Revised NFAP (Spain) – Explanatory note

The aim of this document is to ease the assessing and understanding of the revised National Forestry Accounting Plan (NFAP) for Spain (dated December 2019), by pointing out the changes inserted in the draft NFAP presented in December 2018.

These changes respond to the issues identified in the Synthesis Report by the LULUCF Expert Group[1] and the subsequent Comission Staff Working Document "Assesment of the National Forestry accounting Plans", SWD(2019) 213 final[2]. This explanatory note follows the structure of both documents, developing the following sections:

1. The principles set out in Article 8(5) of the LULUCF Regulation[3].
2. The criteria set out in Section A of Annex IV of the LULUCF Regulation.
3. The elements listed in Section B of Annex IV of the LULUCF Regulation.

The changes address both technical recommendations in SWD and conclusions from the LULUCF Expert Group. No issues have been identified by Spain.

1. Technical recommendations on Article 8(5) Principles

No recommendations have been raised.

2. Technical recommendations on Annex IV, Section A Criteria

a) Demonstrate how the goal of achieving a balance between anthropogenic emissions and removals will be achieved in the second half of the century. Provide qualitative and quantitative information until at least 2050 consistent with the long-term strategy required under Regulation (EU) 2018/1999.

> Section 1.3.a. of the NFAP has been rewritten in order to address this recommendation.

[1] https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3638
[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1561037326961&uri=CELEX:52019SC0213
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.156.01.0001.01.ENG

c) Provide credible and robust evidence for the use of the model for the FRL and revise the FRL, if applicable, including a complete and transparent description of the model, a demonstration of its performance over the period 2010-2017, and an explanation on the discrepancies between projected harvest and historical data.

> Section 3 ("Description of the modeling approach") has been rewritten with the goal of providing a credible and robust evidence for the use of the model for the FRL and a transparent description of the model. A link to the website in which the FRL model explanation document is posted has been included.
> A demonstration of the performance of the model over the period 2010-2017, as well as an explanation on the discrepancies between projected harvest and historical data, can be found in sections 1.3.h and 4.2.

e) Provide a ratio between solid (HWP) and energy use of forest biomass as documented in the period from 2000 to 2009 used for the estimation of the forest reference level and demonstrate it remains constant throughout the projection.

> Section 1.3.e. of the NFAP has been rewritten in order to address this recommendation. The new approach results in a different projected HWP deposit in the FRL (-3.862 kt CO_2/yr instead of -1.732 kt CO_2/yr in 2021-2015)

g) Demonstrate the consistency with the national projections of anthropogenic greenhouse gas emissions reported under Regulation (EU) No 525/2013. Provide explanations for possible differences between national projections and the proposed FRL.

> Further explanations and a new figure added in section 1.3.g.

h) Estimate the FRL based on the area under forest management as indicated in Annex IV, Part B (e) i. Demonstrate the ability of the model used to construct the FRL to reproduce historical data from the national GHG inventory. Demonstrate the consistency between historical data from the national GHG inventory and modelled data for estimating the FRL for the reference period.

> The FRL model is built to calculate and reproduce historical data from 2010 onwards. An explanation of the compliance with this criteria has been included in section 1.3.h.

3. Technical recommendations on Annex IV, Section B Elements

a) Correct header information in Tables 14 and 15 of the NFAP (2025 instead of 2015). Provide information if and how natural disturbances have been taken into account.

> Header corrected (note that former tables 14 and 15 are tables 15 and 16 now).

> Natural disturbances have not been taken into account in the FRL. Further explanations have been incorporated in section 3.1.

b) Include the carbon pools required by Regulation (EU) 2018/841 in the FRL and the national GHG inventory.

> A more detailed explanation of the included carbon pools is provided in section 2.1 and (new) Annex II.

c) Provide a complete and transparent description of the FRL model including a validation during the reference period. Demonstrate how the modelled forest management approach is consistent with the forest management approach observed during the reference period. Provide a full and transparent description of the calibration process and the results. Provide more information on the National Forest Inventory such as the number of sample plots in each maturity class. Explain the unexpected behaviour of harvest early in the historic period. Review the accuracy of the input data to the projection model, in particular for the total biomass in a Eucalyptus plantation at maturity in the northern region. Describe the evolution of growth and harvest across the projected period. Provide evidence that the increase in harvest projected over the commitment period is not influenced by the projected very high harvest in the beginning of the projection period. Clarify if the model takes natural disturbances into account.

> Section 3 (“Description of the modeling approach”) has been rewritten with the goal of providing a complete and transparent description of the model for the FRL. Information on the model during the reference period has been included in section

1.3.h. A link to the website in which the FRL model explanation document is posted has been included.

- The demonstration on how the modelled forest management approach is consistent with the forest management approach observed during the reference period has been extended in sections 3.2.2 and 4.2.
- Further details on the calibration process have been described in section 3.3 (module 8).
- More information on the National Forest Inventory has been included in sections 3.2.1 and 3.3.
- A new explanation of the unexpected behavior of harvest early in the historic period has been provided in section 1.3.h (after figures of "Consistency of the living biomass stock"), which also supports that the increase in harvest projected over the commitment period is not influenced by the projected harvest in the beginning of the projection period.
- New tables 9-14 (formerly tables 8-13) provide corrected values of the input data to the projection model.
- New figures in section 4.1 provide data on the evolution of growth and harvest across the projected period.
- Natural disturbances have not been taken into account in the FRL. Further explanations have been incorporated in section 3.1.

e) i Provide the area under forest management consistent with Table 4.A ("Forest land remaining Forest land") from the latest national GHG inventory using the year preceding the starting point of the projection.

- The area under forest management is taken from GHG inventory table 4.A (2018 edition) corresponding to year 2010. New explanation provided in section 1.3.h, "Consistency of the living biomass stock".

e) ii Provide detailed data on the evolution of HWP for the historical and the projection period and on the evolution with time of the harvest rate. Specify the half-life values used for the HWP categories.

> New information added in section 2.3.2 and new figures in section 4.1 provide data on the evolution of harvest and HWP across the projection period.
> The default half-live values used for HWP categories mentioned in section 3.3 (module 7) are now explicitly referred.

e) iii Provide more information on the modelled increment and harvest.

> New information added in section 2.3.2 and new figures in section 4.1 provide data on the evolution of growth and harvest across the projected period. Section 3 describes the modeling approach to obtain increments and harvests.

e) iv Provide historical and future harvesting rates disaggregated between energy and non-energy uses.

> Section 1.3.e. of the NFAP has been rewritten in order to address this recommendation. The new approach results in a different projected HWP deposit in the FRL (-3.862 kt CO_2/yr instead of -1.732 kt CO_2/yr in 2021-2015).