

Revised European Union renewable-energy policies erode nature protection

To the Editor — Bioenergy production can negatively impact biodiversity^{1,2}. Unfortunately, the recast of the European Renewable Energy Directive (RED) erodes existing biodiversity protections through insufficient safeguards to prevent the unsustainable sourcing of bioenergy.

The existing directive, named RED 2009 (ref. ³), imposes mandatory safeguards against land-use changes to areas of high biodiversity and carbon values (Art. 17; Fig. 1). These rules apply to all types of biofuel when measuring compliance with national targets and renewable-energy obligations, or when providing financial support. This holds for first-generation biofuels from croplands, biogas used in transport and second-generation biofuels, including biomass sourced from forests⁴. The RED 2009 requirements thus apply both to agricultural and forestry production.

The proposed revision, named RED II (ref. ⁵), is extended to all bioenergy types in all energy sectors, and distinguishes agricultural and forestry production (Fig. 1). Under these revisions, land-use change requirements would apply only to agriculture (Art. 26.2–26.4), and no longer to forestry. Instead, new ‘sustainable’ forestry-management rules with few biodiversity safeguards have been added, meaning that bioenergy produced from biomass harvested in primary forests, in high-biodiversity non-primary forests, and

in forests on peatlands, could now be sold legally as sustainable bioenergy in Europe.

Other additions to RED II include inefficient measures for biodiversity protection in terms of forestry management. The new land use, land-use changes and forestry criteria (Art. 26.6) focussing on carbon safeguards will be without effect due to an exclusion clause, and the new protection of ‘highly biodiverse’ forests (Art. 26.3) would apply to ‘agriculture’ instead of ‘forestry’. However, the new option within the agriculture criteria open to European Union (EU) member states to limit the amount of biofuel feedstocks from food and feed crops (including palm oil; Art. 25.1) could reduce the ongoing conversion of natural land to new cropland.

Furthermore, the modified requirements for sustainable forestry under Red II would apply only to installations of total rated thermal output equal to or greater than 20 MW that burn solid biomass (Art. 26.1). This means that about 75% of European wood energy today⁶ would not need to comply with RED II sustainability requirements. This threshold undermines the already weak sustainability requirements for forestry and opens the door for indirect effects within the EU bioenergy market: selling forest biomass complying with RED II to larger plants, but selling non-complying biomass to smaller plants.

RED II also undermines the protection of highly biodiverse grasslands. Under the RED 2009 criteria, grasslands default to ‘non-natural highly biodiverse grassland’, but under RED II, only non-natural grasslands identified as ‘highly biodiverse’ by a ‘competent authority’ are protected (Art. 26.2).

Overall, RED II represents an immense step in the wrong direction for biodiversity: it will incentivize the transformation of biodiverse forests and grasslands into fuel to fulfil society’s ever-increasing demand for ‘clean’ energy. RED II has yet to be approved by the European Parliament, and we strongly recommend for it to be revised immediately: (1) land-use change criteria should also apply to forestry (including the new criterion for highly biodiverse forests); (2) the ‘highly biodiverse grassland’ criterion should not be modified; and (3) thresholds for forest biomass — if needed — should be related to the size of cultivated forest areas (such as 100 ha)⁶, instead of referring to the size of the installations in which the biomass is destined to be burned. □

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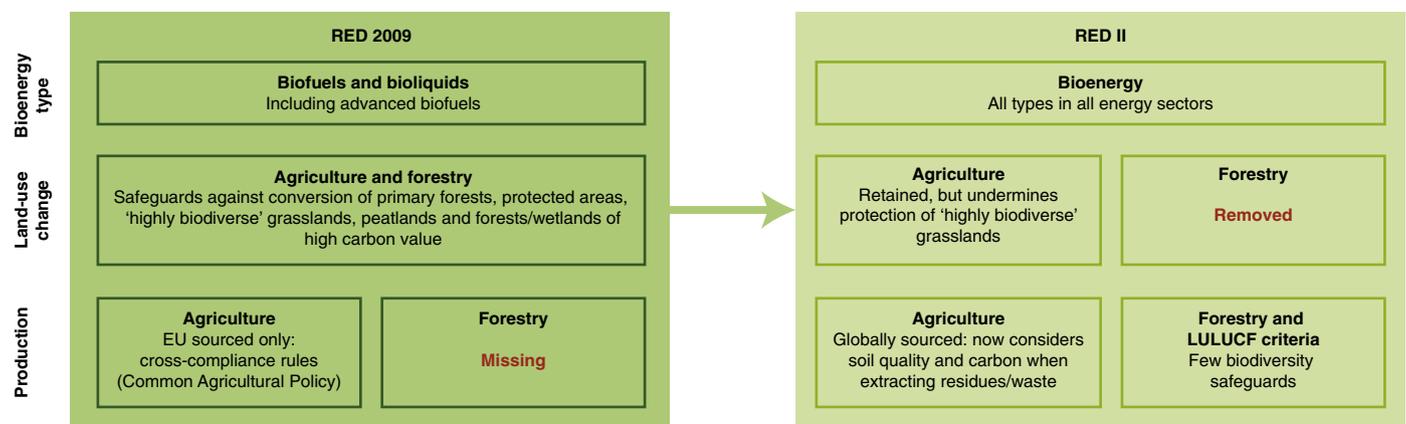


Fig. 1 | Erosion of biodiversity protection. We have identified several elements of the proposed amendment to the European Renewable Energy Directive that lead to fewer safeguards for biodiversity protection (RED 2009: current directive³; RED II: proposed revisions⁵). LULUCF: land use, land-use changes and forestry.

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