for minimizing the ILUC risk
  - The criteria to ensure the full traceability of the whole value chains should be reinforced to minimize ILUC risks. An impact assessment is necessary
- There is a large potential for crop yield increase in many European countries, through improved agricultural management, that can also provide GHG emissions reduction, protection against desertification and soil erosion as well as an increase of the amount of organic carbon in soils, says Antti Arasto
- Sustainable biomass supply for advanced biofuels can offer a win-win opportunity to maintain European farming capacities and jobs





#### **REDII - Recognizing the position of biofuels within the Renewable Energy Directive**

### Summary:

- REDII targets are welcome, but they need to be increased to meet the 2 degree target fully
- The delegated act is an important step forward for the implementation of the REDII
- REDII needs to be implemented in a harmonized approach within EU
  - Especially the sustainability criteria should be equalized in EU
- An integrated bio-based technology development strategy can support
- The combustion engine will be part of the energy transition and therefore sustainable biofuels as well.





#### Outline

- 1. The European Technology and Innovation Platform
- 2. REDII Recognizing the position of biofuels within the Renewable Energy Directive
- 3. How to get involved





## How to participate in ETIP Bioenergy

- Become a member of the **Stakeholder Plenary**
- By signing up to the newsletter, e-mail shots, stakeholder plenary meeting
- By active participation in the Working Groups
  - ... input to position papers,
  - ... input to the Strategic Research and Innovation Agenda,
  - ... input to other publications directed to EC
- Participation in the ETIP Bioenergy is free of charge!



#### **Project Partners**





etaflorence # renewable energies



RI. SE

# www.etipbioenergy.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825179

