

## RENEWABLE ELECTRICITY

# Solutions for the decarbonisation of the pulp and paper industry

The pulp and paper sector is committed to achieving climate neutrality in Europe by 2050. This requires reducing emissions in our production processes by the implementation of energy-efficient technologies and the effective use of fossil-free energy sources.

Cepi's Energy Efficiency Solutions Forum (EESF) aims to accelerate the development and implementation of carbon-reducing technologies and solutions in our sector. We accomplish this by forging new partnerships and collaborating with developers and suppliers of energy efficiency technologies, as well as providers of renewable and fossil-free energy.

Renewable energy sources encompass technologies such as solar, wind, hydro, biomass, and geothermal energy, whereas fossil-free energy sources include nuclear energy. There are numerous options for corporates to support the greening of the electricity grid, such as direct renewables procurement via **Power Purchase Agreements – PPAs** (bundled procurement) or **Energy Attribute Certificates – EACs** (unbundled procurement).

**Corporate renewable energy sourcing** is a rapidly growing trend across Europe.



### The potential of corporate sourcing

The potential for the renewable corporate sourcing market in Europe, which includes PPAs, EACs and other forms of renewable electricity corporate sourcing, is significant.

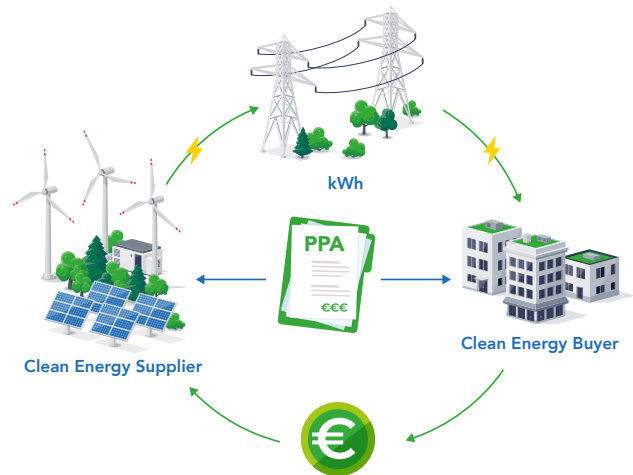
Globally, corporate sourcing has added over 150GW of new wind and solar energy to the grid, via corporate PPAs, direct onsite installations, or other green electricity delivery tools. In 2023, ~930 TWh of renewable electricity was produced in Europe, representing a 125% volume increase since 2015. Both the PPAs and green certificate markets have continued to grow since then and play a substantial role in companies' decarbonisation trajectory.

### Why should I be interested in corporate sourcing?

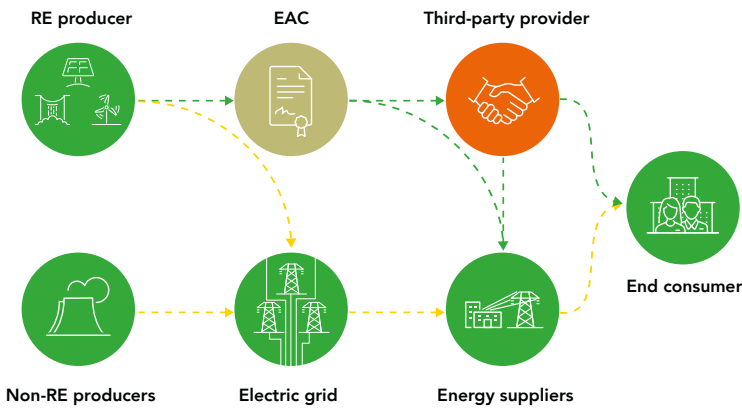
- **Lowering and fixing costs** - Corporate PPAs and forward offtake on EACs enable companies to pay a fixed price for electricity over the period of the contract, typically 5 to 15 years. This mitigates exposure to electricity market volatility, resulting in substantial long-term savings on energy bills.
- **Decarbonisation** - PPAs and EACs enable companies to lower their GHG Scope 2 emissions by renewable energy consumption accounting.
- **Corporate social responsibility** - Corporate sourcing allows your business to show its social awareness and positive impact. Consumers are aware of the environmental impact of products thus proving that you produce with green electricity could be advantageous for your brand.

## What is corporate sourcing and what are PPAs?

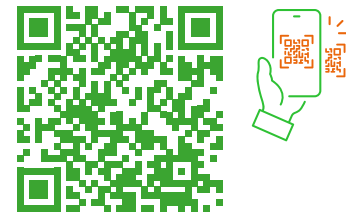
A corporate PPA is an upfront contractual agreement between a buyer and a seller for the exchange of an amount of electricity from a renewable generator for an agreed price (fixed or market-related). These agreements typically last between 5 and 15 years.



## What are Energy Attribute Certificates (EACs)?



## What is a Power Purchase Agreement (PPA)?



Energy Attribute Certificates (EACs) are instruments that certify one megawatt-hour (MWh) of renewable electricity generation. EACs can be traded separately from physical electricity, allowing consumers to claim the use of renewable electricity regardless of their location or grid connection.

EACs are also known as Renewable Energy Certificates (RECs), Guarantees of Origin (GOs), or International Renewable Energy Certificates (I-RECs), depending on the region and market. EACs can be procured on spot markets or forward to hedge price volatility risks.

## Case studies

Sofidel has signed a 10-year power purchase agreement (PPA) with ACCIONA Energía to supply, as of January 2023, more than 90GWh/year of renewable electricity from its renewable energy facilities in Spain to Sofidel's plant in Buñuel (Navarra). Annual production is 90 GWh leading to an annual CO<sub>2</sub> emission reduction of 12,87 MTCO<sub>2</sub>e.

Renova's two industrial units and logistics centres in Zibreira, Torres Novas, Portugal, will receive a total of 7,916 photovoltaic solar panels installed by Greenvolt Group both on the industrial space rooftops and adjacent land. The plan also includes implementing carpports to charge Renova's plug-in hybrid and 100% electric vehicle fleet. Renova will be capable of generating over 6,400 MWh of clean energy annually, reducing its reliance on the national electrical grid.

