

## IEA BIOENERGY CONFERENCE 2015

### 'REALISING THE WORLD'S SUSTAINABLE BIOENERGY POTENTIAL'

Berlin, 27-29 October 2015

#### SUMMARY

##### Introduction

The IEA Bioenergy Implementing Agreement (the Agreement) is a government-to-government collaboration on research on bioenergy, which is formed under the auspices of the International Energy Agency (IEA). Contracting parties to the Agreement include leading countries in bioenergy research, development and deployment from around the world.

The mission of IEA Bioenergy is to increase knowledge and understanding of bioenergy systems in order to facilitate the commercialisation and market deployment of environmentally sound, socially acceptable and cost-competitive bioenergy systems and technologies and to advise policy and decision makers accordingly. With this focus the Agreement carries out its work through the engagement of leading experts/researchers in the field to provide scientifically sound and politically and commercially independent data and information for policy and decision makers.

##### Conclusions from the Conference

In the context of the COP21 meeting in Paris starting on the 30<sup>th</sup> of November 2015, the *IEA Bioenergy Conference 2015* had as its focus '*Realising the world's sustainable bioenergy potential*'. Some of the conclusions from the conference are as follows:

1. The status of bioenergy can be characterised as
  - a. being the largest global renewable energy contributor today
  - b. requiring a tripling of its contribution to global energy supply by 2050 to avoid exceeding the 2 °C target according to scenarios from both the IEA and IRENA
  - c. generating some controversy regarding its sustainability
2. Bioenergy has a crucial role amongst the renewable sources of energy where
  - a. it can provide renewable energy storage or power on demand in harmony with intermittent renewable sources
  - b. it can provide efficient renewable heating supply
  - c. it can uniquely meet renewable transport fuels needs – the heavy duty vehicles, marine and aviation sectors in particular
3. A significant increase in the sustainable biomass resource can be realised, as evidenced by IEA Bioenergy analysis which highlighted
  - a. the potential for efficient mobilisation of more biomass with appropriate governmental support and societal change
  - b. use of biomass in an integrated way in the bio-economy for both products and

- energy while optimising the value of the resource
  - c. use of biomass in the circular economy where waste is transformed into a resource
4. Bioenergy can deliver substantial greenhouse gas (GHG) emission reductions when implementation is carried out in an integrated way through
- a. planting more biomass resulting in increased carbon uptake
  - b. exploiting biomass in sustainably managed systems (in forestry and agriculture)
  - c. increased investment in integrated landscape management to improve productivity and mitigate climate change
5. To realise increased sustainable bioenergy deployment good practices and examples exist. In Sweden, for example, increased forest area coupled with sustainable forest management has resulted in increased bioenergy deployment and reduced carbon emissions. Factors which have been vital to increased sustainable bioenergy deployment included
- a. a stable, medium to long term policy environment
  - b. mobilisation of market forces through the creation of an enabling environment
  - c. an enabling environment for biobased energy and products through
    - i. consumer choice resulting in market pull for biobased products
    - ii. regulatory action through a carbon tax on fossil fuel based products

4<sup>th</sup> November 2015