EFI Multi Donor Trust Fund for Policy Support: Annual Report 2018

19 March 2019

EFI MDTF for Policy Support countries marked by green color. These countries (excl. Norway) represent 72% of the EU forest area, and 60 % of the European forest area (excl. Russia)

EFI ThinkForest seminar, 29 May 2018, Madrid, Spain. Photo: EFI

Executive Summary

What is this document?

This document is the Annual Report of the EFI Multi Donor Trust Fund for Policy Support (hereafter MDTF) for 2018. It presents the activities, outputs, impacts and budget of the MDTF for 1 January 2018 to 31 December 2018. Year 2018 was the first year of the new 3-year cycle of MDTF (2018-2020). The Annual Report aims to provide transparent information, which can also be used to assess and evaluate the performance and impact of the MDTF work.

Project management

EFI Assistant Director Lauri Hetemäki coordinated MDTF project activities in 2018, with important support from Communications Officer Ulla Vänttinen, Communications Manager Rach Colling, Administrative Officer Jarkko Haltia and Brussels Liaison Officer Harald Mauser. The ThinkForest Forum has been chaired by its President, Göran Persson. In addition, other EFI staff resources and outside subcontracting have been used to carry out the activities during 2018.

Project funding and costs in 2018

By the MDTF Steering Committee meeting on 25 September 2018, 11 countries had joined the MDTF: *Austria, Czech Republic, Finland, France, Germany, Ireland, Italy, Lithuania, Norway, Spain and Sweden*. However, before the end of year, France informed the EFI Secretariat that they would step down from the MDTF for the time being. The total financial contribution from the countries to the MDTF by the end of 2018 was 567 451 euros. The total amount of expenses in 2018 is estimated to have been 468 331 euros*. It should be noted that when writing this on 24 February 2019, the EFI accounts for 2018 had not yet been finalized.*

Summary of activities

The highlights of activities and outputs from 2018 include:

In 2018, two *From Science to Policy* (FSTP) studies were published: "Climate-Smart Forestry: mitigation impacts in three European regions" and "Substitution effects of wood-based products in climate mitigation". In addition, in 2018 the Executive Summary of *From Science to Policy 5*: "Leading the way to a European circular bioeconomy strategy", was translated into Chinese, French, German, Italian, Russian and Spanish. Five online newsletters, *Science Supporting Policy-making* were distributed to the EFI network (approx. 600 recipients by the end of 2018).

ThinkForest events are the flagship science-policy events organized by MDTF, and there were two such events in 2018: 1. *"Role of bioeconomy in controlling forest fires",* held in Madrid, 29 May 2018; and 2. "Climate Policy and Forest Bioeconomy*"*, held at the International Press Center, Brussels, 4 December 2018.

Summary of impacts

Publications were widely distributed both in printed and digital forms. 500 copies of each *From Science to Policy study* were printed, and these were distributed at ThinkForest events, to policy makers in Brussels via EFI's Brussels Liaison Office, and sent to EFI's network. The electronic copies of both newly published and back catalogue publications again proved popular. Due to high demand, the Executive Summary of FSTP5 (Leading the way to a European circular bioeconomy strategy) was translated into several languages, including Chinese and Russian.

MDTF-funded publications have become increasingly cited in both academic journals and by policy makers (see Appendix). For example, FSTP2 (A new role for forests and the forest sector in the EU post-2020 climate targets) received 17 citations during 2018, including two in Nature. Both FSTP5 and *What Science Can Tell Us no. 8* (Towards a sustainable European forest-based bioeconomy – assessment and the way forward) were cited in the European Commission's updated Bioeconomy Strategy "A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment" published in October 2018. FSTP5 was also cited in publications by the OECD (Realising the circular bioeconomy, policy paper), and the Finnish Ministry of Agriculture and Forestry (Biopaths to Carbon Neutrality).

Five editions of the *Science Supporting Policy-making* online newsletter were sent during 2018. The newsletter reports on and promotes ThinkForest events and MDTF-funded studies, in addition to more general news items on current MDTF themes. The newsletter is sent by email to EFI's policy support mailing list, which by the end of 2018 totalled some 600 subscribers. Due to the EU General Data Protection Regulation (GDPR), the old mailing list was archived in May 2018, and subscribers were asked to re-subscribe. Consequently, subscriber numbers fell but active promotion is ongoing (e.g. during registration for events).

ThinkForest event participation: In total, 152 people took part in ThinkForest events in Madrid in May and Brussels in December in 2018 (67 and 85 participants, respectively). In addition, the two ThinkForest seminars were watched by video/web streaming by 1 202 persons by the end of 2018 (406 and 796, respectively). Clearly, the web streaming/video has turned out to be a necessary channel to reach a wider audience, although it may at the same time reduce the number of participants physically present in the seminar. In terms of background, four major participant groups were: stakeholder group representatives, the research community, national government (ministries) and forest industry.

Media impact: MDTF Policy Support work was again actively promoted in "traditional" and social media in 2018. Related to the ThinkForest seminars or publications, media published 10 articles (including national newspapers and broadcasters), and the different stakeholder groups published in total 10 follow-up articles in their forums. During 2018, MDTF-funded policy support work was promoted via social media, taking advantage of EFI's existing channels to reach a geographically widespread audience. Effort focused on Twitter, which is used professionally by the policy maker audience. For example, Twitter was used at each of the ThinkForest events, to encourage interaction and dialogue with participants, both those in the room and those watching via the livestream. During 2018, there were approx. 1,500 tweets and the

account gained over 1,300 new followers. Within Europe, a high percentage of followers are based in Spain (14.9%), the UK (14.1%), Finland (7.4%), Belgium (4%) and Germany (4.1%). Other important areas globally include the US (7.7%) and Canada (3.3%).

Expert presentations, hearings and statements: Many requests for presentations or expert statements in policy or science-policy forums based on the publications and ThinkForest events indicated the usefulness of the MDTF events and publications. Based on the *From the Science to Policy* –series studies, the authors of the studies and Chief-Editor provided 9 presentations and expert statements in 2018 in the European Parliament, at various events organized by universities, and at other forums.

Feedback from the network: The publications and ThinkForest events have been tackling topical policy issues and have been considered timely. In particular, participants have appreciated that issues high on the political agenda have been brought to the discussion, and needed science-based information has been provided by the studies and ThinkForest seminars. ThinkForest events have been highly valued by various Commission officials (e.g. Commissioners, senior EC officials, Joint Research Centre officials), national government civil servants, EFI Associate Member representatives, and forest-based sector stakeholders.

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Annex: Tables

1. Introduction and background

1.1 EFI Multi Donor Trust Fund for Policy Support

The objective of the Multi-Donor Trust Fund (MDTF) is to support the operationalization of the activities of the EFI Policy Support Facility. The Trust Fund completed its first 3-year period at the end of 2017, and started a new 3-year period on 1 January 2018.

The Steering Committee is the highest decision-making body of MDTF. The Steering Committee approves the MDTF work programme and related budget. The main aims and responsibilities of the Steering Committee are to provide *strategic guidance and advice* on the operations of FPS. It receives information from the EFI secretariat and gives feedback regarding the outputs, outcomes and impacts resulting from the activities of MDTF policy support work. The Steering Committee does not take part in the operation and management of the MDTF policy support work, science-policy studies, or the selection of the scientists conducting the studies. This is in line with the principle of safeguarding the scientific integrity of the actual science-policy work. However, the Steering Committee members can *comment* the science-policy study manuscripts, but they *do not review* them. That is, the decision how to incorporate, or not to incorporate, the possible Steering Committee comments to the studies, rests on the scientists.

The Steering Committee consists of a representative of each donor and the Director of EFI or his authorized representative. The Chair of the EFI Scientific Advisory Board (SAB), or a designated SAB member, took part in the meetings as an observer. Also, some EFI Member Countries participated as observers in the Steering Committee meetings in 2018 (Poland, Portugal and Slovenia). The membership of a donor ends 12 months following the last contribution of the donor. The Steering Committee meets at least once a year, and maintains an active interaction through correspondence, and can meet informally in connection with other international meetings.

In 2018, the MDTF Steering Committee members were:

1. Ingeborg Bromée, Ministry for Enterprise & Innovation, Sweden
2. Thomas Haußmann, Federal Ministry of Food and Agriculture, Germany
3. José Manuel Jaquotot, Ministry of Agriculture, Food and the Environment, Spain
4. Tomas Krejzar, Ministry of Agriculture, Czech Republic
5. Fergus Moore /Noel O'Connor, Department of Agriculture, Food and the Marine, Ireland
6. Martynas Norbutas, Ministry of Environment, Lithuania
7. Marc Palahí, Director of EFI
8. Enrico Pompei, Ministry of Agricultural, Food and Forestry Policies, Italy
9. Georg Rappold, Federal Ministry on Sustainability and Tourism, Austria
10. Silje Trollstøl, Norwegian Ministry of Agriculture and Food, Norway
11. Taina Veltheim, Ministry of Agriculture and Forestry, Finland

The MDTF policy support work is managed and administrated by the EFI Policy Support Facility. The actual implementation of the science-policy studies is based on the work by EFI staff, its Associate Members, and the science community in general. The aim of the work is to:

- respond in a timely manner to policy makers' information needs with scientific-based analysis and information in an easily understandable and policy-relevant format and scale;
- support the formulation, monitoring and evaluation of sustainable policies and strategies relevant for the European forest-based sector;
- communicate effectively and consequently build a better understanding of forest-related issues, proactively involving policy makers, scientists and stakeholders.

The above objectives are carried out in particular through EFI MDTF science-policy publications (*From Science to Policy* reports and *What Science Can Tell Us* reports) and ThinkForest forum high-level science-policy seminars. The ThinkForest forum events are often chaired by its President, Göran Persson (Prime Minister of Sweden 1996-2006). The President's role has also been important in representing ThinkForest and EFI policy support work in different platforms (e.g., international conferences, videos), providing important networks and access to high-level policy makers, inviting speakers to the ThinkForest seminars, and providing strategic advice for EFI management in science-policy support work.

ThinkForest President Göran Persson chairing the seminar on Climate policy and forest Bioeconomy, 4 December, Brussels.

1.2 MDTF funding and management

Funding: The members of the MDTF in 2018 were 11 countries: ***Austria, Czech Republic, Finland, France, Germany, Ireland, Italy, Lithuania, Norway, Spain and Sweden.*** However, France did not contribute to any funding during 2018 and neither was it taking part in decision making, and informed later that it will not continue in the MDTF for the time being. The total contribution of donors in 2018 was **567 451 euros** The expenses of MDTF activities during 1 January to 31 December 2018 is estimated to have been **468 331 euros** *(the exact amount will be known when the EFI accounts for 2018 are finalized in 2019).*

According to the MDTF Guidelines, funding can be used to finance the following categories of expenditure:

- Policy Support Facility staff costs and travel expenses;
- EFI staff costs, consultant and expert fees and related expenses (travels, etc.) to coordinate and conduct Policy Support Facility studies and activities;
- Costs for contracting EFI member organizations and other relevant organizations for carrying out scientific assessments, policy studies, etc.;
- EFI staff costs and travel expenses related to the negotiations of the trust fund, its establishment and enlargement;
- Communication and media expenses, including publications (e.g. *From Science to Policy* and *What Science Can Tell Us* studies)
- Briefs, EFI News, etc., translations, and video and electronic media;
- Workshop, conference and meeting expenses, including costs associated with presenters, publicity, translation and reporting;
- Equipment related to supporting the activities of FPS;
- Office running costs (not covered by the agreed overheads);
- Costs related to activities, not included above, that have the approval of the Steering Committee;
- Auditing and final external evaluation costs.

Management: The MDTF policy support work is managed and administrated by the *EFI Policy Support Facility*. It initiates, coordinates, carries out and disseminates science-based analysis and synthesis assessments for policy makers, stakeholders, media and the public at large. It supports science-policy dialogue and functions as a go-between scientists and policy makers. One of the main activities is also the managing and operation of ThinkForest Forum, the high-level science-policy information, discussion and information-sharing forum.

Based on feedback from the Steering Committee members, EFI prepares an annual work plan and an associated budget which is approved by the Steering Committee. Studies may be planned to be conducted within a period of up to three years subject to the availability of sufficient funding.

The team responsible for managing and administrating the MDTF policy support work in 2018 was:

Lauri Hetemäki, Assistant Director, EFI
Rach Colling, Communications Manager, EFI
Jarkko Haltia, Administrative Officer, EFI
Harald Mauser, Brussels Liaison Officer, EFI
Ulla Vänttinen, Communications Officer, EFI

2. Activities and outputs

The activities under MDTF for Policy Support were of many different types during 2018. The flagship activities are the ThinkForest events and science-policy publications. In addition, a number of related and supporting activities were carried out, such as the policy support newsletter, webstreaming, videos, policy support webpage, posters, social media activities, expert statements and presentations in policy forums, and efforts to get new countries to join the MDTF. This chapter gives more detailed information about these activities.

2.1 Publications

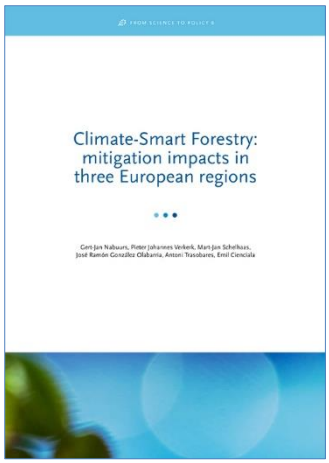
2.1.1. Science-policy studies

MDTF publications build on existing EFI series, with the aim of creating a cascade of products, targeted at different audiences and purposes. Their main objective is to synthesise existing science analysis and results, and draw policy implications based on these, in order to inform policy making and stakeholders work. The text is accordingly written in a format that is easily accessible to these target groups.

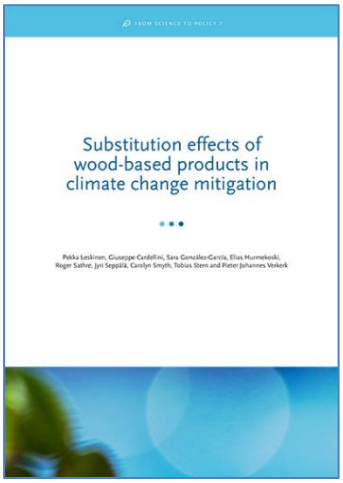
EFI series	No of pages	Purpose
What Science Can Tell Us (WSCTU)	80-100	Synthesis of large scope studies. Main target groups: civil servants, policy makers' assistants, stakeholders, experts, researchers
From Science to Policy (FSTP)	28-32	Synthesis of a specific topic, carried out within a short timeframe (typically in 4-8 months). Main target groups: civil servants, policy makers' assistants, stakeholders, experts, researchers
Executive Summary *(formerly ThinkForest Brief)*	c.8	Executive Summary from either WSCTU or FSTP, summarizing their policy implications. Main target groups: policy makers, policy makers' assistants, media, stakeholders, experts

Detailed science-policy analysis from a *What Science Can Tell Us* or *From Science to Policy* study is summarised in an *Executive Summary*. Both are made available at ThinkForest events.

In 2018, two *From Science to Policy* studies were published. In addition, the Executive Summary of *From Science to Policy 5*: Leading the way to a European circular bioeconomy strategy was translated into Chinese, French, German, Italian, Russian and Spanish in 2018.



From Science to Policy 6: Climate-Smart Forestry: mitigation impacts in three European regions
The study was coordinated by Prof. Gert-Jan Nabuurs, Wageningen University and Research**,** and had 6 authors from 4 institutions**.**

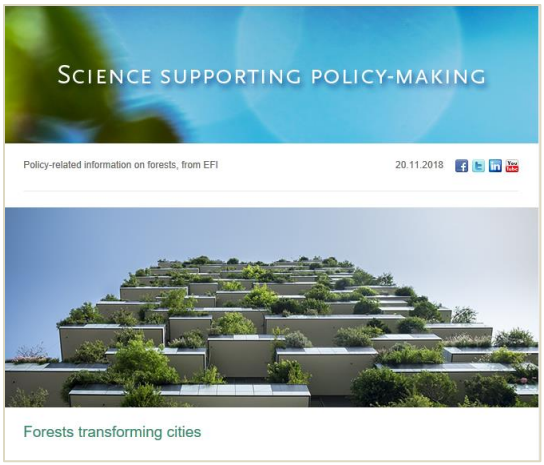


From Science to Policy 7: Substitution effects of wood-based products in climate change mitigation
The study was coordinated by Prof. Pekka Leskinen (EFI), and had 9 authors from 7 institutions**.**

Author affiliations	**Countries represented**
Centre Tecnologic Forestal de Catalunya (CTFC)* EFI Finnish Environment Institute (SYKE)* IFER – Institute of Forest Ecosystems Research* Institute for Transformative Technologies in Berkeley Natural Resources Canada* Technical University of Munich University of Santiago de Compostela Wageningen University and Research* Wood K plus (Kompetenzzentrum Holz GmbH)	Austria Canada Czech Republic Finland Germany Netherlands Spain USA

**EFI Associate or Affiliate Member organization*

Policy support newsletter



The Science Supporting Policy-making online newsletter reports on and promotes ThinkForest events and MDTF-funded studies, in addition to more general news items on current MDTF themes (for example bioeconomy, forest fires).

The newsletter is sent by email to EFI's policy support mailing list, using the Apsis newsletter system, and is promoted to EFI's wider network via social media.

Due to the new EU General Data Protection Regulation (GDPR), the old mailing list was archived in May 2018, and subscribers were asked to re-subscribe to respectively (a) the policy support newsletter mailing list and (b) an events mailing list. Consequently, subscriber numbers fell dramatically (see below), but we saw an increase in engagement (e.g., numbers of people opening newsletters rose to over 50%, from a previous average of around 30%).

Subscription was actively promoted during the year (e.g. during registration for events), and by the end of 2018, the policy support newsletter mailing list totalled some c.600 subscribers, and the events mailing list c.590 subscribers.

Five editions of the newsletter were published in 2018

Newsletter issue	Contents
5-2018 (12.12.2018)	• Forest bioeconomy can play key role in climate solutions • Study analyses contribution of wood products to climate change mitigation • Climate Smart Forestry, the missing link
4-2018 (20.11.2018)	• Forests transforming cities • Join us in Brussels! Climate policy and forest bioeconomy • Updated EU bioeconomy strategy launched
3-2018 (21.09.2018)	• Focus on bioeconomy • Future of global forest governance • Forests: interconnecting SDGs to action • Forests transforming urban living • Climate policy and forest bioeconomy
2-2018 (21.06.2018)	• Using the bioeconomy to prevent forest fires • Irish funding for EFI confirmed during Minister Doyle's visit • Effects of the EU-LULUCF regulation on the use of biomass for bio-energy

1-2018 (09.04.2018)	• Connecting knowledge to action in 2018 • Study demonstrates ways to increase climate benefits from forests • Role of bioeconomy in controlling forest fires • EFI facilitates high-level forest policy discussions

2.2. ThinkForest Seminars

ThinkForest events are mainly organized in Brussels, but occasionally they are also held in MDTF member countries. There were two ThinkForest events in 2018: 1. *"Role of bioeconomy in controlling forest fires",* held in Madrid, 29 May 2018; and 2. "*Climate policy and forest bioeconomy"*, held at the International Press Center, Brussels, 4 December 2018. In Madrid, attendance was good, and new audience had an opportunity to be introduced to a ThinkForest seminar. In addition, the live webstreaming and video recording made available in the web after the event, allowed for easy following outside Spain.

The ThinkForest events benefit significantly from the Presidency of Göran Persson. His PR value, networks, advice, and professional and insightful chairing of the events have greatly helped to raise the profile of the events. In addition, Mr. Persson has helped to promote the ThinkForest, EFI policy support work, and European forest sector in general.

Role of bioeconomy in controlling forest fires

Supplement the extinction-based approach to forest fires with more focus also on prevention, via the bioeconomy. This was the message from the ThinkForest event held in Madrid on 29 May, which gathered policy makers, scientists and practitioners to discuss the issue of forest fires in the Mediterranean region. "As a society we need to be deeply committed to facing this problem with all the tools we have, including the bioeconomy" said Esperanza Orellana, General Director, Spanish Ministry of Agriculture and Fisheries, Food and Environment. She called for a move to a long-term, proactive approach to preventing forest fires, which focused on **forest management**. This was echoed by practitioner Marc Castellnou, strategic fire analyst with the Regional Fire Services in Catalonia, Spain. "A better landscape, a better forest" is needed, he said, rather than more firefighters or more planes. Forest management would make the difference, and help fire services to do their job better. The critical factor, and one of the reasons for lack of forest management is the **lack of value that people place on forests**. We need to create wealth with forests, create awareness, responsibility and culture. Here the **bioeconomy is key**. Inazio Martinez de Arano, Head of EFI's Mediterranean Facility laid out some practical steps. "The bioeconomy provides a way to take forests from a sink of public resources to a source of richness. There are thousands of opportunities, including construction, aeronautics, textiles, resins, agrochemicals, cosmetics", he said. We should make the best use of existing instruments and sectoral policies, such as the EU CAP, to foster innovation and connect value chains.

The seminar was attended by 67 participants. Out of all participants, 11 were country representatives (embassies, permanent reps., ministries). Other main participant groups were researchers (17), forest industry (5) and other stakeholders groups representing mostly local and regional authorities and representatives of farming and investment management organisations (19). The event was followed live web-streamed or via video recording by 406 people. After the seminar, participants had the opportunity to get a virtual experience of being in a middle of forest fire by trying out Virtual Reality headsets. EFI Secretariat assisted participants in this task, and afterwards many positive comments were received on this experiment. To conclude the seminar, a networking event was organised in the conference venue, Hotel Tryp Madrid Atocha.

Climate policy and forest bioeconomy

We need transformational policies and a transformational mindset, to ensure that the forest bioeconomy can help meet the ambitious goals set out in the Paris Agreement. This was the message from the ThinkForest seminar on Climate Policy and Forest Bioeconomy, which was held in Brussels on 4 December. If we want to keep global warming at below 1.5 degrees C we are looking at a transition which is unprecedented in scale. “We are not talking about a single solution, there are choices which have to be made”, agreed Artur Runge-Metzger from the European Commission. We need to drive forward highly productive sustainable land use by 2050, he said. This includes establishing new business opportunities, as well as increasing the capabilities of land and forests to store more carbon in future.

Drilling down into some of the possible opportunities, Pekka Leskinen Head of EFI’s Bioeconomy Programme focused on the role wood-based products could play. EFI’s new science-policy study shows that if we use wood-based products, we see lower fossil and process-based emissions, when compared to non-wood products. The substitution impact is a necessary but not sufficient factor to be taken into account in policy making. We need to take a more holistic perspective which considers also for example the role of forests as a carbon sink, harvested wood products carbon storage, and the synergies and trade-offs with the UN sustainable development goals.

An interactive panel discussion focused on the policy needs for low-carbon products – what could encourage the change to bio-based alternatives and support their competitiveness. The panel agreed that we need stable and predictable policies to encourage long-term investment and research, and collaboration between sectors. “It’s always hard to be first and drive innovation”, said Linda Rosén, CEO of wood construction firm Lindbäcks Group. Making it easier or more financially attractive is very important, as is assistance with market development and scaling up. The important role of public procurement policies in helping to create a market and increase demand for biobased products was highlighted by Katharina Knapton-Vierlich from the European Commission. The panel moderator, Lauri Hetemäki from EFI closed the discussion by stressing the importance of a carbon price. A high enough and economic wide carbon price will be a necessary transformational policy tool for closing the emission gap we have in order to reach a 1.5 to 2 degree target. A carbon price would also help to boost bioeconomy development.

The event took place at the International Press Centre, Brussels, and had 85 participants. The participants represented forest industry and forest owners (13), other stakeholders/ NGOs (25), research organizations (20), European Commission and European Parliament (6), countries (4) and international organizations (29, incl. participants from EFI). The morning session was concluded with the lunch with 80 participants. The event was followed live web-streamed or via video recording by 796 people.

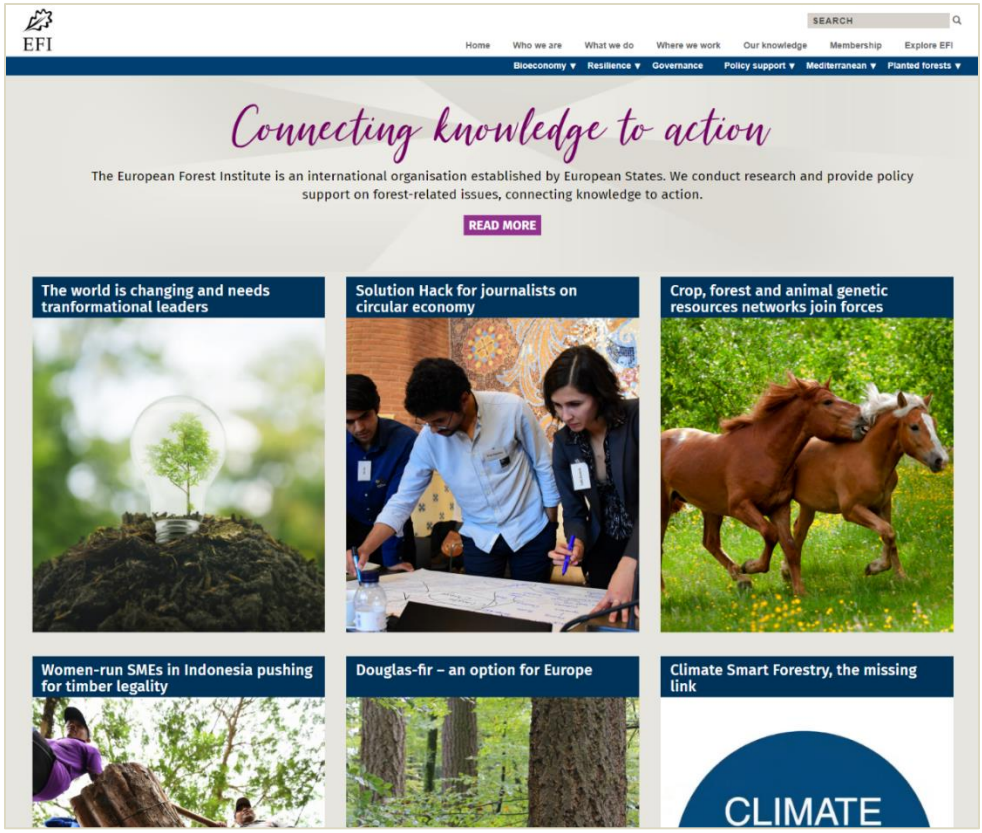
2.3. Other outputs

2.3.1. Online activities

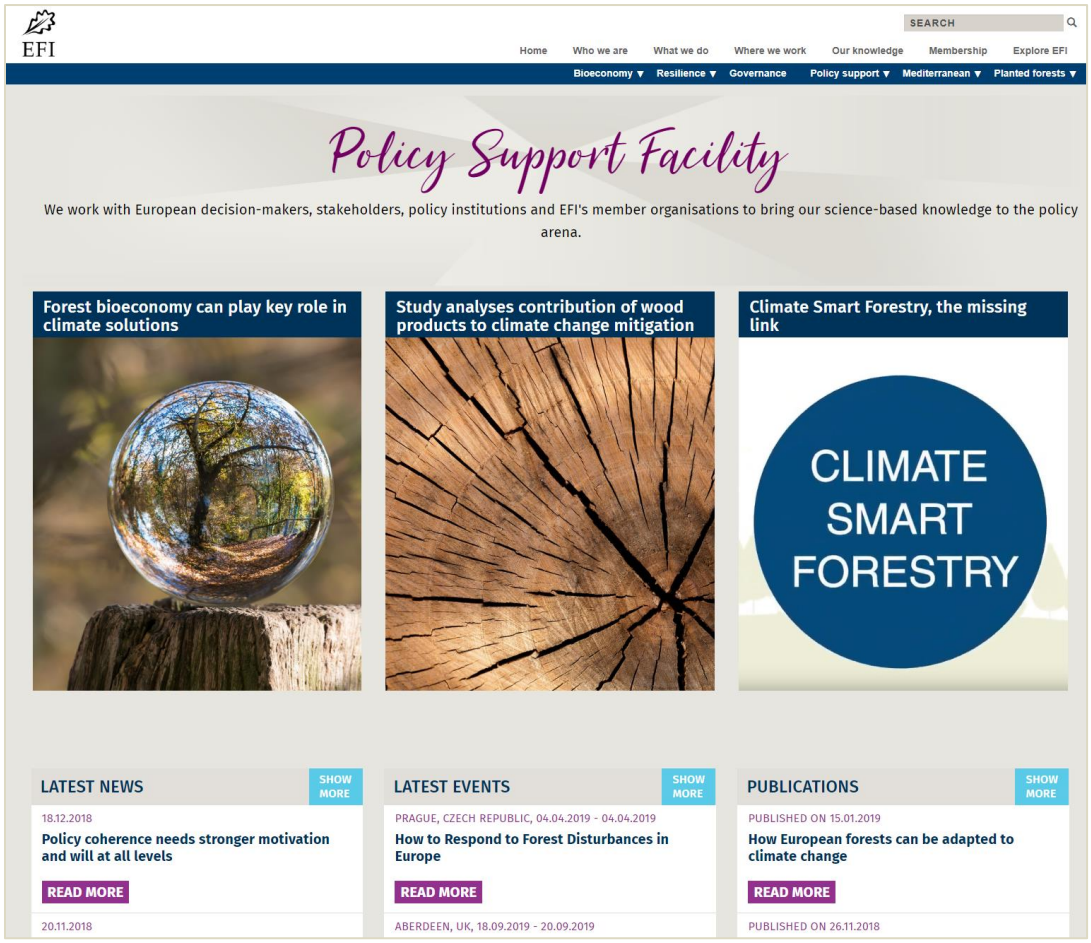
The EFI website is an important tool in MDTF communication activities, as it acts as a central, easily accessible source of information about policy support activities. The website aggregates content from and signposts users to all other channels, but is also the place where a lasting and easily accessible 'footprint' of MDTF-supported outputs is created, making it available to policy makers for future reference.

Policy support/ThinkForest webpages

The EFI website was redesigned, restructured and relaunched in March 2018.

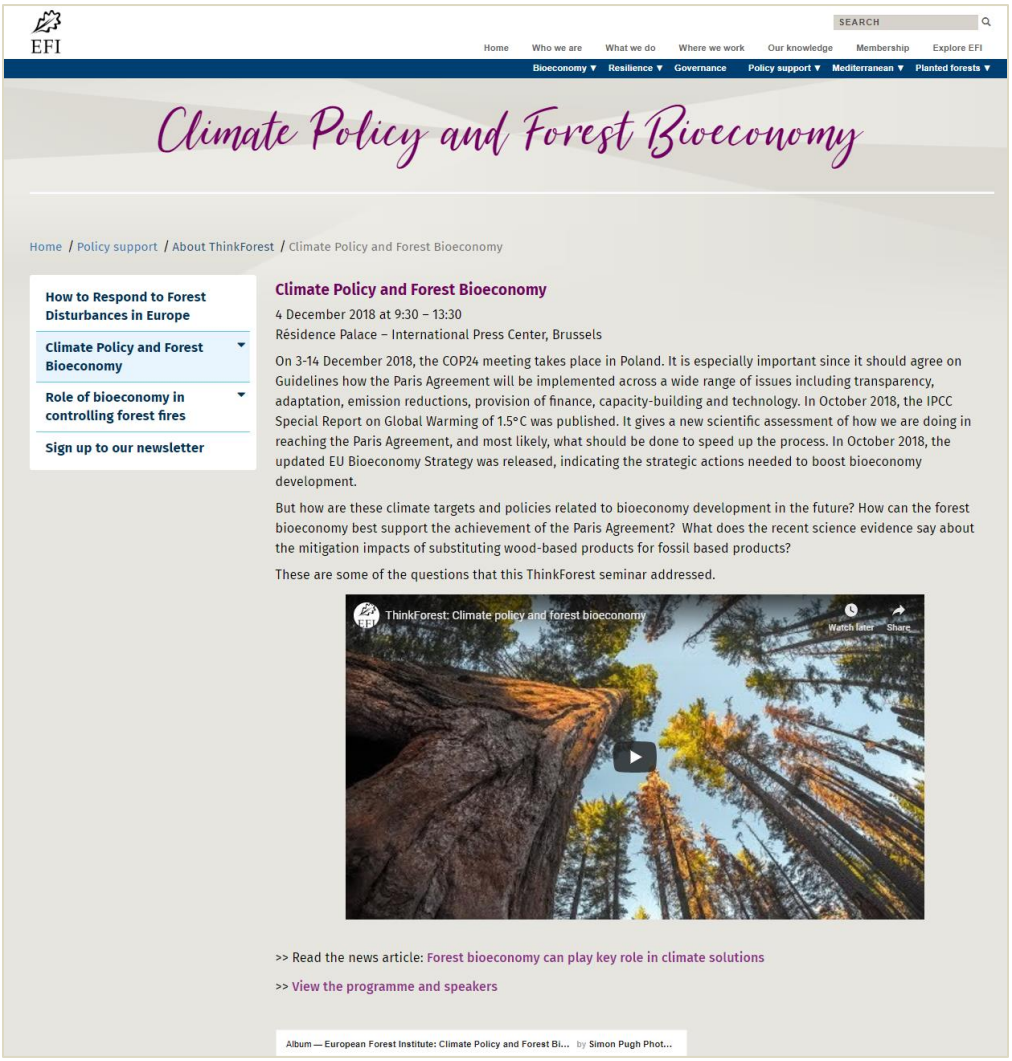


Policy support material can be easily showcased in the picture boxes on the EFI homepage (www.efi.int) and a dedicated Policy Support section (www.efi.int/policysupport) promotes the latest policy support and ThinkForest (www.efi.int/policysupport/thinkforest) activities, signposting to further information.



Each new ThinkForest event has its own dedicated webpage, including mini-biographies of key speakers, programme, background information etc. This is updated after each event to include relevant news releases, photos, presentations and videos.

https://www.efi.int/policysupport



Policy support publications are held in the site-wide Publications Bank (www.efi.int/publications-bank) which is updated as new reports are published.

Videos

Video continued to be used during 2018, with the aim of making ThinkForest events accessible to as wide an audience as possible. Two ThinkForest events (Madrid, May; Brussels, December) were successfully webstreamed live via the EFI YouTube channel. The full event recordings were made available afterwards, giving a lasting record of ThinkForest discussions.

Event	Livestream viewers	Average time watched	Countries *(top 5 viewers)*	Recording views 2018	TOTAL views
Climate policy and forest bioeconomy	107	35 minutes	27 countries (FI, DE, BE, PT, IT)	299	406

04.12.2018, Brussels					
Role of bioeconomy in controlling forest fires 29.05.2018, Madrid	114	25 minutes	14 countries (ES, IT, FI, PT, RO)	682	796

More details are available in the Annex in the Online Statistics section.

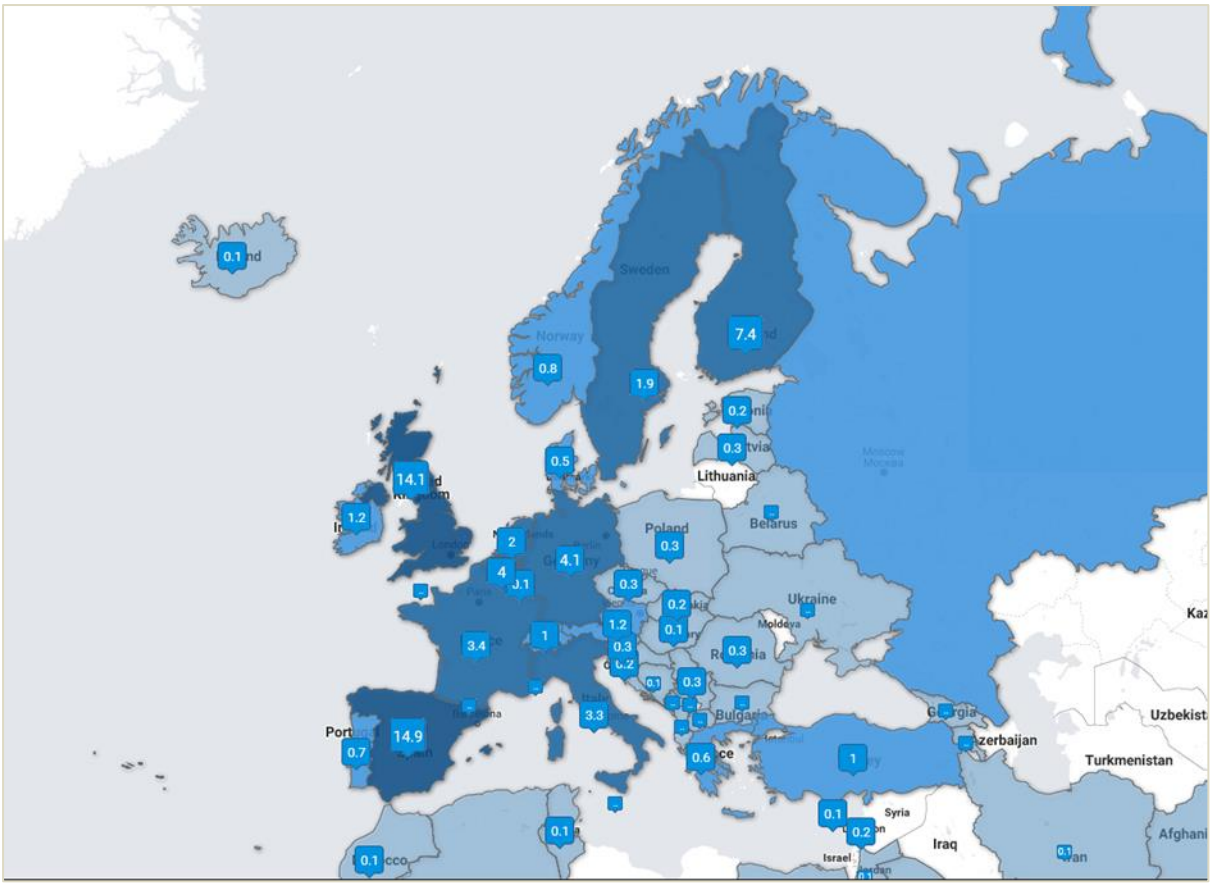
Social media

During 2018, MDTF-funded policy support work was promoted via EFI's social media channels, to reach a geographically widespread audience.

Social media channel	Number of followers *(31 Dec 2018)*	Number of followers *(31 Dec 2017)*
Twitter (main EFI account)	7,431	6,116
Facebook	6,515	5,253
LinkedIn	5,529	4,014
YouTube	731 subscribers	568 subscribers

Effort again focused on Twitter, which is used professionally by the policy maker audience. Tweets were broadcast from each of the 2018 ThinkForest events, which again saw good social media conversations by participants.

During 2018, there were 1,517 tweets from the main EFI Twitter account, which gained over 1,300 new followers. Within Europe, a high percentage of followers are based in Spain (14.9%), the UK (14.1%), Finland (7.4%), Belgium (4%) and Germany (4.1%). Other important areas globally include the US (7.7%) and Canada (3.3%).



EFI's global Twitter followers by country (percentages of total)

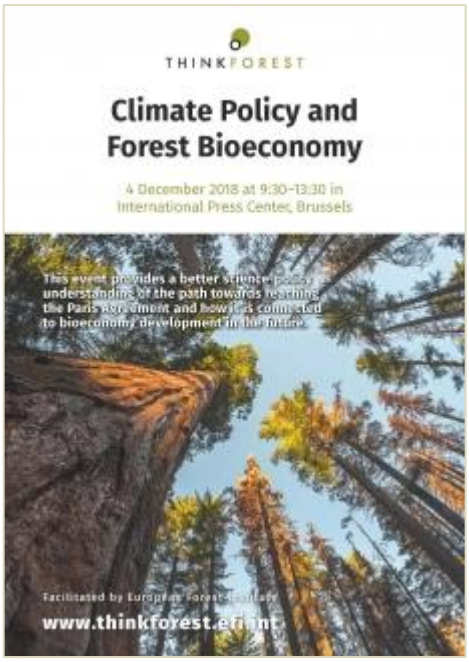
Electronic messaging

The capacity to send messages and invitations via the Apsis software system was again used in 2018. A total of 7 messages relating to ThinkForest events were sent by email to the new policy support mailing list and events list. These included 'save the date' messages, event invitations and reminders, as well as notifications of webstreaming.

More details are available in the Annex in the Online Statistics section.

Posters

Two A4 posters were produced to advertise ThinkForest events in 2018. These were made available in PDF (for example for use on the web) and printed formats, for ease of distribution. Printed posters were used at events, and distributed in Brussels (for example at the European Parliament).



There was active contact with the media during 2018, with news items/press releases and invitations to ThinkForest events.

A distribution list of relevant journalists was created for each event, and extensive use was also made of 'multipliers', i.e. news distribution channels such as AlphaGalileo, ScienceDaily, UNECE/FAO Forest Information Billboard, FAO Infosylva.

A dissemination plan was made for each ThinkForest event, and the results from dissemination activities were monitored and logged, using an off-the-shelf system (Meltwater) (see Table 5, Post-event media coverage).

Six press releases/news items were published in 2018:

Forest bioeconomy can play key role in climate solutions (05.12.2018)
Study analyses contribution of wood products to climate change mitigation (28.11.2018)
EC launches updated bioeconomy strategy (22.10.2018)
EFI supports Ireland's bioeconomy development (06.06.2018)
Using the bioeconomy to prevent forest fires (30.05.2018)
EFI facilitates high-level forest policy discussions (05.04.2018)

Press releases were sent to a distribution list of approx. 400 journalists, depending on the topic (see section 3.4 Media impacts).

Enlarging the MDTF

The MDTF started in January 2015 with 8 countries: Austria, Finland, France, Germany, Ireland, Italy, Norway and Sweden. In 2016 Spain joined, in 2017 the Czech Republic and in 2018 Lithuania. However, at the end of 2018, France stepped down from the MDTF.

Currently Central-, Northern-, Southern and Eastern Europe are all represented in the MDTF. During 2018, active efforts to engage more Southern and Eastern European countries to MDTF were taken by the EFI Director and Assistant Director.

3. Impacts

In general, the EFI MDTF Policy Support work has during 2018 received very positive feedback and it has reached a wide audience. The impact indicators given in this Report show a robust continuation of MDTF activities impact (see Appendix). In addition, the direct responses received from the network (see below), from the discussions EFI staff have had with policy makers, stakeholders and research institutes during 2018, as well as the numerous requests for expert presentations or statements based on the MDTF work support this conclusion. Besides the information reported below, during meetings and discussions that EFI's Director and Assistant Director had during 2018 with European Parliament MEPs, European Commission staff, national ministries and stakeholders, very positive feedback was given for the MDTF policy support work. This included in meetings and discussion with European Commission officials (e.g., Commissioner Phil Hogan, DG AGRI; DG Research Director and Head of Bioeconomy John Bell and Waldemar Kütt), national government Ministers and civil servants (e.g. Minister Andrew Doyle, Ireland; Minister Siim Kiisler, Estonia; Minister Henryk Kowalczyk, Poland), EFI Associate Member representatives, etc. In summary, the work has been very well received and pointed that it is a unique and needed platform for pan-European forest-based sector science-policy work.

3.1 Downloads

All MDTF publications are available in printed and online formats. Print copies were distributed at ThinkForest events, to policy makers in Brussels via EFI's Brussels Liaison Office, and were also sent to EFI's network of member organisations.

The electronic copies of these studies again proved extremely popular.
Included in the table below are details of all major *MDTF* publications produced to date (2015 onwards).

Title	Publication date	No of copies printed and distributed in 2018	No of electronic copies downloaded 2018	Lifetime copies downloaded
FSTP 7 (Substitution effects of wood-based products)	Nov 2018	500	1,666	1,666
FSTP 6 (Climate-Smart Forestry)	Mar 2018	500	1,515	1,515
WSCTU 8 (Forest-based bioeconomy), plus Summary	Dec 2017	450 (printed 2018)	4,235	5,580
FSTP 5 (Circular bioeconomy)	Oct 2017	n/a	2,327	4,947
FSTP 5 Summaries (EN, FR, DE, IT, ES, CN, RU)	Nov 2017-Apr 18	100 each (total 700)	1,497	2,061
WSCTU 7 (Natura 2000) plus Summary	Sept 2017	n/a	756	3,579
FSTP 4 (Forest bioeconomy indicators)	Nov 2016	n/a	1,107	5,682
FSTP 3 (Forest biomass, carbon neutrality)	Oct 2016	n/a	1,218	**15,531**
FSTP 2 (A new role for forests)	Dec 2015	n/a	796	10,839
FSTP 1 (EUTR-FLEGT)	Apr 2015	n/a	757	8,035

Detailed information is available in Table 2.

3.2. Feedback from stakeholders and network

ThinkForest seminars

In summary, the events have been considered to be timely and tackling topical issues. In particular, participants have appreciated that issues high on the political agenda have been brought to the discussion, and additional science-based information has been provided by the publications and ThinkForest events. ThinkForest events have been considered important e.g. by European Parliament and European Commission staff and Brussels-based stakeholders. Below are some examples of the comments received.

ThinkForest event on Role of bioeconomy in controlling forest fires (29 May)

This was the 2nd ThinkForest organized in cooperation with a MDTF country's Ministry (Ministry of Agriculture and Fisheries, Food and Environment, Spain), held at the Hotel Tryp Madrid Atocha. The event had wide reach, including an audience from Spain that usually does not attend the Brussels ThinkForest events. During the event, it was also followed by 114 viewers via webstreaming and after the event a video recording was watched by 682 viewers.

After the seminar, participants had the opportunity to get a virtual experience of being in the middle of a forest fire area by trying out Virtual Reality headsets. EFI Secretariat assisted participants in this task, and afterwards many positive comments were received about this experiment.

"Thank you for a well-organised and very interesting event with such a high-level programme. Should you have similar events in Spain in future, please keep us informed" (Embassy of Finland, Madrid).

ThinkForest event on Climate policy and forest bioeconomy (4 December)

This ThinkForest event was organized in the International Press Centre in Brussels. It gathered 85 participants mostly from Brussels. During the event, it was followed virtually by 107 viewers, and after the event by 299 viewers. The discussion in the event was exceptionally lively.

EFI's new science-policy study "Substitution effects of wood-based products in climate change mitigation" launched at the event was highly appreciated, and received many positive comments for its timely preparation. However, since the publication was launched so late in 2018 (4 December), it is still too early to judge its impact.

After each ThinkForest event, **a press release** on the event has been published at the EFI website. **As a follow-up, stakeholders have published news on their own websites** (see Table below).

ThinkForest event	Number of (web)articles
ThinkForest event on Role of bioeconomy in controlling forest fires, 29 May 2018	1 ministry 2 industry (agriculture/forestry)
ThinkForest event on Climate Policy and Forest Bioeconomy, 4 December 2018	4 industry 3 research

The detailed information is available in Table 4.

3.3. Expert presentations, statements and hearings

Two EFI *From Science to Policy* –series studies were published during 2018. The authors of the studies have presented the study results in many different forums. However, since the FSTP no. 7 was published very late in the year (4 December), there were few presentations of it.

Below, is a summary of the presentations, expert statements and hearings held in various policy and science-policy forums in 2018 and at the beginning of 2019:

Publication	**Presenter / event**
Climate-Smart Forestry: mitigation impacts in three European regions", FSTP 6 *(Published March 2018)*	1. Nabuurs, G-J. Invited talk at Green Deal Sustainable Forest Products: 'Chances for sustainable forestry from climate point of view'. Ridderkerk Netherlands. 27 Nov 2018 2. Nabuurs, G-J. Invited talk Prince Edward Island University (UPEI). Sustainable forestry practices for PEI: compatible ideas from Europe. 18 Nov 2018 3. Nabuurs, G-J. Invited talk at Universite Laval Quebec. European forests: challenges in meeting climate mitigation goals. 15 Nov. 2018 4. Nabuurs, G-J. Purdue University, Lafayette, IN, USA. Invited talk: European forests issues under climate change. 12 Nov 2018 5. Nabuurs, G-J. IEA Task 43. Invited lecture 'Role of European forests in provision of biomass under LULUCF Forest Reference level'. Uppsala. 30 August 2018. 6. Nabuurs, G-J. Invited Key note at Royal Swedish Academy, Stockholm. 'A principle choice – manage forest for wood production or leave it as a carbon sink'. 12 March 2018 7. Nabuurs, G-J. Invited keynote at KNAW symposium. 'Multi functionality in European Forests – the EASAC report'. 19 February 2018 8. Nabuurs, G-J. Invited talk at European Parliament: 'Bioenergy policy post 2020. Can Europe's forests supply sustainably under climate smart forestry?' Organised by Skogs- industrierna, Brussels, 9 Jan. 2018
"Substitution effects of wood-based products in climate mitigation", FSTP 7 *(Published Dec 2018)*	1. Verkerk, H. 2018. Mitigating climate change through Climate-Smart Forestry. FORMASAM kick-off meeting, 12-14 November 2018, Wageningen. 2. Verkerk, H. Climate Smart Forestry, BioMonitor and other outlook activities at EFI. Workshop on Exchange of Experiences in Forest Sector Outlook Studies and Related Work, Diabolo project final conference, Koli, Finland. 14 February **2019** 3. Leskinen, Pekka. Invited talk on Forest bioeconomy in climate change mitigation at World Resources Forum. Antwerp, Belgium. 26 February **2019**

3.4. Media impacts

Media invitations
Press invitations were distributed by email, using an off-the-shelf system, Meltwater. This allows you to create distribution lists based on country and the journalist's 'beat' (area of specialism), and to monitor whether each invitation has been opened.

Meltwater covers all journalists in the following countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Netherlands, Norway, Sweden, Switzerland, UK, USA. In addition, a separate in-house list of Brussels-based correspondents is used.

Event	Mailing list size	Press invitation to event *(% read)*	Media attendance	Organisation
Role of bioeconomy in controlling forest fires, 29 May 2018, Madrid	43	29%	0	n/a
Climate Policy and Forest Bioeconomy, 4 December 2018	400	20%	1	Caravan's journal

Media attendance and immediate coverage of events is often limited, with journalists mostly using events as an opportunity to gain background information on a subject. It is not possible to know how many journalists watch the livestream.

Media coverage
Post-event media coverage and ongoing media monitoring was also carried out via the Meltwater system. The 'Role of bioeconomy in controlling forest fires' ThinkForest event, held in Madrid in May, received the widest media coverage during 2018, reaching Spanish media outlets (See Table 5 for more details).

4. Reporting of expenses

4.1 Background

The general background principle for reporting of the funding and budgeting of the MDTF for 2018 is given here. Finally, due to the time lag between closing the accounts, as of the end of February 2019 (time of writing this) the financial accounts for EFI for 2018 have not yet been closed.

4.2 Expenditures by cost category

In 2018 the MDTF funded partial salaries of the Assistant Director managing the MDTF, communication officer responsible for the administration and event organisation, administrative officer responsible for administrative procedures of MDTF SC and communications manager responsible for the MDTF communication (partly funded by MDTF). During 2018, also the Brussels Liaison Officer was by partially covered by the MDTF funding. These salary costs were linked to the general management, planning, administration, communication, networking, and coordination of the MDTF work. All the other salaries paid from MDTF to EFI staff were related directly to specific policy support activities and Work Packages.

Besides the salaries, expenses related to the expenditure categories listed under the MDTF Guidelines (shown also in Chapter 1.2) were covered by the MDTF funds.

According to MDTF Guidelines, 13% is allocated to overheads (indirect costs). Compared to common practices, this is a very low share. For example, in European Commission Horizon 2020 overheads is 25% for research and innovation projects. Indeed, in the MDTF case, the 13% overheads can be viewed to cover the usage of EFI brand, some of the EFI staff costs (e.g., Director's work input, ad hoc and small administration work input), maintenance of administration software (e.g. budgeting software), office rent and office maintenance costs, etc. The staff costs related to the MDTF activities (e.g., coordination, management, administration, EFI lawyer costs related to subcontracting and country agreements, working for the publications and ThinkForest events) are reported under MDTF salaries, not overheads.

The activities under MDTF have been organized for administrative and cost following purposes under Work Packages (WP). In 2018, costs were related to following WPs:

1. FPS Multi-Donor Trust Fund General
2. FPS MDTF WP1: CSF FSTP No. 6 (2018)
3. FPS MDTF WP2: Madrid ThinkForest (2018)
4. FPS MDTF WP3: Climate substitution impacts (2018)
5. FPS MDTF WP4: Europe Post2020
6. FPS MDTF WP5: Afforestation and Plantation
7. FPS MDTF WP6: Bark beetle
8. FPS MDTF WP7: China-Europe Forest Bioeconomy

The expenses for 2018 are reported in the Table 4.1 next page.

Table 4.1 Expenses funded by MDTF, 1 January–31 December 2018*

Not included in the public version of the document.

5. Current and emerging forest-related policy issues and trends in Europe

According to the MDTF Guidelines *"EFI will provide on a yearly basis a broad overview (summary) of the current and emerging European forest-related policy issues and trends"*. This chapter seeks to fulfil this objective. This year the topic is *"The role of scientists in forest policy discussion"*. The motivation for this are several.

First, there has been increasing requests for evidence-based policy, especially in complex issues such as climate change, biodiversity and bioenergy questions. Scientists have also been active in this front, e.g. via science-policy platforms (e.g. EASAC) and Open Letters (e.g., Beddington et al. 2017, De Wever et al. 2017, Berndes et al. 2018). However, at the same time, science expertise is contested. Populist "post-truth" politicians and social media warriors have questioned the legitimacy of science-based information.[1] The issue is made also more complex due to the fact that there has been occasionally striking disparity between what the scientists' messages are (see the discussion below). Moreover, there is an increasing amount of science information available. According to UNESCO, almost 1.3 million scientific articles were published in 2014 alone. Clearly, the decision-maker needs scientists and science-based intermediary organizations that can synthesize the best science information in a format that is easily accessible, as IPCC or the EFI Policy Support Facility (PSF) are doing. But, science-policy support work has its own challenges, e.g., it can be impacted by pressures that mix science-evidence with vested interests. What are these, and how can they be dealt with? Finally, given that EFI MDTF for Policy Support has now been operating for four years, it is interesting to reflect what are the "lessons learnt" from it.

The Role of Scientists in Forest Policy Discussion

5.1 Background

"The science showing the extent of perverse effects of counting all biomass as renewable has become stronger. By not differentiating between renewable and non-renewable biomass, it is more likely that the Paris targets will be overshot." (European Academies Science Advisory Council, EASC 2019)

"Bioenergy from forest biomass is not carbon-neutral and can have seriously negative climate impacts. The combustion of forest biomass generally releases more carbon dioxide to the atmosphere than fossil fuels, because of the lower energy density and conversion efficiency of biomass (more has to be burnt relative to fossil fuels)." (De Wever et al. 2017)

"There is heated debate about the best way to realize the potential of our forests in the fight against climate change. In the EU, the debate is currently very much focused on questioning the use of forest

[1]One well know example being the quote from British politician during the Brexit referendum "people in this country have had enough of experts" (Michael Gove 2016). https://www.ft.com/content/3be49734-29cb-11e6-83e4-abc22d5d108c

biomass to produce bioenergy. Our view is that bioenergy from sustainably managed forests can contribute positively to climate change mitigation." (Berndes et al. 2018)

"The use of forest biomass for energy is likely to make economic and environmental sense if accompanied by a package of measures to promote best practices in forest management for climate change mitigation." (Berndes et al. 2016)

The above statements that science-based organizations or science groups have recently published clearly show that scientists are ready to get involved in public debate and that there are different views amongst scientists. Politicians, media and the public, especially in the EU, are also increasingly demanding evidence-based information to inform policy making on complex issues such as bioeconomy, climate change, biodiversity and bioenergy. According to Gluckman and Wilsdon (2016) *"Scientific advice to governments has never been in greater demand; nor has it been more contested."*

Some well-known examples of the science community providing policy support, or "informing policy", are the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which both published major new assessments in 2018. Also, other evidence-based forums, such as the European Academies' Science Advisory Council (EASAC), European Environmental Agency (EEA) and the recently established "Think 2030" platform by the Institute for European Environmental Policy (IEEP) engage actively also on forest-related issues. The EFI MDTF for Policy Support Facility and its ThinkForest forum are also working in this arena. Finally, scientists have been active also in publishing Open Letters or opinion articles in media in order to try to inform and influence policy making. However, what is sometimes puzzling for the decision makers and stakeholders, is that top level scientists do not necessarily agree on their messages. Sometimes exactly opposite implications are drawn for example on forest related issues (see below).

In this article, we address the following questions: What should the role of science be in informing policy-making? Why do scientists seem to disagree on forest issues? What is the experience and role of EFI's science-policy work in this? The approach we take to answer these questions is based on the already extensive science-policy literature (e.g. European Parliament 2015; Gustaffson & Lidskog 2018; Kaaronen 2016; Klapwijk et al 2018; Pielke 2007; UK Government Office of Science 2011; Tyler & Akerlof 2019; Wilsdon & Doubleday 2015) and experiences gained in forums such as the International Network for Government Science Advice (INGSA; Gluckman and James Wilsdon 2016) and the Royal Society (Royal Society 2011)**.**[2] Important for the assessment is also the experience and "lessons learnt" from the past four years of EFI MDTF for Policy Support work.

[2] https://www.ingsa.org/

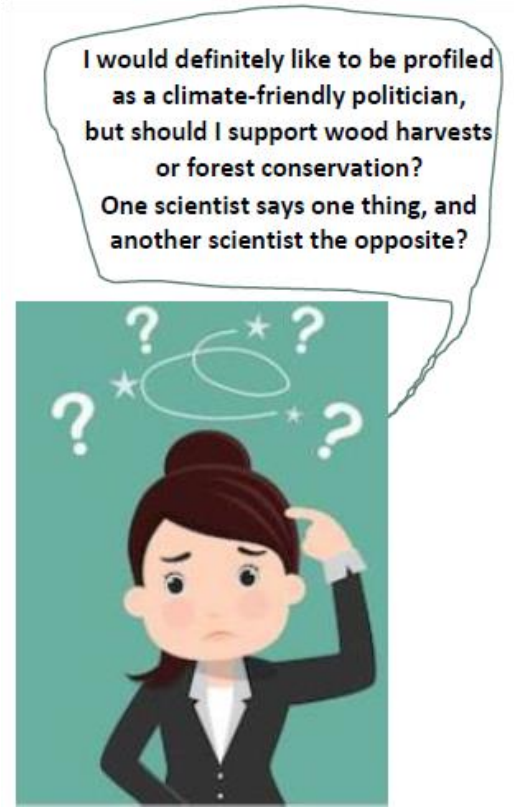


Image: Adobe Stock/thecaption9999

5.2 What should the role of science be in informing policy-making?

In order to assess the different roles that scientists can have in informing policy-making, it is helpful to use the four idealized roles that Pielke (2007) identifies:

1. ***Pure Scientist***. Scientist just provides information directly based on science, without worrying if the messages are relevant for the decision-maker. She is not interpreting the information and neither addressing its possible policy implications. Basically, the "pure scientist" is not concerned how that information is used - it is not the pure scientist's responsibility. *Example: You inform what science knows about forest carbon sequestration, but you leave it to the decision-maker to think how to use this information, and what are its possible implications, or what it means in terms of policies.*

2. ***Science Arbiter***. The scientist serves as a resource for the decision-maker, standing ready to answer questions that the decision-maker thinks are relevant. However the scientist does not pose questions herself, nor tell what the decision-maker ought to prefer. *Example: Decision-maker asks advice on the role of forest in carbon sequestration and how it can be increased. You advise on all the different possibilities to increase forest carbon sequestration and how much they impact this property, but you do not take a stand on what should be the preferred method.*

3. ***Issue Advocate***. The scientist tries to convince the decision-maker on one or few choices. The scientist is in effect telling the decision-maker what he or she ought to prefer. *Example: You advise the decision-maker that there is only one sensible choice how to use forest for carbon sequestration, e.g.*

by preserving all forests as a forest sink.

4. ***Honest Broker.*** The scientist provides information about all possible alternatives and perspectives arising from science, and then lets the decision-maker face the challenge to reduce the scope of choices. The scientist seeks to enable the freedom of choice by a decision-maker. *Example: You advice on all the different possibilities how to increase forest carbon sequestration, and how this property is related to many different factors (e.g. forest management, adaptation of forests to climate change, forest disturbances, different impacts in short-and long-run, etc.). You also advise that if you do A, instead of B., this would likely follow, and vice versa. However, you do not pose a preferred choice (e.g. between A and B), but let the decision-maker to come to her conclusions what is the desirable way to use forests for carbon sequestration, given all the information.*

For Pielke (2007), the role of "Honest Broker" is the preferred role for science. This is also the role that EFI Science Policy Support Facility seeks to play. However, whatever role scientists take, it does not hide the fact that they do not necessarily agree what would be the best information to give to the decision-maker. Why is this so?

5.3 Why do scientists seem to disagree on forest issues?

There can be several reasons why we observe scientists providing even strikingly different views on forest related issues to decision-makers. This type of disagreements is common e.g. in environmental, food and nutrition issues, as well as in forest issues. Some of the factors that may be behind the different views amongst scientists, or tend to work towards enhancing these, are: 1. *scientists values*; 2. *disciplinary perspectives*; 3. *cherry picking*; and 4. *media*.

Scientists' values: Scientists can claim to discuss only based on science, without never making explicit their personal values that actually influence the information they provide, or even lead to provide a certain type of advocacy. However, even the language employed by scientists can be laden with values. For example, scientists have debated the merits of talking about "invasive," "non-native," "exotic" or "alien" species, given that these are metaphorical terms that can have great significance in social and political debates. Moreover, it is evident that ethical and social values, like the desire to promote economic development or environmental protection, can play integral roles in science-policy work. The fact that research is often plagued by uncertainties and there's almost never one clear-cut "right" answer in complex issues such as climate change, gives room for scientists' values to play a role.

In addition, actions, e.g. in forests, can lead to outcomes in which there are trade-offs between different ways to use forests, such as, producing more wood or biodiversity. The uncertainties and trade-offs are particularly evident in dealing with wicked problems like climate change. For example, how can forests and forest bioeconomy mitigate climate change, and what would be the best way to do it? Moreover, if we are not only concerned with climate change mitigation, but also would like to simultaneously advance SDGs, things get even more complicated. In particular, there is bound to be trade-offs, and there could be temptation to give a preference for one action over another based on one's values. Given science support in this situation is especially demanding (McCollum et al. 2018).

For example, increased carbon mitigation through product substitution might result in increasing wood production that could pose a threat to biodiversity. Whereas carbon sequestration through forest sink aids also conservation goals, production goals of managed forests can be impeded. Thus, using forests for climate mitigation can results to different actions, which in turn may have different implications and trade-offs e.g. between wood production vs. nature conservation. For the sake of the example, assume that the mitigation impacts were equally large in the different options. Then the scientist's advice whether to choose between choice A or B and excepting certain trade-off is to some degree a value question. There is nothing wrong in values, as long as the science advice is transparent and its basis is made clear. That is, scientist should declare what is based on scientific evidence, and what on scientist's own values. To be ready and brave enough to say that "this advice comes also from my personal values or views, rather than being purely based on scientific facts".

Disciplinary perspectives: One challenges of science support is that there are alternative perspectives or discipline approaches, research questions and ways to define the scope of the research topic. This can be the case even if all seem to be researching the same topic, and be equally well-based to advise on it. The discussion if one advice is "better" than another, easily becomes an issue between different disciplines – such as ecologists vs. forest scientists - and a question of what type of criteria one uses to evaluate who has the best knowledge.

A good example illustrating this point is from the USA, but similar cases can be found also in Europe, as the quotes in the beginning of this article show. In 2009-2010 two letters by eminent scientists were sent to the US Congress (Schlesinger et al. 2009; Lippke et al. 2010). The letter by Schlesinger et al. (2009) expressed concerns about using forest bioenergy. It noted that land converted from natural forest to bioenergy crops has the net effect of releasing otherwise sequestered carbon into the atmosphere, even if the carbon is subsequently sequestered. Thus, the timing of the conversion becomes an issue. The letter further observed that the "replacement of fossil fuels with bioenergy does not directly stop carbon dioxide emissions from tailpipes or smokestacks." The second letter sent to the Congress (Lippke et al. 2010) criticised the views expressed in the first letter (without mentioning it as such). It expressed concern over equating biogenic carbon emissions with fossil fuel emissions. The scientists argue that an approach focused on smokestack emissions, independent of their feedstocks, would encourage further fossil fuel energy production and increase atmospheric concentrations of greenhouse gases. The letter notes that although the issue appears to centre on biomass carbon neutrality, it is more complex. For example, biomass carbon releases are different from those of fossil fuels not only in magnitude, but also in that biomass burning does not release net permanent additional amounts of carbon into the biosphere. By contrast, burning fossil fuels, which hold carbon captive, does release net, permanent, additional amounts of carbon.

The letter by Schlesinger et al. (2009) has 87 signatories and the bulk of them represent biological, ecological and environmental science. On the other hand, the 114 signatories of the letter by Lippke et al. (2010) represent mainly forest scientists, engineering and biomaterials sciences. In general, it is not unusual that similar pattern of contrasting views on how forest should be used are found between e.g.

ecologists and forest scientists. Maybe this is partly explained by the basic premises from which the different disciplines analyse forests?

To simplify, ecologists tend to analyse the forests and its organisms and fauna without connecting it to society, whereas forest scientists analyse forests together with the interactions with the society. For the former, forest issues may present themselves purely from a natural science perspective, whereas for forest scientists forests may mix natural science and social science perspectives. In addition, it could be that the scientists from different disciplines may to some degree have somewhat different values, as well as associate themselves to different reference groups. It could be that on average ecologists' values tend to stress more nature protection and they associate themselves more with environmental NGOs than forest scientists. The latter may value more the benefits of using forests for different purposes, and associate themselves closer to forest owners and forest owner and industry than environmental NGOs (Eriksson & Klapwijk 2019). This is of course stereotyping the scientists, but may bear some truth in it. If so, it could also explain why scientists have different views, and that some of these views may not originate purely based on science results, but rather from the different perspectives on the issue.

Cherry picking: Either scientists or the policy-makers can pick-up only the evidence that supports their own beliefs or interests, and ignore the other evidence pointing to different implications, i.e. cherry-picking. The scientists can do this e.g. because of the narrow disciplinary perspective, discussed above. For example, ecologists may ignore forest scientists' research and vice versa. In addition, the scientist's values may play a role in the cherry picking. On the other hand, science advisors may become the subject of "policy–making" when the decision-maker wants to pick only selected information from the scientist, i.e. that part of the information that supports the decision-maker's own agenda or interests, and disregards information that has the opposite impact.

For example, Ministries tend to use the scientists for policy support from those institutes that they either control, or that tend to be more in line with the polices of the Ministry. For example, the Ministry of Agriculture and Forestry in Finland tends to ask advice from the researchers of the Natural Resources Institute (LUKE), which it governs, while the Ministry of Environment has a tendency to use the Finnish Environment Institute (SYKE), which it governs. Similarly, the Ministry for Food and Agriculture in Germany tends to rely on scientists from the Thünen Institute, whereas the Ministry of Environment favours scientists from the German Environment Agency (UBA) and the German Federal Agency for Nature Conservation (BFN). Similarly, it can be that scientists funded by business such as engineering sciences, may be more inclined to produce views that support their funders views. One of the most well-known and notorious example of the latter type of influence is the tobacco industry-funded scientists.

"Politicians use science in the same way that a drunk uses a lamp-post for support rather than illumination" [3]

[3] This is the present author's modification of the quote by Andrew Lang from 1910, who said: *" Politicians use statistics in the same way that a drunk uses lamp-posts—for support rather than illumination."* https://en.wikiquote.org/wiki/Andrew_Lang

Media: One factor that tends to heighten the "disagreements" between scientists is the media. The media likes conflicts and it may have a tendency to over-report or overstate the disagreements. Especially the issues related to climate change are now high on the media agenda and in public interests, and it provides a good ground to dwell on this aspect. However, also the scientists may have incentives to use the media attention for their own purposes, and expressing their views in a more simplistic and extreme ways than they would do in a science forum. The increasing influence of social media may well have strengthened these tendencies in recent years.

5.4 The experience and role of science-policy work

Background

Starting from beginning of 2015, the Multi Donor Trust Fund for EFI Science Policy Support Facility (PSF) has been active. When writing this (February 2019), it had published 10 science-policy reports, 10 ThinkForest briefs or Executive Summary publications based on these reports, 15 Science Supporting Policy-Making Newsletters, and held 13 ThinkForest science-policy forum events, and 2 Media workshops.[4] In total, 131 scientists, of which 16 were from EFI, from 18 different countries had taken part in writing the reports. The government representatives from 8-10 different European countries have been steering the work agenda of the PSF. External evaluation of the PSF work was carried out in 2017.

EFI science-policy studies are neutral – nonpartisan and interest group free – science-based publications involving relevant and different scientific disciplines and approaches.[5] The funding and steering of these studies should accordingly follow these principles, and not seek to influence or impose any agenda. The work carried out by the PSF is based on already existing research. The PSF collects, coordinates and synthesizes it, as well as disseminates it in a format targeted to policy support. In doing so, the PSF capitalizes particularly on EFI and its member organizations' (120) research and networks, and also on global scientific knowledge from other organizations and other disciplines. The members of the PSF Steering Committee (SC), consisting of the government representatives of the funding countries and the EFI Director, can propose topics to be included in the work plan. The members of the Steering Committee **comment and approve** the study **proposals**, which describe the general study topic and questions it addresses. The EFI Assistant Director, who coordinates the PSF work, with the help and advice from the EFI Scientific Advisory Board, chooses the scientists and reviewers. When choosing the scientists, the most important criteria is the quality and expertise of the scientists on the topic of the study. In addition, the objective is to seek to have a geographical and gender balance in the science team. The members of the Steering Committee have an opportunity to **provide commenting** to the study manuscripts, but **not to review** them, before they go to print. The decision to take or not to take actions based on the SC comments

[4] Seven *From Science to Policy* –series reports, two *What Science Can Tell Us* –series reports, and one *White Paper* –report. https://www.efi.int/policysupport/publications

[5] EFI Policy Support Facility Activities and Operational Guidelines and Multi-Donor Trust Fund Rules (EFI Internal document.

rests on the scientists of the study report series. This procedure is to guarantee the **integrity of the PSF science-based work**.

In terms of the impact, robustness and how it has answered to the needs, the PSF appears to have performed well according to the external evaluation (Mayer et al. 2017). This view is also supported, e.g., by the external survey of PSF science-policy studies and ThinkForest events (Pülzl 2017), and the impact statistics reported in the PSF Annual Reports[6]. However, here we are more concerned about the lessons learnt in terms of how the science-policy interface has worked in the PSF, and what are the implications we can draw from it, rather than the impact as such.

5.5 Lessons learnt from EFI policy support work

The author of this article has been managing and responsible for coordinating the PSF work since its start in 2015. This gives at the same time first-hand experience of the lessons learnt, but is also subjective. Thus, in order to try to give the views more general meaning, the experiences of PSF work will be reflected against the insights from the science-policy literature and to other science-policy forum work, when possible.

Lesson 1: There is a clear demand for science-policy work

The establishment of the the PSF was the result of the demand for such a work by the funders, i.e. several of the EFI Member Countries. There was no other institute or group doing such a work on pan-European forest related topics, and neither was there any science-policy dialogue platform such as the ThinkForest forum. In 2014, there were 5 countries that expressed a need for establishing and willing to support the PSF. This group quickly enlarged to 8 countries in 2015, and in 2019, 11 countries are supporting it. This development is one indication of the increasing demand for such work.

The increasing demand for evidence-based information to support policy-making is a general trend, as discussed also above. Typically, policy-making requires a good understanding of multiple and complex issues with wide coverage of different aspects, i.e., a synthesis on a topic. However, mainstream science is built to go the other way. Science structures and incentives have developed over time to look at more and more specialized entities or smaller focus areas. As a result, there is a general lack of synthesis reviews which can say what the science community knows on a particular topic at a more holistic level. Indeed, often the bottleneck for decision makers is not the shortage of science-based information, but rather the lack of synthesis studies written in a format that is generally understandable and helpful for supporting policy planning.

However, analysing and coordinating holistic scientific reviews on a topic is very demanding. It requires input from a broad range of perspectives and interdisciplinary work to form a synthesis review. In practice, this typically demands effective coordination and cooperation across a number of different research institutes in different countries. Carrying out such studies is challenging also due to a lack of funding

[6] PSF Annual Reports can be downloaded here: https://www.efi.int/policysupport/ourwork

instruments for this type of synthesis or policy supporting studies. Traditional research funding is directed to new research often on very specific topics, and research which aims to be published in peer-reviewed academic journals. Yet, in the ever more complex, cross sectoral and rapidly changing European forest-based sector the importance and need for this type of synthesis studies is increasing, and therefore also funding for these type of activities should increase.

Lesson 2: Mixed reactions for EFI policy support work

When EFI policy support started with the ThinkForest science-policy forum events in Brussels, it received mixed reactions from stakeholders, especially from some of the lobby organizations in Brussels. For example, some felt that EFI was a competitor for them in providing forest related information to the European Parliament and European Commission, and consequently were negative to the new role EFI had in Brussels. They also thought that scientists' role was to stick just to doing research, not to engage with the policy makers. On the other hand, some stakeholders, European Parliament MEPs and European Commission civil servants warmly welcomed the initiative by EFI.

Over the years, the criticism of the EFI science-policy work has tended to decrease, e.g., some of the lobby groups that were critical in the beginning have later expressed keen interest to cooperate with EFI science-policy work. As regards the EFI science-policy studies, they have in general been well received, referred to and used as a source policy documents or stakeholder group Press Releases, etc. Naturally, depending on the particular study, the interest groups or civil servants that find the information in line with their own interests, tend to flag and refer to these studies, and vice versa.

One case can be recalled, in which explicit criticism to EFI science-policy study on Climate Smart Forestry was received from the European Commission. The EC unit felt that the study sent a different message that they wanted to communicate. They complained e.g. that it was worrying that European Parliament MEPs had contacted them and referred to EFI study as providing information that for a certain aspect backed a different type of policy than the one EC DG was promoting. This reaction can be regarded as understandable, although it does not necessarily imply that there was something wrong in the study as such. It just did not fit to the agenda that the unit was promoting. This is of course a general feature of all science policy work. There tends always to be a party that does not necessarily agree with the findings of the scientists' because these can be regarded not to support or be in line with their own interest or policies. Yet, this should in no way lead to censoring such studies, as this would greatly compromise the usefulness of science-policy work. The fact that science-policy studies do not necessarily give support for existing policies, will always be a possibility, and it is a feature which should be thought of as normal and unavoidable.

Indeed, one of the strengths of the EFI science-policy work is the freedom that it can also analyse the European Union (European Commission) policy documents. This is a feature that e.g. the EU internal science-policy unit, Joint Research Centre (JRC), does not have. The role of JRC is restricted to what can be called as "technical" evidence-based support for the EU, rather than policy support in the sense that the EU policies could be analysed and policy implications provided.

When there is outside criticism or pressure on the science-policy work, it is very important to assess its basis and nature. If it can be clearly pointed that there are mistakes in the studies, or in someway biased information, these should be immediately addressed and corrected transparently. In order to minimize such problems arising, e.g., all the EFI science-policy studies are submitted also to external review, although the study series in which they are published, is not classified as a peer-reviewed series.

Lesson 3: Integrity of the science work is the foundation

The science-policy support is useful only if the integrity of the scientists work is guaranteed. If there is any evidence of interest-based bias or influence from third parties, the credibility, and therefore, the usefulness of the science-policy work is compromised. The science integrity is the most important precondition for useful evidence-based information.

In order to secure the integrity of the EFI science-policy work, the PSF Guidelines set clear rules how the work is carried out (see above). Basically, the role of funders (EFI Member Countries) is clearly separated from the actual work that scientists carry out. There has been continued dialogue between Member Countries steering the PSF work, and the EFI Secretariat coordinating the work, on how to best draw clear line between Member Countries interests and the integrity of the science work. Naturally, the Member Countries have high interest and their own policy lines in topics such as, e.g., forest and climate polices, forest bioenergy polices, and forest biodiversity. If the EFI studies on these (or other) topics are producing information and implications that are not in line with these interests and policies, it is naturally of concern for the funders of the studies. Yet, this situation has to be accepted. If the actual studies were adjusted according to the interests of the funders, the EFI science-policy work would immediately lose its credibility, and therefore its usefulness. In the end, this would neither be the long-run interest of the funders, although they might occasionally wish for different kinds of results from the studies.

The experience based on the 10 science-policy studies that have been carried out under PSF shows, that also scientists have different values, interests and disciplinary limitations. This is of course not surprising, since it is difficult to imagine a scientist without such personal qualities. For example, the personal background and education leaves a mark to each of us. These personal features tend to become more visible especially when the conclusions and policy implications of the studies are discussed in the science groups carrying out the studies (typically between 8-12 scientists in the EFI studies). There is nothing wrong in this as long as it is transparent. That is, if a scientist promotes a certain conclusion or policy implication based on her/his personal view or values, rather than as a direct follow-up from the science evidence, this should be made transparently clear.

Lesson 4: Embrace holistic view and use multidisciplinary and multi-country study teams

The themes addressed by PSF studies have been complex and multifaceted, such as forests and climate change or bioenergy, which span a diverse array of scientific communities and disciplines, makes the work challenging. It has become impossible for researchers to comprehensively track and keep up with all the progress with these type of topics. On the other hand, the policy maker is typically in a position in which she has to consider all the dimensions of the political decision at the same time. For example, when

considering climate policy and forests, it is necessary to consider the ecological, economic and social dimensions at the same time. Moreover, there may be also feedback effects between these different dimensions. That is, decision A might seem the best if analysed only from the ecological perspective, but if economic and social realities are also considered, also from the ecological perspective decision B might be better than A.

Given the above situation, the most helpful approach has turned out to be to get the different approaches and disciplines to provide a common synthesis, rather than everyone providing advice from their own perspectives and with like-minded colleagues. Since it is a fact that there are disciplinary differences and ways to approach certain policy-relevant questions (see above), it is important to compose the study teams so that they represent different disciplinary expertise, and not only "like-minded" scientists. Interestingly, it may also be that scientists in different countries can to certain degree tend to approach the forest issues from different perspectives. Consequently, it is also helpful if the study teams consist of scientists from several different countries.

Analysing and coordinating holistic scientific reviews on a topic is very demanding. In practice, this typically demands effective coordination and cooperation across a number of different research institutes in different countries. Carrying out such studies is challenging also due to a lack of funding instruments for this type of synthesis or policy supporting studies. Traditional research funding is directed to new research often on very specific topics, and research which aims to be published in peer-reviewed academic journals. Yet, in the ever more complex, cross sectorial and rapidly changing European forest-based sector the importance and need for this type of synthesis studies is increasing. This is what the EFI PSF has facilitated on pan-European forest-related topics, but there is need for these type of activities also at the national level. This would naturally require also national funding for such activities.

It is very welcome that new science-policy facilitators have emerged, such as the science-policy platform for the European Academies Science Advisory Council (EASAC) established in 2001. However, for the benefit of all science-policy work, it is important that these facilitators also operate transparently, especially if they represent a wide mandate. For example, EASAC states that its publications represent the views of the 27 European Academies that are its members. In line with this, EASC reports or press releases do not include any *disclaimers* as to whose voice these represent.[7] On the contrary, EASAC stresses that it speaks "with a common voice with the goal of building science into policy at EU level are presented as representing the EASAC members, i.e., all the European academies".[8] However, it is unclear to what extent

[7] For example, all the EFI science-policy publications have a disclaimer stating that *"The views expressed in this publication are those of the authors and do not necessarily represent those of the European Forest Institute, or of the funders*" (= governments of the countries funding EFI science-policy studies).

[8] "EASAC stresses that it is formed by the national science academies of the EU Member States to enable them to collaborate with each other in giving advice to European policy makers. It thus provides a means for the collective voice of European science to be heard. With the growing importance of the European Union as an arena for policy, academies recognise that the scope of their advisory functions needs to extend beyond the national to cover also the European level. Here it is often the case that a trans-European grouping can be more effective than a body from a single country. The academies of Europe have therefore formed EASAC so that they can speak with a common voice with the goal of building science into policy at EU level." (EASAC 2017)

it actually can represent all the European Academies views, rather than the authors of the specific studies and possibly the views of the EASAC Secretary. Neither is it clear if the EASAC studies have been subject to external independent review, and what role the Secretary plays in formulating the reports. Given that EASAC work is very welcome and important, more transparency in the work procedures would benefit the users of this work, as well as general credibility of science-policy work.

In summary, it is important for the coordinators of the science-policy work seek to advance holistic, multidisciplinary and transparent science-policy work. The scientists carrying out such work, and the organizations facilitating this, should not impose their own agendas or interests to their science-policy work. It is unavoidable that all actors have personal values and interests, but they should be transparently kept separate from the science evidence, and be clearly stated if they impact the views they communicate.

Lesson 5: Science evidence is necessary, but not sufficient for policy-making

Sometimes scientists may have the understanding that they have the sufficient knowledge-base for wise policy-making. This view is supported by the fact that they are the best experts in science-based evidence. Yet, it has been argued, that assessments based entirely on academic papers are not sufficient (McCollum et al. 2018), although it may be necessary. This is especially true when reviewing a body of literature as broad as climate change or the SDGs. A reliance only on academic databases and peer-reviewed journals would miss seminal studies in the so called *grey literature*, such as OECD reports, European Commission assessments, non-reviewed research reports or technical working papers, or even IPCC and IPBES assessments. Thus, it is advisable that the science-based review studies pay also attention to this type of grey literature when forming the synthesis.

Even more important is to understand the limitations of science knowledge in today's complex information society (McCollum et al. 2018; Hellström 2018). Many policy problems are large and complex, as is the information environment too. In addition to science knowledge, "useful evidence for policymaking can also be derived from foresight activity, social experiments, contextual knowledge and a tacit knowledge of practices" (Hellström 2018). Valuable information for policymaking is also created through co-creation, dialogue and deliberation with key stakeholders. In future, it is likely to be created also increasingly through advanced data analytics and artificial intelligence. Yet, in the end the policy decision is made by policy maker, and therefore, it is political not scientific. In most societies these decisions rests on democratic mandate, and so it should be.

It is not enough for the science-policy facilitators to stop at written reports. Given the complex setting of policy-making, one essential part of science-policy work needs to be also communication and science-policy dialogue. The aim of these are to distribute knowledge and engage scientists, policy makers, and the problem's associated stakeholders and experts in joint interpretation and sense making of various types of evidence and perspectives. Dialogue, which is essentially about discussing and thinking together, "is a necessary tool for broadening the rigid mental frames of the participants. It also helps to identify where common ground can be found and where disagreements exist and why" (Hellström 2018). The EFI ThinkForest forum serves exactly these purposes.

In summary, it is unrealistic to think that science-policy work alone would be sufficient, especially for complex or wicked policy issues, such as how to combat climate change. Many non-scientific organizations, such as OECD, World Bank, European Commission, and the grey literature in general, can produce relevant and important information. In a democratic society policy decisions should also in the end be "political", and draw from voters mandate for policy makers to make decisions. Other considerations than science alone may be needed for these.

Moreover, it is not rare that the scientists' answer might be "we need more research in order to be able to answer". However, even in this case, scientists may contribute by asking questions that nobody else is asking, but which are important for politicians to consider. Finally, it should not be forgotten that science-policy studies - the systematic reviews and synthesis studies (like the PSF studies) - can also be valuable for new research, e.g., by summarizing the state-of-art knowledge and by pointing research gaps and new research questions.

"A wise man proportions his belief to the evidence"
David Hume

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6. Conclusions

The year 2018 was the 1st year of operation of the new cycle of MDTF (2018-2020). It was a year in which many new activities were still planned, and activities are typically less than during the 2nd and 3rd year of the MDTF cycle. In 2018, two ThinkForest seminars and two *From Science to Policy* –reports were published. In addition, the Executive Summary of *From Science to Policy 5*: "Leading the way to a European circular bioeconomy strategy" was translated into Chinese, French, German, Italian, Russian and Spanish. During 2018, also a new country joined the MDTF, Lithuania. Work to still enlarge the MDTF with new countries in the future also took place in 2018 (with Poland and Slovenia). The cooperation with the European Commission continued, for example, with the bioeconomy work.

Despite acknowledging the difficulties of measuring the impact of MDTF science-policy support work (the impacts are likely to be gradual and at least partly indirect), the indicators related to ThinkForest event participation, publication downloads, requested expert presentations, statements and hearings based on the studies, social media activities, and direct communication from the network members, all indicate great interest in MDTF work and activities.

For the MDTF type of work, usually the most one can wish for is to be able to inform and bring new insights to decision makers and stakeholders, ask relevant questions others are not asking, and inform and impact the policy discussion. The evidence reported in this report indicates that MDTF work has been successful in many, if not all of these. In terms of timing, the publications and events seem to have been right, coming out when they were needed, and in a format that was fitting for the needs.

Since there is no other similar platform, or other organization, engaging in such a pan-European forest-based sector related science-policy work, it is difficult to compare (benchmark) the work to others. In fact, exactly because of this, many policy makers and EFI Associate Member organizations have expressed their interest to support EFI MDTF work. Given these responses and the information provided in this Report, the MDTF work appears to have reached well the set objectives for 2018.

Finally, the EFI Policy Support Facility team gratefully acknowledges the donors and Steering Committee for supporting the work, and providing strategic guidance for it. All the members of the Steering Committee have been very supportive. We wish to thank the Steering Committee and its Chairs in 2018, Noel O'Connor (Ireland) and Taina Veltheim (Finland) for efficient work and support. Also, we wish to thank all the scientists who have contributed to the studies and activities in 2018! The support from the EFI Director has also been very important for this work.

Annexes

Table 1: Country funding contributions (not publicly available).

Table 2: Online statistics

Table 3: Number of ThinkForest participants according to background

Table 4: Stakeholder follow-up articles related to events and publications

Table 5: Media coverage

Table 6: Publication citations

Table 1: Country funding contributions *(euros)*

Not publicly available.

Table 2: Online statistics

Publication statistics

Title	Publication date	No of copies printed and distributed in 2018	No of electronic copies downloaded 2018	Lifetime copies downloaded
FSTP 7 (Substitution effects of wood-based products)	Nov 2018	500	1,666	1,666
FSTP 6 (Climate-Smart Forestry)	Mar 2018	500	1,515	1,515
WSCTU 8 (Forest-based bioeconomy), plus Summary	Dec 2017	450 (printed 2018)	4,235	5,580
FSTP 5 (Circular bioeconomy)	Oct 2017	n/a	2,327	4,947
FSTP 5 Summaries (EN, FR, DE, IT, ES, CN, RU)	Nov 2017-Apr 18	100 each (total 700)	1,497	2,061
WSCTU 7 (Natura 2000) plus Summary	Sept 2017	n/a	756	3,579
FSTP 4 (Forest bioeconomy indicators)	Nov 2016	n/a	1,107	5,682
FSTP 3 (Forest biomass, carbon neutrality)	Oct 2016	n/a	1,218	15,531
FSTP 2 (A new role for forests)	Dec 2015	n/a	796	10,839
FSTP 1 (EUTR-FLEGT)	Apr 2015	n/a	757	8,035

Policy support electronic newsletter

Five editions of the policy support newsletter, *Science Supporting Policy-making* were sent by email to subscribers during 2018.

Edition	Date	Number of subscribers	% read
5-2018	12.12.2018	592	51%
4-2018	20.11.2018	577	52.4%
3-2018	21.09.2018	536	50.3%

2-2018	21.06.2018	500	50.7%
1-2018	09.04.2018	2204	29.9%

Electronic event invitations

Seven event invitations were sent by email to subscribers during 2018:

Event	Date	Number of subscribers	% read
Live ThinkForest webcast 4.12.	03.12.2018	558	45.4%
Register now: ThinkForest seminar on Climate Policy and Forest Bioeconomy, 4.12.18	02.10.2018	514	49.2%
Live ThinkForest webcast: 29.05.2018	28.05.2018	354	51.4%
Reminder: Role of bioeconomy in controlling forest fires, 29.5.2018	03.05.2018	2185	27.1%
Invitation: Role of bioeconomy in controlling forest fires, 29.5.2018	24.04.2018	44	31.7%
Invitation: Role of bioeconomy in controlling forest fires, 29.5.2018	16.04.2018	125	37.2%
Invitation: Role of bioeconomy in controlling forest fires, 29.5.2018	11.04.2018	25	32%

Social media

Twitter

1,517 tweets were sent out during the course of 2018, and by the end of the year, the EFI Twitter account had 7,431 followers. This represents an increase of 1,315 new followers during 2018.

Twitter, 2018	Tweets	Gain in followers
Jan	124	129
Feb	92	105
Mar	132	180
Apr	102	108
May	159	104
Jun	92	88

Jul	107	97
Aug	80	60
Sep	142	88
Oct	143	118
Nov	219	129
Dec	125	109
Total 2018	**1,517**	**1,315**
Total 2017	**1,995**	**1,288**

EFI's other social media channels were also utilised:

Other channels	No of policy support-related posts, 2018
Linked In	11
Facebook	26

Videos

Two policy support videos were published on the EFI YouTube channel in 2018:

Video	Published	No of views 2018
Climate policy and forest bioeconomy	04.12.2018	299
Role of bioeconomy in controlling forest fires	29.05.2018	682

Previous video material:	Published	No of views 2018	Lifetime views
Looking ahead to a circular European bioeconomy	07.11.2017	284	723
Implementing Natura 2000 in forests: lessons learned and looking ahead	27.09.2017	105	589
Leading the way to a new European bioeconomy strategy	10.05.2017	390	1,419
Building an innovative and resilient forest bioeconomy	15.11.2016	70	570
Building the bioeconomy: insights from European strategies	08.06.2016	101	927
Climate policy after COP21: Implications for the European forest-based sector	15.03.2016	11	557
7 videos from COP21 event: Climate policy targets – How can European forests contribute?	04.01.2016	152	1,069
Towards Paris 2015: How can the forest sector contribute?	Oct 2015	25	883
Bioeconomy is the future *(Göran Persson)*	Nov 2015	766	3,213

A new role for forests and the forest sector in climate targets *(Gert-Jan Nabuurs)*	Nov 2015	94	719

Website

In March 2018, EFI launched its new website, with a dedicated section for the Policy Support Facility (www.efi.int/policysupport).

This contains three main areas: Our work, ThinkForest and Publications. These pages showcase policy support information, and signpost users to related information which is now integrated into other areas of the website (eg events, publications, news). Due to the complete restructuring of the EFI website and its move to a Drupal system, it is not possible to make a realistic comparison with page views or visitor numbers from previous years.

Web pages	**Page views 2018**	**Unique visitors 2018**
Policy support main landing page (policysupport/)	1,405	761
Our work (/articles/putting-science-action)	457	269
ThinkForest (policysupport/thinkforest/)	6,563	1,737
Publications (policysupport/publications/)	576	291

Table 3: Number of ThinkForest participants according to background

Participant background	Role of bioeconomy in controlling forest fires, 29 May 2018, Madrid	Climate policy and forest bioeconomy, 4 December 2018, Brussels
European Parliament	-	1
European Commission	1	5
Council of the EU	-	-
Ministries	10	4
Embassies, perm. representations	1	5
Forest industry	5	9
Forest owner	2	4
NGO	3	4
Other stakeholder group	19	24
Research	17	20
Other *(e.g. international org. incl. EFI)*	8	9
Media	-	-
TOTAL	**67**	**85**

Number of MDTF countries represented in ThinkForest events *(out of 10 countries)*

Participant background	Role of bioeconomy in controlling forest fires, 29 May 2018, Madrid	Climate policy and forest bioeconomy, 4 December 2018, Brussels
Ministries in total. From MDTF countries.	10 9 (ES, IT)	4 4 (DE, FIN)
Embassies, perm. representations in total. From MDTF countries.	1 1 (FIN)	5 2 (FIN, ES)

Table 4: Stakeholder follow-up articles related to events and publications

ThinkForest event on Role of bioeconomy in controlling forest fires, 29 May 2018		
Publisher / Stakeholder	**Specified, article name**	**Link**
Ministerio de Agricultura y Pesca, Alimentación y Medio Ambiente	La directora general de Desarrollo Rural y Política Forestal inaugura una Jornada de ThinkForest sobre Bioeconomía y su relación con la prevención de los Incendios Forestales	http://www.mapama.gob.es/es/prensa/180529iniciativathinkforest_tcm30-450533.pdf
Portal forestal de Castilla y León	La directora general de Desarrollo Rural y Política Forestal inaugura una Jornada de ThinkForest sobre Bioeconomía y su relación con la prevención de los Incendios Forestales	http://www.pfcyl.es/portada
Bulprofor (Agricultural/forestry, Bulgaria)	Превенцията чрез инструментариума на биоикономиката е най-добрата превенция и срещу горските пожари - едно проучване на Европейския горски институт	https://www.facebook.com/BULPROFOR/posts/2223011407716830

ThinkForest event on Climate Policy and Forest Bioeconomy, 4 December 2018		
Publisher / Stakeholder	**Specified, article name**	**Link**
European Organisation of the Sawmill Industry	Substitution effects of wood-based products in climate change mitigation	https://www.eos-oes.eu/en/news.php?id=1540
Biomonitor, EU H2020 project	Study analyses contribution of wood products to climate change mitigation	http://biomonitor.eu/news/study-analyses-contribution-of-wood-products-to-climate-change-mitigation/
Confederation of Timber Industries	EFI study analyses contribution of wood products to climate change mitigation	http://www.cti-timber.org/content/efi-study-analyses-contribution-wood-products-climate-change-mitigation
Icelandic Forest Service - Skógrækt in	Tré í stað steinsteypu - áskorun til arkitekta og byggingarverkfræðinga	https://www.skogur.is/is/um-skograektina/frettir-og-vidburdir/frettir-og-pistlar/tre-i-stad-steinsteypu-askorun-til-arkitekta-og-byggingarverkfraedinga
Finnish Forest Association	Research report: Climate Smart Forestry could reduce EU's climate emissions by 20%	https://smy.fi/en/artikkeli/research-report-climate-smart-forestry-could-reduce-eus-climate-emissions-by-20/

Malaysian Timber Certification Council	EFI study analyses contribution of wood products to climate change mitigation	https://bit.ly/2C5PEHR
UNB Wood Science and Technology Centre	Interesting article on "Substitution effects of wood-based products in climate change mitigation"	https://www.linkedin.com/feed/update/urn:li:activity:6476866438723362816

Table 5: Media coverage

ThinkForest event on Role of bioeconomy in controlling forest fires, 29 May 2018			
Publisher	**Type of publication**	**Article name**	**Link**
AlphaGalileo	Global news distributor	Using the bioeconomy to prevent forest fires	https://www.alphagalileo.org/en-gb/Item-Display/ItemId/164380
Ecoticias.com	Spanish online news provider	Jornada de ThinkForest sobre Bioeconomía y su relación con la prevención de los Incendios Forestales	https://www.ecoticias.com/medio-ambiente/184747/Jornada-ThinkForest-sobre-Bioeconomia-prevencion-Incendios-Forestales
La Oropéndola Sostenible	Spanish online environmental blog	Jornada de ThinkForest sobre Bioeconomía y su relación con la prevención de los Incendios Forestales	http://laoropendolasostenible.blogspot.com/2018/05/jornada-de-thinkforest-sobre.html
iNet Green	Spanish online environmental news	Jornada de ThinkForest sobre Bioeconomía y su relación con la prevención de los Incendios Forestales	http://inetgreen.club/2018/05/30/jornada-de-thinkforest-sobre-bioeconomia-y-su-relacion-con-la-prevencion-de-los-incendios-forestales/
ThinkForest event on Climate Policy and Forest Bioeconomy, 4 December 2018			
AlphaGalilieo	Global news distributor	Substitution effects of wood-based products in climate change mitigation	https://www.alphagalileo.org/en-gb/Item-Display/ItemId/171412?returnurl=https://www.alphagalileo.org/en-gb/Item-Display/ItemId/171412
AlphaGalileo	Global news distributor	Forest bioeconomy can play key role in climate solutions	https://www.alphagalileo.org/en-gb/Item-Display/ItemId/171789?returnurl=https://www.alphagalileo.org/en-gb/Item-Display/ItemId/171789
Helsingin Sanomat	Finnish national newspaper	Metsien on vastattava monenlaisiin tarpeisiin	https://www.hs.fi/mielipide/art-2000005913672.html

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Uusipuu.fi 26.04.2018	Finnish bioeconomy portal	Göran Persson: Metsäpohjainen biotalous on panostus ilmastonmuutosta vastaan	https://www.sttinfo.fi/tiedote/goran-persson-metsapohjainen-biotalous-on-panostus-ilmastomuutosta-

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Maaseuduntulevaisuus 03.05.2018	Finnish agricultural newspaper	Metsätalous pelastaa ilmaston, uskoo demari Göran Persson	https://www.maaseuduntulevaisuus.fi/metsä/artikkeli-1.233226

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From Science to Policy 1: Assessment of the EU Timber Regulation and FLEGT Action Plan Published 21 April 2015			
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Andrighetto, Nicola	University of Padua, PhD thesis, 2018	Impacts and interaction of political and economic driving forces in the international timber trade	http://paduaresearch.cab.unipd.it/10680/
Pauline Pirlot, Tom Delreux and Christine Farcy	In European Union External Environmental Policy: Rules, Regulation and Governance Beyond Borders. Springer, Camilla Adelle, Katja Biedenkopf, Diarmuid Torney (eds). (Available online 15.11.2017)	Forests: A Multi-sectoral and Multi-level Approach to Sustainable Forest Management	https://link.springer.com/chapter/10.1007/978-3-319-60931-7_9
Laura Secco, Matteo Favero, Mauro Masiero, Davide Matteo Pettenella	Land Use Policy, Volume 62, March 2017 (published online 28.12.2016)	Failures of political decentralization in promoting network governance in the forest sector: Observations from Italy	http://dx.doi.org/10.1016/j.landusepol.2016.11.013
Niels Janzen, Holger Weimar	Drewno. 2016, Vol. 59 Issue 197	Market coverage of the EUTR - what share of wood imports into the EU is covered by the EUTR?	http://drewno-wood.pl/pobierz-255
Y T Tegegne	University of Helsinki PhD thesis, 2016	FLEGT and REDD+ synergies and impacts in the Congo Basin: lessons for global forest governance	https://helda.helsinki.fi/bitstream/handle/10138/169117/FLEGTand.pdf?sequence=1
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Ines Gavrilut, Aureliu-Florin Halalisan, Alexandru Giurca, and Metodi Sotirov	Forests 2016, 7(1), 3 (Published 22.12.2015)	The Interaction between FSC Certification and the Implementation of the EU Timber Regulation in Romania	http://www.mdpi.com/1999-4907/7/1/3/htm
	UNECE (Published 10.11.2015)	Forest Products Annual Market Review 2014-2015	https://issuu.com/unpublications/docs/9789210575607/41
Mauro Masiero, Davide Pettenella, and Paolo Omar Cerutti	Forests 2015, 6, 3452-3482 (Published 30.09.2015)	Legality Constraints: The Emergence of a Dual Market for Tropical Timber Products?	http://www.cifor.org/publications/pdf_files/articles/ACerutti1502.pdf
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