



# Forest Carbon Partnership Facility

## 3a. Technical issue related to Reference Levels for ER-PD development

Fourteenth Meeting of the Carbon Fund (CF14)

Paris, France

June 20-22, 2016

# Process so far

- **CF13:** Agreement on process to address emerging Issues in ER-PD Development
- **April 19, 2016:** Web based discussion on three common issues identified by the FMT in their interactions with REDD Countries while developing their ER-PD
  - Revision of the Reference Level during the Term of the ERPA
  - Use of interpolation to estimate reference level
  - Effect of the gap between the end of Reference Period and the start of ERPA Term on the calculation of emissions during the Term of the ERPA
- Written feedback by CFPs and Observers
- **June 7, 2016:** Second Web based discussion on three issues and general options for CFPs to consider relevant lessons from the application of the MF and the type of decisions associated with these options

# Options to consider relevant lessons from the application of the MF

- **Modifications of the MF:**
  - Applicable for necessary and well-justified modifications that supplement, change or deviate from the current MF
  - Modifications incorporated into a revised version of the MF and agreed through a new resolution
  - Mandatory for programs that have not signed the ERPA, voluntary for programs that have
- **Guidance on the MF:**
  - Clarifies or specifies issues already addressed in the MF
  - Captured in the Carbon Fund's Chair Summary (for decisions made at meetings) and separate guidance documents
  - The FMT to create a "guidance" section on the FCPF website, containing a series of such guidance documents as they are endorsed by the CFPs
  - Voluntary application by ER Programs



***Issue 1: Revision of the Reference Level during the Term of the ERPA***

# Background on issue

- MF: no requirement that the Reference Level of ER Programs would need to be revised during the Term of ERPA
- ER Program might propose to update their Reference Level for the following circumstances:
  - Improved data availability and quality in the future or
  - Phased approach to FREL design for countries' submission to the UNFCCC

# Applicable criteria and/or indicators of the MF

- **Criterion 3:** The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.
- **Criterion 4:** The ER Program should account for, measure, and report, and include in the ER Program Reference Level, significant Carbon Pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.
- **Criterion 10:** The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC.

# Proposed decision

- CFPs to provide **guidance on MF**
- Will be captured in the Carbon Fund's Chair Summary and posted on the FCPF website as a separate guidance document

# Draft guidance - main points

- Updates to Activity Data and Emission Factors that improve accuracy and quality of the Reference Level:
  - Updates to the Reference Level may include changes to Activity Data and Emission Factors
  - Allowed if resulting from improved data and methodologies that increase accuracy and quality of emissions estimates
  - Shall not compromise the consistency of emissions estimates for the Reference Period and program implementation phase
  - Shall also be used to update estimates of Emission Reductions for prior Reporting Periods -> the Uncertainty Buffer shall be adjusted



# Draft guidance - main points (cont')

- Updates to include additional Carbon Pools or greenhouse gases to improve accuracy and completeness of the Reference Level:
  - use of improved data and methodologies has shown that Carbon Pools or greenhouse gases that were previously considered as 'not significant' are instead 'significant'
  - use of improved data and methodologies allows for cost-effective estimates of Carbon Pools or greenhouse gases that were previously excluded because that would be conservative and underestimate total emission reductions.

# Draft guidance - main points (cont')

- Updates to include additional Carbon Pools or greenhouse gases to improve accuracy and completeness of the Reference Level:
  - use of improved data and methodologies has shown that Carbon Pools or greenhouse gases that were previously considered as 'not significant' are instead 'significant'
    - Does not compromise the consistency of emissions estimates for the Reference Period and program implementation phase
    - Any changes in the Reference Level shall only be applied to estimates of the emission reductions for the current and future Reporting Period(s).
  - use of improved data and methodologies allows for cost-effective estimates of Carbon Pools or greenhouse gases that were previously excluded because that would be conservative and underestimate total emission reductions.
    - Demonstrate that inclusion is consequence of improved data and methodologies and has not resulted in significant changes in the design of the ER Program

# Draft guidance - main points (cont')

- Proposed updates that change the REDD+ Activities associated with the Reference Level:
  - As part of the availability of better data, ER Programs might want to revise the Reference Level to include REDD+ Activities that were previously not selected (for example to include certain enhancement activities).
  - This would also mean that extra ER Program Measures would need to be included in the ER Program to reduce emissions from these pools compared to the Reference Level.
  - Carbon Fund Participants clarify that inclusion of additional REDD+ Activities in the Reference Level is not allowed.

# Draft guidance - main points (cont')

- Changes to Reference Levels that have been adjusted upward in accordance with Indicator 13.3
  - Earlier guidance also applies to ER Programs who's Reference Level is adjusted upward by a limited amount above average annual historical emissions in accordance with criterion 13.
  - But with the following restrictions:
    - As part of the proposed revision, it shall be shown that the ER Program still meets the eligibility requirements in Indicator 13.2;
    - The proposed adjustment still meets the threshold indicated in Indicator 13.4 based on a calculation of Carbon Stocks using the improved data and methodologies;
    - The revised Reference Level should not exceed the original Reference Level without a credible justification following Indicator 13.3

# Draft guidance - main points (cont')

- **Process for updating the Reference Level:**
  - Updates to the Reference Level can be submitted at the end of each Reporting Period and are subject to Verification .
  - Carbon Fund Participant request the FMT to include this in the Process Guidelines for the Carbon Fund of the FCPF.

# Discussion on issue 1

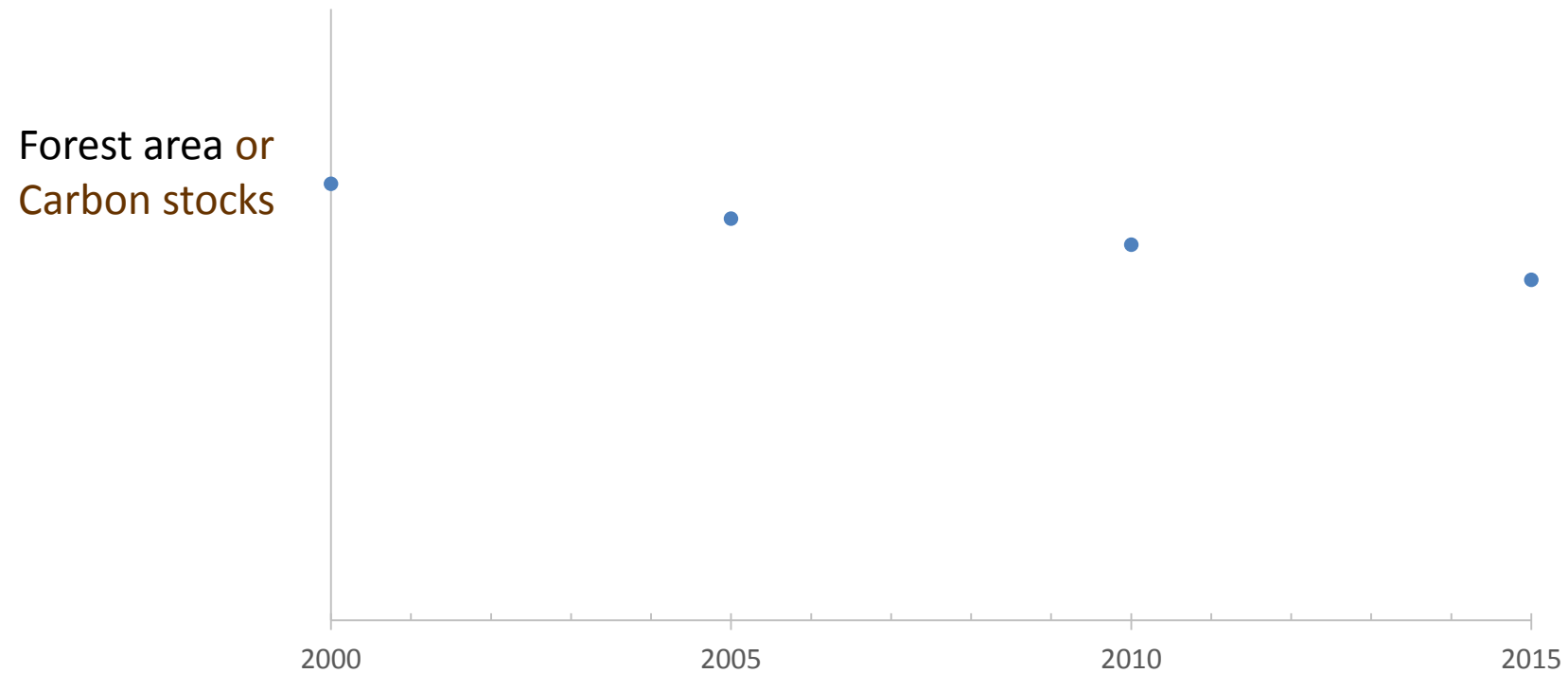
- Do CFPs agree with the proposed guidance?



***Issue 2: Use of interpolation to estimate reference level***

# Background on issue

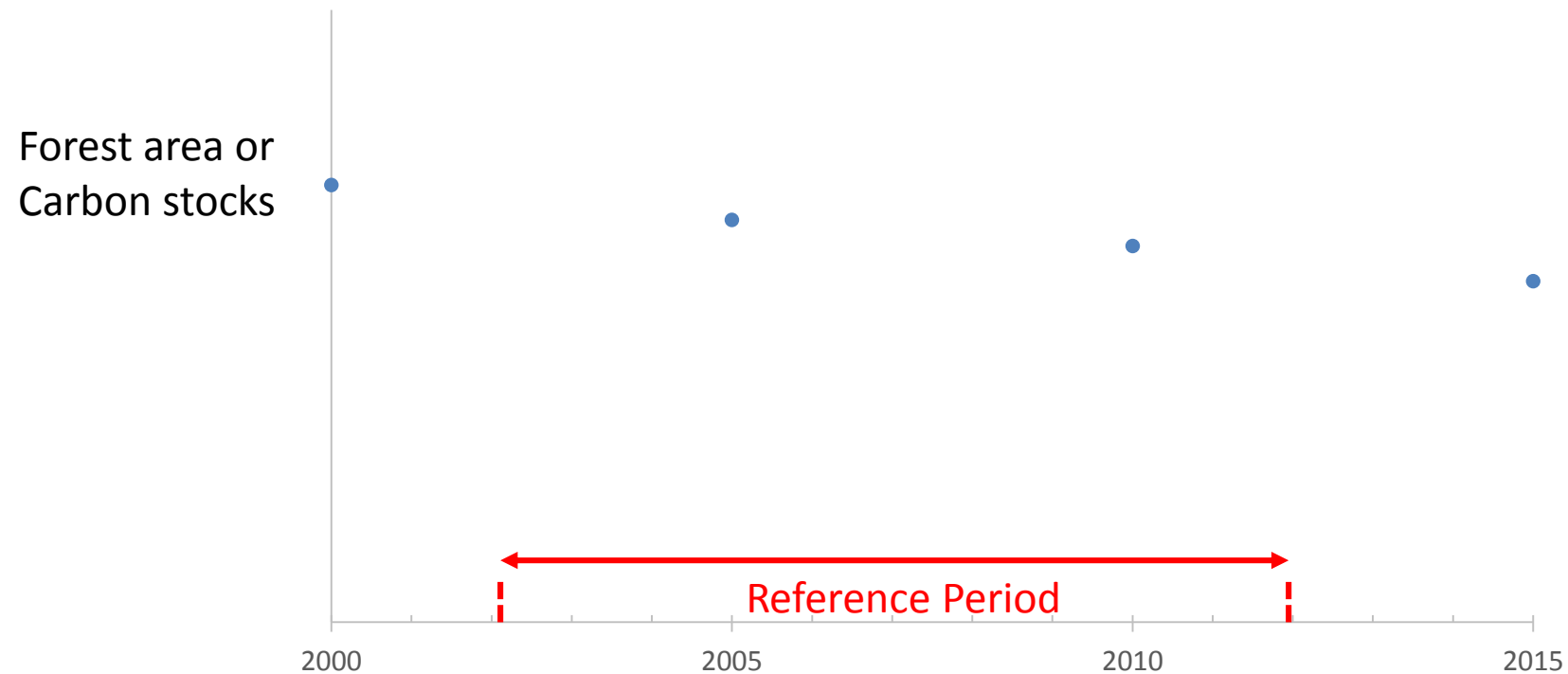
- Many countries try to periodically collect data on their forest resources





# Background on issue (cont')

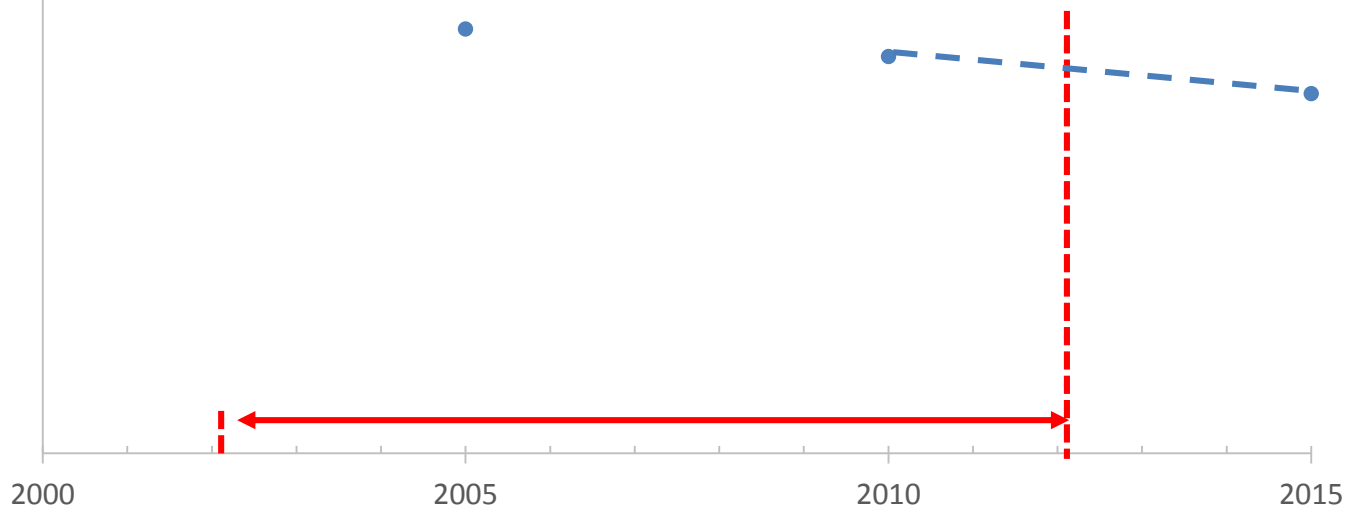
- Many countries try to periodically collect data on their forest resources
- Observations may not coincide with the years stipulated for the end-date of the reference period in the MF



# Background on issue (cont')

- Many countries try to periodically collect data on their forest resources
- Observations may not coincide with the years stipulated for the end-date of the reference period in the MF
- A way to solve this would be through interpolation using values outside of the reference period

Forest area or  
Carbon stocks



# Background on issue (cont')

- We may encounter two different cases of interpolation
  1. **Interpolation of Emission Factors:** A country has two national forest inventories (e.g. 2010 and 2015) and would like to estimate the carbon stocks changes within the Reference Period (e.g. 2010-2012) and through that the Emission Factor
  2. **Interpolation of Activity Data:** A country has two Forest Cover maps or one Forest Cover Change map (e.g. 2010 and 2015) and would like to estimate the forest cover changes within the Reference Period (e.g. 2010-2012)

# Applicable criteria and/or indicators of the MF

- **Indicator 11.1** requires that the end-date for the Reference Period is the most recent date prior to 2013 for which forest-cover data is available to enable IPCC Approach 3.
- **Indicator 11.2** requires that the start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date
- **Indicator 13.1** requires that the Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2.

# Proposed decision

- CFPs to provide **guidance on MF**
- Will be captured in the Carbon Fund's Chair Summary and posted on the FCPF website as a separate guidance document

# Draft guidance - main points

- ER Programs may estimate activity data or emission factors by interpolation of estimates made before and/or after the required start and end-date of the Reference Period assuming a linear progression of forest gain or loss
- If interpolation is used the following requirements shall be met:
  - The effect of such an interpolation on the RL shall be clearly documented;
  - It shall be also justified (using secondary data) that the interpolation period does not include any unusual and significant forest loss in terms of forest area or forest carbon and therefore that such interpolation does not lead to an increase in the uncertainty of activity data or emission factors;
  - It shall be demonstrated that methods to estimate emissions outside the Reference Period are consistent with the methods used to estimate emissions within the Reference Period

## Discussion on issue 2

- Do CFPs agree with the proposed guidance?

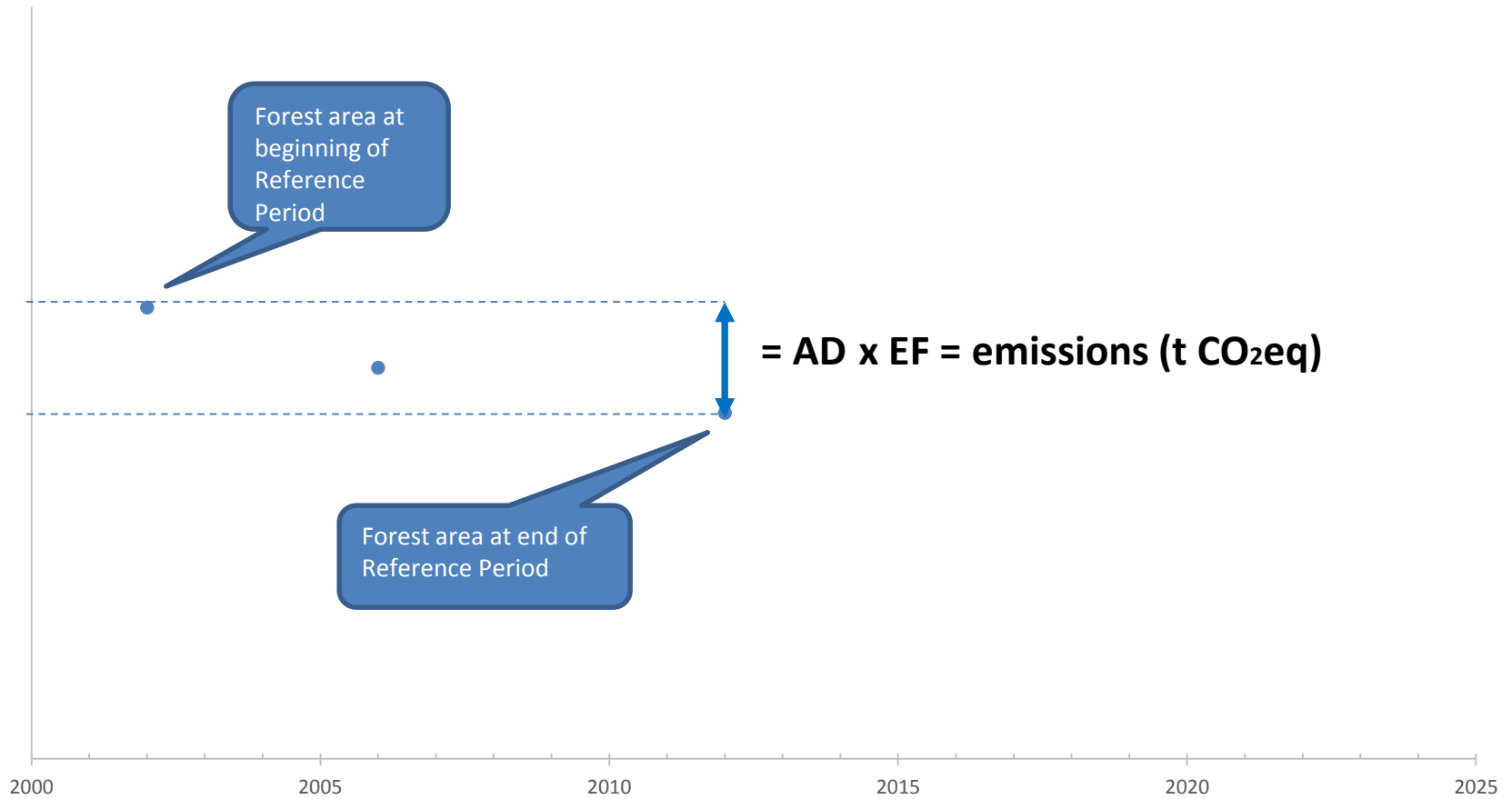


***Issue 3: Effect of the gap between the end of Reference Period and the start of ERPA Term on the calculation of emissions during the Term of the ERPA***

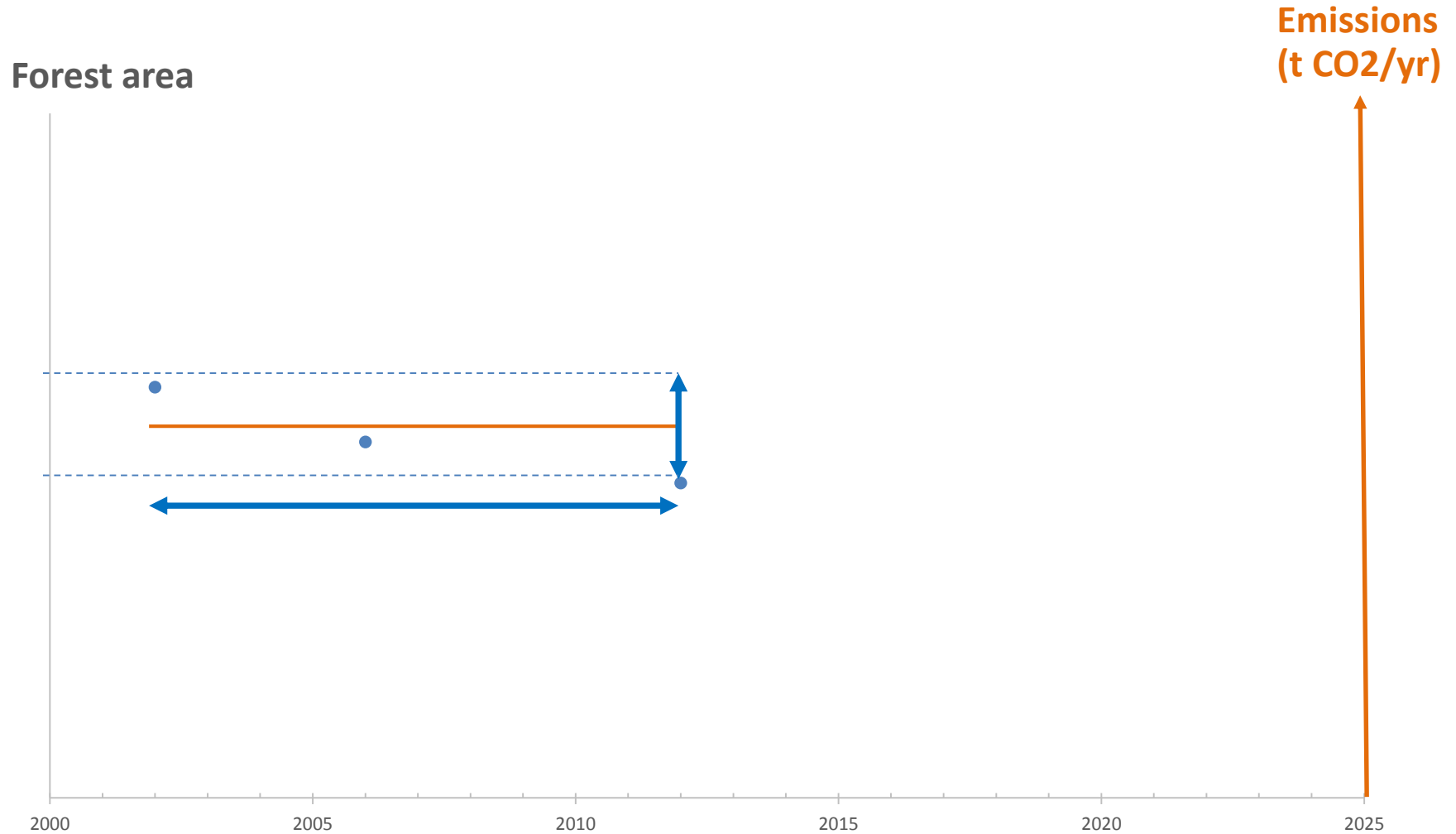


# Background on issue

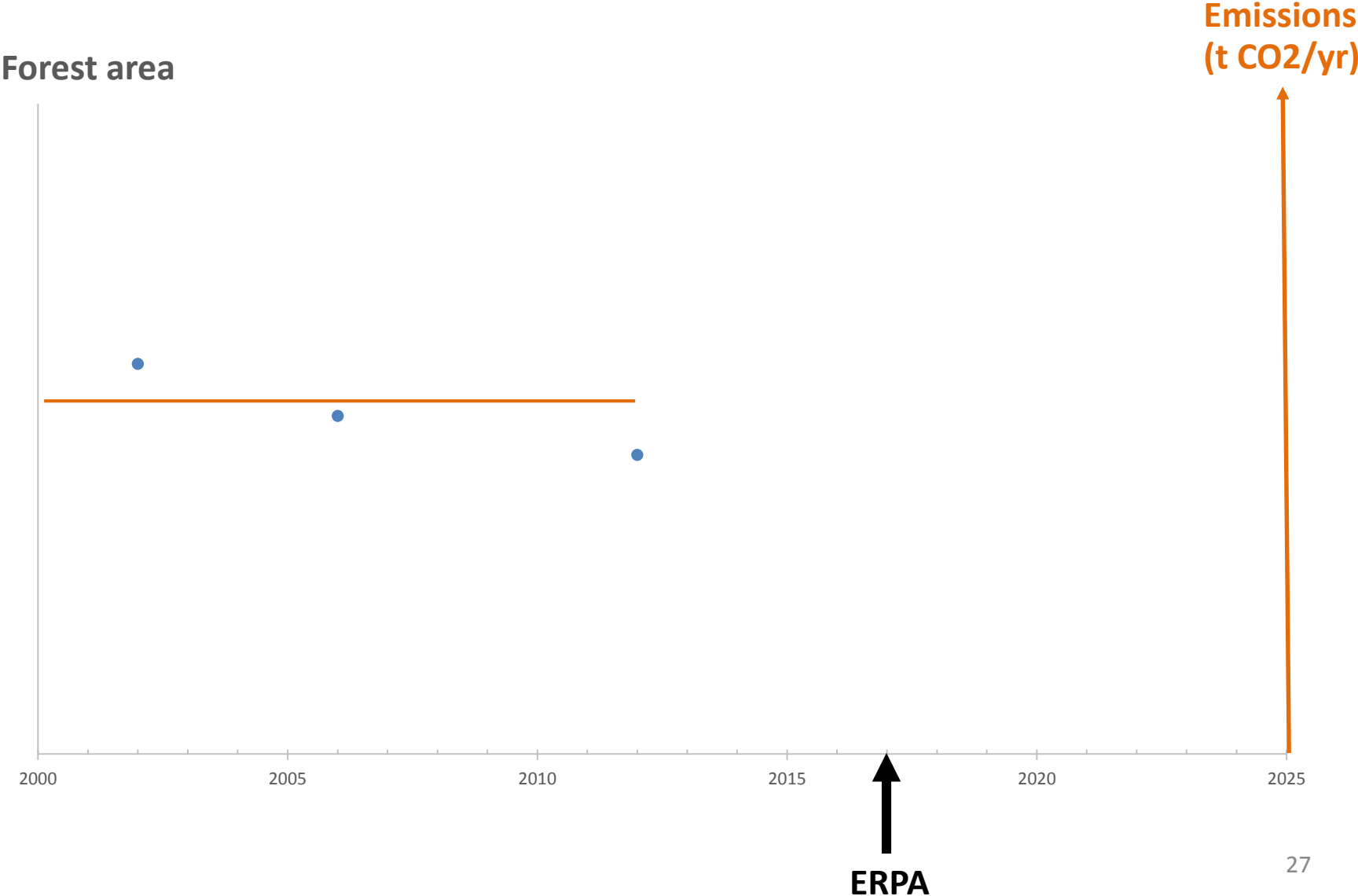
## Forest area



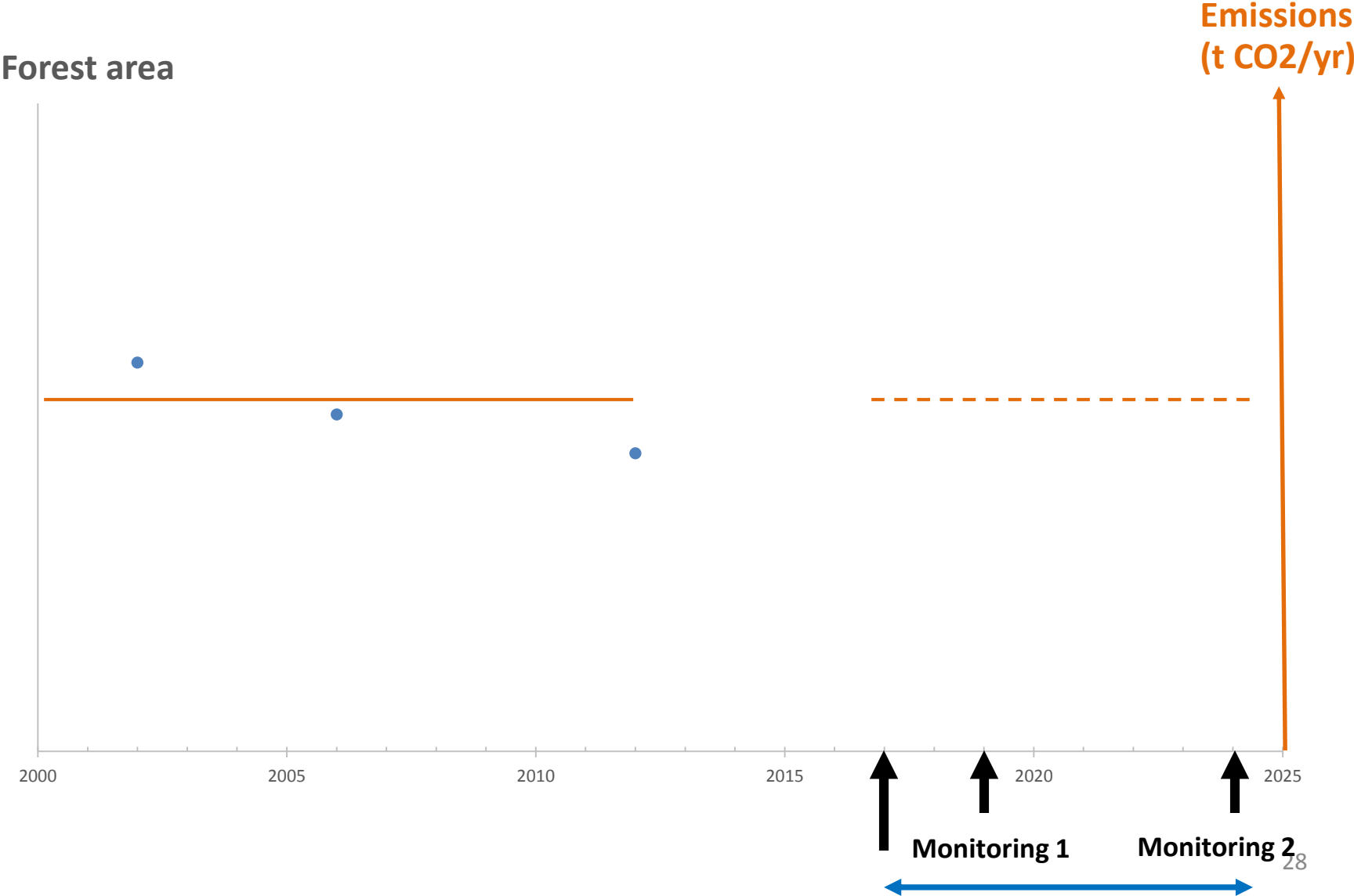
# Background on issue (cont')



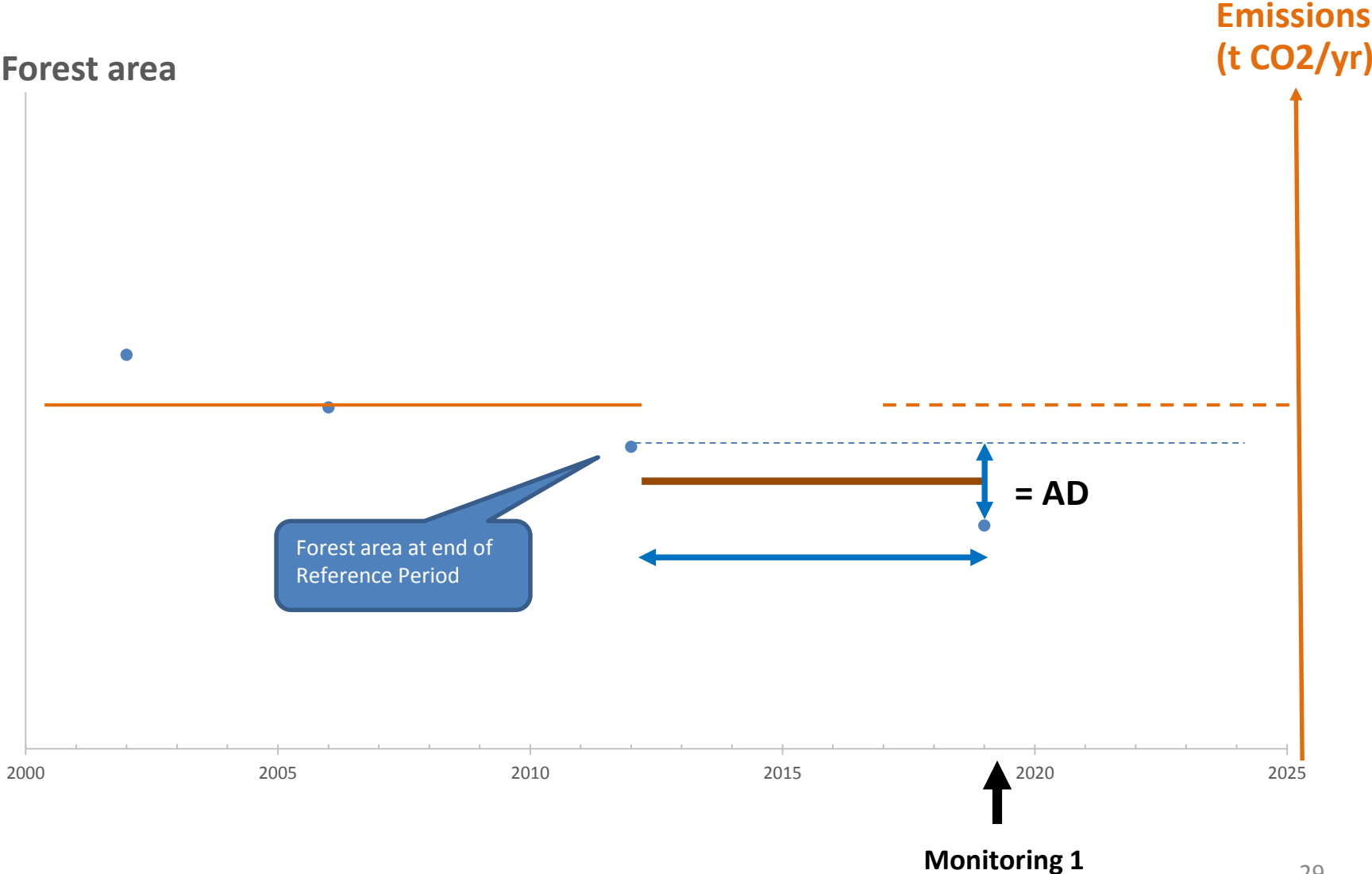
# Background on issue (cont')



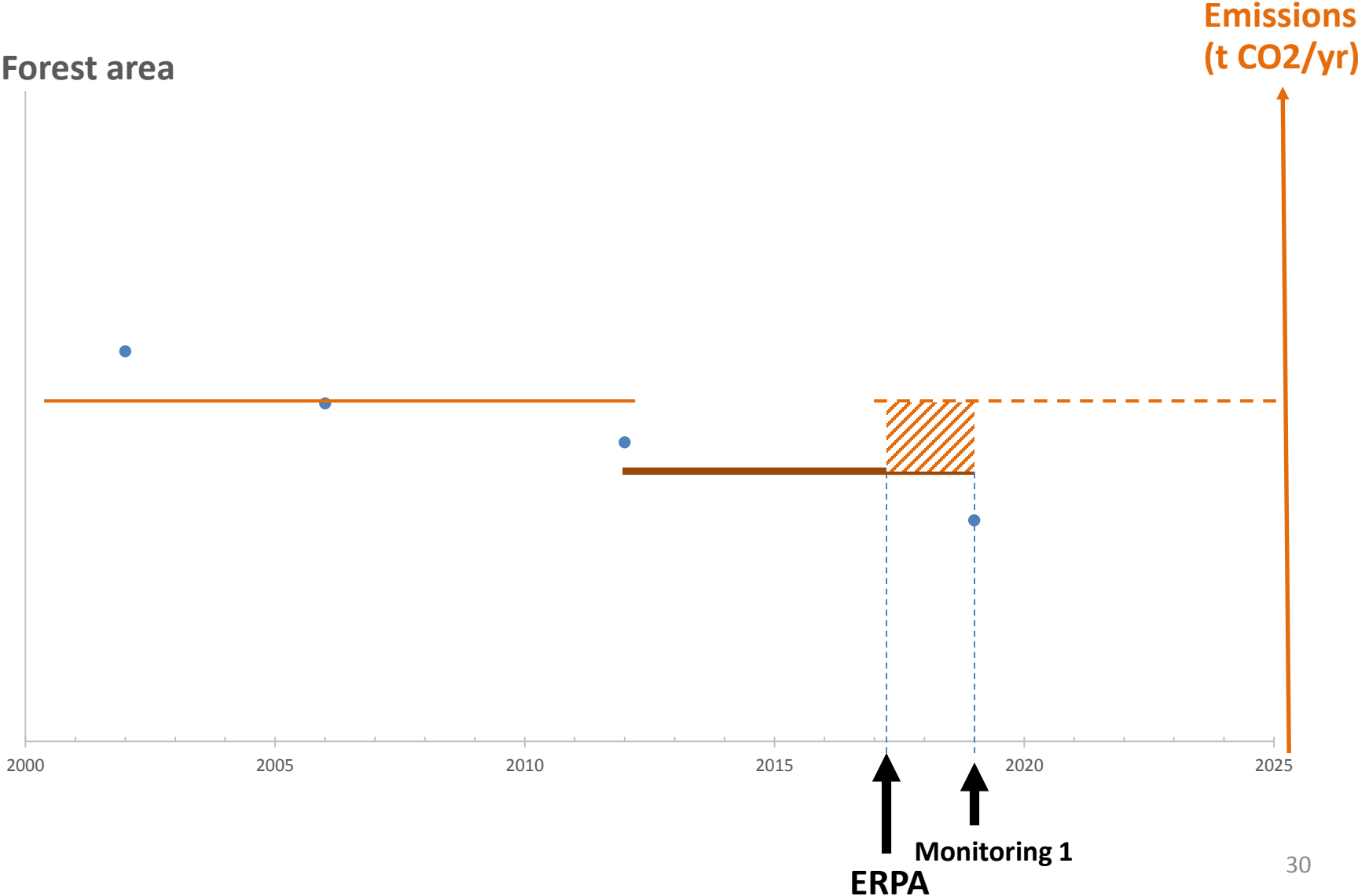
# Background on issue (cont')



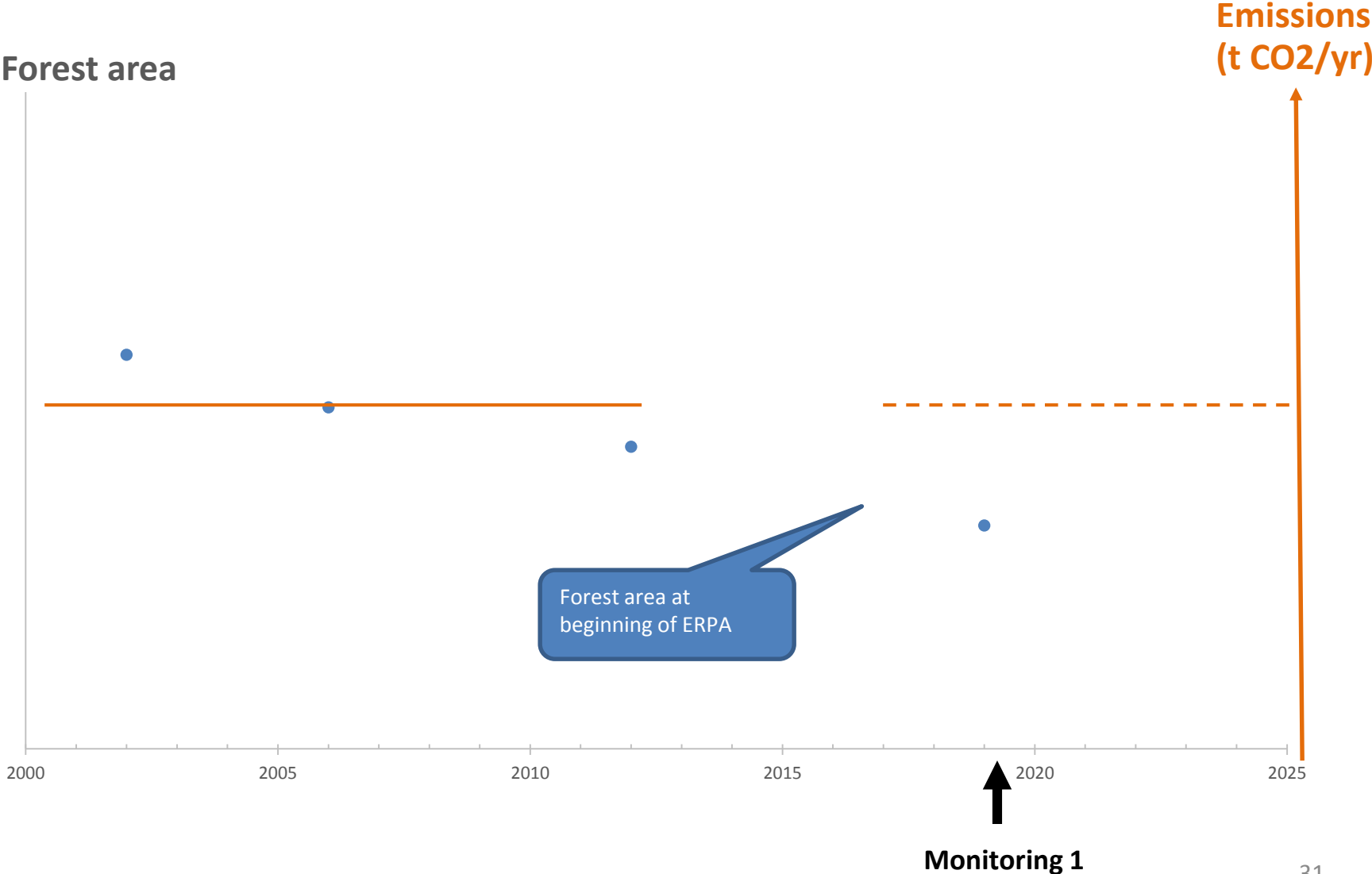
# Background on issue (cont')



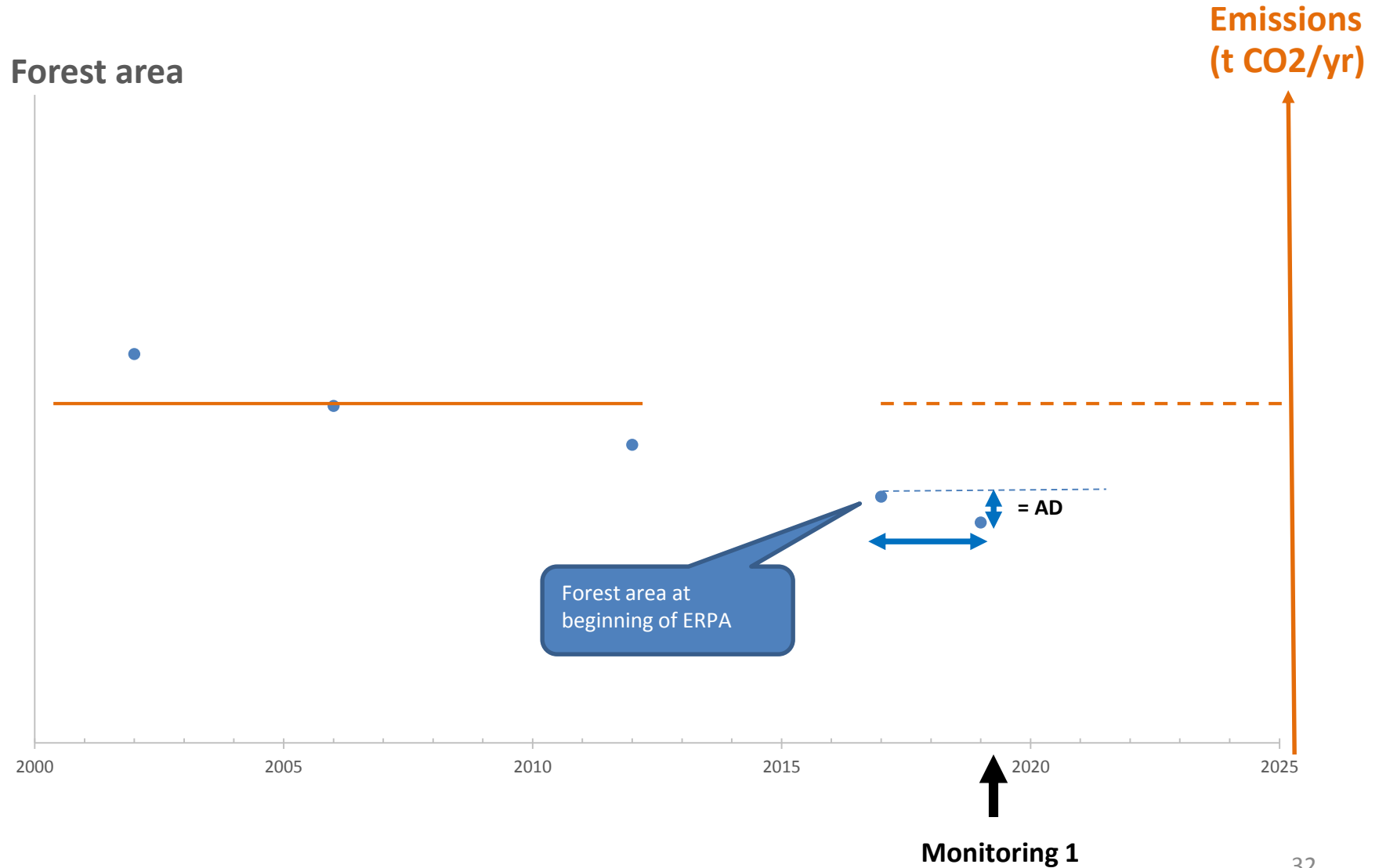
# Background on issue (cont')



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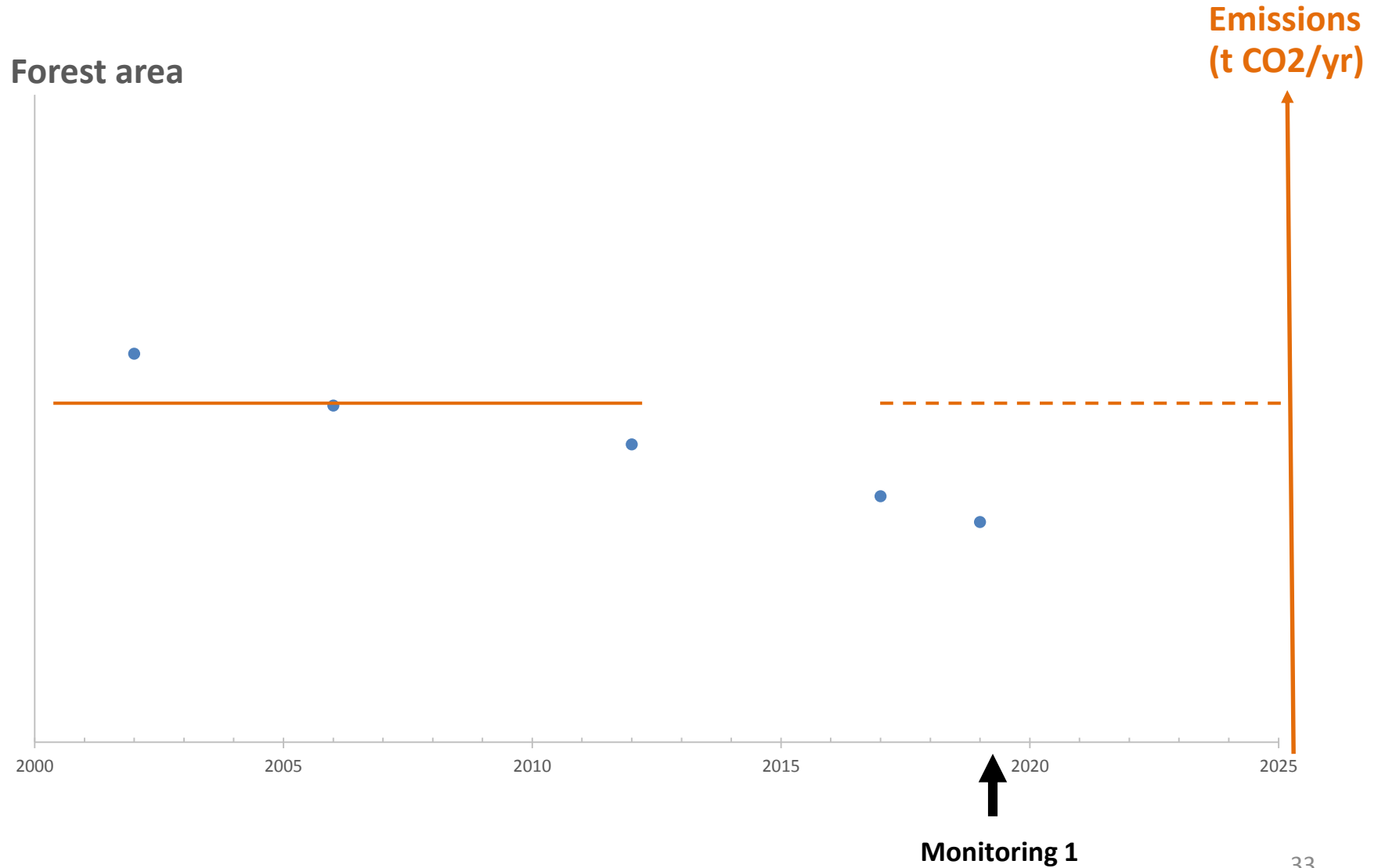


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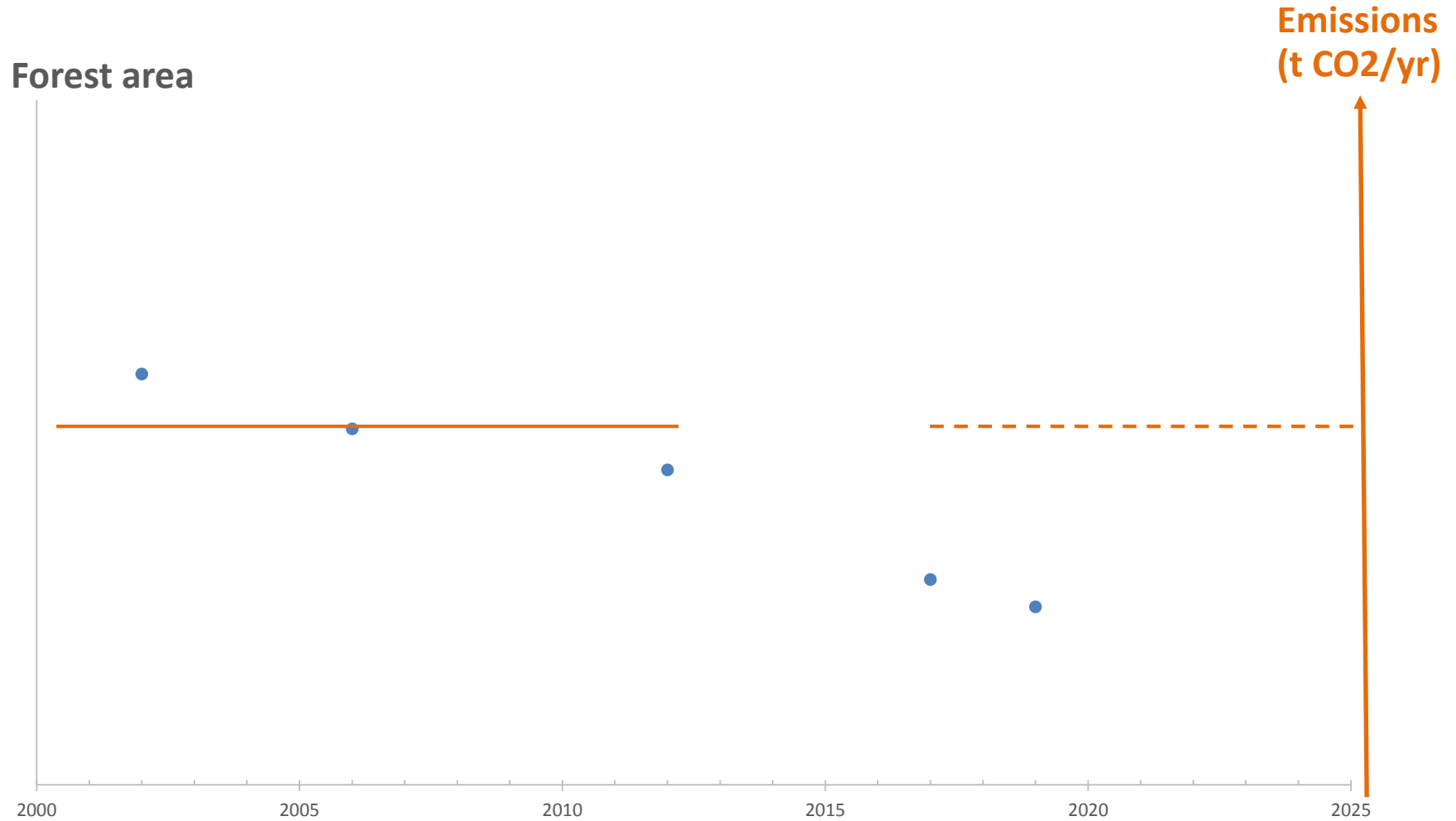




# Background on issue (cont')



# Background on issue (cont')



# Background on issue: summary

- To determine the rate of emissions during any period, at least two estimates of forest area (for deforestation) and quality (for degradation) are required
- The difference between the two estimates determines the rate of loss/gain or degradation/enhancement, respectively (Activity Data)
- The MF only states that 'Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA'
- To determine the emissions since the beginning of the Term of the ERPA, ER Programs are free to choose what they use as the 'starting point for determining change'
- This could be the end of the Reference Period, the start of the ERPA Term or another point in between when data are available

# Background on issue: summary (cont')

- How ER Programs choose their 'starting point for determining change', has an impact on the calculated emission rate during the Term of the ERPA
- Since this is the rate that is compared to the RL, this therefore impacts the calculation of the Emission Reductions
- There could be events that influence the trajectory of emissions between the end of the Reference Period and the start of the Term of the ERPA (leading to either an increase or decrease in deforestation/forest degradation)
- The longer the gap between the Reference Period and the Term of the ERPA, the bigger the chance that significant events occur and the choice of the 'starting point for determining change' has an impact on the calculated emission rate during the Term of the ERPA

# Applicable criteria and/or indicators of the MF

- **Indicator 10.1:** The Reference Level is expressed in tonnes of carbon dioxide equivalent per year
- **Indicator 11.1:** The end-date for the Reference Period is the most recent date prior to 2013 for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy

# Applicable criteria and/or indicators of the MF

- **Indicator 14.2:** Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available

# Proposed decision

- CFPs to provide **guidance on MF**
- Will be captured in the Carbon Fund's Chair Summary and posted on the FCPF website as a separate guidance document

# Draft guidance - main points

- In Indicator 11.1 'convincing justification' may include the availability of forest-cover data to enable IPCC Approach 3 that is dated less than three years prior to start of the Term of the ERPA.
- In this case, for Indicator 14.2 the ER Program shall estimate Activity Data for the first Reporting Period based on a forest map that is derived from data corresponding to the end of the Reference Period.
- For ER Programs that do not propose an alternative end-date or provide justification for an end-date that is more than three years prior to start of the Term of the ERPA, for Indicator 14.2 these ER Programs shall estimate Activity Data for the first Reporting Period based on a forest map that is derived from data corresponding to a period of less than three years prior to start of the Term of the ERPA.



## Discussion on issue 3

- Do CFPs agree with the proposed guidance?



**Thank you!**