# Trinomics<sup>®</sup>

#### Analysis on biomass in National Energy and Climate Plans

Online, *WWF event - The role of woody biomass for energy and the NECP revision* 22 June 2023

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Introduction



#### Our work:

- Fern: Analysis on biomass in NECPs
- NRDC: Analysis of subsidies to biomass for electricity generation
- EC DG ENER: Support to IA of RED revisions
- Wild Europe: RECCS strategy to replace solid biomass use for energy (forthcoming)

## Matthew Smith Senior Consultant - Trinomics





### Fern study



- Published April 2021
- <u>https://www.fern.org/fr/publications-</u> insight/analysis-on-biomass-innational-energy-and-climate-plans-2326/



#### Analysis on biomass in National Energy and Climate Plans

Final Report - with Annexes







- Provide overview of planned use of forest biomass for energy (electricity, heating and cooling) based on analysis of NECPs
- Evaluate how biomass is reported in the NECPs, particularly how well this corresponds to Governance regulation requirements
  - Including current and planned policies and measures
  - Biomass availability and sourcing





As set out in Annex I of the Governance Regulation, the general framework for the integrated NECPs should include:

- (Section A: National Plan, 2.1.ii) **estimated trajectories on bioenergy demand**, disaggregated between heat, electricity and transport, and on biomass supply by feedstock and origin (distinguishing between domestic production and imports). For forest biomass, an assessment of its source and impact on the LULUCF sink is also required.
- Additionally, (in 3.1.2.i or 3.1.2.vii) where applicable, specific measures on the promotion of the use of energy from biomass need to be detailed, especially for new biomass mobilisation taking into account:
  - Biomass availability, including sustainable biomass: both domestic potential and imports from third countries;
  - Other biomass uses by other sectors (agriculture and forest-based sectors); as well as measures for the sustainability of biomass production and use.
- Finally, (under 5.1.i) **impact assessments of planned policies and measures**, as described in section 3, **projections of development of the energy system** and GHG emissions and removals as well as air pollutants under the planned policies and measures at least until 10 years after the period covered by the plan are required, as are policy interactions at national and EU level.



### Results – NECP compliance



		•		NECP complian	nce			
Country	2.1.ii	2.1.iv		2.1.iv	3.1.2.vii			5.1.i
	Trajectories	Biomas Feedstock origin	s supply Domestic/imports	Forest biomass source and LULUCF impact	Specific measures on the promotion of the use of energy from biomass	Biomass availability taken into account	Other biomass uses taken into account	Impact of planned measures
Austria	•	•	•	•	•	•	•	•
Belgium	•	•	•	•	•	•	•	•
Bulgaria	•	•	•	•	•	•	•	•
Czechia	•	•	•	•	•	•	•	•
Germany	•	•	•	•	•	•	•	•
Denmark	•	•	•	•	•	•	•	•
Estonia	•	•	•	•	•	•	•	•
Greece	•	•	•	•	•	•	•	•
Spain	•	•	•	•	•	•	•	•
Finland	•	•	•	•	•	•	•	•
France	•	•	•	•	•	•	•	•
Croatia	•	•	•	•	•	•	•	•
Hungary	•	•	•	•	•	•	•	•
Ireland	•	•	•	•	•	•	•	•
Italy	•	•	•	•	•	•	•	•
Lithuania	•	•	•	•	•	•	•	•
Latvia	٠	•	•	•	•	•	•	٠

• Fully complied • Partially complied • Not complied

### Results – NECP compliance



NECP compliance										
Country	2.1.ii	2.1.iv		2.1.iv	3.1.2.vii			5.1.i		
	Trajectories	Biomass supply Feedstock origin Domestic/imports		Forest biomass source and LULUCF impact	Specific measures on the promotion of the use of energy from	Biomass availability taken into account	Other biomass uses taken into account	Impact of planned measures		
Netherlands	•	•	•	•	biomass	•	•	•		
Poland	•	•	•	•	•	•	•	•		
Portugal	•	•	•	•	•	•	•	•		
Romania	•	•	•	•	•	•	•	•		
Sweden	•	•	•	•	•	•	•	•		
Slovenia	•	•	•	•	•	•	•	•		
Slovakia	•	•	•	•	•	•	•	•		
Counts										
•	20	10	14	5	18	9	8	18		
•	3	1	0	8	2	0	0	5		
•	1	13	10	11	4	15	16	1		

• Fully complied • Partially complied • Not complied







- Trajectories relatively well reported increases in biomass use planned
  - But much less clarity on how this is supplied
- Few NECPs addressed impacts on the LULUCF sink
- Specific policy measures identified by most
  - But less clarity on how biomass availability and other uses taken into account
- Impacts of planned measures evaluated
  - But typically not biomass trajectory specific but as part of whole



## Subsequent developments



#### • Green Deal policies

- Increased RES and emissions targets
  - RED II & III revisions changes to sustainability criteria
  - Adjusted Climate Target Plan / Fit-for-55 scenarios
- Forthcoming
  - Updates to NECPs due by  $30^{th}$  June 2023



### **Updated scenarios**

- Massive increase in biomass energy planned 2030-2050
- Increased role for BECCS
- Large hope for Lignocellulosic grass after 2030
  - But also significant growth for short-coppice, forest stemwood and forest residues





Thank you for your attention, please contact us for more information

#### Matthew Smith

Trinomics Westersingel 34 3014GS Rotterdam, the Netherlands matthew.smith@trinomics.eu