# IEA Bioenergy Roadmap – launched yesterday!





<u>www.iea.org/publications/freepublications/publication/technology-roadmap-on-bioenergy.html</u>



# Global bioenergy and biofuel market forecasts to 2022 from the *Renewables 2017* market report

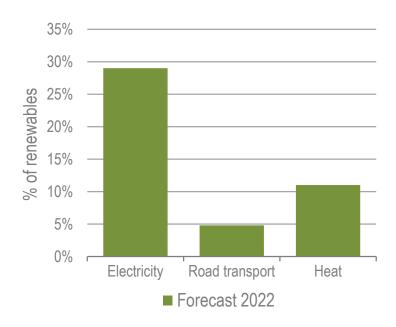
Ottawa, 28<sup>th</sup> November 2017



# **Electricity leads the way in terms of integrating renewables**



Global share of renewables in in each sector (left) and contribution of bioenergy and other renewables, both 2022

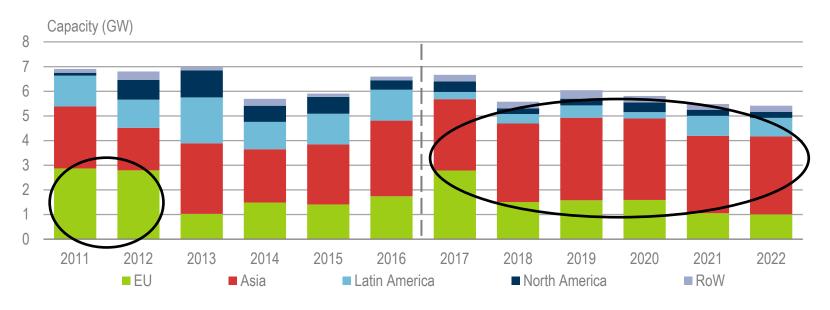


Renewables share of global power generation is forecast to increase to 29% in 2022. While bioenergy is one of a portfolio of contributors to renewable electricity, it leads the way in terms of renewable transport and heat.

## Global bioenergy electricity capacity additions relatively stable



### Gross annual bioenergy electricity capacity additions by region 2011-22

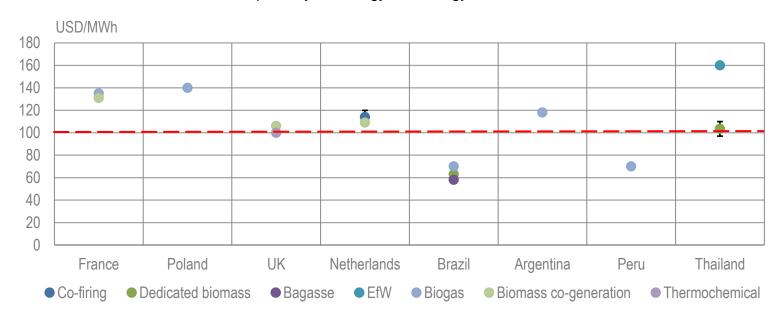


An acceleration of bioenergy deployment over the forecast period is not anticipated. While Europe has led deployment historically, Asia is forecast to drive growth in the forecast.

# Auction design crucial to biomass deployment prospects



### Awarded auction price by bioenergy technology, auctions held over 2016-17

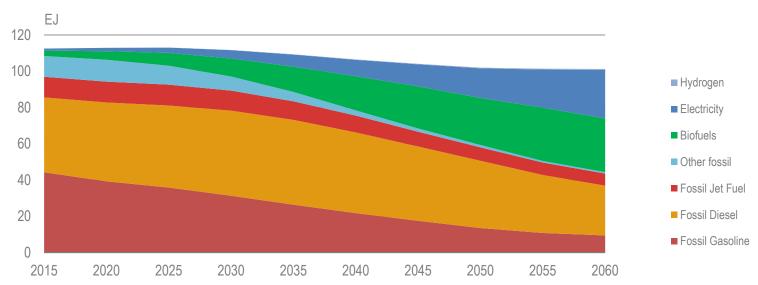


Contracts awarded for bioenergy are generally ≥\$100/MWh, except for in South America. Higher generation costs need to be viewed in the context of biomass dispatchability and wider benefits.

# Biofuels: an important option in a portfolio of transport solutions





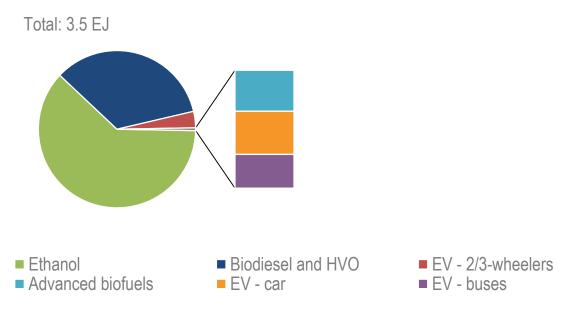


While demand of transport services more than doubles, biofuels complement end-use efficiency and strong growth in electricity, providing almost 30% of transport final energy demand in 2060

# Biofuels still forecast to account for most renewables in road transport by 2022



Renewable energy consumption in road transport 2016 (left) and 2022 (right)



By 2022 conventional biofuels should still account for 92% of renewable energy consumption in road transport; most renewable electricity demand is from China's 2/3 wheeler fleet as electric cars account for just 1%.