



Liste de publications techniques et de recherche liées au Modèle du bilan du carbone du secteur forestier canadien (2023)

Le Service canadien des forêts de Ressources naturelles Canada a élaboré le [Modèle du bilan du carbone du secteur forestier canadien \(MBC-SFC3\)](#) afin de répondre aux besoins de comptabilité du carbone forestier à l'échelle opérationnelle qu'ont les aménagistes et analystes forestiers à travers le Canada. Le MBC-SFC3 est un cadre de modélisation à l'échelle du peuplement et du paysage qui peut servir à la simulation de la dynamique des stocks de carbone forestier requis en vertu de la Convention-Cadre des Nations Unies sur les changements climatiques (CCNUCC). Il se conforme aux méthodes d'estimations citées dans le rapport de 2003 du Groupe d'experts intergouvernemental sur l'évolution du climat (GIEC) intitulé [Recommandations en matière de bonnes pratiques pour le secteur de l'utilisation des terres, changements d'affectation des terres et foresterie](#) ainsi que les [Lignes directrices 2006 du GIEC pour les inventaires nationaux de gaz à effet de serre](#).

Le présent document propose une liste de publications techniques et de recherche liées au MBC-SFC3. Les publications sont classées par pays ou union économique ou politique où l'on a publié le document, ou selon l'endroit où le MBC-SFC3 fut mis en œuvre. En date de janvier 2023, la liste est longue, mais pas exhaustive. Les chercheurs sont encouragés à transmettre toute publication de recherche qui comprend l'utilisation du MBC-SFC3 à [Stephen Kull](#), forestier-vulgarisateur en modélisation du carbone au Service canadien des forêts.

CANADA

Amichev, B.; Bentham, M. J.; Kurz, W. A.; Laroque, C. P.; Kulshreshtha, S.; Piwowar, J. M.; Van Rees, K. C. J. 2016. [Carbon sequestration by white spruce shelterbelts in Saskatchewan, Canada: 3PG and CBM-CFS3 model simulations](#). Ecological Modelling, 325: 35-46.

Amichev, B. Y.; Bentham, M. J.; Kulshreshtha, S. N.; Laroque, C. P.; Piwowar, J. M.; Van Rees, K. C. J. 2016. [Carbon sequestration and growth of six common tree and shrub shelterbelts in Saskatchewan, Canada](#). Canadian Journal of Soil Science, 97(3).

Amichev, B. Y.; Kurz, W. A.; Smyth, C. E.; Van Rees, K. C. J. 2011. [The carbon implications of large-scale afforestation of agriculturally marginal land with short-rotation willow in Saskatchewan](#). GCB Bioenergy, 4(1): 70-87. [en anglais]

Asante, P. 2011. [Carbon Dynamics and Optimal Forest Rotation](#). FORMATH, 10: 235262.

Asante, P.; Armstrong, G. 2016. [Carbon sequestration and the optimal forest harvest decision under alternative baseline policies](#). Canadian Journal of Forest Research, 46(5).

Banfield, G. E.; Kurz, W. A. 2005. [Operational-scale forest carbon accounting](#). Popular Summary-Proceedings, Forests and Natural Resources in the 22nd Century: Science Forum, 31 août au 1er septembre 2005, Kamloops, C.-B. BC Journal of Ecosystems and Management, 6(2): 106-109. [en anglais]

Bernier, P. Y.; Guindon, L.; Kurz, W. A.; Stinson, G. 2010. [Reconstructing and modelling 71 years of forest growth in a Canadian boreal landscape: a test of the CBM-CFS3 carbon accounting model](#). Can. J. For. Res., 40: 109-118. [en anglais]

Boisvenue, C.; Bergeron, Y.; Bernier, P.; Peng, C. 2012. [Simulations show potential for reduced emissions and carbon stocks increase in boreal forests under ecosystem management](#). Carbon Management, 3(6): 553-568. [en anglais]

Boisvenue, C.; Paradis, G.; Eddy, I. M. S.; McIntire, E. J. B.; Chubaty, A. M. 2022. [Managing forest carbon and landscape capacities](#). Environmental Research Letters, 17(11): 114013.

Boisvenue, C.; Smiley, B. P.; White, J. C.; Kurz, W. A.; Wulder, M. A. 2016. [Improving carbon monitoring and reporting in forests using spatially-explicit information](#). Carbon Balance and Management, 11(23). [en anglais]

Bona, K. A.; Fyles, J. W.; Shaw, C.; Kurz, W. A. 2013. [Are mosses required to accurately predict upland black spruce forest soil carbon in national-scale forest C accounting models?](#) Ecosystems, 16(6): 1071-1086. [en anglais]

Bona, K. A.; Shaw, C. H.; Fyles, J. W.; Kurz, W. A. 2016. [Modelling moss-derived carbon in upland black spruce forests](#). Can. J. For. Res., 46(4): 520-534. [en anglais]

- Boucher, J.-F.; Tremblay, P.; Gaboury, S.; Villeneuve, C. 2012. [Can boreal afforestation help offset incompressible GHG emissions from Canadian industries?](#) *Process Safety and Environmental Protection*, 90(6): 459-466.
- Cameron, E. K.; Shaw, C. H.; Bayne, E. M.; Kull, S. J. 2015. [Modelling interacting effects of invasive earthworms and wildfire on forest floor carbon storage in the boreal forest.](#) *Soil Biology and Biochemistry*, 88: 189-196. [en anglais]
- Carle, M.-A.; D'Amours, S.; Azouzi, R.; Rönnqvist, M. 2021. [A Strategic Forest Management Model for Optimizing Timber Yield and Carbon Sequestration.](#) *Forest Science*, 67(2): 205-218.
- Chen, B.; Arain, M. A.; Chen, J. M.; Croft, H.; Grant, R. F.; Kurz, W. A.; Bernier, P.; Guindon, L.; Price, D.; Wang, Z. 2016. [Evaluating the impacts of climate variability and cutting and insect defoliation on the historical carbon dynamics of a boreal black spruce forest landscape in eastern Canada.](#) *Ecological Modelling*, 321: 98-109. [en anglais]
- Chen, Y.; Kershaw, J. A.; Hsu, Y.-H.; Yang, T.-R. 2020. [Carbon estimation using sampling to correct LiDAR-assisted enhanced forest inventory estimates.](#) *The Forestry Chronicle*, 96(1): 9-19.
- de Groot, W.; Landry, R.; Kurz, W. A.; Anderson, K. R.; Englefield, P.; Fraser, R. H.; Hall, R. J.; Banfield, E.; Raymond, D. A.; Decker, V.; Lynham, T. J.; Pritchard, J. M. 2007. [Estimating direct carbon emissions from Canadian wildland fires.](#) *International Journal of Wildland Fire*, 16(5): 593-606. [en anglais]
- Dessureault, P.-L.; Boucher, J.-F.; Tremblay, P.; Bouchard, S.; Villeneuve, C. 2015. [Uncovering the minor contribution of land-cover change in upland forests to the net carbon footprint of a boreal hydroelectric reservoir.](#) *Journal of Environmental Quality*, 44(4): 1111-1118.
- Dufour, B.; Boucher, J.-F.; Tremblay, P.; Mailly, D.; Lord, D. 2016. [Black-spruce-lichen woodlands growth and carbon drawdown potentials as revealed by mature stands.](#) *Boreal Env. Res.*, 21: 71-86.
- Dymond, C. C.; Beukema, S.; Nitschke, C. R.; Coates, K. D.; Scheller, R. M. 2016. [Carbon sequestration in managed temperate coniferous forests under climate change.](#) *Biogeosciences*, 13, 1933-1947.
- Dymond, C. C.; Neilson, E. T.; Stinson, G.; Porter, K. B.; MacLean, D. A.; Gray, D. R.; Campagna, M.; Kurz, W. A. 2010. [Future Spruce Budworm Outbreak May Create a Carbon Source in Eastern Canadian Forests.](#) *Ecosystems*, 13(6): 917-931. [en anglais]
- Dymond, C. C.; Titus, B. D.; Stinson, G.; Kurz, W. A. 2010. [Future quantities and spatial distribution of harvesting residue and dead wood from natural disturbances in Canada.](#) *Forest Ecology and Management*, 260(2): 181-192. [en anglais]
- Ferster, C. J.; Trofymow, J. A.; Coops, N. C.; Chen, B.; Black T. A. 2015. [Comparison of carbon stock changes and cumulative carbon fluxes from inventory ground plots, eddy-covariance flux-towers and model estimates in an age sequence of coastal Douglas-fir stands in British Columbia.](#) *Forest Ecosystems*, 2(13). [en anglais]
- Fradette, O.; Marty, C.; Faubert, P.; Dessureault, P.-L.; Paré, M.; Bouchard, S.; Villeneuve, C. 2021. [Additional carbon sequestration potential of abandoned agricultural land afforestation in the boreal zone: A modelling approach.](#) *Forest Ecology and Management*, 499: 119565.
- Giles-Hansen, K.; Wei, X. 2022. [Cumulative disturbance converts regional forests into a substantial carbon source.](#) *Environmental Research Letters*, 17, 044049.
- Giles-Hansen, K.; Wei, X.; Hou, Y. 2021. [Dramatic increase in water use efficiency with cumulative forest disturbance at the large forested watershed scale.](#) *Carbon Balance and Management*, 16(6).
- Hagemann, U.; Moroni, M. T.; Shaw, C. H.; Kurz, W. A.; Makeschin, F. 2010. [Comparing measured and modelled forest carbon stocks in high-boreal forests of harvest and natural-disturbance origin in Labrador, Canada.](#) *Ecological Modelling*, 221(5): 825-839. [en anglais]
- Hararuk, O.; Shaw, C.; Kurz, W. A. 2017. [Constraining the organic matter decay parameters in the CBM-CFS3 using Canadian National Forest Inventory data and a Bayesian inversion technique.](#) *Ecological Modelling*, 364: 1-12. [en anglais]
- Head, M.; Bernier, P.; Levasseur, A.; Beaugard, R.; Margni, M. 2019. [Forestry carbon budget models to improve biogenic carbon accounting in life cycle assessment.](#) *Journal of Cleaner Production*, 213: 289-299. [en anglais]
- Heffner, J.; Steenberg, J.; Leblon, B. 2021. [Comparison between Empirical Models and the CBM-CFS3 Carbon Budget Model to Predict Carbon Stocks and Yields in Nova Scotia Forests.](#) *Forests*, 12(9): 1235.
- Hennigar, C. R.; MacLean, D. A.; Amos-Binks, L. J. 2008. [A novel approach to optimize management strategies for carbon stored in both forests and wood products.](#) *Forest Ecology and Management*, 256(4): 786-797.
- Hilger, A. B.; Shaw, C. H.; Metsaranta, J. M.; Kurz, W. A. 2012. [Estimation of snag carbon transfer rates by ecozone and lead species for forests in Canada.](#) *Ecological Applications*, 22(8): 2078-2090. [en anglais]
- Hoffman, D. R.; Shaw, C. H.; Kull, S. J.; Voicu, M. F.; McNalty, C. 2019. [Forest floor recovery index: Boreal Mixedwood field guide.](#) Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta). [en anglais]
- Hope, E. S.; Filewod, B.; McKenney, D. W.; Lemprière, T. C. 2021. [A financial analysis of four carbon offset accounting protocols for a representative afforestation project \(southern Ontario, Canada\).](#) *Canadian Journal of Forest Research*, 51(7).
- Kelley, J.; Trofymow, J. A.; Metsaranta, J. M.; Filipescu, C. N.; Bone, C. 2021. [Use of Multi-Temporal LiDAR to Quantify Fertilization Effects on Stand Volume and Biomass in Late-Rotation Coastal Douglas-Fir Forests.](#) *Forests*, 12(5): 517.
- Kull, S. J.; Morken, S.; Smyth, C. E.; Fellows, M. 2019. [Modèle du bilan du carbone du secteur forestier canadien \(MBC-SFC3\): Description des tableaux et paramètres de la Base de données de l'index des archives.](#) Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta).
- Kull, S. J.; Morken, S.; Smyth, C. E.; Fellows, M. 2019. [Modelo de balance de carbono del sector forestal canadiense \(MBC-SFC3\): Descripciones de tablas y parámetros de la Base de datos de índice de archivo.](#) Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta). [en espagnol]

- Kull, S. J.; Rampley, G. J.; Morken, S.; Metsaranta, J.; Neilson, E. T.; Kurz, W. A. 2019. [Modèle du bilan du carbone du secteur forestier canadien \(MBC-SFC3\) à l'échelle opérationnelle. Version 1.2 : Guide de l'utilisateur.](#) Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta).
- Kull, S. J.; Rampley, G. J.; Morken, S.; Metsaranta, J.; Neilson, E. T.; Kurz, W. A. 2019. [Modelo de balance de carbono del sector forestal canadiense \(MBC-SFC3\) a escala operativa, versión 1.2: guía del usuario.](#) Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta). [en espagnol]
- Kurz, W. A. 2005. [Progress towards Canada's National Forest Carbon Monitoring, Accounting and Reporting System](#), in M. Mitsuo and K. Hidesato, (éds.). Proceedings of a workshop on practical national forest inventory systems to meet the requirements of the Kyoto Protocol, 15 et 16 novembre 2004, Tokyo. Forestry and Forest Products Research Institute, Tsukuba, Ibaraki, Japon. [en anglais]
- Kurz, W. A. 2011. Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3). Experiences in implementing a Tier 3 approach, in H.S. Eggleston, N. Srivastava, K. Tanabe, J. Baasansuren, and M. Fukuda, (éds.), pages 39-47. [IPCC 2011. Use of Models and Facility-Level Data in Greenhouse Gas Inventories. Proceedings. Report of IPCC Expert Meeting on Use of Models and Measurements in Greenhouse Gas Inventories.](#) 9 au 11 août 2010, Sydney, Australie. Institute for Global Environmental Strategies (IGES), Hayama, Japon. [en anglais]
- Kurz, W. A.; Apps, M. J. 2006. [Developing Canada's National Forest Carbon Monitoring, Accounting and Reporting System to meet the reporting requirements of the Kyoto Protocol.](#) Mitigation and Adaptation Strategies for Global Change, 11: 33-43. [en anglais]
- Kurz, W. A.; Apps, M. J.; Banfield, G. E.; Stinson, G. 2002. [Forest carbon accounting at the operational scale.](#) The Forestry Chronicle, 78(5): 672-679. [en anglais]
- Kurz, W. A.; Dymond, C. C.; Stinson, G.; Rampley, G. J.; Neilson, E. T.; Carroll, A. L.; Ebata, T.; Safranyik, L. 2008. [Mountain pine beetle and forest carbon feedback to climate change.](#) (Contient des informations complémentaires). Nature, 452: 987-990. [en anglais]
- Kurz, W. A.; Dymond, C. C.; White, T. M.; Stinson, G.; Shaw, C. H.; Rampley, G. J.; Smyth, C.; Simpson, B. N.; Neilson, E. T.; Trofymow, J. A.; Metsaranta, J.; Apps, M. J. 2009. [CBM-CFS3: A model of carbon-dynamics in forestry and land-use change implementing IPCC standards.](#) Ecological Modelling, 220(4): 480-504. [en anglais]
- Kurz, W. A.; Hayne, S.; Fellows, M.; MacDonald, J. D.; Metsaranta, J. M.; Hafer, M.; Blain, D. 2018. [Quantifying the impacts of human activities on reported greenhouse gas emissions and removals in Canada's managed forest: conceptual framework and implementation.](#) Canadian Journal of Forest Research, 48(10): 1227-1240. [en anglais]
- Kurz, W. A.; Stinson, G.; Rampley, G. J. 2007. [Could increased boreal forest ecosystem productivity offset carbon losses from increased disturbances?](#) Philosophical Transactions of the Royal Society B, 363(1501): 2261-2269. [en anglais]
- Kurz, W. A.; Stinson, G.; Rampley, G. J.; Dymond, C. C.; Neilson, E. T. 2008. [Risk of natural disturbances makes future contribution of Canada's forests to the global carbon cycle highly uncertain.](#) Proceedings of the National Academy of Sciences (USA), 105(5): 1551-1555. [en anglais]
- Lamers, P.; Junginger, M.; Dymond, C. C.; Faaij, A. 2012. [Damaged forests provide an opportunity to mitigate climate change.](#) Global Change Biology Bioenergy, 6(1): 44-60.
- Lantz, V.; MacLean, D.; Chang, W.-Y.; Slaney, G.; Hennigar, C.; Cooke, B. 2007. [Role of pest management in sequestering carbon in forests: integration with CBM-CFS3 and economic analyses.](#) Réseau sur la gestion durable des forêts, rapport de projet, 31 décembre 2007, rapport final de projet, Edmonton (Alberta).
- Li, Z.; Kurz, W. A.; Apps, M. J.; Beukema, S.J. 2003. [Belowground biomass dynamics in the Carbon Budget Model of the Canadian Forest Sector: recent improvements and implications for the estimation of NPP and NEP.](#) Canadian Journal of Forest Research, 33(1): 126-136. [en anglais]
- Luckai, N.; Larocque, G. R.; Archambault, L.; Paré, D.; Boutin, R.; Groot, A. 2012. [Using the carbon budget model of the Canadian forest sector \(CBM-CFS3\) to examine the impact of harvest and fire on carbon dynamics in selected forest types of the Canadian boreal shield.](#) The Forestry Chronicle, 88: 426-438. [en anglais]
- Malcolm, J. R.; Holtsmark, B.; Piascik, P. W. 2020. [Forest harvesting and the carbon debt in boreal east-central Canada.](#) Climatic Change, 161: 433-449.
- Man, C. D.; Lyons, K. C.; Nelson, J. D.; Bull, G. Q. 2015. [Cost to produce carbon credits by reducing the harvest level in British Columbia, Canada.](#) Forest Policy and Economics, 52: 9-17.
- Ménard, I.; Thiffault, E.; Boulanger, Y.; Boucher, J.-F. 2022. [Multi-model approach to integrate climate change impact on carbon sequestration potential of afforestation scenarios in Quebec, Canada.](#) Ecological Modelling, 473, 110144.
- Ménard, I.; Thiffault, E.; Kurz, W. A.; Boucher, J.-F. 2022. [Carbon sequestration and emission mitigation potential of afforestation and reforestation of unproductive territories.](#) New Forests.
- Metsaranta, J. M. 2019. [Long-term tree-ring derived carbon dynamics of an experimental plantation in relation to species and density in Northwestern Ontario, Canada.](#) Forest Ecology and Management, 441: 229-241.
- Metsaranta, J. M.; Beauchemin, S.; Langley, S.; Tisch, B.; Dale, P. 2018. [Assessing the long-term ecosystem productivity benefits and potential impacts of forests re-established on a mine tailings site.](#) Forests, 9(11), 707, 1-23. [en anglais]
- Metsaranta, J. M.; Dymond, C. C.; Kurz, W. A.; Spittlehouse, D. L. 2011. [Uncertainty of 21st century growing stocks and GHG balance of forests in British Columbia, Canada resulting from potential climate change impacts on ecosystem processes.](#) Forest Ecology and Management, 262(5): 827-837. [en anglais]
- Metsaranta, J. M.; Kurz, W. A. 2012. [Inter-annual variability of ecosystem production in boreal jack pine forests \(1975–2004\) estimated from tree-ring data using CBM-CFS3.](#) Ecological Modelling, 224(1): 111-123. [en anglais]
- Metsaranta, J. M.; Kurz, W. A.; Neilson, E. T.; Stinson, G. 2010. [Implications of future disturbance regimes on the carbon balance of Canada's managed forest \(20102100\).](#) Tellus B, 62B(5): 719-728. [en anglais]
- Metsaranta, J. M.; Mamet, S. D.; Maillet, J.; Barr, A. G. 2021. [Comparison of tree-ring and eddy-covariance derived annual ecosystem production estimates for jack pine and trembling aspen forests in Saskatchewan, Canada.](#) Agriculture and Forest Meteorology, 307: 108469.

- Metsaranta, J. M.; Shaw, C.; Kurz, W. A.; Boisvenue, C.; Morken, S. 2017. [Uncertainty of inventory-based estimates of the carbon dynamics of Canada's managed forest \(1990–2014\)](#). Canadian Journal of Forest Research, 47(8): 1082-1094. [en anglais]
- Metsaranta, J. M.; Smyth, C. E.; Kurz, W. A. 2017. Canada, in *Chapter 8 in Barreiro, S.; Schelhaas, M.-J.; McRoberts, R.E.; Kändler, G.(eds.) Forest Inventory-based Projection Systems for Wood and Biomass Availability*, Managing Forest Ecosystems 29, Springer.
- Metsaranta, J. M.; Trofymow, J. A.; Black, T. A.; Jassal, R. S. 2018. [Long-term time series of annual ecosystem production \(1985–2010\) derived from tree rings in Douglas-fir stands on Vancouver Island, Canada using a hybrid biometric-modelling approach](#). Forest Ecology and Management, 429: 57-68. [en anglais]
- Moroni, M. T.; Shaw, C. H.; Kurz, W. A.; Rampley, G. J. 2010. [Forest carbon stocks in Newfoundland boreal forests of harvest and natural disturbance origin II: model evaluation](#). Can. J. For. Res., 40: 2146-2163. [en anglais]
- Morton, C.; Cameron, R.; Duinker, P. 2010. Modeling carbon budgets in four protected wilderness areas in Nova Scotia in Bondrup-Nielsen, S.; Beazley, K.; Bissix, G.; Colville, D.; Flemming, S.; Herman, T.; McPherson, M.; Mockford, S.; O'Grady, S. (Eds). 2010. Ecosystem Based Management: Beyond Boundaries. Compte-rendu de la 6e conférence internationale de la science et de la gestion des aires protégées, le 2126 mai 2007, Université Acadia, Wolfville (Nouvelle-Écosse). Science and Management of Protected Areas Association, Wolfville (N.-É).
- Neilson, E. T.; McLean, D. A.; Meng, F.-R.; Arp, P. A. 2007. [Spatial distribution of carbon in natural and managed stands in an industrial forest in New Brunswick, Canada](#). Forest Ecology and Management, 253(1-3): 148-160.
- Neilson, E. T.; McLean, D. A.; Meng, F.-R.; Hennigar, C. R.; Arp, P. A. 2008. [Optimal on- and off-site forest carbon sequestration under existing timber supply constraints in northern New Brunswick](#). Canadian Journal of Forest Research, 38(11): 2784-2796.
- Robinson, A.; Defrenne, C. E.; Roach, W. J.; Dymond, C. C.; Pickles, B. J.; Simard, S. W. 2022. [Harvesting intensity and aridity are more important than climate change in affecting future carbon stocks of Douglas-fir forests](#). Front. For. Glob. Change, 5: 934067.
- Sage, L. K.; Smith, C. T.; Kurz, W.; Thiffault, E.; Paré, D.; Bernier, P. 2018. [Empirical and Predicted Boreal Forest Carbon Pools Following Stem-Only Harvesting in Quebec, Canada](#). Soil Science Society of America Journal, 83(S1): S59-S81.
- Sharma, T.; Kurz, W. A.; Stinson, G.; Pellatt, M. G.; Li, Q. 2013. [A 100-year conservation experiment: Impacts on forest carbon stocks and fluxes](#). Forest Ecology and Management, 310: 242-255. [en anglais]
- Shaw, C. H.; Banfield, E.; Kurz, W. A. 2008. [Stratifying soils into pedogenically similar categories for modeling forest soil carbon](#). Canadian Journal of Soil Science, 88(4): 501-516.
- Shaw, C. H.; Bona, K. A.; Kurz, W. A.; Fyles, J. W. 2015. [The importance of tree species and soil taxonomy to modeling forest soil carbon stocks in Canada](#). Geoderma Regional, 4: 114-125. [en anglais]
- Shaw, C. H.; Hilger, A. B.; Metsaranta, J.; Kurz, W. A.; Russo, G.; Eichel, F.; Stinson, G.; Smyth, C.; Filiatrault, M. 2013. [Evaluation of simulated estimates of forest ecosystem carbon stocks using ground plot data from Canada's National Forest Inventory](#). Ecological Modelling, 272: 323-347. [en anglais]
- Shaw, C. H.; Hoffman, D. R.; Voicu, M. F.; Kull, S. J.; McNalty, C. 2018. [Forest Floor Recovery Index: A tool to assess forest recovery after reclamation](#). Ressources Naturelles Canada, Service canadien des forêts, Centre de foresterie du Nord, Edmonton (Alberta). Rapport d'information NOR-X-427. 38 p. [en anglais]
- Simard, S. W.; Roach, W. J.; Defrenne, C. E.; Pickles, B. J.; Snyder, E. N.; Robinson, A.; Lavkulich, L. M. 2020. [Harvest Intensity Effects on Carbon Stocks and Biodiversity Are Dependent on Regional Climate in Douglas-Fir Forests of British Columbia](#). Frontiers in Forests and Global Change, 3: 88.
- Smiley, B. P.; Trofymow, J. A. 2017. [Historical effects of dissolved organic carbon export and land management decisions on the watershed-scale forest carbon budget of a coastal British Columbia Douglas-fir-dominated landscape](#). Carbon Balance and Management, 12(15). [en anglais]
- Smiley, B. P.; Trofymow, J. A.; Niemann, K. O. 2016. [Spatially-explicit reconstruction of 100 years of forest land use and disturbance on a coastal British Columbia Douglas-fir-dominated landscape: Implications for future watershed-scale carbon stock recovery](#). Applied Geography, 74: 109-122. [en anglais]
- Smyth, C. E.; Kurz, W. A. 2013. [Forest soil decomposition and its contribution to heterotrophic respiration: A case study based on Canada](#). Soil Biology & Biochemistry, 67: 155-165. [en anglais]
- Smyth, C. E.; Kurz, W. A.; Neilson, E. T.; Stinson, G. 2013. [National-scale estimates of forest root biomass carbon stocks and associated carbon fluxes in Canada](#). Global Biogeochemical Cycles, 27(4): 1262-1273. [en anglais]
- Smyth, C., Kurz, W. A., Rampley, G., Lemprière, T. C., Schwab, O. 2017. [Climate change mitigation potential of local use of harvest residues for bioenergy in Canada](#). GCB Bioenergy, 9(4): 817-832. [en anglais]
- Smyth, C. E.; Smiley, B. P.; Magnan, M.; Birdsey, R.; Dugan, A.J.; Olguin, M.; Mascorro, V. S.; Kurz, W. A. 2018. [Climate change mitigation in Canada's forest sector: a spatially explicit case study for two regions](#). Carbon Balance and Management, 13(11). [en anglais]
- Smyth, C. E.; Stinson, G.; Neilson, E.; Lemprière, T. C.; Hafer, M.; Rampley, G. J.; Kurz, W. A. 2014. [Quantifying the biophysical climate change mitigation potential of Canada's forest sector](#). Biogeosciences, 11(13): 3515-3529. [en anglais]
- Smyth, C. E.; Trofymow, J. A.; Kurz, W. A.; the CIDET Working Group. 2009. [Decreasing uncertainty in CBM-CFS3 estimates of forest soil carbon sources and sinks through use of long-term data from the Canadian intersite decomposition experiment](#). Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Pacifique, Rapport d'information BC-X-422. 46 pp. [en anglais]
- Smyth, C. E.; Trofymow, J. A.; Kurz, W. A.; CIDET Working Group. 2011. [Including the effects of water stress on decomposition in the Carbon Budget Model of the Canadian Forest Sector CBM-CFS3](#). Ecological Modelling, 222(5): 1080-1091. [en anglais]
- Steenberg, J. W. N.; Laganière, J.; Ayer, N. W.; Duinker, P. N. 2023. [Life-cycle greenhouse gas emissions from forest bioenergy production at combined heat and power projects in Nova Scotia, Canada](#). Forest Science, fxc060.

- Stinson, G.; Kurz, W. A.; Smyth, C. E.; Neilson, E. T.; Dymond, C. C.; Metsaranta, J. M.; Boisvenue, C.; Rampley, G. J.; Li, Q.; White, T. M.; Blain, D. 2011. [An inventory-based analysis of Canada's managed forest carbon dynamics, 1990 to 2008](#). *Global Change Biology*, 17(6): 2227-2244. [en anglais]
- Stinson, G.; Kurz, W. A.; Tinis, S.; Paradine, D.; Leckie, D. G. Pages 78-86 in M. Mitsuo and K. Hidesato, editors. 2005. [Spatially explicit forest carbon stock change accounting: approach, implementation, and data requirements](#). Proceedings of a workshop on practical national forest inventory systems to meet the requirements of the Kyoto Protocol, 15 et 16 novembre 2004, Tokyo. Forestry and Forest Products Research Institute, Tsukuba, Ibaraki, Japon. [en anglais]
- Taylor, A. R.; Wang, J. R.; Kurz, W. A. 2008. [Effects of harvesting intensity on carbon stocks in eastern Canadian red spruce \(*Picea rubens*\) forests: An exploratory analysis using the CBM-CFS3 simulation model](#). *Forest Ecology and Management*, 255(10): 3632-3641. [en anglais]
- Trofymow, J. A.; Stinson, G.; Kurz, W. A. 2008. [Derivation of a spatially explicit 86-year retrospective carbon budget for a landscape undergoing conversion from old-growth to managed forests on Vancouver Island, BC](#). *Forest Ecology and Management*, 256(10): 1677-1691. [en anglais]
- Voicu, M. F.; Shaw, C.; Kurz, W. A.; Huffman, T.; Liu, J.; Fellows, M. 2017. [Carbon dynamics on agricultural land reverting to woody land in Ontario, Canada](#). *Journal of Environmental Management*, 193: 318-325. [en anglais]
- Wang, Z.; Grant, R. F.; Arain, M. A.; Chen, B. N.; Coops, N.; Hember, R.; Kurz, W. A.; Price, D. T.; Stinson, G.; Trofymow, J. A.; Yeluripati, J.; Chen, Z. 2011. [Evaluating weather effects on interannual variation in net ecosystem productivity of a coastal temperate forest landscape: A model intercomparison](#). *Ecological Modelling*, 222(17): 3236-3249.
- Wang, Z.; Grant, R. F.; Bernier, P. Y.; Chen, B.; Chen, J. M.; Govind, A.; Guindon, L.; Kurz, W. A.; Peng, C.; Price, D. T.; Stinson, G.; Sun, J.; Trofymow, J. A.; Yeluripati, J. 2013. [Incorporating weather sensitivity in inventory-based estimates of boreal forest productivity: A meta-analysis of process model results](#). *Ecological Modelling*, 260: 25-35.
- White, T. M.; Luckai, N.; Larocque, G. R.; Kurz, W. A.; Smyth, C. E. 2008. [A practical approach for assessing the sensitivity of the Carbon Budget Model of the Canadian Forest Sector \(CBM-CFS3\)](#). *Ecological Modelling*, 219(3-4): 373-382. [en anglais]
- Wulder, M. A.; White, J. C.; Stinson, G.; Hilker, T.; Kurz, W. A.; Coops, N. C.; St-Onge, B. A.; Trofymow, J. A. 2010. [Implications of differing input data sources and approaches upon forest carbon stock estimation](#). *Environmental Monitoring and Assessment*, 166(1-4): 543-561. [en anglais]
- Xu, Z.; Smyth, C. E.; Lemprière, T. C.; Rampley, G. J.; Kurz, W. A. 2017. [Climate change mitigation strategies in the forest sector: biophysical impacts and economic implications in British Columbia, Canada](#). *Mitig. Adapt. Strateg. Glob. Change*, pp 1-34. [en anglais]
- Feng, Y.; Xiao, W.; Zhu, J.; Li, Q. 2020. [Impacts of afforestation on the carbon stocks and carbon sequestration rates of regional forest ecosystems](#). *Journal of Ecology and Rural Environment*, 36(3): 281-290.
- Feng, Y.; Zhu, J.-H.; Xiao, W.-F.; Bi, Y.-L.; Huang, B.-L.; Wen, Q.-Z.; Deng, X.-Q. 2018. Carbon transition of old-growth spruce forest ecosystem in Diqing Prefecture, Yunnan. *J. of Yunnan University*, 40(2): 372-381.
- Fu, T.; Zhu, J.; Xiao, W.; Zeng, L. 2014. [Above-ground biomass distribution models for arbor layer of eight subtropical forest types](#). *Scientia Silvae Sinicae*, 50(9): 1-9.
- Fu, T.; Zhu, J.; Xiao, W.; Zeng, L. 2014. Forest Volume Growth Prediction of Main Forest Types in the Three Gorges Reservoir Area. *Forest Research*, 27(3): 429-434.
- Huang, G.; Li, Q.; Luo, S.; Kong, F.; Li, Y.; Li, X.; Kuang, S.; Zheng, J.; Huang, L. 2016. Forest carbon storage in Lushan based on CBM-CFS3 model. *Acta Agriculturae Universitatis Jiangxiensis*, 38(4): 695-705.
- Li, S.; Li, S.; Huang, M. 2017. [Effects of thinning intensity on carbon stocks and changes in larch forests in China Northeast Forest Region](#). *Journal of Resources and Ecology*, 8(5): 538-544.
- Tang, Y.; Shao, Q.; Shi, T.; Lu, Z.; Wu, G. 2022. [Spatiotemporal dynamics of forest ecosystem carbon budget in Guizhou: customization and application of the CBM-CFS3 model for China](#). *Carbon Balance and Management*, 17(10).
- Zhang, B.; Zhang, L.; Liu, X.; Zhao, Z.; Cao, J.; Zhang, W. 2016. [Vegetation carbon storage and carbon sequestration rates in northern Hebei Province](#). *Chinese Journal of Eco-Agriculture*, 24(3): 392-402.
- Zhang, M.; Wang, J.; Han, T.; Ouyang, X.; Pan, P.; Liu, D. 2022. [Characteristics of Carbon Density and Its Influencing Factors of *Pinus massoniana* Forest Based on CBM-CFS3 Model](#). *Forest Resources Management*, 0(6): 44-53.
- Zhen, W.; Huang, M.; Zhai, Y.-L.; Chen, K.; Gong, Y.-Z. 2014. [Variation of forest vegetation carbon storage and carbon sequestration rate in Liaoning Province, Northeast China](#). *Journal of Applied Ecology*, 25(5): 1259-1265.
- Zheng, J.; Wei, X.; Liu, Y.; Liu, G.; Wang, W.; Liu, W. 2016. [Review of regional carbon counting methods for the Chinese major ecological engineering programs](#). *Journal of Forestry Research*, 27(4): 727-738.

CORÉE DU SUD

- Kim, H.; Kim, Y.-H.; Kim, R.; Park, H. 2015. [Reviews of forest carbon dynamics models that use empirical yield curves: CBM-CFS3, CO2FIX, CASMOFOR, EFISCEN](#). *Forest Science and Technology*, 11(4): 212-222.
- Kim, M.; Lee, W.-K.; Kurz, W. A.; Kwak, D.-A.; Morken, S.; Smyth, C. E.; Ryu, D. 2016. [Estimating carbon dynamics in forest carbon pools under IPCC standards in South Korea using CBM-CFS3](#). *iForest - Biogeosciences and Forestry*, 10(1): 83-92.

CHINE

- Feng, Y.; Fu, T.; Zhu, J.; Zeng, L.; Xiao, W. 2014. Principle, structure and application of Carbon Budget Model (CBM-CFS3) of Canada. *World Forestry Research*, 27(3): 87-91.

ÉTATS-UNIS

DeLyser, K.; Papa, C.; Clay, K.; Gadoth-Goodman, D.; Cooper, L.; Ontl, T. 2022. [Impact of Forest Management and Wood Utilization on Carbon Sequestration and Storage in Pennsylvania and Maryland: Results for State of Maryland](#). American Forests, Washington, D.C. 58 p.

DeLyser, K.; Papa, C.; Clay, K.; Gadoth-Goodman, D.; Cooper, L.; Ontl, T. 2022. [Impact of Forest Management and Wood Utilization on Carbon Sequestration and Storage in Pennsylvania and Maryland: Results for State of Pennsylvania](#). American Forests, Washington, D.C. 59 p. Dugan, A. J.; Birdsey, R.; Mascorro, V. S.; Magnan, M.; Smyth, C. E.; Olguin, M.; Kurz, W. A. 2018. [A systems approach to assess climate change mitigation options in landscapes of the United States forest sector](#). Carbon Balance and Management, 13(13): 1-14.

Dugan, A. J.; Lichstein, J. W.; Steele, A.; Metsaranta, J. M.; Bick, S.; Hollinger, D. Y. 2021. [Opportunities for forest sector emissions reductions: a state-level analysis](#). Ecological Applications, 31(5), e02327.

[Kurz, W. A.; Birdsey, R. A.; Mascorro, V. S.; Greenberg, D.; Dai, Z.; Olguin, M.; Colditz, R. 2016. Modélisation et évaluation intégrées de la dynamique du carbone forestier en Amérique du Nord : Outils de suivi des émissions de gaz à effet de serre dans les forêts et de leur élimination, et de présentation de rapports et de projets connexes. \(Rapport sommaire\) Montréal, Canada, Commission de coopération environnementale. 24 pp.](#)

[Kurz, W. A.; Birdsey, R. A.; Mascorro, V. S.; Greenberg, D.; Dai, Z.; Olguin, M.; Colditz, R. 2016. Modélisation et évaluation intégrées de la dynamique du carbone forestier en Amérique du Nord : Outils de suivi des émissions de gaz à effet de serre dans les forêts et de leur élimination, et de présentation de rapports et de projets connexes. Montréal, Canada, Commission de coopération environnementale. 124 pp. \[en anglais\]](#)

Sleeter, B. M.; Frid, L.; Rayfield, B.; Daniel, C.; Zhu, Z.; Marvin, D. C. 2022. [Operational assessment tool for forest carbon dynamics for the United States: a new spatially explicit approach linking the Lucas and CBM-CFS3 models](#). Carbon Balance Management, 17(1).

Smyth, C. E., Dugan, A. J., Olguin, M., Birdsey, R., Wayson, C., Alanís, A., Kurz, W. A. 2020. [A synthesis of climate change mitigation options based on regional case studies of the North American forest sector using a harmonized modeling approach](#). Ressources naturelles Canada, Service canadien des forêts, Centre de foresterie du Pacifique, Victoria, Colombie-Britannique. Rapport d'information BC-X-455. 22 pp.

Zald, H. S. J.; Spies, T. A.; Harmon, M. E.; Twery, M. J. 2015. [Forest Carbon Calculators: A Review for Managers, Policymakers, and Educators](#). Journal of Forestry, 114(2): 134143.

IRLANDE

Duffy, P.; Black, K.; Fahey, D.; Hyde, B.; Kehoe, A.; Monaghan, S.; Murphy, J.; Ryan, A. M.; Ponzi, J. 2022. [Ireland National Inventory Report 2022: Greenhouse gas emissions 1990–2020 reported to the United Nations Framework Convention on Climate Change](#). Environmental Protection Agency, Wexford, Irlande.

ITALIE

Pilli, R.; Grassi, G.; Cescatti, A. 2014. [Analisi storica e modellizzazione della dinamica del carbonio in foresta attraverso il Carbon Budget Model: un esempio per la Provincia Autonoma di Trento](#). [Analyse historique et modélisation de la dynamique du carbone forestier à l'aide du Modèle du bilan du carbone : un exemple pour la province de Trente (Nord-est de l'Italie)] Forest@ - Journal of Silviculture and Forest Ecology, 11: 13-28.

Pilli, R.; Grassi, G.; Kurz, W. A.; Smyth, C. E.; Blujdea, V. 2013. [Application of the CBM-CFS3 model to estimate Italy's forest carbon budget, 1995–2020](#). Ecological Modelling, 266: 144-171.

Pilli, R.; Grassi, G.; Moris, J. V.; Kurz, W. A. 2014. [Assessing the carbon sink of afforestation with the Carbon Budget Model at the country level: an example for Italy](#). iForest - Biogeosciences and Forestry, 8(4): 410-421.

Pilli, R.; Vizzarri, M.; Chirici, G. 2021. [Combined effects of natural disturbances and management on forest carbon sequestration: the case of Vaia storm in Italy](#). Annals of Forest Science, 78(46).

MEXIQUE

Mascorro, V. S.; Coops, N. C.; Kurz, W. A.; Olguin, M. 2014. [Attributing changes in land cover using independent disturbance datasets: a case study of the Yucatan Peninsula, Mexico](#). Regional Environmental Change, 16: 213-228.

Mascorro, V. S.; Coops, N. C.; Kurz, W. A.; Olguin, M. 2015. [Choice of satellite imagery and attribution of changes to disturbance type strongly affects forest carbon balance estimates](#). Carbon Balance and Management, 10(30): 1-15.

Olguin, M.; Wayson, C.; Fellows, M.; Birdsey, R.; Smyth, C. E.; Magnan, M.; Dugan, A. J.; Mascorro, V. S.; Alanís, A.; Serrano, E.; Kurz, W. A. 2018. [Applying a systems approach to assess carbon emission reductions from climate change mitigation in Mexico's forest sector](#). Environmental Research Letters, 13(3).

POLOGNE

Wysocka-Fijorek, E.; Dobrowolska, E.; Budniak, P.; Korzeniewski, K.; Czubak, D. 2023. [Forest Resources Projection Tools: Comparison of Available Tools and Their Adaptation to Polish Conditions](#). Forests, 14(3): 548.

RÉPUBLIQUE TCHÈQUE

Cienciala, E. 2022. [Climate-Smart Forestry Case Study: Czech Republic](#). In: Hetemäki, L.; Kangas, J.; Peltola, H. (eds). Forest Bioeconomy and Climate Change. Managing Forest Ecosystems, Vol 42. Springer, Cham., pp. 173-182.

ROUMANIE

Blujdea, V. N. B.; Sikkema, R.; Dutca, I.; Nabuurs, G.-J. 2021. [Two large-scale forest scenario modelling approaches for reporting CO₂ removal: a comparison for the Romanian forests](#). Carbon Balance and Management, 16(25).

Blujdea, V. N. B.; Viskari, T.; Kulmala, L.; Gârbacea, G.; Dutcă, I.; Miclăuş, M.; Marin, G.; Liski, J. 2021. [Silvicultural interventions drive the changes in soil organic carbon in Romanian forests according to two model simulations](#). Forests, 12(6), 795.

ROYAUME-UNI

Forster, E. J.; Healey, J. R.; Dymond, C. et Styles, D. 2021. [Commercial afforestation can deliver effective climate change mitigation under multiple decarbonisation pathways](#). Nature Communications, 12(3831).

Forster, E. J.; Healey, J. R.; Dymond, C. C.; Newman, G.; Davies, G.; Styles, D. 2019. [Linking construction timber carbon storage with land use and forestry management practices](#). IOP Conference Series: Earth and Environmental Science, 323 012142.

RUSSIE

Kurbatova, A. I.; 2021. [Аналитический обзор по современным исследованиям изменений биотических составляющих углеродного цикла](#) [Examen analytique des études modernes sur les changements dans les composantes biotiques du cycle du carbone]. RUDN Journal of Ecology and Life Safety, 28(4): 428-438.

Ptichnikov A. V.; Karelin D. V.; Kotlyakov V. M.; Pautov Y. A.; Borovlev A. Y.; Kuznetsova D. A.; Zamolodchikov D. G.; Grabovsky V. I. 2019. [Applicability of international indicators of land degradation neutrality estimation for Russian boreal forests](#). // Доклады Академии наук. 489(2): 195-198.

Torzhkov, I. O.; Konstantinov, A. V.; Kushnir, E. A. 2019. [Estimation forecast of the Russian Federation forests carbon balance based on the long-term scenarios of forest complex development](#). IOP Conference Series: Earth and Environmental Science, 392, 012051.

Vinogradova, V. V.; Gracheva, R. G.; Dorina, A. L.; Kotov, A. V.; Kurichev, N. K.; Morgunov, B. A.; Potashnikov, V. Yu.; Proskuryakova, L. N.; Poultry, A. V.; Safonov, G. V.; Safonova, Yu. A.; Semakina, A. A.; Semiletov, I. P.; Sizonov, A. G.; Stetsenko, A. V.; Frolov, I. D.; Cherenkova, E. A.; Shakhova, N. E. 2021. УСТОЙЧИВОЕ РАЗВИТИЕ В ПЕРИОД ПАНДЕМИИ: ПРИРОДНЫЕ РЕСУРСЫ, ИЗМЕНЕНИЕ КЛИМАТА И РЕЗИЛИЕНТНОСТЬ ТЕРРИТОРИЙ [Le développement durable en période de pandémie : ressources naturelles, changements climatiques et résilience des territoires]. École des hautes études en sciences économiques (HSE), Université nationale de recherche, Rapport HSE, Moscou.

Zamolodchikov, D. G.; Grabovskii, V. I.; Korovin, G. N.; Gitarskii, M. L.; Blinov, V. G.; Dmitriev, V. V.; Kurz, W. A. 2013. [Carbon budget of managed forests in the Russian Federation in 1990–2050: Post-evaluation and forecasting](#). Russian Meteorology and Hydrology, 38(10): 701-714.

Zamolodchikov, D. G.; Grabovsky, V. I.; Korovin, G. N.; Kurz, W. A. 2008. [Assessment and projection of carbon budget in forests of Vologda Region using the Canadian model CBM-CFS](#). Lesovedenie, 6: 3-14.

Zamolodchikov, D. G.; Grabovsky, V. I.; Kurz, W. A. 2014. Influence of forest harvest rates on the carbon balance of Russian forests: projective analysis using the CBM-CFS3 model. Proceedings of the St. Petersburg Forestry Research Institute. Numéro 1: 5-18.

SLOVÉNIE

Jevšenak, J.; Klopčič, M.; Mali, B. 2020. [The Effect of Harvesting on National Forest Carbon Sinks up to 2050 Simulated by the CBM-CFS3 Model: A Case Study from Slovenia](#). Forests, 11(10), 1090.

Mali, B.; Kušar, G. 2021. [Predhodno vrednotenje obstoječih modelov za simuliranje zalog ogljika](#) [Évaluation préliminaire des modèles existants pour la simulation des stocks de carbone]. LIFE IP CARE4CLIMATE (LIFE17 IPC/SI/000007), Ljubljana.

UNION EUROPÉENNE

Avitabile, V.; Baldoni, E.; Baruth, B.; Bausano, G.; Boysen-Urban, K.; Caldeira, C.; Camia, A.; Cazzaniga, N.; Ceccherini, G.; De Laurentiis, V.; Doerner, H.; Giuntoli, J.; Gras, M.; Guillen Garcia, J.; Gurria, P.; Hasegawa, M.; Jasinevičius, G.; Jonsson, R.; Konrad, C.; Kupschus, S.; La Notte, A.; M'barek, R.; Mannini, A.; Migliavacca, M.; Mubareka, S.; Patani, S.; Pilli, R.; Rebours, C.; Ronchetti, G.; Ronzon T.; Rougieux, P.; Sala, S.; Sánchez López, J.; Sanye Mengual, E.; Sinkko, T.; Sturm, V.; Van Leeuwen, M.; Vasilakopoulos, P.; Verkerk, P.J.; Virtanen, J.; Winker, H.; Zulian, G. 2023. [Biomass production, supply, uses and flows in the European Union. Integrated assessment](#). Mubareka, S.; Migliavacca, M.; Sánchez López, J. (Editors). Office des publications de l'Union européenne, Luxembourg, 2023, doi:10.2760/484748, JRC132358.

Blujdea, V.; Rougieux, P.; Sinclair, L.; Morken, S.; Pilli, R.; Grassi, G.; Mubareka, S.; Kurz, W. 2022. [The JRC Forest Carbon Model: description of EU-CBM-HAT](#). EUR 31299 EN, Office des publications de l'Union européenne, Luxembourg, JRC130609.

Böttcher, H.; Kurz, W. A.; Freibauer, A. 2008. [Accounting of forest carbon sinks and sources under a future climate protocol— factoring out past disturbance and management effects on age-class structure](#). Environmental Science and Policy, 11(8): 669-686.

Camia, A.; Giuntoli, J.; Jonsson, R.; Robert, N.; Cazzaniga, N.; Jasinevičius, G.; Avitabile, V.; Grassi, G.; Barredo Cano, J. I.; Mubareka, S. 2021. [The use of woody biomass for energy production in the EU](#). EUR 30548 EN, Office des publications de l'Union européenne, Luxembourg.

Grassi, G.; Pilli, R.; House, J.; Federici, S.; Kurz, W. A. 2018. [Science based approach for credible accounting of mitigation in managed forests](#). Carbon Balance and Management, 13(8): 1-16.

Jonsson, R.; Blujdea, V. N-B.; Fiorese, G.; Pilli, R.; Rinaldi, F.; Baranzelli, C.; Camia, A. 2018. [Outlook of the European forest-based sector: forest growth, harvest demand, wood-product markets, and forest carbon dynamics implications](#). iForest Biogeosciences and Forestry, 11(2): 315-328.

Jonsson, R.; Rinaldi, F.; Pilli, R.; Fiorese, G.; Hurmekoski, E.; Cazzaniga, N.; Robert, N.; Camia, A. 2021. [Boosting the EU forest-based bioeconomy: Market, climate, and employment impacts](#). Technological Forecasting and Social Change, 163, 120478.

Petrescu, A. M. R.; McGrath, M. J.; Andrew, R. M.; Peylin, P.; Peters, G. P.; Ciais, P.; Broquet, G.; Tubiello, F. N.; Gerbig, C.; Pongratz, J.; Janssens-Maenhout, G.; Grassi, G.; Nabuurs, G.-J.; Regnier, P.; Lauerwald, R.; Kuhnert, M.; Balkovic, J.; Schelhaas, M.-J.; van der Gon, H. A. C. D.; Solazzo, E.; Qiu, C.; Pilli, R.; Konovalov, I. B.; Houghton, R. A.; Günther, D.; Perugini, L.; Crippa, M.; Ganzenmüller, R.; Lujikx, I. T.; Smith, P.; Munassar, S.; Thompson, R. L.; Conchedda, G.; Monteil, G.; Scholze, M.; Karstens, U.; Brockmann, P.; Dolman, A.J. 2021. [The consolidated European synthesis of CO₂ emissions and removals for the European Union and United Kingdom: 1990–2018](#). Earth System Science Data, 13(5), 2363-2406.

- Petrescu, A. M. R.; Peters, G. P.; Janssens-Maenhout, G.; Ciais, P.; Tubiello, F. N.; Grassi, G.; Nabuurs, G.-J.; Leip, A.; Carmona-Garcia, G.; Winiwarter, W.; Höglund-Isaksson, L.; Günther, D.; Solazzo, E.; Kiesow, A.; Bastos, A.; Pongratz, J.; Nabel, J. E. M. S.; Conchedda, G.; Pilli, R.; Andrew, R. M.; Schelhaas, M.-J.; Dolman, A. J. 2020. [European anthropogenic AFOLU greenhouse gas emissions: a review and benchmark data](#). Earth System Science Data, 12(2), 961-1001.
- Pilli, R.; Alkama, R.; Cescatti, A.; Kurz, W. A.; Grassi, G. 2022. [The European forest carbon budget under future climate conditions and current management practices](#). Biogeosciences, 19: 3263-3284.
- Pilli, R.; Grassi, G. 2021. [Provision of technical and scientific support to DG ESTAT in relation to EU land footprint estimates and gap-filling techniques for European forest accounts \(LAFO\)](#). EUR 30581 EN, Office des publications de l'Union européenne, Luxembourg.
- Pilli, R.; Grassi, G.; Kurz, W. A.; Fiorese, G.; Cescatti, A. 2017. [The European forest sector: past and future carbon budget and fluxes under different management scenarios](#). Biogeosciences, 14(9): 2387-2405.
- Pilli, R.; Grassi, G.; Kurz, W. A.; Moris, J. V.; Viñas, R.A. 2016. [Modelling forest carbon stock changes as affected by harvest and natural disturbances. II. EU-level analysis](#). Carbon Balance and Management, 11(20): 1-19.
- Pilli, R.; Grassi, G.; Kurz, W. A.; Viñas, R. A.; Guerrero, N. H. 2016. [Modelling forest carbon stock changes as affected by harvest and natural disturbances. I. Comparison with countries' estimates for forest management](#). Carbon Balance and Management, 11(5).
- Pilli, R.; Kull, S. J.; Blujdea, V. N. B.; Grassi, G. 2018. [The Carbon Budget Model of the Canadian Forest Sector \(CBM-CFS3\): customization of the Archive Index Database for European Union countries](#). Annals of Forest Science, 75(71).
- Sahoo, A.; Perez Dominguez, I.; Mubareka, S.; Fiorese, G.; Grassi, G.; Pilli, R.; Himics, M.; Blujdea, V.; Follador, M.; Neuwahl, F.; Salvucci, R.; Rózsai, M.; Witzke, H. P.; Kesting, M. 2021. [Improved modelling framework for assessing the interactions between the energy, agriculture, forestry and land use change sectors](#). EUR 30514 EN, Office des publications de l'Union européenne, Luxembourg, JRC123172.