Assessment of national AFOLU policies of the Czech Republic and their Alignment with EU Environmental Targets

Abstract:

As we come close to 2030, some EU countries are struggling to meet their international targets set by the European Union in a number of fields related to the AFOLU sector.

In the case of the Czech Republic the challenges and difficulties on achieving a steady pace in meeting those goals have been more noticeable as the years pass. Changes in agricultural practices and climate protection policies are getting more complicated to overcome as the country suffers from internal instabilities and external global factors. That’s why this paper aims to properly asses the main divergences in the national policies of the Czech Republic in contrast with its international commitments with the EU.

In order to address each policy’s compatibility with the overall European stragedies and its objectives, is necessary to employ data from the Czech Hydrometeorological Institute (CHMI) statistics and projections report on greenhouse gas emissions, Czechia’s Final updated NECP 2021 – 2030, State Environmental Policy of the Czech Republic 2030 with a view to 2050, National Action Plan for Adaptation to Climate Change and regulations by the European Commission on the AFOLU sector, including the EU Biodiversity Strategy 2030.

The results of the literature review ranked the current main targets of the national policies of the Czech Republic and their performances against the EU’s own targets in biodiversity, climate and emissions, resource use and efficiency, adaptation, monitoring and socio-economic benefits.

This analysis is targeted to provide important conclusion about the current state of the national policies of the Czech Republic and support policy makers to evaluate and asses the main deficiencies that lags the country’s ability to meet his EU targets.

1. Intro
2. Methods

This paper examines and analyses the main environmental and climate policies relevant to the agriculture, forestry, and land use sectors in the Czech Republic and its alignments of national targets with the European Union regulations and goals. Policies discussed in the analysis are included NECP, NAS/NAP, SEP, BS, NRR and reports like NIR/NID.

EU commission based strategies that set the framework for national policies, like Fitfor55, LULUCF regulation, ESR, EST, BS and NR are used as benchmarks. These directives are used for a comparative assessment of how the national targets converges or diverges from EU compliances.

For data analysis, the official reporting is provided by the Czech Hydrometeorological Institute (CHMU), the national body responsible for compiling greenhouses gas inventories and projections. The data is in line with IPCC guidelines. There’s also national statistics in the Czech statistical office, Eurostat.

Targets: Emissions reductions and carbon sinks (reduction agricultural non-CO2 emissions and enhance forest and land use carbon sink), Biodiversity and Ecosystem restoration (restoration of 30% of degraded ecosystems by 2030 and increase of strictly land areas to 20% of territory + improve grassland butterflies, farmland birds and soil organic carbon levels), Resource use and water/nutrient efficiency (reduction of nitrogen and phosphorus runoff, improve water use efficiency in agricultural and irrigation).

Policy target mapping: each Czech policy is mapped against corresponding eur/international framework to determined level of alignment.

Baseline and trend analysis: baselines values 1990 and 2005 are stablished using CHMU and EU reporting data

Gap assessment: policies are evaluated through scoring matrix that considers emissions reductions, biodiversity, adaptation. Divergences and shortcomings are identified based on Czech advances and targets not meeting the EU obligations like insufficient LULUCF sink restoration, biodiversity indices or incomplete nutrient management measures.

1. Results

Hypothesis: Czech environmental and climate policies show significant progress in adaptation and mitigation planning, but there’s still a gap between national strategies and EU targets, especially in the agriculture, forestry and land use sectors. Divergence in biodiversity restoration, land management and emissions reductions indicate that while the Czech Republic is advancing compliance, it risks underdelivering on the EU fit for 55 package, LULUCF and biodiversity 2030 goals without stronger integration of measurable and enforceable AFOLU targets.

Broad problem: EU ambitions goals 2030/2050 (fit for 55, lulucf regulation, nature restoration regulation (biodiversity strategy 2030/EU Nature Restoration Law). AFOLU sectors are central for both mitigation (carbon sinks) and adaptation (biodiversity, soil, water). Czech national frameworks (NECP, NAS/NAP, Forestry management plan). PROBLEM: Czech national policies often set qualitative objectives but lack quantified, enforceable AFOLU targets that meet EU obligations.

Narrow problems: LULUCF sink (forestry), Czechia NECP excluded LULUCF in 2019 and in the 2024 draft there’s still uncertainties remain about the capacity to restore sink function by 2030. Non-CO2 GHG (agriculture), BS2030 and NRR require positive trends in farmland birds, butterfly index, soil organic and Czech agriculture policies remain focused on production support (CAP pillar I) with weaker integration of biodiversity and nutrient use efficiency measures. Biodiversity and Nature Restoration, EU requires 30% degraded ecosystem restored by 2030 and 20% of land strictly protected, but Czech implementation is lagging especially on peatland restoration and high diversity features in farmland. Water and Nitrogen Management, EU water framework directive and nitrates directives require reductions in N&P runoff, czechia still faces challenges with agricultural intensification, livestock nutrient loads, and droughts mitigation measures.

Ranking

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Policies | Biodiversity | Emissions | Resources | Adaptation | Monitoring | Socioeconomic |
| National Adaptation Strategy and Plan |  |  |  |  |  |  |
| National Energy and Climate Plan |  |  |  |  |  |  |
| National Hydrogen Strategy |  |  |  |  |  |  |
| River Basin Management Plan |  |  |  |  |  |  |
| Waste Management Plan |  |  |  |  |  |  |
|  | Ecosystem restoration (birds, butterflies, peatlands, HDLF) | GHG reductions in agriculture, LULUCF sink, forestry managment | N&P management, water use efficiency, SOC | Drought/flood prevention, forest pest resilience, agroecosystem | Measureable indicator(NIR/NID) | Contribution to rural jobs, sustainable production and trade, just transition aspects |

1. Discussion