Send the report to SNS-secretary Mimmi Blomquist (SNS@slu.se)

ANNUAL STATUS REPORT for PROJECT SNS-120

YEAR: 2016

Please notice that the size of text sections in the form can be adjusted if needed.
The length of the report should not exceed 3 pages. **Supplementary information can be attached**

<table>
<thead>
<tr>
<th>1. Project title</th>
<th>Anthropogenic greenhouse gas emissions from organic forest soils: improved inventories and implications for sustainable management</th>
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| 2. Project leader| Raija Laiho  
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|                                         | E-mail raija.laiho@luke.fi |
| 4. Project status| The project develops according to the plan. The project has organized kick-off partner meeting, hired an expert for data organizing and analyses, relevant published data has been reviewed and organized for analyses, the first joint publication from the project is being drafted.  
|                  | The project will benefit the Nordic-Baltic community by providing the most thorough analysis currently feasible on the greenhouse gas emissions from organic forest soils and their main constraints. This is important since organic forest soils are a source of greenhouse gases to the atmosphere.  
|                  | Organic forest soils are common in this region but not elsewhere in Europe (apart from Ireland, where they are managed in a quite different manner).  
|                  | The project has raised great interest and the results are eagerly waited for by e.g., those responsible for the national greenhouse gas inventories. |
5. Activities during the reporting year

- Project kick-off meeting and seminar was held in Riga (May 19-20, 2016), with field excursion, presentations and discussions (Appendix 1)
- project has hired the expert for collecting and analysing data and drafting manuscripts
- relevant published data has been reviewed from the literature and organized for analyses
- relevant unpublished data form the partners has been requested
- data analyses have been preliminarily planned together with an expert statistician
- data analyses on published data are in progress
- the first joint publication supporting the project goals has been outlined and currently the MS is in writing phase

6. Results achieved during the reporting year

- Greenhouse gas annual flux database includes 194 CO₂ estimates, 233 CH₄ estimates, and 196 N₂O estimates from boreal and temperate regions with comparable climate conditions to the partnership area, including data from boreal and temperate conditions
- The database deepens the data specifications regarding the origins of GHG flux estimates according to land-use type, land-use history, vegetation characteristics, and climate characteristics, to much higher details compared to previous assessments. That is achieved by inclusion of data from larger amount of relevant and transparent monitoring methods, by applying emission estimates from individual monitored years (to be used with mixed model approach), and by enriching the reported GHG data by best available climate data from external sources.

7. Publishing and communication during the reporting year

- The scientific presentations given in the kick-off meeting in Riga can be found on the web page of our “umbrella network”, CAR-ES: http://www.nordicforestresearch.org/car-es/events/
- The main communication between the partners has taken place by e-mails, where the main partner has updated the group on project progress and group- and individual e-mail correspondence has been applied for checking-up published data specifics and enquiries on unpublished data availability
- Publication planning and strategy is in progress, and at present a plan for 3 peer-reviewed papers involving all partners has been made, and further communications popularizing the outcome of the data analyses will follow.
- The first peer-reviewed paper manuscript is in writing phase and it focuses on technical aspects of GHG data retrieval requirements, methodological options providing robust data to GHG accounting, and major technical gaps in data applicability to GHG accounting.
10. **Short economic report (overview) of the reporting year**

The project managed to hire an excellent expert for taking the main responsibility of data review and collation, analyses and drafting of the manuscripts: Dr Jyrki Jauhiainen, who has, e.g., taken part in producing the IPCC guidelines and default emissions factors for greenhouse gas inventory of organic soils. This was largely possible because the partner University of Helsinki, Department of Forest Sciences, provided own funding for hiring Jyrki for 2016, starting from the kick-off meeting in Riga. We therefore transferred the main part of the SNS grant allocation received in 2016, SEK 300 000, to be used for Jyrki’s salary in 2017. Without the funding from the University of Helsinki and this transfer for 2017, we would not have been able to hire such an experienced scientist to the project. SEK 200 000 of the 2016 allocation was divided between the partners for organizing and participating in the kick-off meeting in Riga (see Appendix 2).

11. **Date and signature**

Date: 28/2/2017

Signature of project leader: