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What are the overall policy needs for the future?

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ADVANCEFUEL Stakeholder Webinar

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N.° 764799.

Biomass policy: why 'reconsider'

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Biomass for single 'sector' targets	**A value chain approach with SECTOR INTEGRATION**
The biomass policy agenda has been based on delivering sector specific targets (e.g. energy, transport, etc.)	**Challenges and gaps are identified along the value chain.** **Stakeholders contribute and improve knowledge for geographically specific capacities and context.** **Targeted focus on 'challenging elements' from the outset of policy reform.**
Multiple objectives that are subjected to trade-off on a common scale with other non-biomass options.	**Multiple objectives are clearly recognised per value chain stage and aggress challenges that restrict implementation and market uptake.** **New policy targets optimal performance based on sustainability and resource efficiency.**
People are treated as passive recipients.	**Stakeholders are engaged throughout the value chain policy analysis with clear roles and benefits.**
Attempts to abolish future uncertainty, and pre-take future decisions.	**Accepts uncertainty and facilitates bottom up decision making which includes future options that capitalise on local context and capacities, safeguard sustainability and facilitate resource efficiency.**

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Why ‘now’? What is new?

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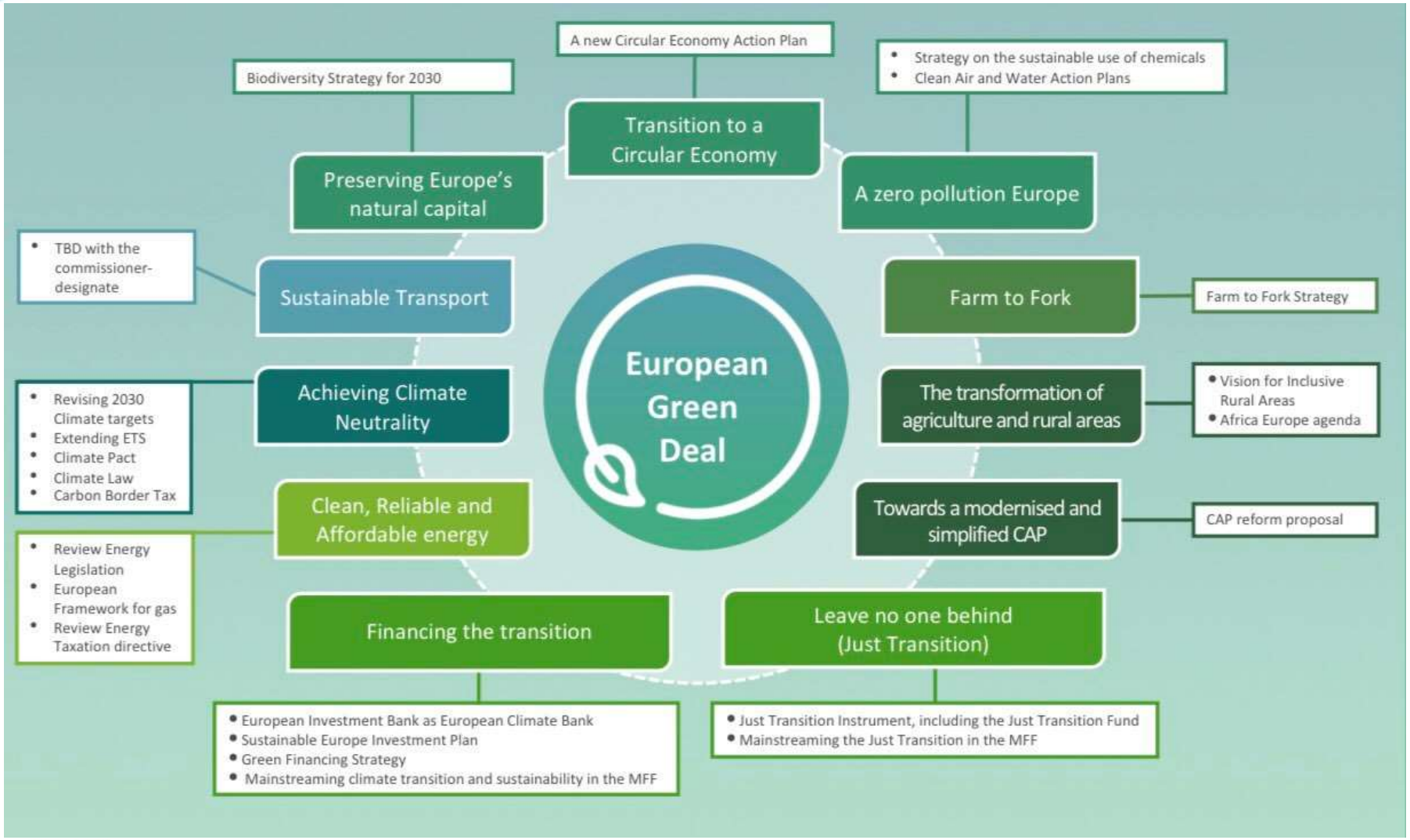

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https://www.compostnetwork.info/wordpress/wp-content/uploads/green-deal.jpg

What is relevant for advanced biofuels?

CAP & REDII

RED II: Cultivate unused, abandoned or severely degraded land

Specific objective	Interventions	Result indicators	Impact indicators
Contribute to climate change mitigation and adaptation, as well as sustainable energy	Payments for natural constraints and other region-specific constraints (ANC) Payments for management commitments (environment, climate, genetic resources, animal welfare)	R.12 Adaptation to climate change: Share of agricultural land under commitments to improve climate adaptation R.14 Carbon storage in soils and biomass: Share of agricultural land under commitments to reducing emissions, maintaining and/ or enhancing carbon storage (permanent grassland, agricultural land in peatland, forest, etc.) R.15 Green energy from agriculture and forestry: Investments in renewable energy production capacity, including bio-based (MW) ….	I.10 Contribute to climate change mitigation: Reducing GHG emissions from agriculture I.11 Enhancing carbon sequestration: Increase the soil organic carbon I.12 Increase sustainable energy in agriculture: Production of renewable energy from agriculture and forestry

REDII: crops which benefit from improved agricultural practices

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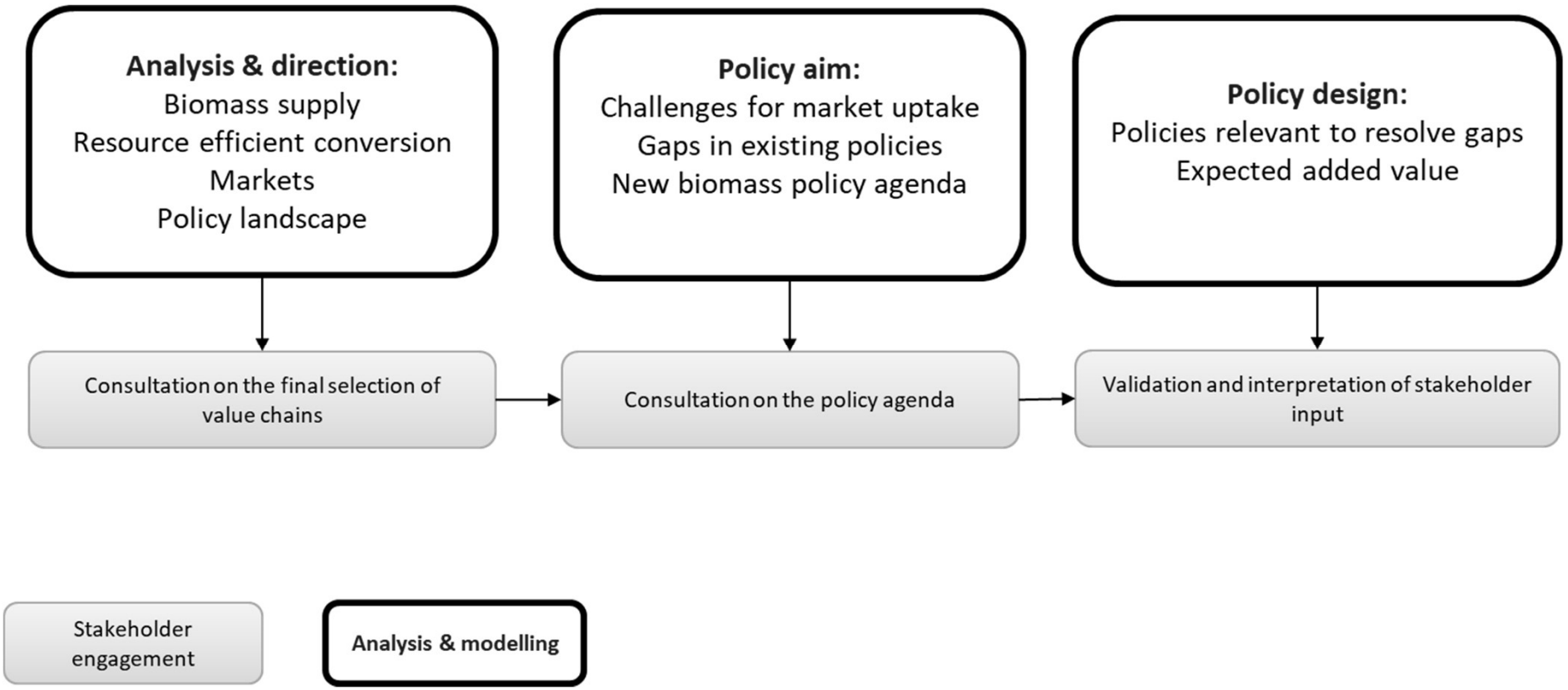
Approach to assess future policy needs



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Land use

Challenge	Policy relevant gaps	Policy needs
Marginal land	Legislation often has ambitions to exploit such land but lacks detailed planning, financing and awareness interventions.	Develop policy for the exploitation of marginal land biomass. Develop dedicated financial mechanisms in CAP to support such exploitation. Clarity on definition of marginal land
Awareness and misconceptions about land use for lignocellulosic biomass crops	Capacity building on opportunities for lignocellulosic biomass crops	Improve perceptions through targeted awareness, training and capacity building
Carbon sequestration	The benefits of biomass for carbon sequestration are not adequately substantiated	Clarity on quantification of carbon sequestration

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Biomass production

Challenge	Policy relevant gaps	Policy needs
Lignocellulosic crops may need new management techniques	Knowledge for lignocellulosic crops and opportunities to integrate them to current agricultural systems	Training and education for new farming and management techniques
Development of improved varieties with resilience to low input crop management (e.g. water, heat tolerance, etc.)	Increase innovation in lignocellulosic biomass cropping	R&D financing
Deployment of carbon farming and harvesting innovations	Common regulatory framework, approach and indicators.	Improve standardised methodologies for data collection on SOC levels
Mobilisation of residual streams	Absence of dedicated policy support for biomass mobilisation.	Policies should refine rules and financing for mobilisation of residual biomass

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Conversion

Challenge	Policy relevant gaps	Policy needs
Fuel mix and an increase in energy efficiency are considered critical to meet the Paris Agreement targets.	Generic financing options and instruments in current legislation.	The policy measures to be implemented need to be strong enough to ensure that significant amounts of RESfuels and ZEVs are deployed. These need to go hand in hand with the energy efficiency improvements.
Low access to capital in SMEs and industries	Only a few SMEs and industries are aware of potential opportunities and most of them have limited access to capital that will allow them to invest in new technologies	Improve access to finance, regulatory support and information to SMEs and industries to share risks and facilitate decision making in biorefinery innovation.
Technology development and deployment is capital intensive and results to high production cost of RES fuels.	Lack of tailored financing which addresses the varying scales of production and provides financial support.	A combination of policies, such as quota obligation combined with feed-in premium, are needed to provide secure and reliable market conditions, particularly for aviation and also maritime sector.

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End use

Challenges	Relevant policy gaps	Policy needs
Slow uptake of RESfuels because of their high costs and lower, competing fossil fuel prices.	Absence of regulatory mechanism to bridge the price gap between renewable and fossil-based fuels Lack of a regulatory framework which impacts biomass price fluctuations.	Tailored financial support to reward efficiency and improve market prices
Low uptake of advanced biofuels for aviation, maritime and shipping sectors	Aviation, marine and freight sectors are excluded from biofuel obligatory quotas, GHG emission reduction targets and national targets and have no specific provisions in place to promote the use of advanced biofuels	Non-financial incentives and information provision, financial incentives and investment grants to promote new innovation technologies for carbon efficiency, and market regulation with regulatory instruments such as feed-in premiums, certification and standardization

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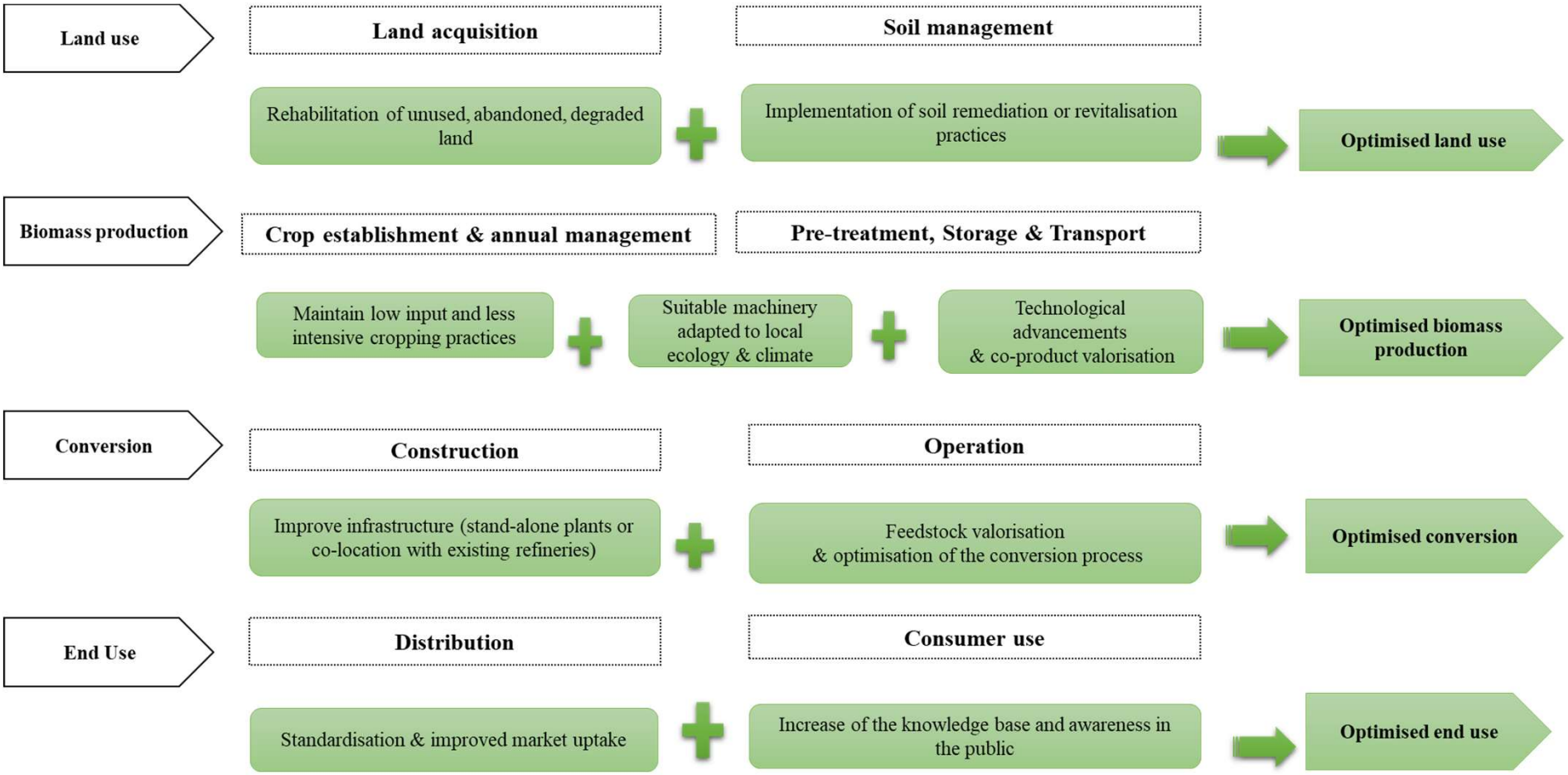
Optimisation targets for future policy



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Thank you for your attention!