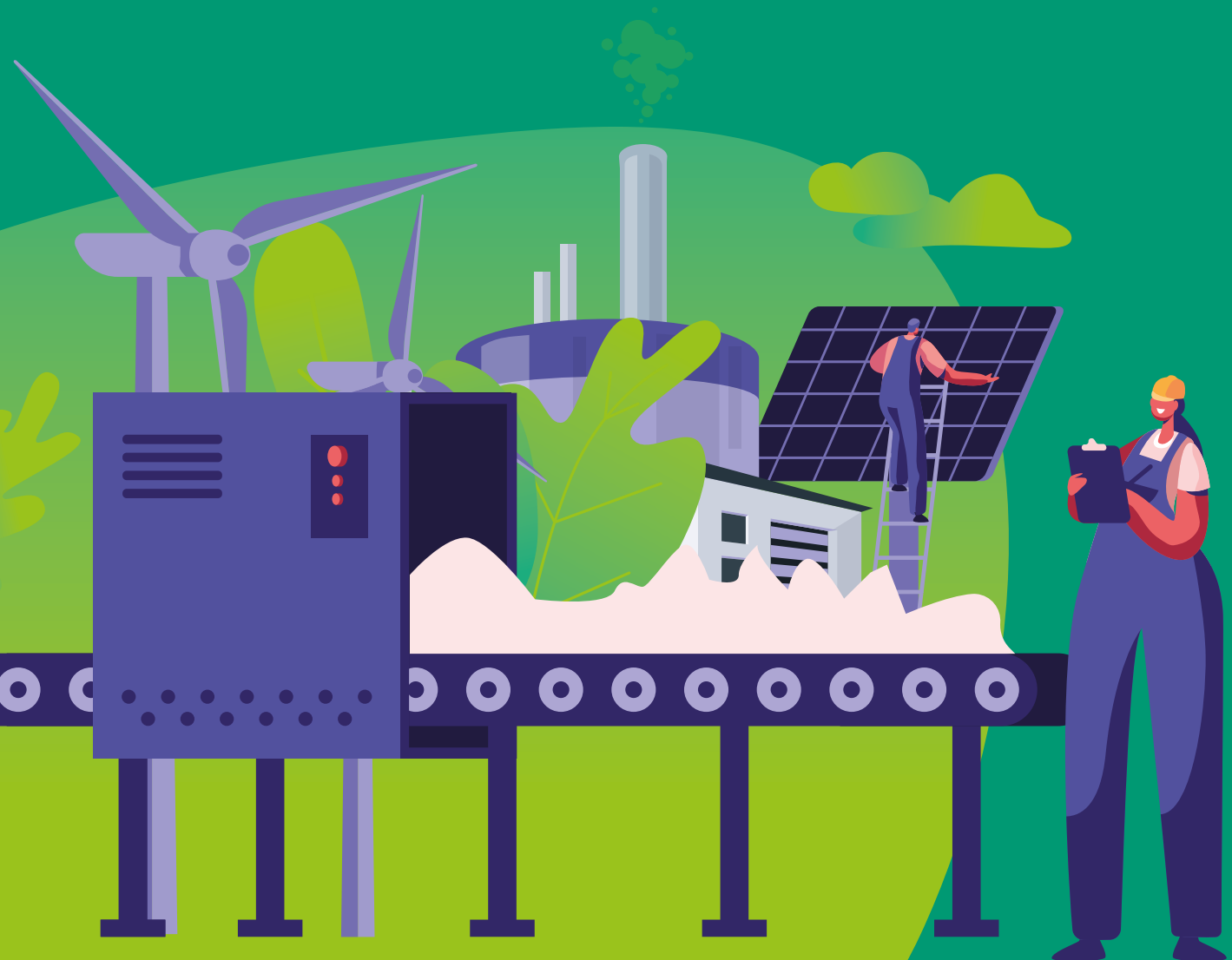


# A Checklist for EU Climate and Energy Policies

The way forward for the pulp and  
paper industry



## The pulp and paper industry today

The pulp and paper industry is the fourth largest industrial user of energy in Europe. The majority of our current processes are heat driven. This means that around 70% of our energy consumption is used for low to medium temperature heat generation. Our production sites are optimally integrated into the energy system, where we are:

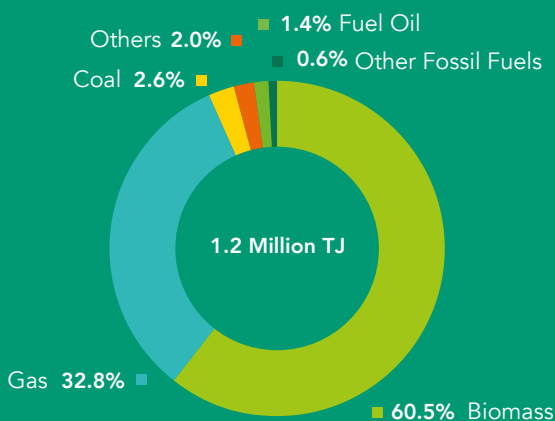
- One of the leading industrial sectors in the use of renewables in industrial heating with biomass, coming from side-streams of our activities, accounting for more than 60% of our primary energy,
- One of the largest industrial prosumers in Europe, with the potential to produce another 31 TWh of fossil-free electricity and heat on-site,
- Providers of solutions to defossilise other sectors, such as district heating or transport.

## Defining the enabling policy framework

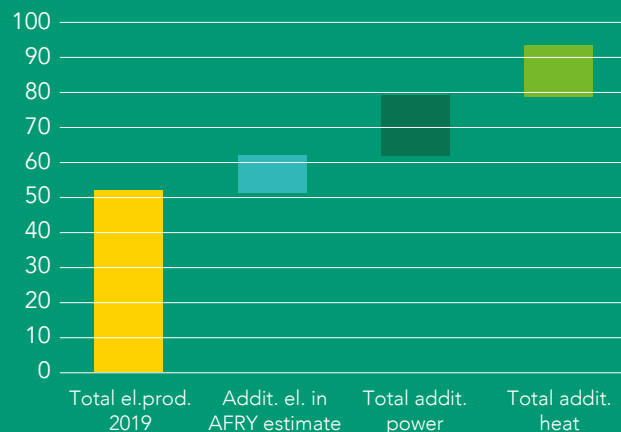
The upcoming elections to the European Parliament and the change of the political leadership in the European Commission are an opportunity for policymakers to define and address the gaps in the policy framework. The European policies have an enormous impact in determining Europe's competitiveness, growth and climate ambition. The operating conditions for doing business in Europe need to improve. Critical issues for our sector include access to affordable fossil-free energy, the 2040 climate and energy package, and the budget for innovation financing.

## Total fuel consumption 2021 60,5% biomass

Cepi Statistics



## AFRY estimate in TWh, compared to electricity produced by the paper industry according to Ceperi statistics



■ Cepi statistics

■ AFRY methodology leads to a slightly larger figure: to be consistent, additional power is counted from that level

■ Additional potential of heat and power, converted to TWh, are the sum of all the means listed employed (wherever possible)

## The ambition and activities of the pulp and paper industry

The pulp and paper sector is committed to achieving climate neutrality in Europe by 2050. Our sector has great potential to sustainably reduce greenhouse gas emissions, with a key area being our own production. While we recognise that the path to carbon neutrality is challenging, we also see great potential in our renewable and recyclable raw material as well as in the bio-based energy in our production. To further propel the journey towards carbon neutrality, we will focus on the following four areas in our own operations:

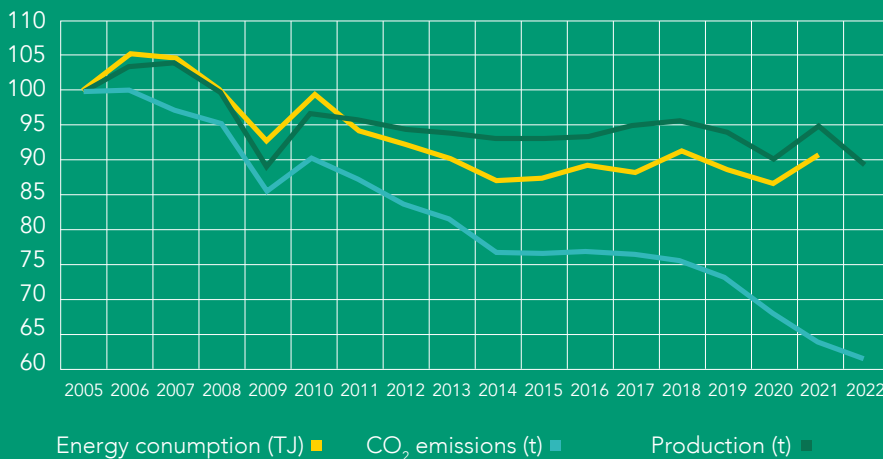
- Continuously improving the energy efficiency in the manufacturing,
- Increasing the consumption and generation of renewable and/or low carbon energy in our mills,
- Maximising value and circularity of all used raw materials,
- Bridging the gap between existing and demanded technologies for the decarbonisation of our industry.

While the European legislation should create an enabling framework for the pulp and paper industry's decarbonation, our sector is taking the following actions to improve energy efficiency and efficient use of fossil-free energy:

- We work with and forge new partnerships with developers and suppliers of energy efficiency technologies and providers of fossil-free energy to unlock the level of electricity and heat needed to decarbonise our production.
- We share knowledge, disseminate best practices and increase awareness about the opportunities provided by corporate fossil-free energy sourcing.
- We promote the efficient use of fossil-free energy sources by prioritising the direct use of primary energy sources whenever possible, thereby minimising conversion losses and the need for converting them into secondary or tertiary energy carriers.
- We advocate for a full supply chain approach to energy efficiency in order to pressurise upstream suppliers to prioritise the provision of fossil-free energy.
- We continue investing into research and innovation in critical areas such as, but not limited to, onsite renewable energy generation, innovative water removal technologies, energy and heat recovery technologies and waterless processes.

## Decoupling economic growth from carbon emissions 39% CO<sub>2</sub> emissions reduction since 2005

Cepi Statistics



## Critical conditions and policy asks

The pulp and paper industry is keen to establish a strong working relationship with the newly elected Members of the European Parliament and the European Commission leadership. Our goal is to collaborate on the development of a policy framework that not only future-proofs our sector but also maintains its global competitiveness. Such a framework needs to:

### 01

**Secure access to abundant, affordable fossil-free energy which is key for our industries' global competitiveness and ultimate viability in Europe**

- Encourage investment in the development of infrastructure and the improvement of power and heat networks' capacity to cost-efficiently integrate a diversity of fossil-free energy sources within industrial sectors.
- Support the deployment of optimisation technologies for heat and power networks to mitigate renewables' variability, to accelerate their integration, and maximise the use of transmission capacity by increasing thermal and/or system limits or optimally addressing margins.
- Facilitate access to hedging structures in order to promote long-term and stable price investments in fossil-free energy.
- Require carrying out integrated energy systems' planning of local heat and power networks and infrastructure, to give visibility to clean energy investment opportunities and cross-sectoral synergies.

### 02

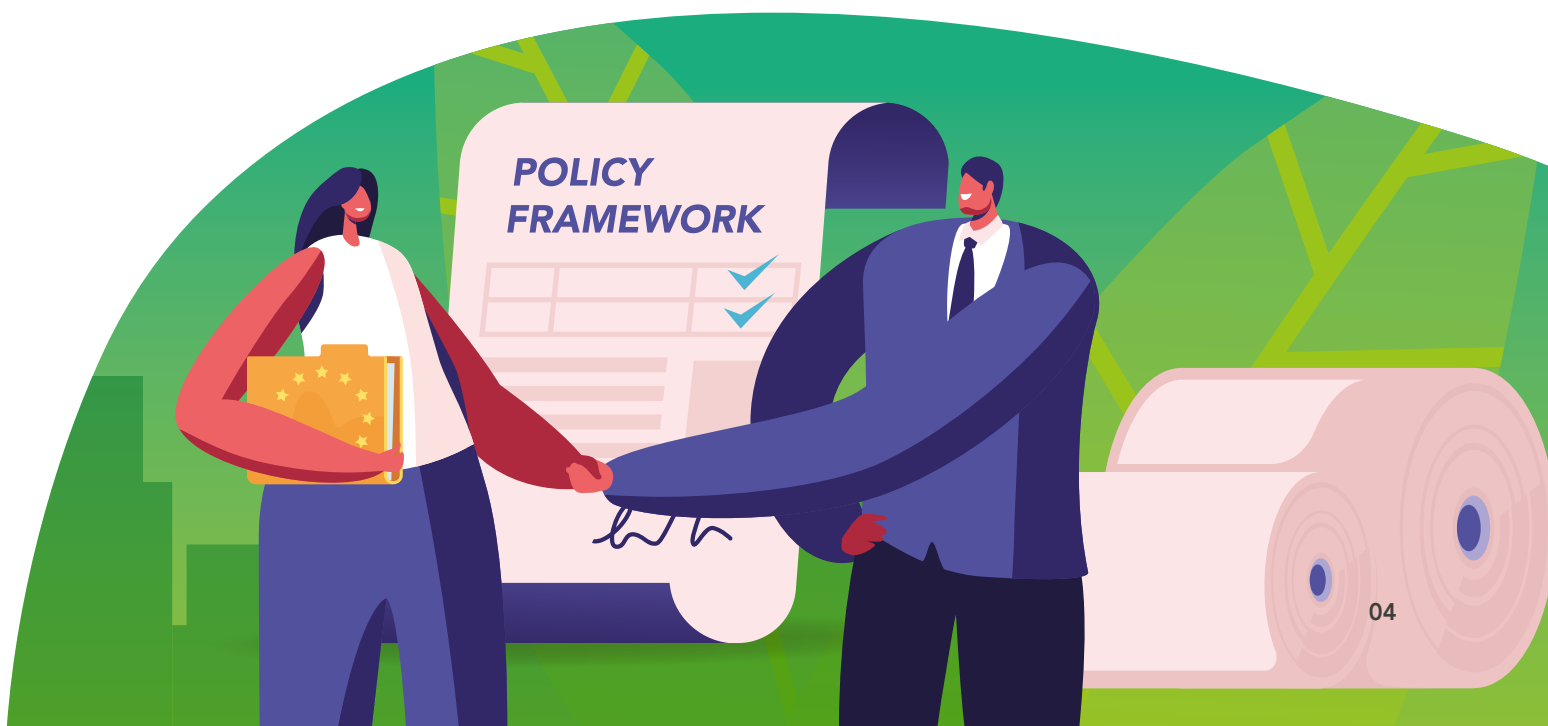
**Facilitate on-site renewable energy production, including the use of waste and residues for bioenergy, to contribute to Europe's energy self-sufficiency**

- Accelerate on-site permitting, including fast-tracking of solar PV and solar thermal rooftops, as well as geothermal installations, and prioritise decentralised renewable energy generation (power and/or heat).
- Ensure easy access to the electricity grid and heat networks for industrial prosumers.
- Facilitate the installation of renewable energy and storage solutions, for instance on underutilised industrial grounds.
- Facilitate innovation in scaling up circularity business models.

### 03

**Incentivise industrial symbiosis and voluntary integration of industry with energy system to ensure systemic emission reductions**

- Incentivise voluntary integration of industrial energy prosumers with all energy systems (across electricity, heat, biogas, biomethane and hydrogen) to ensure systemic emission reductions and improved resiliency and flexibility.
- Promote sector coupling (e.g. through thermal energy storage, when feasible), decentralise efficient generation and solutions that avoid network losses, support power system adequacy, and reduce the need for costly grid reinforcements.



## 04

Unlock financing instruments for de-risking the industry's investments in new installations or substantial refurbishments aimed at improving energy efficiency, CO<sub>2</sub> avoidance and switching to fossil-free energy

- Provide long-term signals for industry to prioritise investments in energy efficiency and renewable energy generation and storage.
- Encourage financial institutions to evaluate energy efficiency investments as a relatively low risk in order to encourage new finance projects for existing and new clients.
- Develop an EU-wide fiscal framework to facilitate an off-balance sheet investment possibility for solutions such as energy performance contracting, efficiency services agreements offered by energy service companies (ESCOs) and Heat as a Service (HaaS).
- Guide Member States on how to effectively open up and promote access to financial instruments (for example, credit guarantee schemes) to companies, especially SMEs, thus stimulating further investments in renewable energy generation and thereby access to renewable electricity.

## 05

Encourage innovation in energy efficiency and renewable energy integration in industrial processes including the combination of technologies, and unlock access to research and development funding for demonstration projects that tackle the specific needs of this industrial sector

- Promote industry involvement in application-oriented research and development to raise the technology readiness levels and de-risk investment for companies.
- Set up research and development programmes that focus in particular on deployment research thus supporting a fast roll-out of new technologies in the industry.
- Fund world-class research and technology infrastructures (demonstrators, testbeds, piloting facilities, living labs) to validate, prototype, and scale up innovations quickly, while meeting EU standards and regulations, and facilitating their market adoption.

## Implementation of the EU legislation at national level

The Fit for 55 package and the legislation which has been adopted in response to the energy crisis needs to be swiftly implemented at national level. Member States will play a key role in achieving the objectives of the following key EU policies. The National Energy and Climate Plans should precisely reflect the national governments' efforts to implement the following European legislation:

- The Electricity Market Design reform,
- The Green Deal Industrial Plan for the Net-Zero Age, notably the Net-Zero Industry Act and the Critical Raw Materials Act,
- The Renewable Energy Directive III and the EU Solar Energy Strategy,
- The REPower EU Regulation accelerating the permitting process,
- The Regulation on batteries and waste batteries.



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