Reclaiming strict protection via the European Green Deal

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Strict protection is a fundamental component of any strategy for biodiversity protection and ecosystem restoration. Most Western countries, however, currently fail to acknowledge its relevance in their conservation programs. The European Green Deal (EGD)—the climate neutrality strategy launched by the European Union (EU) in 2019—is a marked exception. By identifying strict protection as one of the key solutions to ensure ecosystem health, the EGD reasserts the importance of strict protection both at the regional and global level. However, its approach is far from perfect. To harness the full potential of strict protection, the EU must clarify the existing regulatory framework and strengthen its commitment to ecological sustainability.

Strict protection as a key ecological option

Strict protection is a specific type of ecosystem management, one characterized by control and limitation of human visitation, use, and impacts in particular areas, with a view to ensure protection of their high biodiversity value and geological and geomorphological features (Dudley 2008).

Strict protection falls under land-sparing approaches, which can be integrated with diverse land-sharing management solutions to form a cohesive conservation strategy. But it is particularly relevant to ecosystems that require, by reason of their distinguishing features, a high degree of ecological protection and a restrictive management approach—as is the case with primary and old-growth forests and other wilderness areas, such as wetlands, peatlands, and grasslands. Strict reserves are recognized as the most effective solution in area-based conservation, offering better protection for natural spaces against human pressures (eg Jones *et al.* 2018). While some local economic activities might face initial adjustments, the success of strict protection hinges on effective enforcement and community engagement, fostered through clear communication and financial mechanisms like payments for ecosystem services (Wang *et al.* 2024).

Global struggles, regional promises: the European Green Deal

Despite its potential, however, strict protection does not enjoy great consideration in the Western world, particularly in relation to primary and old-growth forests, which continue to decline at alarming rates both in Europe and globally (Mikolāš *et al.* 2023). Despite the implementation of important international initiatives, such as the inclusion of forests in natural and mixed UNESCO World Heritage sites, we are witnessing a daily erosion of the unique biodiversity heritage contained in the planet's ecosystems, including but not limited to those in the tropical biome. The situation is particularly negative in the US, where the US Forest Service announced in January 2025 that it would no longer "prepare an environmental impact statement (EIS) for the Land Management Plan Direction for Old-Growth Forest Conditions Across the National Forest System".

In this global context, the EU is a remarkable exception. As openly stated in the EU Biodiversity Strategy, strict protection is one of the key solutions to ensure ecosystem health and contribute to achieving climate neutrality, the ultimate goal of the EGD. By 2030, at least 10% of the EU land and sea should be strictly protected. This is an ambitious objective, considering that only 3% of land and less than 1% of marine areas are currently subject to strict protection regimes in the EU (Cazzolla Gatti *et al.* 2023). To reach such a goal, additional strictly protected areas should be designed through the Natura 2000 scheme, an EU network of protected areas of high biodiversity value jointly managed by Member States' authorities under the coordination of the European Commission. In addition, other effective area-based conservation measures (OECMs)—a new approach, where conservation is pursued as a by-product of other management objectives that achieve long-term and effective in-situ conservation of biodiversity outside of protected areas—might be used to contribute to the target. This commitment to the extension of strictly protected areas aligns with the historical consolidation of nature conservation in Europe, as well as with the overall purpose of renovating the ambitions of the Convention on Biological Diversity.

A window of opportunity, and two major issues

The EU position is promising. Regionally, it strengthens the role played by strict protection in biodiversity protection.

Globally, it may represent a source of inspiration for other Western polities and contribute to international regimes responsible for nature conservation.

Despite this promising horizon, however, the operationalization of strict protection in the EGD is disappointing. Indeed, no indicator has yet been developed to measure progress toward the target of strictly protecting at least one-third of the EU's protected areas (Robuchon *et al.* [2025]; EU Biodiversity Strategy Dashboard). Consequently, the EU's engagement in ensuring strict protection is less effective than promised in policy documents. Moreover, independent research quoted in Robuchon *et al.* (2025) suggests that an annual increase of around 1% of additional strictly protected areas is needed to reach 10% of strict protection by 2030—which is certainly unrealistic, if one considers the annual increase observed so far for the designation of all protected areas.

Two main factors may explain the difficulties in the operationalization of strict protection in the EGD: regulatory and substantive obstacles.

Regulatory obstacles

The current regulatory framework, laid down by the Commission Staff Working Document 23 in 2022, exhibits several gaps. For example, it does not clarify the conditions for the establishment of a strict protection regime. The only requirement is that areas under strict protection must be "functionally meaningful", so that "their strict protection regime can produce the expected results in terms of conservation"—a proposition that fails to offer clear guidance to national authorities called to reach the 10% target. Another open question is that of conservation objectives and measures. While the overall rationale is that of leaving natural processes "essentially undisturbed", it is allowed to plan a variety of different interventions, including "limited and well-controlled activities that either do not interfere with natural processes or enhance them". Although such an approach has the obvious advantage of flexibility, it is too relaxed, as it includes the establishment of regimes outside the scientific foundations of strict protection.

Substantive obstacles

At the heart of strict protection lies the idea of "ecological primacy", which assumes that in certain circumstances ecological limits must have primacy over social and economic regimes. To clarify the relevance of ecological primacy to policymaking, legal scholars have increasingly referred to a new definition of sustainability, one that is independent from sustainable development and termed "ecological sustainability" (Chiti and Giorgi 2024)—a policy and legal concept also used in conservation studies (Levis *et al.* 2024). As opposed to sustainable development, ecological sustainability implies a hierarchy between the interests at stake, one in which ecological concerns prevail over social and economic interests.

While ecological primacy is promoted by some international actions, such as UNESCO World Heritage sites, its recognition in the EU is far more limited. With the exception of the Nature Restoration Law (Hering *et al.* 2023), EU political institutions have so far failed to fully acknowledge the relevance of ecological sustainability in EU legislation, as illustrated by the cautious approach taken by the Commission in relation to primary and old-growth forests. While a strict protection regime for such forests has been envisaged in the New EU Forest Strategy, it has not yet been made legally binding.

How to fix the EU approach to strict protection

To mitigate or overcome the above-mentioned regulatory and substantive difficulties, we argue that three steps should be taken.

First, an EU regulatory framework should be adopted to clarify the conditions under which a strict protection regime is to be established. The new framework should provide Member States' authorities with guidance on key issues, including (i) the circumstances under which a strict protection regime can be established and (ii) the variety of strict protection regimes in relation to their objectives.

As for the latter, five main options for strict protection should be envisaged. The first two options are the forms of land sparing represented by the IUCN categories Ia (strict nature reserves) and Ib (wilderness areas). The third option is that of protected areas set aside to protect natural biodiversity and to promote education and recreation—such as national parks, identified by the autonomous IUCN category IUCN-II, or reserves associated with the Man and the Biosphere (MAB) programme. The fourth and fifth options are those of passive and active restoration/rewilding, provided that they are aimed at helping degraded ecosystems to recover integrity.

Second, it is necessary to revise the EU procedure governing the establishment of strict protection regimes by national authorities. It is appropriate to strengthen coordination within the European Commission, to lay down a binding timetable, and to introduce several steering mechanisms to promote the homogenization and convergence of national practices.

Finally, EU political institutions should openly recognize the specific ecological rationale of strict protection. This is the most difficult and challenging issue. EU institutions remain largely fixed to sustainable development—a policy objective based on balancing environmental, economic, and social interests—as the default mode of action, rather than ecological primacy. But there are situations in which the primacy to ecological concerns should be used to reach conservation and restoration objectives. This was recently acknowledged in a 2024 European Environment Agency Report claiming that designations of new strictly protected areas should extend to some areas of high potential economic value requiring "protection without compromise" (Visconti *et al.* 2024). Recognizing the political and

legal relevance of ecological sustainability in the EGD is a necessary step to complement such science-based positions and relaunch strict protection as a means to protect and restore highly sensitive natural areas for our common future.

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