



CLEARCUTTING PROVISIONS IN THE EU

REGULATORY COUNTRY CLUSTERS



SUPERB
Upscaling Forest Restoration



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EXECUTIVE SUMMARY

National forest legislation has a long history in many European Member States (EU-MS) and has had a significant impact on the governance of forests across Europe over time. The EU Nature Restoration Regulation (NRR) stipulates directly applicable and legally binding forest restoration targets and indicators, making a transposition into national legislation redundant. Nevertheless, it can be assumed that a certain degree of compatibility with national forest legislation will be crucial to ensure a successful and coherent implementation of National Forest Restoration Plans (NRPs) and progress towards the selected forest ecosystem restoration indicators. Incoherencies between the NRR forest ecosystem restoration targets and indicators and national legal forest frameworks on the other hand are likely to pose a challenge to a successful implementation in the years to come.

Against this backdrop, we conducted in-depth analyses of national forest laws and related legislation and, based on that, create forest restoration policy maps to provide an overview on how certain forest ecosystem indicators and respective management practices included in the NRR are currently regulated or promoted in different EU countries. These policy maps summarize if and to what extent national forest laws and related legislation refer to the forest ecosystem indicators stipulated by the NRR by building country categories based on the findings from the legal analysis. Based on this, conclusions are drawn on the status of vertical coherence of EU forest restoration policy, particularly as stipulated under the NRR, and the national forest regulatory frameworks of the EU-MS. This policy coherence assessment is expected to inform the development of supportive forest policy and legal frameworks both at the EU and national levels, thereby supporting the development and implementation of the NRPs in the years to come.

This report presents the key findings from the analysis of regulatory provisions across the 27 EU Member States (plus the United Kingdom) regarding **clear-cutting**, which is estimated to be the predominant management practice on approximately two-thirds of European forest land (Mason et al., 2021).



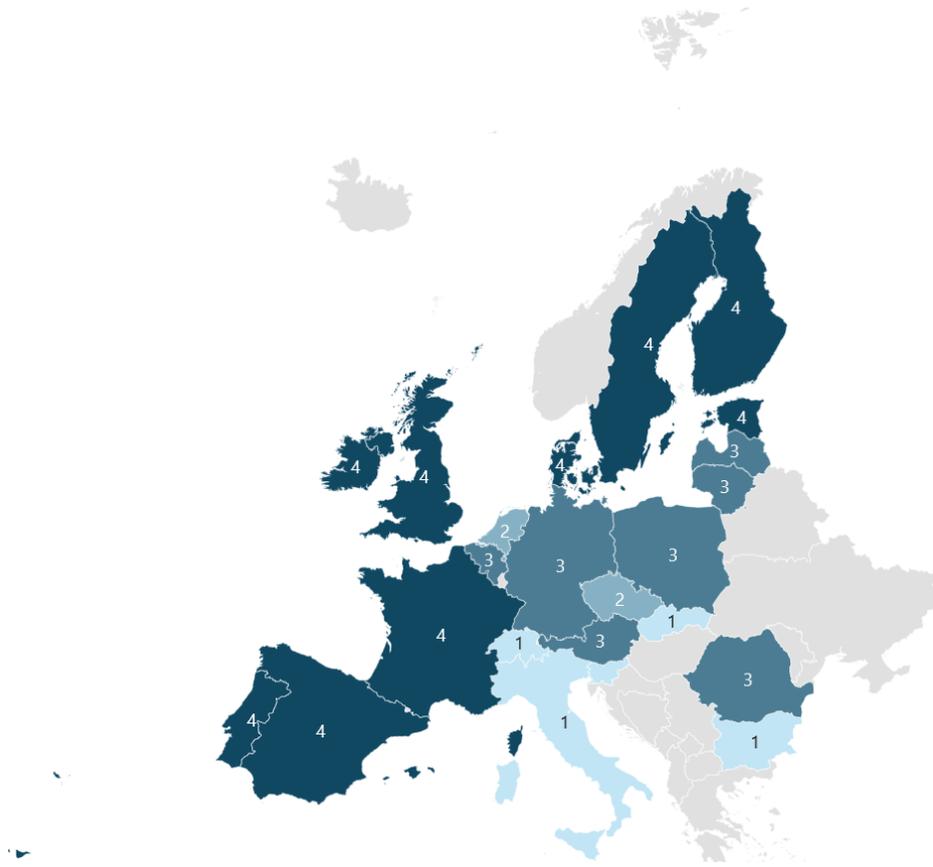
KEY FINDINGS

Opinions are divided between forestry scientists and ecologists on the ecological impact of clearcutting. While multiple studies highlight the detrimental effect of clearcut management on forest biodiversity, including tree species diversity (Torras and Saura, 2008; Jokela et al., 2019) others emphasize the beneficial effects such as for eurytopic and open land species (Pykälä, 2004; Česonienė et al., 2019). It can indeed be assumed that whether clearcut management has detrimental effects on forest biodiversity depends on the animal and plant species under consideration, as well as the geographical context. In the following, the characteristics of this management practice are contrasted with the forest ecosystem restoration indicators outlined in the recently adopted NRR.

Large-scale clear-cutting can be an obstacle to the biodiversity restoration of forest ecosystems for several reasons (Pawson et al., 2006). First, the extensive extraction of woody biomass can lead to a depletion of both living and dead woody material (Rudolphi and Gustafsson, 2007), which contradicts forest restoration efforts aimed at increasing the share of standing and lying deadwood for biodiversity protection and conservation. Second, forest restoration from monocultures and even aged forests towards mixed and uneven-aged forest stands in (large-scale) clearcut areas can be challenging due to the relatively homogeneous site conditions, which may hinder the re-establishment of a diverse species mix with varying light and nutrient requirements (Torras and Saura, 2008). Third, clearcut management can impact the nesting and breeding habitats of forest bird species that rely on the structural features provided by old trees with habitat structures (Müller et al. 2007). Fourth, clearcutting extensive forest areas can create a barrier to enhancing forest connectivity and, therefore, reduce the permeability of forest habitats to the movement of certain species (Popescu and Hunter, 2011).

In light of the potential impacts of clearcutting on forest biodiversity restoration described above, national forest laws and related legislation were analyzed in terms of their provisions and regulations governing clearcut management. Based on this analysis, countries were categorized according to whether their regulatory frameworks allow or prohibit clearcut management or impose restrictions on the maximum allowable clearcut size. This resulted in the identification of four country categories regarding the regulation of clearcutting. Category 1 comprises the strictest regulations, imposing a ban on clearcut practices except for socio-ecological reasons. Category 2 comprises countries whose regulatory frameworks do not prohibit clearcutting per se yet impose small maximum allowable sizes of clearcut areas up to 2 ha. Category 3 countries principally allow clearcutting with maximum allowable size restrictions above 2 while Category 4 countries allow clearcutting without imposing general clearcut size limits with few specific exemptions.

The EU Forest Strategy for 2030 highlights the environmental and ecosystem concerns related to clearcutting and its' effects on above ground biodiversity and carbon storage. It calls for a use of this management practice only in duly justified cases. Moreover, large-scale clearcutting can undermine various forest ecosystem indicators outlined in Article 12 of the EU-NRR, including the accumulation of standing and lying deadwood and the creation of uneven-aged and mixed species forests. Therefore, to promote forest biodiversity restoration efforts in EU Member States, a revision of the regulatory framework governing clearcutting might be advisable to enhance vertical forest restoration policy coherence and implementation of the NRR.



Identified country categories regarding the regulation of clearcutting.

Description of country categories regarding the regulation of clearcutting and identified country groups.

Category 1: (Sub)national forest laws prohibit clearcutting with a few socio-ecological exemptions.	Category 2: (Sub)national forest laws allow clearcutting up to a maximum allowable clearcut size of 2 ha.	Category 3: (Sub)national forest laws allow clearcutting of areas larger than 2 ha.	Category 4: (Sub)national forest laws allow clearcutting with no general clearcut size limits (few specific exemptions).
Bulgaria, Italy, Slovakia, Slovenia	Czech Republic, the Netherlands	Austria, Belgium, Germany (Federal level), Latvia, Lithuania, Poland, Romania	Denmark, Estonia, Finland, France, Ireland, Portugal, Spain, Sweden, the UK

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