



Annual Report SUPPLEMENT



Associate and Affiliate Members

December 2017

Austria

- Federal Research and Training Centre for Forests, Natural Hazards and Landscape
- University of Natural Resources and Life Sciences (BOKU), Department of Forest and Soil Sciences

Belarus

- V.F. Kuprevich Institute of Experimental Botany at the National Academy of Science of Belarus (IEB NASB)

Belgium

- K.U. Leuven, Division Forest, Nature & Landscape
- Research Institute for Nature and Forest

Bosnia and Herzegovina

- University of Sarajevo, Faculty of Forestry

Bulgaria

- University of Forestry

Canada

- Natural Resources Canada, Canadian Forest Service*

Croatia

- Croatian Forest Research Institute
- University of Zagreb, Faculty of Forestry

Czech Republic

- Czech University of Life Sciences Prague, Faculty of Forestry and Wood Sciences
- Forestry and Game Management Research Institute
- Institute of Forest Ecosystem Research Ltd.
- Mendel University in Brno, Faculty of Forestry and Wood Technology

Denmark

- Forest & Landscape, University of Copenhagen

Estonia

- Estonian University of Life Sciences

Finland

- Finnish Environment Institute (SYKE)
- Karelia University of Applied Sciences
- Metsähallitus
- Metsämiesten Säätiö Foundation
- Metsäteho Oy – R&D operations in forestry
- Natural Resources Institute Finland (LUKE)
- Stora Enso Wood Supply
- Tapio Oy
- University of Eastern Finland
- University of Helsinki, Department of Forest Sciences

France

- AgroParisTech – ENGREF, The Nancy Centre
- ECOFOR
- French Institute of Technology for forest based and furniture sectors – FCBA

- INRA – Department of Forests and Forestry Products
- National Research Institute of Science and Technology for Environment and Agriculture (Irstea)
- Office National des Forêts (ONF)

Germany

- Center of Forestry Weihenstephan
- Department of Forest Sciences, Dresden University of Technology
- Eberswalde University for Sustainable Development, Faculty of Forest and Environment
- Johann Heinrich von Thünen Institute, Federal Research Institute of Rural Areas, Forestry and Fisheries
- Forest Research Institute of Baden-Württemberg
- Potsdam Institute for Climate Impact Research
- State Enterprise for Forestry and Timber
- University of Freiburg, Faculty of Environment and Natural Resources
- University of Göttingen, Faculty of Forest Sciences and Forest Ecology

Greece

- NERCO-N. Chlykas and Associates Consulting Societe Anonyme

Iceland

- Iceland Forest Service

Ireland

- Forest Service, Department of Agriculture, Food and the Marine
- University College Dublin, School of Agriculture and Food Science

Italy

- Agricultural Research Council – Forest Monitoring and Planning Research Unit (CRA-MPF)
- Department of Land, Environment, Agriculture and Forestry (LEAF), University of Padova
- FOXLAB
- Italian Academy of Forest Sciences
- National Research Council (CNR)
- University of Molise
- University of Tuscia, Faculties of Agricultural (agriculture & forestry) and Biological Sciences

Latvia

- Latvian State Forest Research Institute "Silava"
- Latvia University of Agriculture, Forest Faculty

Lithuania

- Aleksandras Stulginskis University, Faculty of Forest Sciences and Ecology
- Institute of Forestry, Lithuanian Research Centre for Agriculture and Forestry

The Netherlands

- Alterra
- Wageningen University, Forestry groups

Norway

- Norwegian Institute of Bioeconomy Research (NIBIO)
- Norwegian University of Life Sciences, Department of Ecology and Natural Resource Management

People's Republic of China

- Guangxi Academy of Sciences, Nanning*

Poland

- Forest Research Institute (IBL)
- Poznań University of Life Sciences, Faculty of Forestry
- Warsaw University of Life Sciences (SGGW), Faculty of Forestry
- Wood Technology Institute

Portugal

- School of Agriculture (ISA), Department of Forestry

Romania

- Forest Research and Management Institute (ICAS)

Russian Federation

- All-Russian Research Institute of Silviculture and Mechanization of Forestry
- Centre for Forest Ecology and Productivity of the Russian Academy of Sciences (CEPF RAS)
- Institute of Physicochemical and Biological Problems in Soil Science, Russian Academy of Sciences
- Moscow State Forest University
- Petrozavodsk State University
- Saint-Petersburg State Forest Technical University
- Volga State University of Technology, Centre of Sustainable Forest Management and Remote Sensing

Serbia

- Faculty of Forestry, University of Belgrade
- Institute of Forestry
- Institute of Lowland Forestry and Environment

Slovak Republic

- Institute of Forest Ecology – Slovak Academy of Sciences
- National Forest Centre – FRI Zvolen
- Technical University in Zvolen

Slovenia

- InnoRenew CoE
- Slovenian Forestry Institute
- University of Ljubljana, Department of Forestry

Spain

- CREAF – Centre for Ecological Research and Forestry Applications
- Forest Research Centre (CIFOR-INIA)
- Forest Sciences Center of Catalonia (CTFC)
- Neiker-Tecnalia
- University of Valladolid, School of Agriculture, Food Technology and Forestry

Sweden

- Federation of Forest Owners
- Holmen Skog AB
- Linnaeus University
- Skogforsk – The Forestry Research Institute of Sweden
- Sveaskog
- Swedish Forest Agency
- Swedish University of Agricultural Sciences (SLU), Faculty of Forestry
- The Marcus Wallenberg Foundation

Switzerland

- ETH Zürich, Institute for Terrestrial Ecosystems ITES
- School of Agricultural, Forest and Food Sciences, Bern University of Applied Sciences
- Swiss Federal Institute for Forest, Snow and Landscape Research WSL

Turkey

- İstanbul University, Faculty of Forestry
- Kastamonu University, Faculty of Forestry
- Poplar and Fast Growing Forest Trees Research Institute

Ukraine

- National University of Life and Environmental Sciences of Ukraine
- Ukrainian Research Institute of Forestry and Forest Melioration (URIFFM)

United Kingdom

- Bangor University, School of the Environment, Natural Resources and Geography
- Forestry Commission, Forest Research
- The James Hutton Institute
- University of Wolverhampton, Centre for International Development and Training (CIDT)

USA

- University of Georgia, Center for Forest Business*

International bodies

- European Confederation of Woodworking Industries – CEI-Bois
- International Forestry Students' Association (IFSA)
- Nordic Forest Research Co-operation Committee (SNS)
- The Union of Southern European Forest Owners (USSE)

member organisations in 37 countries

*Affiliate Members

Country Members

By the end of the year 2017, a total of 28 European States had ratified the Convention on EFI, namely: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Board

Knut Øistad, Norway (Chair of the Board)
Roland Daamen, Germany
Dr. Erwin Dreyer, France
Prof. Dr. Christine Farcy, Belgium (Vice Chair of the Board)
MP Hanna Kosonen, Finland
Dr. Natalia Lukina, Russian Federation
Prof. Marco Marchetti, Italy
Prof. Dr. Tomasz Zawiła-Niedźwiecki, Poland (Vice Chair of the Board)

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Dr. Gary Kerr, UK
Prof. Dr. Phoebe Koundouri, Greece
Prof. Dr. Manfred Lexer, Austria
Prof. Dr. Karin Ljung, Sweden
Prof. Dr. Elena Paoletti, Italy
Prof. Dr. Anne Toppinen, Finland
Administrative support: Katriina Pajari, EFI

Projects 2017

Advanced Biofuels – Research and Innovation perspective of the mid- and long-term Potential for Advanced Biofuels

EFI'S ROLE: PARTNER | 2016–2017

AFINET – Agroforestry Innovation Networks

EFI'S ROLE: PARTNER | 2017–2019

AGFORWARD – AGroFORestry that Will Advance Rural Development

EFI'S ROLE: PARTNER | 2014–2017

BenchValue FIN – Benchmarking the sustainability performance of value chains

EFI'S ROLE: COORDINATOR | 2016–2019

BenchValue FR – Benchmarking the sustainability performance of value chains (France)

EFI'S ROLE: COORDINATOR | 2016–2020

BEWATER – Making society an active participant in water adaptation to global change

EFI'S ROLE: PARTNER | 2013–2017

BIOECOMAP – Synthesis on forest bioeconomy research and innovation in Europe

EFI'S ROLE: COORDINATOR | 2017–2018

BIOSUMMIT – 2017 Bioeconomy Investment Summit

EFI'S ROLE: PARTNER | 2016–2017

CARAVANE – Reasoned Catalog for new species to be experimented

EFI'S ROLE: PARTNER | 2016–2018

EIP-Agri Focus Group

EFI'S ROLE: COORDINATOR | 2017

ESPERENSE – Réseau national multipartenaire d'évaluation de ressources génétiques forestières pour le future

EFI'S ROLE: SOLE PARTNER | 2017–2020

EU Forest Strategy – Study on Progress in Implementing the EU Forest Strategy

EFI'S ROLE: COORDINATOR | 2017–2018

European Forest Risk Facility (FRISK)

EFI'S ROLE: PARTNER | 2017–2018

Evaluation of RD Forest measures

EFI'S ROLE: COORDINATOR | 2016–2017

EVOLTREE- EVOlution of TREEs as drivers for terrestrial biodiversity

EFI'S ROLE: SECRETARIAT | 2011–2018

FC-GPG – Good Practice Guidelines for Forest Concessions

EFI'S ROLE: COORDINATOR | 2016–2017

FLEGt Facility

EFI'S ROLE: COORDINATOR | 2006–

FORBIO – Sustainable, climate-neutral and resource-efficient forest-based bioeconomy

EFI'S ROLE: PARTNER | 2015–2017

FOREXTCOOP Development of international cooperation framework for the forest extension organizations

EFI'S ROLE: COORDINATOR | 2017–2018

FORLAND – Ideator to develop business case of innovative geo assessment tool for land use and forest planning under changing climates

EFI'S ROLE: SUBCONTRACTOR | 2017

FPS Multi-Donor Trust Fund

EFI'S ROLE: COORDINATOR | 2015–2017

FuGO – New frontiers in global forest GOvernance – from lessons learnt to FUture options

EFI'S ROLE: COORDINATOR | 2017–2018

GenTree – Optimising the management and sustainable use of forest genetic resources in Europe

EFI'S ROLE: PARTNER | 2016–2020

GTTN Phase 2 – Global Timber Tracking Network

EFI'S ROLE: COORDINATOR | 2016–2019

INCREDible – Innovation Networks of Cork, Resins and Edibles in the Mediterranean basin

EFI'S ROLE: COORDINATOR | 2017–2020

InForMAR – Integrated Forest Management Learning Architecture

EFI'S ROLE: COORDINATOR | 2017–2020

LULUCF-TC2 – Technical corrections of forest management reference levels

EFI'S ROLE: SUBCONTRACTOR | 2017

Lookout Station

EFI'S ROLE: SOLE PARTNER | 2017–

MultiCo – Promoting Youth Scientific Career Awareness and its Attractiveness through Multi-stakeholder Co-operation

EFI'S ROLE: CONSULTANT | 2015–2018

MULTIRISKS – Multiple risks analysis and mitigation in planted forests

EFI'S ROLE: PARTNER | 2016–2018

MySustainableForest – Operational sustainable forestry with satellite-based remote sensing

EFI'S ROLE: PARTNER | 2017–2020

NETRISKWORK – Networking for the European Forest Risk Facility Initiative

EFI'S ROLE: PARTNER | 2017–2018

NOFOBE – Nordic Forest-Based Sector in Bioeconomy

EFI'S ROLE: PARTNER | 2016–2020

OPERAs – Operational Potential of Ecosystem Research Applications

EFI'S ROLE: PARTNER | 2012–2017

PLURIFOR – Transnational plans for the management of forest risks

EFI'S ROLE: COORDINATOR | 2016–2019

POLYFORES – Decision-making support for forest ecosystem services

EFI'S ROLE: SUBCONTRACTOR | 2017–2020

REDD Facility

EFI'S ROLE: COORDINATOR | 2011–

SAFARI – SFM approaches to foster FLEGT and REDD+ interactions

EFI'S ROLE: COORDINATOR | 2015–2018

SIMRA – Social Innovation in Marginalised Rural Areas

EFI'S ROLE: PARTNER | 2016–2020

SIMWOOD – Sustainable Innovative Mobilisation of Wood

EFI'S ROLE: PARTNER | 2013–2017

SingleTree – The single tree experiment

EFI'S ROLE: PARTNER | 2016–2020

SponForest – Unraveling the Potential of Spontaneous Forest Establishment to Maximize Ecosystem Functions and Services in Dynamic Landscapes

EFI'S ROLE: COORDINATOR | 2017

SUMFOREST – Tackling the challenges in sustainable and multifunctional forestry through enhanced research coordination for policy decisions

EFI'S ROLE: PARTNER | 2014–2017

SURE – Sustaining and enhancing resilience of European Forests

EFI'S ROLE: COORDINATOR | 2017–2020

TECH4EFFECT – Techniques and Technologies for Effective Wood Procurement

EFI'S ROLE: PARTNER | 2016–2020

ToSIA-SE – Tool for Sustainability Impact Assessment

EFI'S ROLE: SUBCONTRACTOR | 2016–2017

TREC – Reasoned transfert of introduced species

EFI'S ROLE: PARTNER | 2016–2018

VALERIE – VALOrising European Research for Innovation in agriculturE and forestry

EFI'S ROLE: PARTNER | 2014–2017

XYLOFUTUR – Convention de partenariat

EFI'S ROLE: SUBCONTRACTOR | 2017

Events 2017

Restoring sustainable forest value chains

(Side event at the Mediterranean Forest week 2017)

- 22 March 2017, Agadir, Morocco
- Organisers: EFIMED
- Number of participants and countries: 30/10

Leading the way to a new European bioeconomy strategy

- 10 May, Berlin, Germany
- Organisers: EFI
- Number of participants and countries: 71/12

Society on the move: Social Innovation for a bio-based economy

- 16 May, Barcelona, Spain
- Organisers: EFIMED, Sant Pau Foundation
- Number of participants and countries: 50/15

SIMRA Annual meeting

- 16–18 May, Barcelona, Spain
- Organiser: EFIMED
- Number of participants and countries: 40/15

ThinkForest roundtable discussion: Climate Smart Forestry

- 30 May, Brussels, Belgium
- Organisers: EFI
- Number of participants and countries: 27/14

EFUF 2017 Urban forest boundaries

- 31 May–2 June, Barcelona, Spain
- Organiser: EFIMED, AMB
- Number of participants and countries: 100/11

International Summer School on Forest Planning and Management: Training in New Tools and Techniques

- 19–23 June, Waterford, Ireland
- Organiser: EFI

Kick-off meeting: European Network Integrate

- 26–27 June, Bonn, Germany
- Organisers: Ministry of Agriculture of the Czech Republic, Federal Ministry of Food and Agriculture of Germany, EFI
- Number of participants and countries: 55/17

Sumforest Summer School for Young Researchers

Stage 1 Practical approaches to transnational research proposal writing in the area of sustainable forest management

- 27–29 June, Minsk, Belarus
- Organisers: EFI, SUMFOREST
- Number of participants and countries: 25/10

Inauguration of EFI Bonn

- 29 August, Bonn, Germany
- Organisers: EFI
- Number of participants and countries: 120/20

Implementing Natura 2000 in Forests: Lessons Learned and Looking Ahead

- 27 September, Brussels, Belgium
- Organisers: EFI
- Number of participants and countries: 81/17

EFI 2017 Annual Conference

- 4 October, Oslo, Norway
- Organisers: EFI
- Number of participants and countries: 72/22

Seminar in connection to the EFI Annual Conference: Emerging forest-based solutions and their implications for forest management

- 5–6 October, Oslo, Norway
- Organisers: EFI, NIBIO, NMBU
- Number of participants and countries: 98/23

Solutions for Wood Mobilisation in Europe

- 12–13 October, Paris, France
- Organisers: EFI, SIMWOOD-project
- Number of participants and countries: 97/20

Sumforest Summer School for Young Researchers

Stage 2 Networking and communication skills in research in the area of sustainable forest management

- 13–16 October, Barcelona, Spain
- Organisers: EFI, SUMFOREST
- Number of participants and countries: 25/10

Bridging research, policy and practice for sustainable forest management

- 17–18 October, Barcelona, Spain
- Organisers: EFI, SUMFOREST
- Number of participants and countries: 90/31

GTTN Timber Tracking Workshops

- 19–20 October, Washington DC, USA
- Organisers: EFI
- Number of participants and countries: 55/18

Looking ahead to a circular European bioeconomy

- 7 November, Brussels, Belgium
- Organisers: EFI
- Number of participants and countries: 97/14

Open Discussion “Policy, business-models and human capital for bioeconomy: Identifying opportunities”

- 9 November, Moscow, Russia
- Organisers: EFI, Moscow Business School Skolkovo
- Number of participants and countries: 70/3

REDDy for more? The future of global forest governance (Side event at the COP23)

- 11 November, Bonn, Germany
- Organisers: EFI
- Number of participants and countries: 55/12

More than Wood: Innovation and entrepreneurship in cork, resin, edibles and other forest products

- 28 November, Barcelona, Spain
- Organisers: EFIMED, Sant Pau Foundation
- Number of participants and countries: 48/10

INCREIBLE Kick-off meeting

- 28–29 November, Barcelona, Spain
- Organisers: EFIMED
- Number of participants and countries: 25/9

Informar kick-off meeting

- 7–8 December, Bonn, Germany
- Organisers: EFI
- Number of participants and countries: 34/14

Opportunities and challenges of sustainable forest bioeconomy

- 13 December, Helsinki, Finland
- Organisers: EFI, FORBIO, The Royal Swedish Academy of Agriculture and Forestry and Future Forests
- Number of participants and countries: 70/10

2017 Bioeconomy Investment Summit

- 14–15 December, Helsinki, Finland
- Organisers: EFI, LUKE, City of Joensuu, Regional Council of North Karelia, European Commission
- Number of participants and countries: 399/40

Sustainable biomass production and the challenges of competing forest use in northern Europe.

EFINORD Annual meeting

- 12–13 December, Helsinki, Finland
- Organiser: EFINORD

State-of-the-art in International Forest Policy, graduate course

- 4 September – 8 October, Umeå Sweden.
- Organiser: EFINORD

EFI ASSOCIATED EVENTS

Forest ecosystems in the conditions of climate change: regional and international dimensions

- 17–19 May, Yoshkar-Ola, Russia
- Organisers: Volgattech University
- Number of participants and countries: 95/5

ACRONYMS

AMB	Metropolitan Authority of Barcelona
EFI	European Forest Institute
EFIMED	EFI's Mediterranean Regional Office
ERA	European Research Area
ERA-NET	Joint Programming Initiative
FORBIO	Project on sustainable, climate-neutral and resource-efficient forest-based bioeconomy
Future forests	Forest research program driven by the Swedish University of Agricultural Sciences, Umeå University and the Forestry Research Institute of Sweden
INFORMAR	Project on the Integrated Forest Management Learning Architecture
LUKE	Natural Resources Institute Finland
NIBIO	Norwegian Institute for Bioeconomy Research
NMBU	Norwegian University of Life Sciences
SIMRA	Social Innovation in Marginalised Rural Areas
SUMFOREST	ERA-NET for SUstainable forest management, Multifunctional Forestry and European Forest Policy
ThinkForest	European high-level forum on future of forests

Publications

■ EFI series

- Winkel, G. (ed.) Towards a sustainable European forest-based bioeconomy – assessment and the way forward. *What Science Can Tell Us* 8, 2017
- Sotirov, M. (ed.) Natura 2000 and forests: Assessing the state of implementation and effectiveness. *What Science Can Tell Us* 7, 2017
- Hetemäki, L., Hanewinkel, M., Muys, B., Ollikainen, M., Palahí, M. and Trasobares, A. Leading the way to a European circular bioeconomy strategy. *From Science to Policy* 5, 2017
- Tognetti, R., Scarascia Mugnozza, G. and Hofer, T. (eds.) Mountain Watersheds and Ecosystem Services: Balancing multiple demand of forest management in head-watersheds. Technical Report 101. 2017.
- Rougieux, P., Van BrusseLEN, J., Lovrić, M., Kiljunen, J., Varis, S. and Zudin, S. The Forest Products Trade Flow Database – A reproducible method and tool to support the analysis of international forest products trade. Technical Report 100, 2017.

■ Peer-reviewed articles

- Auty, D., Moore, J., Achim, A., Lyon, A., Mochan, S., and Gardiner, B. Effects of early re-spacing on the density and microfibril angle of Sitka spruce wood. *Forestry* 91(3): 307–319. First published on line 2017 at <https://doi.org/10.1093/forestry/cpx004>
- Bauhus J., Forrester D.I., Gardiner B., Jactel H., Vallejo R. and Pretzsch H. Ecological Stability of Mixed-Species Forests. In: Pretzsch H., Forrester D., Bauhus J. (eds) *Mixed-Species Forests*. Springer, Berlin, Heidelberg. Pp. 337–382. https://doi.org/10.1007/978-3-662-54553-9_7
- Bechini, L., Koenderink, N., ten Berge, H.F.M., Corre, W., van Evert, F.K., Facchi, A., Gharsallah, O., Gorrioz-Mifsud, E., Grignani, C., den Herder, M., Hily, Y., Justes, E., Lepennetier, A., Moretti, B., Newell-Price, P., Nonini, L., Oberti, R., Ramoneteu, S., Rois, M., de Ruijter, F., Sacco, D., Schuler, P.M., Willems, D., Zandstra, A. and Top, J. Improving access to research outcomes for innovation in agriculture and forestry: the VALERIE project. *Italian Journal of Agronomy* 12(2).
- Blondet, M., De Koning, J., Borrass, L., Ferranti, F., Geitenauer, M., Weiss, G., Turnhout, E. and Winkel, G. Participation in the implementation of Natura 2000: a comparative study of six EU member states. *Land Use Policy* 66: 346–355.
- Borrass, L.; Kleinschmit, D. and Winkel, G. The “German model” of integrative multifunctional forest management. Analysing the emergence and political evolution of a forest management concept. *Forest Policy and Economics* 77: 16–23.
- Brokerhoff, E.G., Barbaro, L., Castagnéyrol, B., Forrester, D.I., Gardiner, B., González-Olabarria, J.R., Lyver, P. O'B., Meurisse, N., Oxbrough, A., Taki, H., Thompson, I.D., van der Plas, F. and Jactel, H. Forest biodiversity, ecosystem functioning and the provision of ecosystem services. *Biodiversity and Conservation* 26: 3005–3035. <https://doi.org/10.1007/s10531-017-1453-2>
- Burns, S. L., Brukas, V., Krott, M. and Giessen, L. Trends in European forest policy research. *Forest Policy and Economics* 83: 179–180.
- Burns, S.L., Krott, M., Sayadyan, H. and Giessen L. The World Bank improving environmental and natural resource policies: power, deregulation, and privatization in (post-Soviet) Armenia. *World Development* 92: 215–224.
- Carvalho de, E. F. and Giessen, L. Los progresos y retrocesos del ordenamiento normativo forestal brasileño: pobre gobernanza forestal y acelerada deforestación [Progress and setbacks of the Brazilian forest regulatory system: poor forest governance and rapid deforestation]. *Revista de Direito Ambiental* 22(86): 97–136.
- Csilléry, K., Kunstler, G., Courbaud, B., Allard, D., Lassegues, P., Haslinger, K. and Gardiner, B. Coupled effects of wind-storms and drought on tree mortality across 115 forest stands from the Western Alps and the Jura mountains. *Global Change Biology* 23: 5092–5107. <https://doi.org/10.1111/gcb.13773>
- D'Amato, D., Droste, N., Allen, B., Kettunen, M., Lähtinen, K., Korhonen, J., Leskinen, P., Matthies, B.D. and Toppinen, A. Green, circular, bio economy: A comparative analysis of sustainability avenues. *Journal of Cleaner Production* 168: 716–734.
- De Luca, A.I., Iofrida, N., Leskinen, P., Stillitano, T., Falcone, G., Strano, A. and Gulisano, G. Life cycle tools combined with multi-criteria and participatory methods for agricultural sustainability: Insights from a systematic and critical review. *Science of the Total Environment* 595: 352–370.
- den Herder, M., Kurttila, M., Leskinen, P., Lindner, M., Haatanen, A., Sironen, S., Salminen, O., Juusti, V., Holma, A. Is enhanced biodiversity protection conflicting with ambitious bioenergy targets in eastern Finland? *Journal of Environmental Management* 187: 54–62. <https://doi.org/10.1016/j.jenvman.2016.10.065>
- den Herder, M., Moreno, G., Mosquera-Losada, R.M., Palma, J.H.N., Sidiropoulou, A., Santiago Freijanes, J.J., Crous-Duran, J., Paulo, J.A., Tomé, M., Pantera, A., Papanastasis, V.P., Mantzanas, K., Pachana, P., Papadopoulos, A., Plieninger, T., Burgess, P.J. Current extent and stratification of agroforestry in the European Union. *Agriculture, Ecosystems & Environment* 241: 121–132. <https://doi.org/10.1016/j.agee.2017.03.005>
- Garcia de Jalon, S., Burgess, P.J., Graves, A., Moreno, G., McAdam, J., Pottier, E., Novak, S., Bondesan, V., Mosquera M.R., Crous-Duran, J., Palma, J.H.N., Paulo, J.A., Oliveira, T., Cirou, E., Hannachi, Y., Pantera, A., Wartelle, R., Kay, S., Malignier, N., Van Lerberghe, P., Tsonka, P., Mirck, J., Rois, M., Kongsted, A.G., Thenail, C., Luske, B., Berg, S., Gosme, M., Vityi, A. How is agroforestry perceived in Europe? An assessment of positive and negative aspects by stakeholders. *Agroforestry Systems*. <https://doi.org/10.1007/s10457-017-0116-3>

- Geitzenauer, M., Blondet, M., De Koning, J., Ferranti, F., Sotirov, M., Weiss, G. and Winkel, G. The challenge of financing the implementation of Natura 2000. Empirical evidence from six European Union Member States. *Forest Policy and Economics* 82: 2–13.
- Giessen, L. and Sahide, M.A.K. Blocking, attracting, imposing, and aligning: The utility of ASEAN forest and environmental regime policies for strong member states. *Land Use Policy* 67: 13–26.
- Haara, A., Store, R. and Leskinen, P. Analyzing uncertainties and estimating priorities of landscape sensitivity based on expert opinions. *Landscape and Urban Planning* 163: 56–66.
- Harrison, P. A., Dunford, R., Barton, D. N., Kelemen, E., Martin-Lopez, B., Norton, L., Termansen, M., Saarikoski, H., Hendriks, K., Gomez-Baggethun, E., Czucz, Bálint; Garcia-Llorente, M., Howard, D., Jacobs, S., Karlsen, M., Koppenroinen, L., Madsen, A., Rusch, G., Eupen, M. van, Verweij, P., Smith, R., Tuomasjukka, D. and Zulian, G. Selecting methods for ecosystem service assessment: A decision tree approach. *Ecosystem Services*. <https://doi.org/10.1016/j.ecoser.2017.09.016>
- Hart, E., Sims, K., Kamimura, K., Gardiner, B. A Hybrid Method for Feature Construction and Selection to Improve Wind-Damage Prediction in the Forestry Sector. GECCO '17 Proceedings of the Genetic and Evolutionary Computation Conference. Pp. 1121–1128. <https://doi.org/10.1145/3071178.3071217>
- Jactel, H., Boberg, J., Bonal, D., Castagneyrol, B., Gardiner, B., Gonzalez-Olabarria, J.R., Koricheva, J., Meurisse, N. and Brockerhoff, E.G. Tree diversity drives forest stand resistance to natural disturbances. *Current Forestry Report*. <https://doi.org/10.1007/s40725-017-0064-1>
- Jasinevičius, G., Lindner, M., Cienciala, E. and Tykkyläinen, M. Carbon Accounting in Harvested Wood Products: Assessment Using Material Flow Analysis Resulting in Larger Pools Compared to the IPCC Default Method. *Journal of Industrial Ecology*. <https://doi.org/10.1111/jiec.12538>
- Jasinevičius, G., Lindner, M., Verkerk, P.J. and Aleinikovas, M. Assessing impacts of wood utilisation scenarios for a Lithuanian bioeconomy on carbon in forests and harvested wood products and on the socio-economic performance of the forest sector. *Forests*.
- Kamimura, K., Gardiner, B., and Koga, S. Observations and predictions of wind damage on Larix kaempferi trees following pre-commercial thinning. *Forestry*. <https://doi.org/10.1093/forestry/cpx006>
- Karvonen, J., Halder, P., Kangas, J. and Leskinen, P. Indicators and tools for assessing sustainability impacts of the forest bioeconomy. *Forest Ecosystems* 4.
- Konczal, A. A. Forest anthropology. Foresters – perception and formation of visions of nature in Poland [in Polish]. Warsaw-Poznan: Polish Academy of Science Press, Adam Mickiewicz University Press.
- Konczal, A. A. Trees of which a task is to remember. “Groves of a memory” in a duty of a forest mythopractice [in Polish] *Czas Kultury* 3.
- Kraus D., Schuck A., Bebi P., Blaschke M., Bütlér R., Flade M., Heintz W., Krumm F., Lachat T., Larrieu L., Lehnerova L., Levin M., Mergner U., Pach M., Paillet Y., Pyttel P., Rydkvist T., Santopuoli G., Sever K., Sturm K., Vandekerckhove K., Winter S. and Witz, M. Spatially explicit database of tree related microhabitats (TreMs). Version 1.2. Integrate+ project. Published by Institut National de la Recherche Agronomique (INRA).
- Leipold, S. and Winkel, G. Discursive Agency: (Re) Conceptualising actors and practices in the analysis of discursive policy making. *Policy Studies Journal* 45: 510–534.
- Lindner, M. and Suominen, T. Towards a sustainable bioeconomy. *Scandinavian Journal of Forest Research* 32(7): 549–550. <https://doi.org/10.1080/02827581.2017.1357329>
- Locatelli, T., Tarantola, S.; Gardiner, B. and Patenaude, G. Variance-based sensitivity analysis of the ForestGALES wind risk model – model behaviour and lessons for forest modelling. *Environmental Modelling and Software* (87). <https://doi.org/10.1016/j.envsoft.2016.10.010>
- Logmani, J., Krott, M., Lecyk, M. and Giessen, L. Customizing elements of the International Forest Regime Complex in Poland? Non-implementation of a National Forest Programme and redefined transposition of NATURA 2000 in Białowieża Forest. *Forest Policy and Economics* 74: 81–90.
- Lotze-Campen, H., Verburg, P.H., Popp, A., Lindner, M., Verkerk, P.J., Moiseyev, A., Schrammeijer, E., Helming, J., Tabeau, A., Schulp, C.J.E., van der Zanden, E.H., Lavalle, C., e Silva, F.B., Walz, A. and Bodirsky, B. A cross-scale impact assessment of European nature protection policies under contrasting future socio-economic pathways. *Regional Environmental Change*. First online 16 May 2017. <https://doi.org/10.1007/s10113-017-1167-8>
- Maier, C. and Winkel, G. Implementing nature conservation through integrated forest management: a street-level bureaucracy perspective on the German public forest sector. *Forest Policy and Economics* 82: 14–19.
- Moore, J., Gardiner, B. and Sellier, D. *Tree Mechanics and Wind Loading*. Plant Biomechanics. Springer.
- Mouchet, M.A., Paracchini, M.L., Schulp, C.J.E., Stürck, J., Verkerk, P.J., Verburg, P.H. and Lavorel, S. Bundles of ecosystem (dis)services and multifunctionality across European landscapes. *Ecological Indicators*, Pp. 23–28. <https://doi.org/10.1016/j.ecolind.2016.09.026>
- Mouchet, M.A., Rega, C., Lasseur, R., Georges, D., Paracchini, M.-L., Renaud, J., Stürck, J., Schulp, C.J.E., Verburg, P.H., Verkerk, P.J. and Lavorel, S. Ecosystem service supply by European landscapes under alternative land-use and environmental policies. *International Journal of Biodiversity Science, Ecosystem Services & Management*. Pp. 1–13. <https://doi.org/10.1080/21513732.2017.1381167>

- Mustalahti, I., Cramm, M., Ramcikovic-Suominen, S. and Tegegne Y.T. Resources and rules of the game: Participation of Civil Society in REDD+ and FLEGT-VPA processes in Lao PDR. *Forests* 8(2): 50. <https://doi.org/10.3390/f8020050>
- Myllyviita, T., Antikainen, R. and Leskinen, P. Sustainability assessment tools – their comprehensiveness and utilisation in company-level sustainability assessments in Finland. *International Journal of Sustainable Development & World Ecology* 24(3): 236–247.
- Orazio, C., Cordero Montoya, R., Régolini, M., Borges, J., Garcia-Gonzalo, J., Barreiro, S., Botequim, B., Marques, S., Sedmák, R., Smreček, R., Brodrechtová, Y., Brukas, V., Chirici, G., Marchetti, M., Moshammer, R., Biber, P., Corrigan, E., Eriksson, L., Favero, M., Galev, E., Hengeveld, G., Kavalauškas, M., Mozgeris, G., Navrátil, R., Nieuwenhuis, M., Paligorov, I., Pettenella, D., Stanislavaitis, A., Tomé, M., Trubins, R., Tuček, J., Vizzarri, M., Wallin, I., Pretzsch, H. and Sallnäs O. Decision Support Tools and Strategies to Simulate Forest Landscape Evolutions Integrating Forest Owner Behaviour: A Review from the Case Studies of the European Project, INTEGRAL. *Sustainability* 9(4): 599. <https://doi.org/10.3390/su9040599>
- Poëtte, C., Gardiner B., Dupont, S., Brunet, Y., Böhm, M., Harman, I., Finnigan, J. and Hughes, D. The impact of landscape fragmentation on atmospheric flow: a wind tunnel study. *Boundary-Layer Meteorology*. <https://doi.org/10.1007/s10546-017-0238-1>
- Rahman, R. and Giessen, L. Formal and informal interests of donors to allocate aid: Spending patterns of USAID, GIZ, and EU forest development policy in Bangladesh. *World Development* 94: 250–267.
- Reyer, C.P.O., Bathgate, S., Blennow, K., Borges, J.G., Bugmann, H., Delzon, S., Faias, S.P., Garcia-Gonzalo, J., Gardiner, B., Gonzalez-Olabarria, J.R., Gracia, C., Guerra Hernández, J., Kellomäki, S., Kramer, K., Lexer, M.J., Lindner, M., van der Maaten, E., Maroschek, M., Muys, B., Nicoll, B., Palahi, M., Palma, J.H.N., Paulo, J.A., Peltola, H., Pukkala, T., Rammer, W., Ray, D., Sabaté, S., Schelhaas, M-J., Seidl, R., Temperli, C., Tomé, M., Yousefpour, R., Zimmermann, N.E. and Hanewinkel, M. Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests? *Environment Research Letters* (12). <https://doi.org/10.1088/1748-9326/aa5ef1>
- Rois-Díaz, M., Lovric, N., Lovric, M., Ferreiro-Domínguez, N., Mosquera-Losada, M.R., den Herder, M., Graves, A., Palma, J.H.N., Paulo, J.A., Pisanelli, A., Smith, J., Moreno, G., García, S., Varga, A., Pantera, A., Mirck, J. and Burgess, P. Farmers' reasoning behind the uptake of agroforestry practices: evidence from multiple case-studies across Europe. *Agroforestry Systems* 1–18. <https://doi.org/10.1007/s10457-017-0139-9>
- Saikku, L., Tainio, P., Hilden, M., Antikainen, R., Leskinen, P. and Koskela, S. Diffusion of solar electricity in the network of private actors as a strategic experiment to mitigate climate change. *Journal of Cleaner production* 142: 2730–2740.
- Sarker, P., Rahman, S. and Giessen, L. Empowering state agencies through national and international community forestry policies in Bangladesh. *International Forestry Review* 19(1): 79–101.
- Seppälä, J., Leskinen, P. and Myllyviita, T. Expert Panel Weighting and Aggregation of the Sustainable Society Index (SSI) 2010 – a Decision Analysis Approach. *Sustainable Development* 25: 322–335.
- Singer, B. and Giessen, L. Towards a donut regime? Domestic actors, climatization, and the hollowing-out of the international forests regime in the Anthropocene. *Forest Policy and Economics* 79: 69–79.
- Sotirov, M., Stelter, M. and Winkel, G. The Emergence of the European Union Timber Regulation: How Baptists, Bootleggers, Devil Shifting and Moral Legitimacy Drive Change in the Environmental Governance of Global Timber Trade. *Forest Policy and Economics* 81: 69–81.
- Suominen, T., Kunttu, J., Tuomasjukka, D., Jasinevičius, G. and Lindner, M. Trade-offs in sustainability impacts of introducing cascade use of wood. *Scandinavian Journal of Forest Research* 32(7): 588–597. <https://doi.org/10.1080/02827581.2017.1342859>
- Tegegne, Y.T., Ramcikovic-Suominen, S., Fobissie, K., Visseren-Hamakers, M.I.J., Lindner, M. and Kanninen, M. Synergies among social safeguards in FLEGT and REDD + in Cameroon. *Forest Policy Economics* 75: 1–11. <http://dx.doi.org/10.1016/j.forpol.2016.11.005>
- Tuomasjukka, D., Athanassiadis, D. and Vis, M. Threefold Sustainability Impact Assessment method expansion for renewable energy value chains. *International Journal of Forest Engineering* 28: 116–122. <https://doi.org/10.1080/14942119.2017.1318549>
- van der Zanden, E.H., Verburg, P.H., Schulp, C.J.E. and Verkerk, P.J. Trade-offs of European agricultural abandonment. *Land Use Policy* 62: 290–301. <https://doi.org/10.1016/j.landusepol.2017.01.003>
- Verkerk, P., Sánchez, A., Libbrecht, S., Broekman, A., Bruggeman, A., Daly-Hassen, H., Giannakis, E., Jebari, S., Kok, K., Krivograd Klemenčič, A., Magjar, M., Martinez de Arano, I., Robert, N., Smolar-Žvanut, N., Varela, E., Zoumides, C. A Participatory Approach for Adapting River Basins to Climate Change. *Water* 9(12), 958. <https://doi.org/10.3390/w9120958>
- Winkel, G., Leipold, S., Buhmann, K., Cashore, B., De Jong, W., Nathan, I., Sotirov, M. and Stone, M. Narrating illegal logging across the globe. Between Green Protectionism and Sustainable Resource Use. *International Forestry Review* 19: 1–17.
- Yousefpour, R., Temperli, C., Jacobsen, J.B., Thorsen, B.J., Meilby, H., Lexer, M.J., Lindner, M., Bugmann, H., Borges, J.G., Palma, J.N.H., Blennow, K., Ray, D., Zimmermann, N.E., Delzon, S., Kremer, A., Kramer, K., Reyer, C., Lasch, P., Garcia-Gonzalo, J. and Hanewinkel, M. Framework for modelling adaptive management and decision-making in forestry under climate change. *Ecology and Society* 22.
- Yusran, Y., Sahide, A., Supratman, S., Sabar, A., Krott, M., and Giessen, L. The empirical visibility of land use conflicts: From latent to manifest conflict through law enforcement in a national park in Indonesia. *Land Use Policy* 62: 302–315.

■ Other peer-reviewed

- Arifi, B., Shawn, B., Winkel, G. and Ruppert-Winkel, G. The Simmern Solidarity Pact – Reconciling Income Imbalances between Villages. In: Bieling, C. & Plieninger, T. *The Science and Practice of Landscape Stewardship*. Cambridge University Press. Pp. 181–183.
- Arifi, B., Winkel, G. and Ruppert-Winkel, C. Landscape stewardship in wind energy conflicts: between cultural myths and interests. In: Bieling, C. and Plieninger, T. *The Science and Practice of Landscape Stewardship*. Cambridge University Press. Pp. 167–181.
- Hapca, A., Price, A., Gardiner, B. and Macdonald, E. Methods for Assessing Stem StraightnessForestry Commission Technical Note 21, Forestry Commission, Edinburgh.
- Konczal, A. A. *Telling (hi)stories in the Anthropocene. When forest is multispecies relation*. In: eds. E. Kavalski, S. Hobden, E. Cudworth. *Posthuman Dialogues in International Relations*. London: Routledge. Pp. 53–67.
- Lindner, M., Dees, M.G., Anttila, P., Verkerk, P.J., Fitzgerald, J., Datta, P., Glavonjic, B., R., P. and Zudin, S. *Assessing Lignocellulosic Biomass Potentials From Forests and Industry*. In: Panoutsou, C. (Ed.), *Modeling and Optimization of Biomass Supply Chains. Top-Down and Bottom-up Assessment for Agricultural, Forest and Waste Feedstock*. Academic Press. Pp. 127–159.
- Schelhaas, M.-J., Nabuurs, G.-J., Verkerk, P.J., Hengeveld, G., Packalen, T., Sallnäs, O., Pilli, R., Grassi, G., Forsell, N., Frank, S., Gusti, M. and Havlik, P. *Forest Resource Projection Tools at the European Level*. In: Barreiro, S., Schelhaas, M.-J., McRoberts, R.E., Kändler, G. (eds.). *Forest Inventory-based Projection Systems for Wood and Biomass Availability*. Springer. Pp. 49–68. <https://www.springer.com/us/book/9783319561998>

Income statement

	2017 / EUR	2016 / EUR
■ ORDINARY OPERATIONS		
Project income	10 941 816.84	11 644 524.62
Project expenses		
Staff expenses	-6 081 428.42	-5 821 297.88
Depreciation	-773.34	-2 871.36
Other expenses	-4 143 939.32	-4 843 103.10
Project expenses total	-10 226 141.08	-10 667 272.34
GROSS SURPLUS/DEFICIT FROM PROJECTS	715 675.76	977 252.28
Other expenses		
Staff expenses	-1 570 067.30	-1 302 287.16
Depreciation	-32 629.45	-29 103.23
Other expenses	-1 141 121.26	-995 982.90
Other expenses total	-2 743 818.01	-2 327 373.29
■ OTHER INCOME		
Other income	23 599.33	43 508.88
Membership fees	172 450.09	195 706.07
Transfer to EFI network fund	-171 065.00	0.00
Other income total	24 984.42	239 214.95
■ SUBSIDIES		
Subsidies Government	2 031 666.67	1 194 411.23
Subsidies Non-government	176 106.05	185 400.00
Subsidies total	2 207 772.72	1 379 811.23
■ INVESTMENTS AND FINANCIAL ACTIVITIES		
Income	0.98	22.82
Expenses	-10 430.63	-3 014.54
Investments and financial activities total	-10 429.65	-2 991.72
■ SURPLUS/DEFICIT OF THE FINANCIAL YEAR	194 185.24	265 913.45

Balance Sheet

	2017 / EUR	2016 / EUR
■ ASSETS		
Non-current assets		
Intangible assets - other capitalised long-term expenses	8 996.25	24 045.70
Tangible assets - machinery and equipment	44 986.68	8 687.15
Non-current assets total	53 982.93	32 732.85
Current assets		
Current receivables		
Accounts receivable	244 417.52	265 041.12
Accrued income and prepaid expenses	46 763.94	52 022.84
Project receivables	1 137 849.05	735 403.49
Vat receivables	85 505.82	38 433.07
Prepaid expenses	50 152.42	131 889.54
Current receivables	1 564 688.75	1 222 790.06
Cash in hand and at banks	5 784 292.70	6 825 266.47
Current assets total	7 348 981.45	8 048 056.53
■ ASSETS	7 402 964.38	8 080 789.38
■ LIABILITIES		
Equity		
Surplus (deficit) from previous periods	1 419 894.89	1 045 460.42
Other equity	0.00	108 521.02
EFI network fund	171 065.00	0.00
Surplus (deficit) for the period	194 185.24	265 913.45
Total equity	1 785 145.13	1 419 894.89
Liabilities		
Current liabilities		
Advanced payments received - multi-donor trust fund	2 791 923.11	4 302 656.36
Other advance payments received	1 321 615.24	997 181.53
Purchases payables	993 633.80	559 532.00
Accrued liabilities and deferred income	368 950.59	314 927.58
Partner liabilities	0.00	396 132.67
Other liabilities	141 696.51	90 464.35
Current liabilities	5 617 819.25	6 660 894.49
Total liabilities	5 617 819.25	6 660 894.49
■ LIABILITIES	7 402 964.38	8 080 789.38



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