The ART Fuels Forum
The Forum where the Advanced Biofuel Industry meets

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ART Fuels Goals & Objectives
ART Fuels Forum (H2020) - Altern.&Ren.Transport Fuels

- **Alternative and Renewable Fuels Forum** – supported by EC-DG Energy
- **Goal:** Market & Policies post 2020 (to 2030).
- **~100** participants (Members, Affiliate, Observers, NGO & Think-tanks)
- **Industry-led forum**
Support for alternative and renewable liquid and gaseous fuels forum
(policy and market issues)

The ART Fuels Forum, established under the project “Support for alternative and renewable liquid and gaseous fuels forum (policy and market issues)”, is financed by the European Commission and aims at bringing together selected representatives of:
- the European Alternative and Renewable Transport Fuels (ART Fuels) production industry
- the transport consumption industry
- the main international cooperation actors and
- the EU policy makers and stakeholders

towards facilitating discussion and elaboration of common issues on policy and market penetration barriers for these fuels.
The project contributes to enhancing and strengthening the understanding of the needs of the ART Fuels sector in view of improving:
- policy understanding and its implementation at European level
- appreciation of market uptake issues
- technology insight and deployment issues
- appreciation of international cooperation, WTO and GHG emissions issues

The Forum integrates a series of organized and structured discussions, plenary meetings, preparation of position papers, etc. towards shaping strategies and policies for market deployment of ART Fuels.
The AFF structure
In addition to the structured links to US, CAN and INDIA, collaborations and joint actions have been established with the following organisations:

- IRENA
- Biofuture Platform
- IEA
- below50
- ETIP Bioenergy
- FlightPath

International Workshop
10-11/4/2018 - Brussels, BE
03

REDII and AFF Key Messages

Greenhouse gas emission in the EU in percentage change since 1990:

- Road Transport Sector
- Other Sectors
AFF main focus during 2017-2018

- **AFF work** focused on the new **EU Directive on Renewable Energies (REDII)**
- **This Legislative Framework is decisive for the Adv.Biofuels & Low Carbon Fuel industries.** AFF endorsed the work by **SubGroup on Advanced Biofuels - SGAB**

**2003**
Biofuel Directive 2003/30/EC

**2009**
Fuel Quality Directive 2009/30/EC

**2015**
ILUC Directive 2015/1513

**2016**
REDII Directive (EC proposal) COM(2016) 767 final

**Dec.2017**
EU Council General Approach
EU Parliament Plenary Vote on REDII

**Jan.2018**
EU-India Adv. Biofuels Conf. - New Delhi, 6-8.03.2018
REDII EC proposal: food vs no-food biofuels

- **Food-based (conventional) Biofuels.** From 7% at 2020 to 3.8% at 2030

- **No-food Biofuels.** From 1.5% at 2020 to 6.8% at 2030. They include, at 2030
  - Biofuels from Organic Waste & Residues (Annex IX part B): 1.7% cap
  - Advanced Biofuels (Annex IX Part A): 3.6%
  - Renewable electricity, RFNBO: 1.5%
Only feedstock list. No technology-related definition. SGAB Proposal: “AB are those produced from biomass other than food/feed crops while meeting the EU sustainability regime under the legislation in force”
ART Fuel – Key Messages & Statements

KEY MESSAGES FROM Alternative Renewable Transport Fuel Forum Teams on RED II proposal

INTRODUCTION

For the Cohesion Fund Programme (CFP) and its applications to the EU, the Innovation Target (Technology, Sustainability, Finance, Environment, Regulation, Innovation, etc.) should be an element of the CFP.

SECTOR SPECIFIC MESSAGES

IMPLICATIONS OF THE RED II PROPOSAL FOR DEPLOYMENT OF POWER-TO-X TECHNOLOGIES (‘‘e-Fuels’’)

POSITION PAPER

The proposed changes in the context of the Renewable Energy Directive (RED II) to integrate biofuels and renewable energy in the transport sector via a set of interrelated, Renewables Funds, and National Regulations Initiative (NRI) for EU countries that are not in the context of the European Union. The need for strategic action at both the national and European levels is evident, as well as the need for a coherent approach that can be implemented at both levels.
ART Fuel Main Key Messages - General

• LONG-TERM STABLE POLICY FRAMEWORK
• PENALTIES FOR NON-COMPLIANCE
• POST 2030 PROVISIONS
• SUSTAINABILITY CRITERIA
• 1G TO AB TRANSITION
• FINANCING
• SPECIFIC INCENTIVES FOR AVIATION
• MULTIPLIER FACTORS
• PROTECTION OF INVESTMENTS
• GHG EMISSION FROM WASTE TO BE REASSESSED
• SPECIAL ATTENTION TO NEW TECHNOLOGIES
• BIOMASS CO-PROCESSING IN PETROLEUM REFINERIES
From R&D to Demo to Industrial – no shortcuts to market
ART Fuel Main Key Messages – SUMMARY

• LONG-TERM STABLE POLICY FRAMEWORK NEEDED
• PENALTIES FOR NON-COMPLIANCE
• POST 2030 PROVISIONS (BEYOND 2030)
• SUSTAINABILITY CRITERIA
• 1G TO AB TRANSITION
• FINANCING MECHANISMS
• SPECIFIC INCENTIVES FOR AVIATION. TAILOR-MADE SOLUTIONS NEEDED. GLOBAL DIMENSION. INDECISIVENESS PUT EU FURTHER BEHIND
• MULTIPLIER FACTORS
• PROTECTION OF INVESTMENTS
• GHG EMISSION FROM WASTE TO BE REASSESSED
• SPECIAL ATTENTION TO NEW TECHNOLOGIES
• BIOMASS CO-PROCESSING IN PETROLEUM REFINERIES (PYROLYSIS)
• REMOVAL OF BARRIERS TO POWER-TO-X DEPLOYMENT
• LOW ILUC IMPACT BIOFUELS
EU Parliament (17.1.18)

- Binding EU Target at 12% of RES in Transports (in addition to 35% En.Eff and 35% RES in Fin.En.Cons.).

- Conventional Biofuels (“1st Gen”) limited to 2017 share: National caps at 2017 level, min 2%, max 7%.

- Palm oil ban by 2021.

- Advanced biofuel, renewable fuels of non-biological origin, waste-based fuels and renewable electricity in transports: at least 1.5% at 2021, 10% at 2030.

- Member Stated must set National targets, and then monitor and achieve these.

However, while the definition of Advanced Biofuels has been extended to include waste-based fuels, MSWs have been removed from Annex IX: this generates a contradiction, favouring thermal conversion of wastes and incineration.

EU Council (18.12.17)

- Target of 14% of renewables in transports by all 2030 in each Member State

- 3% sub-target at 2030 for the Advanced Biofuels, entitled by double counting, as well as intermediate target of 1% at 2025.

- Electric mobility promoted by a 5x multiple counting, and 2x in renewable rail transports

- Maintain the 7% cap for conventional biofuels, to ensure certainty for investors.

Other elements on GHG emission reduction and sustainability for liquid, solid and gaseous biofuels exist in the both the Council and EP positions.

Still various critical matters on the ground. The EU Industry brings key messages/statements through AFF in REDII debate
India participation to AFF
India Participation, Contribution in ART Fuel forum and learnings

• It has been a very exciting and educating experience in participating in the ART Fuel forum deliberations

• A unique forum comprising of Policy makers, Bio fuel production Industry, Consumer segment, Major International players and other stake holders in creating Advanced Bio Fuel eco system in EU and drawing a very practical, environment and Investment friendly sustainable road map for 2030 and beyond

• The consultative process adopted by ART Fuel forum would favour a long term stable policy frame work for EU

• Besides contributions in the Plenary meetings, networking with the ART Fuel participants has helped in creating awareness on the Indian initiatives and its commitment to Alternate, renewable and sustainable fuel program and understand issues and challenges faced in EU
India Participation, Contribution in ART

Fuel forum and learnings

• India in its quest for creating its own Alternate fuel road map has been engaging with EU, Brazil, Industries from USA, Canada and other countries for some time now.

• However, this engagement is accelerated with the involvement with ART Fuel forum.

• Participation IEA Bio Energy Task 39 meeting in Sep 2017, beginning of a consultation process to become a IEA Bio energy member was initiated in the 1st Plenary of ART Fuel forum.

• A large Indian contingent participation in the 6th ICLE on 27-28th Sep in Brussels has not only provided valuable inputs to the Indian Ligno Cellulosic Ethanol program but also has been an eye opener for EU and International participants on the aggressive program pursued by India.

• Participation in the Bio Future Summit in October 2017 at Sao Paulo Brazil has further strengthened these dialogues with multiple International stake holders.
India Participation, Contribution in ART Fuel Forum and learnings

• Recently concluded conference on Sustainable Bio Fuels jointly organised by Mission Innovation and Bio Future platform sponsored by Ministry of Science & Technology, Government of India in New Delhi are just a few examples of International co-operation in advanced Bio Fuel

• Last week dialogue between Below 50 and CII- Bio Energy team in India has been possible which should go a long way in creating awareness and large Industry/business participation in this program

• To peak it all we now are participating in this Indo – EU conference on Advanced Bio Fuel which will help understand initiatives in India and EU better and scale up the cooperation which again is a result of ART Fuel forum consultations

• India (federal structure with so many states and Union territories) and EU (with 29 member countries) have similar challenges. India can take leaf out of EU – ART Fuel initiative and further strengthen our own consultative process with all stakeholders

• Should pave way for Indo – EU joint development programs, trade and cooperation
Conclusions
Conclusions

• ART Fuel Forum (AFF) recently completed its first year of operation. It is now well established as industry-led platform.

• The number of members/participants has been growing fast.

• REDII discussion, key for the development of the Advanced Biofuel industry, so far inevitably attracted most of the attention of Members.

• However, the scope for ART Fuel Forum is wider, covering markets, International Cooperation, financing, biomass potential, and other issues

• AFF will address these topics in 2018, with International collaboration central in the discussion