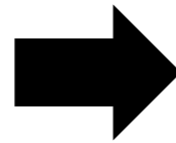


How can biomass/bioenergy aid the transformation towards carbon neutrality and what actions are needed?

Francisco José Domínguez Pérez
Bioenergy and Waste Department

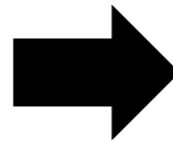
EU Framework

Union 2030 energy and climate framework



Union's binding target to cut emissions by at least 40 % below 1990 levels by 2030.

DIRECTIVE (EU) 2018/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2018 on the promotion of the use of energy from renewable sources (RED II)



- ***Share of energy from renewable sources in the Union's gross final consumption of energy in 2030: 32 %.***
- ***Share of renewable energy within the final consumption of energy in the transport sector by 2030: 14 %.***
- ***Contribution of advanced biofuels and biogas as a share of final consumption of energy in the transport sector in 2030: 3,5 %.***

Spain - NECP: Overall Targets

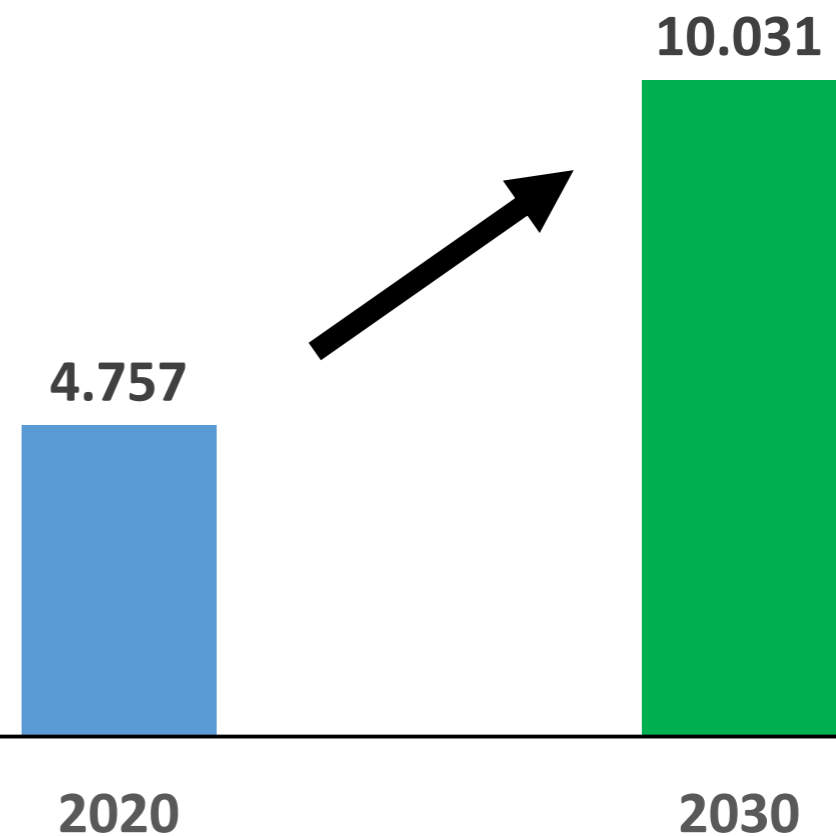
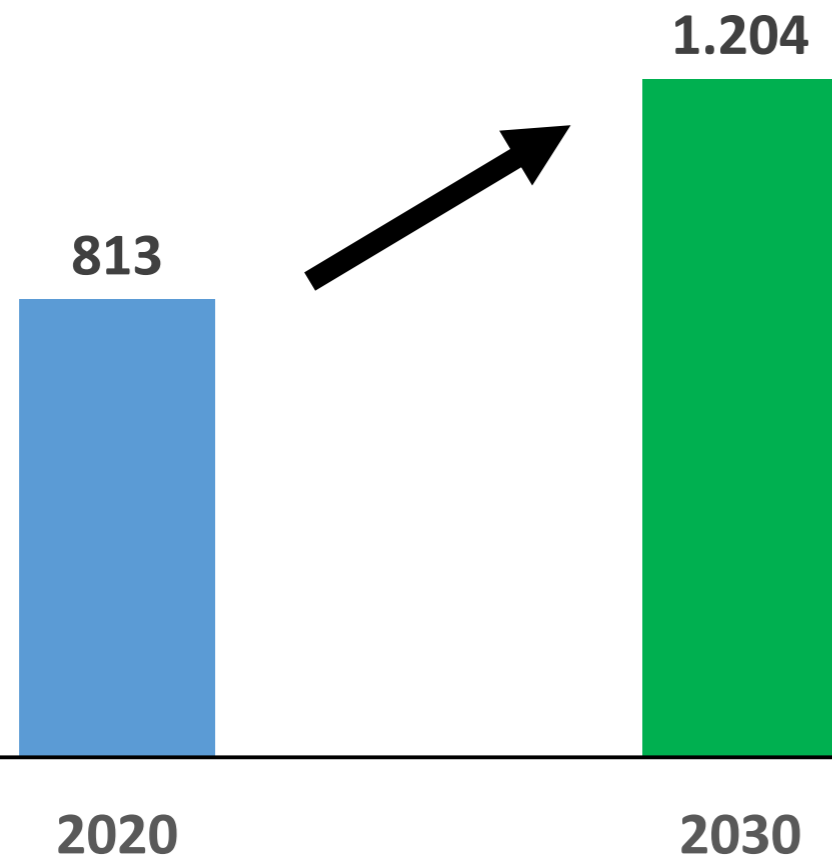
	<i>DER II</i>	<i>NECP</i>
<i>RES</i>	<i>32 %</i>	<i>42 %</i>
<i>RES-T</i>	<i>14 %</i>	<i>28 %</i>
<i>Advanced Biofuels</i>	<i>3.5 %</i>	<i>3.7 %</i>

Spain - NECP: Bioenergy Targets

Gross electricity generation (GWh)

Biogas

Biomass



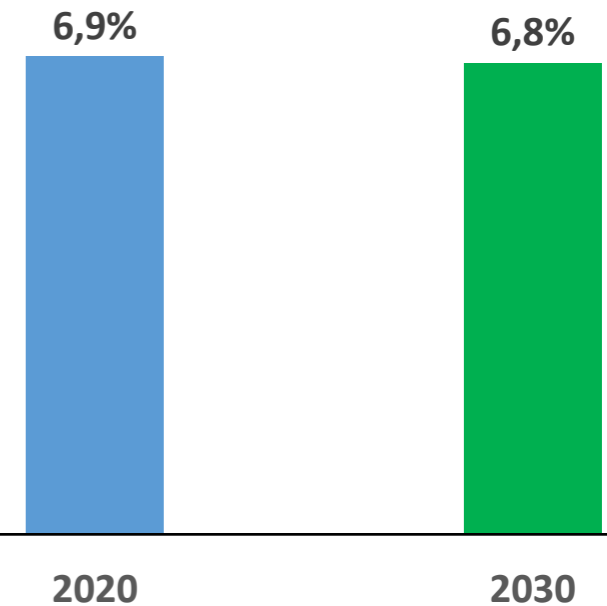
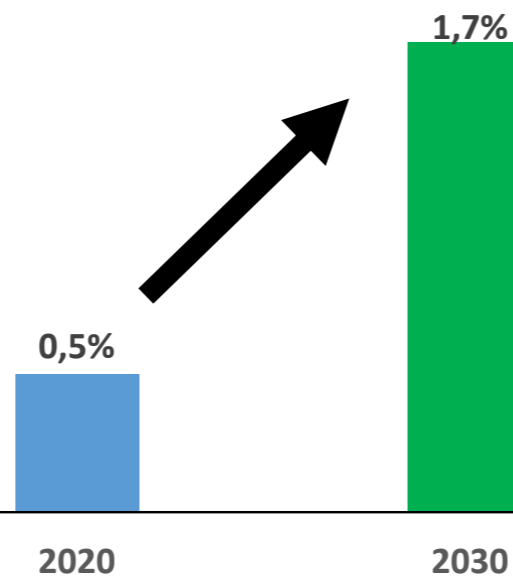
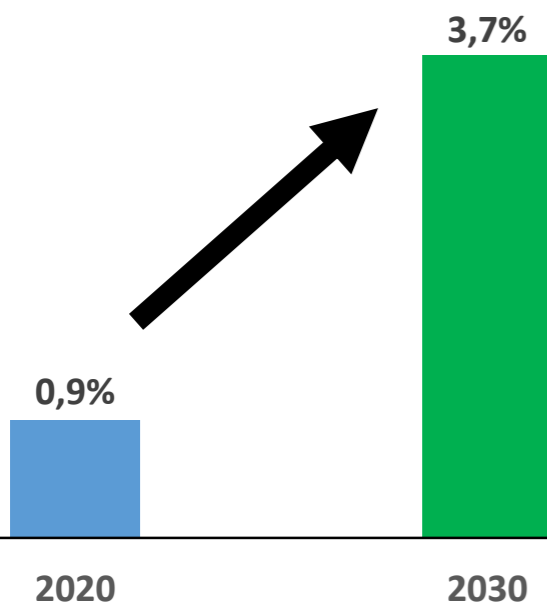
Spain - NECP: Bioenergy Targets

Biofuels and biogas for transport (%)

Advanced

UCO/Animal fats

Food & feed crops



Spain - NECP: Bioenergy Policies

- **Promotion of renewable energies in industry.**
 - ✓ **Focus on thermal uses, including biomass and biogas.**
- **Framework for the development of renewable energies for thermal uses.**
 - ✓ **Including biomass and biogas.**
- **Biofuels for transport.**
 - ✓ **Biofuels consumption mandate.**
 - ✓ **Aid for investment in advanced biofuels plants.**
 - ✓ **Specific targets for aviation.**
- **Promotion of renewable gases.**
 - ✓ **Including biogas and biomethane.**
- **Specific programmes for the use of biomass.**
 - ✓ **Legislative and economic policies.**
- **GHG emissions reduction in waste management.**
 - ✓ **Including biogas and biomethane production.**

Spain – Long-term decarbonisation strategy 2050

- ***Synergies between forest management and bioenergy production.***
 - ✓ ***Decarbonisation.***
 - ✓ ***Forest fire prevention.***
 - ✓ ***Rural development.***
- ***Sectoral decarbonisation.***
 - ✓ ***Transport: contribution of biofuels and biogas for transport.***
 - ✓ ***Renewable gases: including biogas and biomethane.***
 - ✓ ***Agricultural: biogas and fertilisers production.***
 - ✓ ***Municipal waste and waste water: biogas and biomethane production.***
- ***Under development:***
 - ✓ ***Biogas roadmap.***

Thank you for your attention

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