

MUSIC WORKSHOP “PROSPECTS OF BIOCOAL FOR THE METALLURGICAL INDUSTRY”
POLICY RECOMMENDATIONS

Manolis Karampinis, Bioenergy Europe
15 February 2023

WWW.MUSIC-H2020.EU

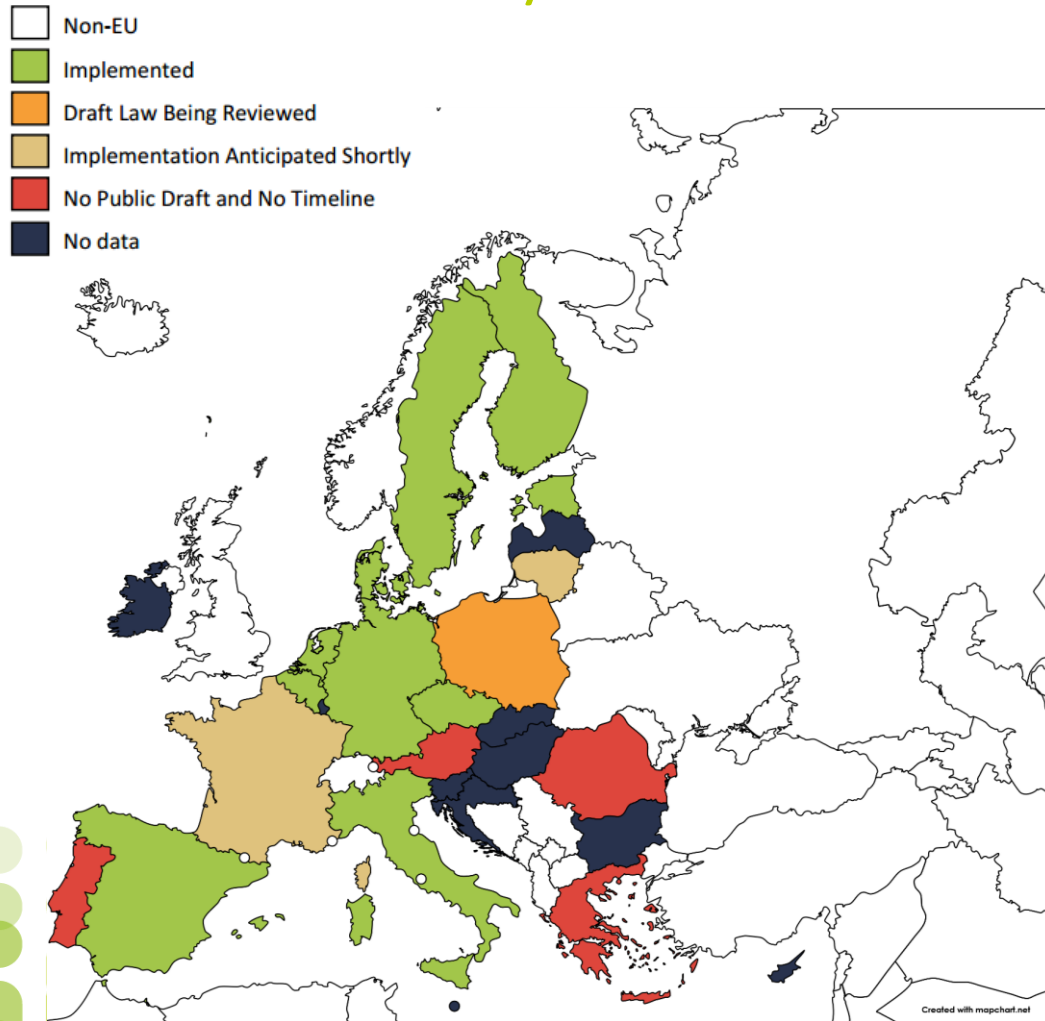
#MUSIC_H2020

MUSIC Policy Recommendations for IBC market uptake

1. Adopt a constant policy framework for biomass sustainability criteria
2. Adopt a “soft” cascading principle
3. Establish minimum targets for IBCs (rather than quotas)
4. Promote and provide funding for innovative applications



1. Constant & unified policy framework for biomass sustainability



- REDII sustainability criteria have not yet been fully implemented or evaluated
- REDIII proposals steer into forest sector regulation → historically, a competence of member-states
- With high uncertainties over what is considered and what is not considered sustainable (and eligible for support), investors will refrain from making decisions for IBCs project development
- One regulation to govern sustainability criteria; avoid the adoption of different criteria in other regulations (e.g. Taxonomy)

2. “Soft” cascading principle

Danish authorities order Ørsted’s oil- and coal-fired power stations into operation

01.10.2022 12:20



Nov 18, 2022

ARBAFLAME WITH NEW SHIPMENT OF PELLETS TO REPLACE EUROPEAN COAL

Updated: Nov 24, 2022

Fast pyrolysis bio oil key markets

- Sustainable transport fuels - comply with e.g. RED II and production of RINS
- Biobased chemicals – renewable materials
- Heat application – e.g. district heating or peak shaving

- A mandatory cascading principle would be hard to implement; previous attempts (Sweden) have failed
- Markets can ensure that IBCs and other bio-products will find use in the higher added value applications, provided there is local demand
- IBC producers should have the flexibility to respond to changing market conditions, i.e. providers of biocarbon / providers of bioenergy

3. Establish minimum targets instead of quotas

The Biomethane Industrial Partnership

Teaming up to achieve 35 bcm of sustainable biomethane by 2030

- Quotas are dependent on the overall level of energy consumption and may be affected by market shocks
- Minimum targets (e.g. by 2030) send a strong political message to IBC investors / project developers
- Example: replace 1 Mt of metallurgical coal with torrefied biomass by 2030

2030 TARGETS

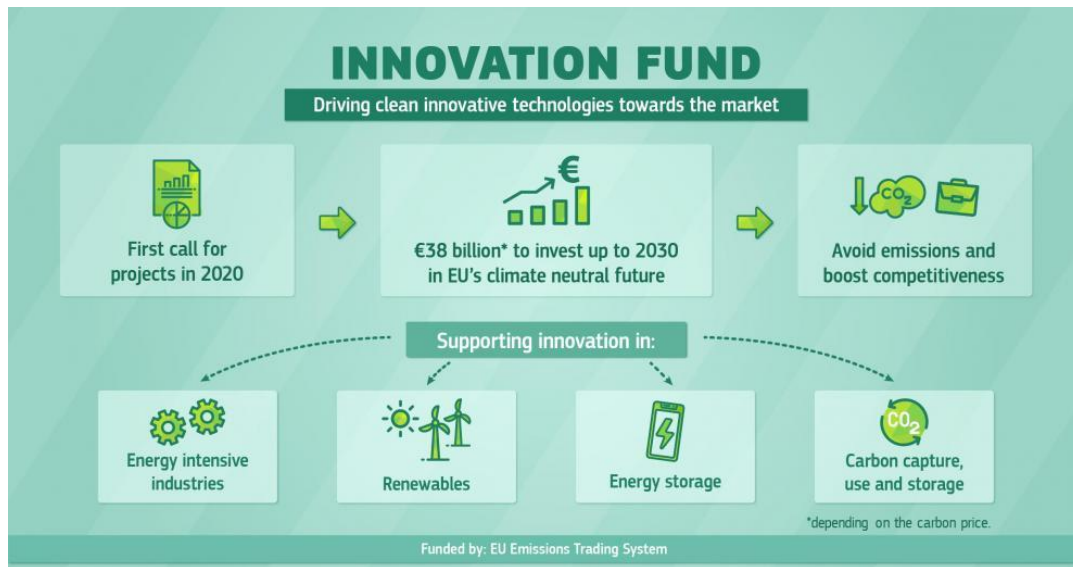
40GW of renewable hydrogen electrolyzers in the EU



10 million tonnes of renewable hydrogen produced in the EU



4. Promote and provide funding for innovative applications



- Torrefied biomass / FPBO can be considered to be TRL9; however, significant improvements in production processes can still be anticipated
- Likewise, current or emerging applications (power/heat, transport fuels, steel) can still be improved
- New end-uses for IBCs, with lower TRLs, may also materialize, especially in hard-to-abate industries with demand for fossil carbon (example: non ferrous metals)
- Access to funding for innovative, first-of-a-kind projects but also for improving current technologies will be instrumental in unlocking this potential





MUSIC

Market Uptake Support for Intermediate Bioenergy Carriers

THANK YOU
FOR YOUR
ATTENTION!



WWW.MUSIC-H2020.EU

#MUSIC_H2020



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 857806.

