

# Payments for forest ecosystem services with focus on CO<sub>2</sub> removal

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## **Abstract:**

The demand for forest products and services is changing in very significant terms internationally and also in Europe. The New Green Deal is stimulating decarbonisation and replacement with forest biomass the fossil energy and the fossil resources-based industrial products (textiles, plastics, paints, additives for the pharmaceutical and cosmetics sectors, etc.). But there is very significant growth in demand not only for provisioning services, i.e., products with market prices, but also for unpriced cultural and regulatory services. In the case of unpriced services, suppliers are often not motivated to keep or increase the supply. Even in cases where the supply of unpriced services is a spill over of market ones (e.g., the protection of biodiversity as a spill over of the productive plantations), the services are provided at sub-optimal levels and much less than social demand.

To solve these problems, it has been proposed the creation of systems for the Payment for Environmental Services (PES) in addition to or replacing traditional public instruments under public control (passive tools like constraints and obligations; active tools like subsidies and tax incentives). PES are based on free bargaining between suppliers and beneficiaries who must pay for their additional environmental services that are using, in such a way creating a financial motivation for their supply. In Europe, the recent discussion on the PES, the formal public statements, the commitments set out in the plans were much larger than the development of new PES. The reasons are different, first the presence of traditional public regulatory systems that oblige suppliers to offer unpriced services, leaving limited spaces to an additional offer based on voluntary exchanges, the complexity of legal agreements between beneficiaries and suppliers, the hostility towards the idea of “commoditisation” of publicly available environmental services, which many perceive as a basic right of citizens-consumers. More frequent are the cases of quasi-PES (or PES like) where some of the contractual conditions between suppliers and beneficiaries have been regulated by the State. Indeed, the difficulties in the organisation of “pure” PES systems have resulted in a new State’s attention to dictate the rules and to perform functions of stimulus, monitoring, control, and information of operators. The presence of more active public authorities in regulating the supply of forest ecosystem services can be highlighted by analysing the role of the European Commission in preventing deforestation and forest degradation, in the protection of old-growth forests and in general of forest biodiversity, in defining the criteria and indicators of sustainable forest investments. But perhaps the most significant case of the activation of the regulatory role of public authorities is that of the voluntary market for credits linked to forest activities of carbon removal.

At the end of 2022, the EC approved the Carbon Removals Regulation (CRC) with framework principles for regulating three sectors of investment: the activities in agriculture and forestry, the removal of carbon in wood products with long life cycle and the industrial carbon removal. The just started process of finalising the legislation will be very critical. The EC expects to define the methodologies for the certification of the carbon removals credits with the support of an

unelected expert group, that will have to addressing permanence, additionality, reversals, and measurement.

The risk is that these public interventions to regulate the market, which are not limited to soft tools like monitoring, valuation, and information actions, but which create new institutions and top-down rules, will re-propose in a different version the traditional role of a strong State that regulates and manages the market, reducing the role and responsibility of civil society and increasing transaction costs. *“What has been will be again, what has been done will be done again; there is nothing new under the sun”*.

**Keywords:**

European Green Deal, policy measures, European Union, Carbon Removals Regulation