

## References to data and methods used in the calculation of municipal GHG balances

- Bastviken D., Cole J., Pace M. and Tranvik L. 2004. Methane emission from lakes: Dependence of lake characteristics, two regional assessments, and a global estimate. *Global Biogeochemical Cycles* 18, No. 4, GB4009. <http://dx.doi.org/10.1029/2004GB002238>
- Bergström I., Mäkelä S., Kankaala P. and Kortelainen P. 2007. Methane efflux from littoral vegetation stands of southern boreal lakes: An upscaled regional estimate. *Atmospheric Environment* 41: 339-351. <http://dx.doi.org/10.1016/j.atmosenv.2006.08.014>
- Haaspuro T. 2013. LUONNIKAS – laskentatyökalu kunnille luontoperäisten kasvihuonekaasujen nielujen ja lähteiden arviointiin. Novia publikation och produktion, serie/sarja A: Artiklar/Artikkelit 2. Utgivare/julkaisija: Yrkeshögskolan Novia, Fabriksgatan 1, Vasa, Finland. ISBN: 978-952-5839-75-3. <https://www.novia.fi/dmsdocument/40>
- Heikkinen J., Ketoja E., Nuutinen V. and Regina K. 2013. Declining trend of carbon in Finnish cropland soils in 1974–2009. *Global Change Biology* 19:1456–1469. <http://onlinelibrary.wiley.com/doi/10.1111/gcb.12137/full>
- Humborg C., Mörth C.-M., Sundbom M., Borg H., Blenckner T., Giesler R. and Ittekkot V. 2010. CO<sub>2</sub> supersaturation along the aquatic conduit in Swedish watersheds as constrained by terrestrial respiration, aquatic respiration and weathering. *Global Change Biology* 16: 1966–1978. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2486.2009.02092.x/abstract>
- Juutinen S, Alm J. and Larmola T. 2003. Major implication of the littoral zone for methane release from boreal lakes. *Global Biogeochemical Cycles*, 17, No. 4, 1117. <http://onlinelibrary.wiley.com/doi/10.1029/2003GB002105/abstract>
- Juutinen S. Rantakari M., Kortelainen P., Huttunen J.T., Larmola T., Alm J., Silvola J. and Martikainen P.J. 2009. Methane dynamics in different boreal lake types. *Biogeosciences* 6: 209-233. [doi:10.5194/bg-6-209-2009](http://dx.doi.org/10.5194/bg-6-209-2009)
- Järvenpää, M., Repo, A., Akujärvi, A., Kaasalainen, M. & Liski, J. 2016. Yasso15 litter decomposition and soil carbon model. Manuscript in preparation. <http://www.syke.fi/projects/yasso>.
- Kortelainen P., Rantakari M., Huttunen J., Mattsson T., Alm J., Juutinen S., Larmola T., Silvola J. and Martikainen P. 2006. Sediment respiration and lake trophic state are important predictors of large CO<sub>2</sub> evasion from small boreal lakes. *Global Change Biology* 12: 1554-1567. [doi:10.1111/j.1365-2486.2006.01167.x](http://dx.doi.org/10.1111/j.1365-2486.2006.01167.x)
- Rantakari M. & Kortelainen P. 2005. Interannual variation and climatic regulation of the CO<sub>2</sub> emission from large boreal lakes. *Global Change Biology* 11:1368-1380. [doi:10.1111/j.1365-2486.2005.00982.x](http://dx.doi.org/10.1111/j.1365-2486.2005.00982.x)
- Redsven, V., Hirvelä, H., Härkönen, K., Salminen, O., Siitonen, M. 2013. MELA2012 Reference Manual (2nd edition). The Finnish Forest Research Institute. 666 p. ISBN: 978-951-40-2451-1 (PDF). [http://mela2.metla.fi/mela/julkaisut/opaat/mela2012\\_2nd\\_ed.pdf](http://mela2.metla.fi/mela/julkaisut/opaat/mela2012_2nd_ed.pdf)
- Saarnio S., Morero M., Shurpali N.J., Tuittila E.-S., Mäkilä M. and Alm J. 2007. Annual CO<sub>2</sub> and CH<sub>4</sub> fluxes of pristine boreal mires as a background for the lifecycle analyses of peat energy. *Boreal Environment Research* 12: 101-113. <http://www.borenav.net/BER/pdfs/ber12/ber12-101.pdf>
- Statistics Finland, 2014. Greenhouse Gas Emissions in Finland 1990–2012 (National Inventory Report under the UNFCCC and the Kyoto Protocol). [http://www.stat.fi/tup/khkinv/fin\\_nir\\_2012\\_2014\\_04\\_15.pdf](http://www.stat.fi/tup/khkinv/fin_nir_2012_2014_04_15.pdf)
- Tolonen K. and Turunen J. 1996. Accumulation rates of carbon in mires in Finland and implications for climate change. *The Holocene* 6, 2: 171-178. [doi:10.1177/095968369600600204](http://dx.doi.org/10.1177/095968369600600204)
- Vanhala, P., Bergström, I., Haaspuro, T., Kortelainen, P., Holmberg, M., Forsius, M. 2016. Boreal forests can have a remarkable role in reducing greenhouse gas emissions locally: Land use-related and anthropogenic greenhouse gas emissions and sinks at the municipal level. *Science of the Total Environment* 557-558:51-57. <http://dx.doi.org/10.1016/j.scitotenv.2016.03.040>