EFI Trust Fund for Policy Support: Annual Report 2021

20 January 2022

EFI Trust Fund for Policy Support countries marked by green colour. These countries (excl. Norway) represent 64% of the EU forest area, and 50 % of the European forest area (excl. Russia)

Executive Summary

What is this document?

This document is the Annual Report of the **European Forest Institute** (**EFI) Policy Support Facility Trust Fund** (hereafter **Trust Fund**) for 2021. It presents the activities, outputs, impacts and budget of the Trust Fund for 1 January 2021 to 31 December 2021. Year 2021 was the first year of the new 5-year cycle of Trust Fund (2021-2025). The Annual Report aims to provide transparent information, which can also be used to assess and evaluate the performance and impact of the Trust Fund work.

Facility management

EFI Assistant Director Lauri Hetemäki coordinated Trust Fund project activities until end of August 2021. At the beginning of September, new Assistant Director Helga Pülzl started her work. Trust Fund project activities were supported also by Communications Officer Ulla Vänttinen, Head of Communications Rach Colling, Administrative Officer Jarkko Haltia and Brussels Liaison Officer Harald Mauser. The ThinkForest Forum has been chaired by its President Janez Potočnik in 2021. In addition, other EFI staff resources and outside subcontracting have been used to carry out the activities during 2021.

Facility funding and costs in 2021

In 2021, the Trust Fund consisted of the following 11 Trust Fund countries: *Austria, Czech Republic, Finland, Germany, Ireland, Italy, Lithuania, Norway, Slovenia, Spain and Sweden*. Slovenia joined the Trust Fund in 2021. The total financial contribution from the countries to the Trust Fund by the end of 2021 was **475 580** euros. The total amount of expenses in 2021 is estimated to have been **386 081 euros***. It should be noted that when writing this on 20 January 2022, the EFI accounts for 2021 had not yet been finalized.*

Summary of activities

The highlights of activities and outputs from 2021 include:

In 2021, one *Knowledge to Action* study was published: Key Questions on Forests in the EU together with extended questions (available online). In addition, the 2020 publication, From Science to Policy 11: China-Europe Forest Bioeconomy: Assessment and Outlook was translated into Chinese and made available

online. Several single-issue mailings as well as 2 online newsletters, *Science Supporting Policymaking* were distributed to the EFI network (approx. 1038 recipients by the end of 2021).

ThinkForest events represent an important part of science-policy events organized by the Trust Fund, and there was one such event in 2021 organised as a webinar: *Role of Science in Supporting Policymaking: A Post-COVID World on 20 May.* Due to COVID-19 impacts to face-to-face events, no in person events could be organised in 2021.

Three study teams started their work during 2021. Two studies, one on forest biodiversity and enhancement and one on forest-based climate change mitigation, are being prepared as Science to Policy publications. The third study on environmental sustainability of modern wood buildings and wood-based textile fibres is being prepared for the From Knowledge to Action series.

Summary of impacts

Publications were widely distributed in digital forms in 2021, and the electronic copies of both newly published and back catalogue publications again proved popular.

Trust Fund -funded publications have become increasingly cited in both academic journals and by policy makers (see Appendix). In 2021, the most highly cited publications continued to be FSTP8 *Living with bark beetles: impacts, outlook and management options* (published April 2019) and FSTP7 *Substitution effects of wood-based products in climate change mitigation* (published November 2018), demonstrating the ongoing relevance of these topics, both for scientists and policymakers. It is notable that the 2021 *Key Questions on Forests in the EU* publication received a high number of citations by policymakers in its first year of publication, including the Estonian Ministry of the Environment, and JRC/European Commission.

ThinkForest event participation: 130 people took part in ThinkForest webinar on "Role of Science in Supporting Policymaking: A Post-COVID World on the day of the event, 20 May. In addition, a recording of the ThinkForest webinar was watched 297 times by the end of 2021. In terms of background, four major participant groups were: the research community, forest industry, national government (ministries) and NGOs together with other stakeholder groups. Due to continued impacts of COVID-19, no face-to-face events were organised in 2021.

Media impact: Trust Fund Policy Support work was actively promoted in 2021. There was active contact with the media, with news items/press releases and invitations to the ThinkForest event. 8 press releases/news items were published in 2021 on the EFI website and EFI blog, on timely, relevant topics. We continued to extend invitations to journalists to ask questions during the ThinkForest webinar. However, articles published by media and stakeholder groups were fewer than in recent years, understandably affected by the global pandemic and the move to online-only events.

During 2021, Trust Fund policy support work was promoted via social media, including EFI channels such as Twitter (the main EFI Twitter account now has over 11,950 followers), Facebook, LinkedIn, YouTube and the EFI blog. For example, Twitter was used at the ThinkForest webinar to encourage interaction and dialogue with participants. Social media activities in 2021 also focused around the *Key Questions on Forests in the EU* publication, with the production of infographics and short animated videos. These saw a large amount of interaction, both natively on Twitter/LinkedIn/Facebook, as well as directly on YouTube.

Expert presentations, hearings and statements: Many requests for presentations or expert statements in policy or science-policy forums based on the publications and ThinkForest webinars indicated the usefulness of the Trust Fund events and publications. Based on the *From the Science to Policy* –series and *Knowledge to Action* -series report, the authors of the studies and Chief-Editor provided 21 presentations and expert statements in total at various science-policy and 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 webinars. ThinkForest online 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 Policy Support Facility Trust Fund

The objective of the EFI Policy Support Facility Trust Fund (Trust Fund) is to support the operationalization of the activities of the EFI Policy Support Facility. The Trust Fund completed its 2nd 3-year period at the end of 2020 and started a new 5-year-period at the beginning of 2021.

The Steering Committee is the highest decision-making body of Trust Fund. The Steering Committee approves the Trust Fund work programme and related budget. The main aims and responsibilities of the Steering Committee are to provide *strategic guidance* on the activities of the Facility funded by the Trust Fund. It receives information from the EFI secretariat and gives feedback regarding the outputs, outcomes and impacts resulting from the activities of the Facility. The Steering Committee does not take part in the operation and management of the Trust Fund 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 Member state and the Director of EFI or his authorized representative. The Chairs of the EFI Board and EFI Scientific Advisory Board (SAB), or a designated Board/SAB member, take part in the meetings as an observer. The membership of a Trust Fund member 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 2021, the Trust Fund Steering Committee members were:

1. Harald Aalde, Ministry of Agriculture and Food, Norway
2. Steven Dörr, Federal Ministry of Food and Agriculture, Germany
3. Alenka Korenjak, Ministry of Agriculture, Forestry and Food, Slovenia (from July 2021 onwards)
4. Tomas Krejzar, Ministry of Agriculture of the Czech Republic, Czech Republic
5. Nerijus Kupstaitis, Ministry of Environment, Lithuania
6. Fergus Moore, Department of Agriculture, Food and the Marine, Ireland
7. Marc Palahí, EFI
8. Enrico Pompei, Ministero delle Politiche Agricole Alimentari e Forestali, Italy
9. Magdalena Lackner, Federal Ministry on Sustainability and Tourism, Austria
10. Daniel Roures, Ministry of Ecological Transition and Demographic Challenge, Spain
11. Jan Svensson, Ministry of Enterprise and Innovation, Sweden
12. Tatu Torniainen, Ministry of Agriculture and Forestry, Finland

The Trust Fund 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 Trust Fund science-policy publications (*From Science to Policy* reports and *What Science Can Tell Us* reports) and ThinkForest forum high-level science-policy seminars and online events. The ThinkForest forum events are usually chaired by its President. From July 2019 onwards Janez Potočnik, the former EU Commissioner for both Science and Research, and Environment, has been the ThinkForest President. The President's role has also been important in representing ThinkForest and EFI policy support work in different platforms (e.g., international conferences, webinars, videos), providing important networks and access to high-level policy makers, inviting speakers to the ThinkForest seminars and online events, and providing strategic advice for EFI management in science-policy support work.

ThinkForest President, Janez Potočnik, since July 2019.

1.2 Trust Fund funding and management

Funding: The members of the MDTF in 2021 were 11 countries: ***Austria, Czech Republic, Finland, Germany, Ireland, Italy, Lithuania, Norway, Slovenia, Spain and Sweden.*** The total contribution of donors in 2021 was **475 580 euros.** The expenses of Trust Fund activities during 1 January to 31 December 2021 is estimated to have been **386 081 euros** *(the exact amount will be known when the EFI accounts for 2021 are finalized in 2022).*

According to the Trust Fund 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 (including but not limited to travels) to coordinate and conduct studies and implement products and services;
- Costs for contracting EFI Associate and Affiliate Members 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*, *What Science Can Tell Us* studies, policy briefs, EFI policy support newsletter, etc.), translations, and video and electronic media, media conferences, etc.;
- Workshop, conference, webinar and meeting expenses, including costs associated with presenters, publicity, translation and reporting; exchange of experts, training and demonstration events, etc.;
- Equipment;
- Office running costs;
- Costs for auditing of the Trust Fund and external evaluation of the Facility;
- Costs related to the Facility or the Trust Fund, not included above, that have the approval of the Trust Fund Steering Committee.

Management: The Trust Fund 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. The team responsible for managing and administrating the Trust Fund policy support work in 2021 was:

Lauri Hetemäki, Assistant Director, EFI (until end of August 2021)
Helga Pülzl, Assistant Director, EFI (from 1st September 2021-)
Rach Colling, Head of Communications, EFI
Jarkko Haltia, Administrative Officer, EFI

Harald Mauser, Brussels Liaison Officer, EFI
Ulla Vänttinen, Communications Officer, Events, EFI

2. Activities and outputs

The activities under Trust Fund for Policy Support were of many different types during 2021. The flagship activities are the ThinkForest webinars and science-policy publications. In addition, a number of related and supporting activities were carried out, such as the policy support newsletter, videos, policy support webpage, social media activities, expert statements and presentations in policy forums/webinars, and efforts to get new countries to join the Trust Fund. 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, to inform policy making and stakeholders' work. The text is accordingly written in a format that is easily accessible to these target groups. To help wider distribution and impact, the studies or their Executive Summaries are also translated to other languages, when needed. So far, the translations include Chinese, Czech, French, German, Italian, Russian and Spanish editions.

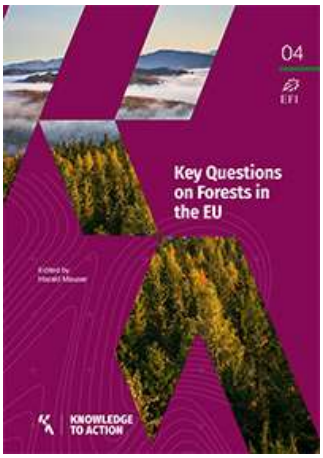
To ensure maximum impact and findability, from 2019 onwards all EFI publications have been given Digital Object Identifier or **DOI references**. This is a string of numbers, letters and symbols used to identify an article or document and link it to the web. A DOI helps a reader easily locate a document and makes the publications more citable.

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)	28-50	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
Knowledge to Action (K2A)	12-60	Presents the results of research (or topic synthesis), an initiative or project in an attractive format. Main target groups: society, stakeholders, policy-makers, media.

In 2021, one Knowledge to Action study was published: *Knowledge to Action 04: Key questions on forests in the EU***.** The authors also contributed to an extended version of the report, which was made available online (www.efi.int/forestquestions). An extended answer was made available for each question (both online, and to download as a pdf, with detailed referencing (see below).

In addition, the 2020 publication, *From Science to Policy 11*: *China-Europe Forest Bioeconomy: Assessment and Outlook* was translated into Chinese and made available online.

Work also began with the author groups for three forthcoming studies (one Knowledge to Action, two From Science to Policy), which will be published in 2022.



Knowledge to Action 04: Key questions on forests in the EU
https://doi.org/10.36333/k2a04

The report was coordinated by Harald Mauser from EFI. It had 30 authors from 5 institutions, and 3 countries.

Author affiliations	Countries represented
Austrian Research Centre for Forests BFW EFI EFI Forest Bioeconomy Network EFI Forest Policy Research Network Natural Resources Institute Finland LUKE* Swedish University of Agricultural Sciences SLU*	Austria Finland Sweden

**EFI Associate or Affiliate Member organization*

Extended questions	
How did EU-27 forests develop, and why do they differ from those of the past?	PDF, online materials
Who owns the forests and how are they managed?	PDF, online materials

What do people think about forests in the EU?	PDF, online materials
How has climate change affected EU forests and what might happen next?	PDF, online materials
To manage or not to manage – how can we support forests to mitigate climate change and adapt to its impacts?	PDF, online materials
How does forest management affect biodiversity?	PDF, online materials
What role do forests play in the water cycle?	PDF, online materials
How can forests improve human health and wellbeing?	PDF, online materials
How can trees and forests support sustainable and climate friendly cities?	PDF, online materials
How does forest management and the use of wood contribute to economic prosperity and employment?	PDF, online materials
How can a forest-based bioeconomy support biodiversity and climate neutrality?	PDF, online materials
What is the impact of the EU's consumption on the world's forests?	PDF, online materials

Development of infographics

The Knowledge to Action study, Key questions on forests in the EU, included many facts and figures. Three infographics were developed to enhance readability and shareability of these, as well as the publication's key messages. These were also shared extensively on social media and formed the basis of a video animation (see Online Activities).

https://www.efi.int/policysupport

https://www.efi.int/policysupport

https://efi.int/sites/default/files/images/forestquestions/EU27forests_final.pdf

2.1.2 Policy support newsletter and mailings

The Science Informing Policy-making online newsletter reports on and promotes ThinkForest events and MDTF-funded studies, in addition to more general news items on current Trust Fund themes (for example bioeconomy, forest fires). The newsletter is sent by email to EFI's policy support mailing list and is promoted to EFI's wider network via social media.

Subscription was actively promoted during the year (e.g. during registration for events), and by the end of 2021, the policy support newsletter mailing list totalled some c.1038 subscribers. In summer 2021, we changed technical provider from Apsis to Mailchimp, to increase ease of use and maintain cost-efficiency.

Several editions of the newsletter were published in 2021, and we also continued to make extensive use of single-issue mailings (for example relating to publications, events and news) which saw high engagement figures.

Newsletter/mailing	Contents
18.02.2021	• Invitation: Nature at the heart of a global circular bioeconomy
07.04.2021 Issue 1/2021	• The role of science in policymaking • New study tackles key questions on forests in the EU • Investing in nature is crucial for sustainable development • Empowering the circular bioeconomy through the EU Green Deal
24.02.2021	• New Assistant Director for Policy Support appointed
24.03.2021	• New publication: Key questions on forests in the EU
19.04.2021	• Open letter: Marc Palahí reflects on A New Deal for European forests
29.04.2021	• Is forest harvesting increasing in Europe?
04.05.2021	• Register now: ThinkForest seminar on the Role of Science in Supporting Policymaking
01.06.2021 Issue 2/2021	• Exploring the science-policy process • EU forest strategy: adapt, innovate, employ • The future we want: the forests we need

2.2. ThinkForest webinars

On 20 May 2021, ThinkForest event on 'Role of Science in Supporting Policymaking: A Post-COVID World' was organised online. Due to continued COVID-19 impacts to face-to-face events, a planned physical event for autumn 2021 had to be postponed to a later date.

Role of Science in Supporting Policymaking: A Post-COVID World (20 May)

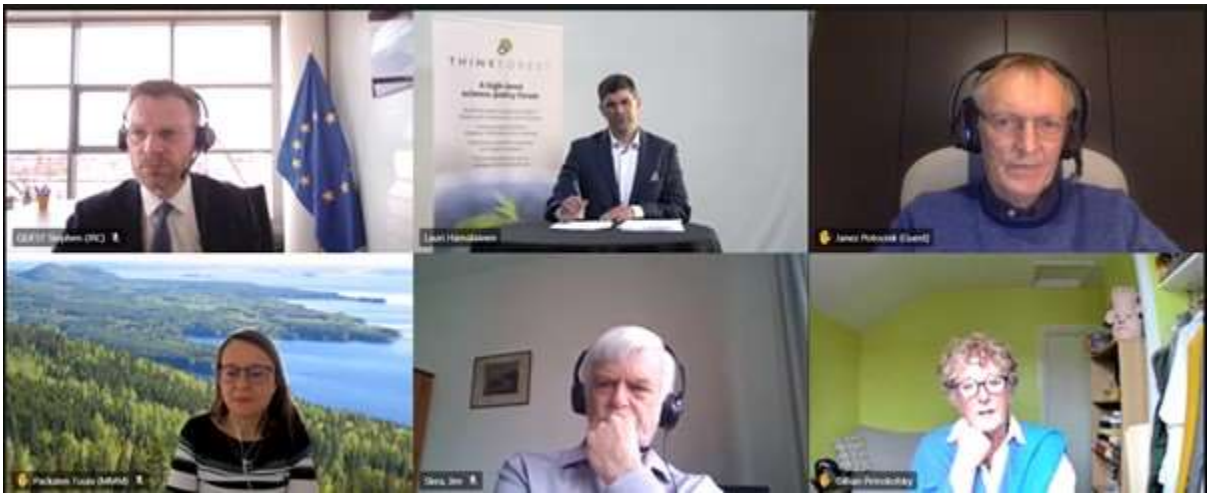
The ThinkForest event on the Role of Science in Supporting Policymaking brought together scientists and policymakers to explore how we can create a joint understanding of what is needed from both sides.

Virginijus Sinkevičius, Commissioner for Environment, Oceans and Fisheries explained how the European Commission is actively engaging with the scientific community, via for example H2020 projects developing novel science, its own Joint Research Centre, and Knowledge Centres such as the Knowledge Centre on Bioeconomy, which have created a network of experts. 'Changes are happening fast and the policy needs to follow together with our monitoring tools. New challenges are reflected in our research priorities and we are doing more to put this research into practice and to facilitate the uptake of scientific advice', he said.

Pippa Hackett, Irish Minister of State for Land use and Biodiversity gave a ministerial view of science-policy dialogue. As a woodland owner herself, she saw the need for research and evidence-based decision-making also from another viewpoint, and highlighted the importance of involving the general public and

other stakeholders. In Ireland national forums are used to enable discussion with many stakeholders, including scientific institutions.

Stephen Quest, Director General of the European Commission's Joint Research Centre pointed out some of the challenges in organizing science-policy cooperation. You have to select the right experts as honest brokers and synthesize evidence, avoiding cherry picking and producing information that policy makers can understand. But we also need to manage policymakers' expectations on the ability of science to provide the right answers. Policy makers should be transparent in using evidence and handling trade-offs



ThinkForest webinar took place on 20 May 2021. The panel discussion: *Role of Science in Policy Support* was chaired by Marc Palahí (EFI) and speakers included Stephen Quest (JRC, European Commission), ThinkForest President Janez Potočnik, Tuula Pitkänen (Ministry of Agriculture and Forestry, Finland), Jim Skea (Working Group III, IPCC) and Gillian Petrokofs ky (University of Oxford)

A wide-ranging panel discussion explored further some of the issues surrounding the complexity of scientific information and fragmentation of knowledge, and the need for honest knowledge brokers. When research results get cherry picked and their use in policymaking is not fully accountable, we risk the integrity of science. Here formal structures like the IPCC which has a well-structured process for engagement between scientists and policymakers, or techniques like systemic review can help. Multi-disciplinary cooperation is important, and it should also not be forgotten that policymakers also have relevant strengths.

The webinar was followed live by 130 participants on 20 May. The event was recorded and the video has been watched 297 times by the end of 2021. Out of all registered participants (287), 18 were country representatives (ministries and embassies). Other main participant groups were researchers (134), forest owners and forest industry (28), European Commission officials (12) NGOs (25), other stakeholder groups (40) and international organisations (25, incl. participants from EFI).

2.3. Other outputs

2.3.1. Online activities

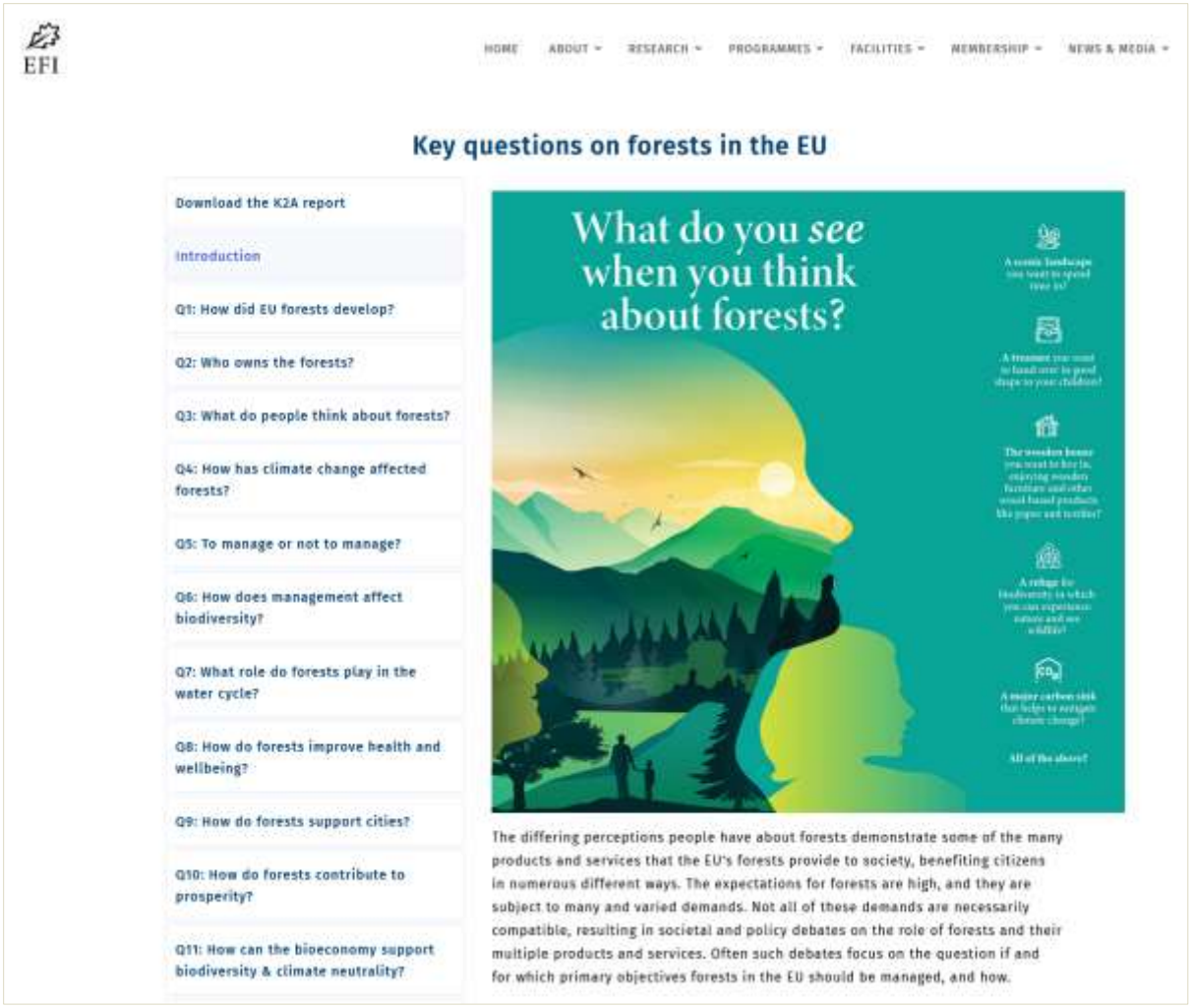
The EFI website is an important tool in Trust Fund communication activities, as it acts as a central, easily accessible source of information about policy support activities. The website aggregates content from and signposts users to all other channels, but is also the place where a lasting and easily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

Policy support activities can be found via the Science and Policy home page, or via the Policy Support Facility page. ThinkForest activities are promoted via a dedicated page, (www.efi.int/policysupport/thinkforest), and each new event has its own dedicated subpage, 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.

All Trust Fund publications are deposited in the site-wide Publications Bank (www.efi.int/publications-bank).

Key questions on forests in the EU

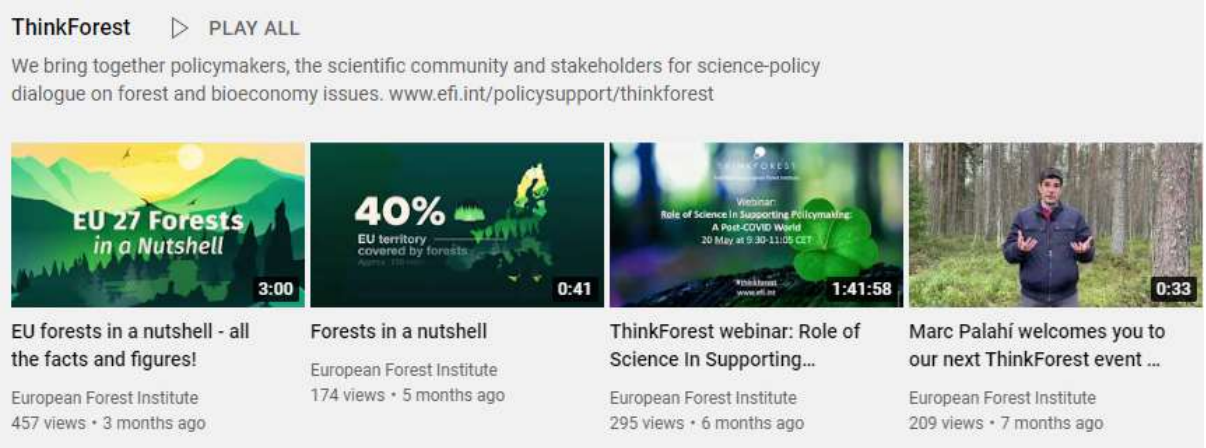
In 2021, a dedicated sub-site was made available on the EFI website for materials from the Key questions on forests in the EU report. An extended answer was made available for each question, complete with graphs, images and detailed referencing (see, for example, Question 1: How did EU forests develop https://efi.int/forestquestions/q1).



Launched in March 2021, the sub-site had approx. 10,500 page views by the end of 2021.

VIDEOS

In 2021, all ThinkForest events were accessed as webinars. The webinar recordings were made available afterwards via the EFI YouTube channel, giving a lasting record of ThinkForest discussions.



Event	Recording views 2021
ThinkForest webinar: Role of Science in Supporting Policymaking: A post-COVID world (May)	297
Promotional video for social media: Marc Palahí welcomes you to our next ThinkForest event on 20 May 2021	210

In 2021, animated infographics for social media were produced, to support the Key Questions on Forests in the EU publication. This included 5 small animations, consolidated into one larger compilation video, "EU 27 Forests in a Nutshell".

- Full compilation: EU forests in a nutshell https://www.youtube.com/watch?v=g9m8N6g7PSc
- Part 1: https://youtu.be/VwfwcSIr87o
- Part 2: https://youtu.be/QXWhqCujM_k
- Part 3: https://youtu.be/WGlHIjApBK4
- Part 4: https://youtu.be/q-A8zhGY-MM
- Part 5: https://youtu.be/9lWmN2MtW90

The videos and publication were promoted on EFI's social media channels in June, July and August, to coincide with the ongoing discussions about the new EU Forest Strategy. There was high engagement, particularly on Twitter – for example the tweet below on 16 June received 1,172 video views, and over 11,000 impressions.

SOCIAL MEDIA

During 2021, MDTF-funded policy support work was promoted via EFI's social media channels, to reach a growing and geographically widespread audience.

Social media channel	Number of followers (31 Dec 2021)	Number of followers *(31 Dec 2020)*	Number of followers *(31 Dec 2019)*
Twitter (main EFI account)	11,950	10,300	8,853
Facebook	9,560	8,141	7,812
LinkedIn	14,830	11,450	8,349
YouTube	1,553	1,210	911

Effort again focused on Twitter, which is used professionally by the policy maker audience. Tweets were broadcast from the 2021 ThinkForest webinar, with good social media conversations and interactions.

During 2021, the main EFI Twitter account gained over 1650 new followers. The messages were also amplified by EFI's other Twitter accounts, and across EFI's other social media channels, where the audience is also rapidly increasing (especially on LinkedIn).

Enlarging the MDTF

The Trust Fund 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 2020-21, active efforts to engage more European countries to MDTF were taken by the EFI Director and Assistant Director, and in 2021 Slovenia joined. Discussions are ongoing with Poland and the UK.

3. Impacts

In general, the EFI Trust Fund for Policy Support work has during 2021 received positive feedback and it has reached a wide audience. The impact indicators given in this Report show a robust continuation of Trust activities impact (see Appendix). In 2021 due to continued COVID19 impacts it was not possible to receive direct feed-back on the activities in the ThinkForest networking events, nor in large face-to-face meetings with the policy-makers, stakeholders, etc. However, the numerous requests for expert presentations or statements as well as smaller in person talks and telephone conversations based on the Trust Fund work support the conclusion that the work has been very much valued. Besides the information reported below, during meetings and discussions that EFI's Director, Assistant Director and Brussel's Liaison Officer had during 2021 with European Parliament MEPs, European Commission staff, national ministries and stakeholders, very positive feedback was given for the Trust Fund policy support work. In summary, the work has been well received and pointed that it is a unique and needed platform for pan-European forest-based sector science-policy work.

3.1 Downloads

Previously, all MDTF publications have been available in printed and online formats. However, in 2021, no copies of publications were printed due to COVID19.

The electronic copies of these studies again proved very popular. Included in the table below are details of downloads of all major Trust Fund publications produced to date (2015 onwards) from the EFI website. This is of course a snapshot of one segment of usage, as the publications are also available in e.g., ResearchGate, authors' institutional repositories, organisations' own libraries etc.

Title	Publication date	No of electronic copies downloaded 2021*	DOI resolutions 2021	Lifetime copies downloaded
K2A04 (Forest questions)	Mar 2021	1475 Long version pdfs: 635	602	2110
FSTP11 (China-Europe bioeconomy)	Dec 2020	179	329	307
K2A03 (Public perception)	Oct 2020	238	228	594
FSTP10 (Forest governance)	April 2020	114	565	667
FSTP9 (Plantation forests)	Dec 2019	157	281	689
FSTP8 (Bark beetles) (EN, CZ)	Apr 2019	391	336	5213
FSTP 7 (Substitution effects of wood-based products)	Nov 2018	394	890	5053
FSTP 6 (Climate-Smart Forestry)	Mar 2018	222	238	3625
WSCTU 8 (Forest-based bioeconomy), plus Summary	Dec 2017	161	n/a	8551
FSTP 5 (Circular bioeconomy) (EN, CN, RU)	Oct 2017	137	320	7362
FSTP 5 Summaries (EN, FR, DE, IT, ES, CN, RU)	Nov 2017-Apr 18	20	n/a	4039
WSCTU 7 (Natura 2000) plus Summary	Sept 2017	84	n/a	4245
FSTP 4 (Forest bioeconomy indicators)	Nov 2016	43	169	8390
FSTP 3 (Forest biomass, carbon neutrality)	Oct 2016	187	269	17218
FSTP 2 (A new role for forests)	Dec 2015	65	141	11733
FSTP 1 (EUTR-FLEGT)	Apr 2015	20	56	8828

** In 2020 we moved to a new system of measurement for online downloads, with consequently smaller figures.*

*** DOI resolutions: shows the number of people who have clicked on the DOI address for a publication*

3.2. Impact and feedback from stakeholders and network

The continued COVID19 impacts in 2021 decreased almost totally the face-to-face meetings with the relevant network who participates in and follows Trust Fund activities. Consequently, the direct responses to the Trust Fund activities were much scarcer relative to the previous years. However, during continued online exchanges including with member states representatives, European Commission services, forest stakeholders and Non-governmental Organisation as well as scientists, covering both natural and social scientists, the results of Trust Fund publications were presented and discussed. This work was well received and found policy relevant.

The EFI Director had several meetings with His Royal Highness Prince of Wales (HRH), and in those meetings discussed also the work based on Trust Fund publications. Under the patronage of HRH, the Circular Bioeconomy Alliance was established in 2020, which the EFI Director coordinates.

In summary, both the direct and indirect impacts of the Trust Fund work carried out in past years and in 2021 have had an impact at a high level of policy.

ThinkForest webinars

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 webinars. ThinkForest webinars have been considered important e.g. by European Commission staff and Brussels-based stakeholders. Below are some examples of the comments received.

ThinkForest webinar on Role of Science in Supporting Policymaking: A Post-COVID World (20 May)

This ThinkForest webinar was followed live by 130 participants which is approx. 45% of registered participants (287). By end of December 2021, a recording of the webinar had been watched 297 times. Out of all registered participants, 18 were country representatives (ministries and embassies). Other main participant groups were researchers (134), forest owners and forest industry (28), European Commission officials (12), NGOs (25), other stakeholder groups (40) and international organisations (25, incl. participants from EFI). Below you'll find some feedback related to this webinar as received in anonymous feedback questionnaire:

Thank you for a very interesting webinar yesterday! I am looking forward to receiving the link to the recording, which I hope I can share with colleagues.

I particularly liked the engaging conversations from leaders in the field as well as active and very good organisation from the moderator of the event.

Very well-developed programme, perfect speakers, lively moderation of the event, range of interesting topics discussed.

The panel discussion was very insightful.

I thought the topic was very interesting, overall. Especially the panelists had solid experiences in the field and very interesting insights. It is probably one of the most interesting webinars have participated in recently. I also noted the interesting perspectives for what the panelists thought was needed for the future, i.e. how to improve the policy-science collaboration, and which are the potential tools.

I particularly liked the openness in all statements and contributions, mixed with unique personal experiences.

The organization was great. Everything worked very well. If anything, maybe there could have been a little more time with questions from the audience, also based on their reactions to the presentations.

If the programme could have been longer, I think the Q&A part would have been more interesting. However, I understand that we are bounded by time constraints.

It was very appropriate, in terms of time and thematics addressed. If I may, I would like to point that it would be very welcome to have more events such as this because it was really mind-opening and it was great to have so many points of view and personal thoughts.

3.3. Expert presentations, statements and hearings

In 2021, one Knowledge to Action study was published. The authors of the studies, and the Chief Editor of the publications, have presented the study results in various forums.

Below, is a summary of the presentations, expert statements and hearings held in various policy and science-policy forums. In 2021, 21 presentations were held.

Publication	**Presenter / event**
"Climate-Smart Forestry: mitigation impacts in three European regions", FSTP 6 *(Published March 2018)*	1. Nabuurs, G.-J. Koli Forum "Climate smart forestry in Europe – while resources are under pressure from climate change", 14 October **2021** 2. Nabuurs, G.-J. Speaker in Climate Smart Forestry – A focus on fundamentals in 2021. "Progress with climate smart forestry in Europe – examples of demo sites in Netherlands", webinar, 30 September **2021** 3. Nabuurs, G.-J. Invited response: Climate smart forestry and ways to avoid 'lose-lose' options. KSLA–EFI-IEA bioenergy workshop on role of woody biomass for energy. Webinar, 15 April **2021** 4. Nabuurs, G.-J. Chatham House panel member: Greenhouse gas emissions from burning US biomass in European Union and the UK. 21 January **2021** 5. Nabuurs, G.-J. Speaker 'More room for forest in Netherlands'. Webinar under Climate Accord, 15 January **2021** 6. Mauser, H., Towards Climate Smart Forestry. European Bioenergy Future

	2020, Webinar 19 November 2020, Keynote. 7. Nabuurs, G.-J., Invited talk at EU Green Week, Bioenergy session. 'Role of European forests in providing sustainable wood biomass in the future', 19 Oct. 2020, Webinar 8. Mauser, H., Forest Biomass and EU Policies. BIO4ECO - Final Conference, Webinar, 17 September 2020, invited presentation. 9. Nabuurs, G.-J., Invited talk at Shell- State Forest Service meeting on assessing the carbon effects of forest restoration. Almere, Netherlands, 11 Sept. 2020 10. Nabuurs, G.-J., Invited keynote at EFI webinar 'Climate-smart forestry in the Green deal'. 20 May 2020 11. Mauser, H., Consequences of Climate Change on European Forests. Bioenergy Europe - Wood Chips Working Group, Webinar, 15 April 2020, invited presentation. 12. Nabuurs, G.-J-, Invited keynote 'climate smart forestry' at the Conference Governing and managing forests for multiple ecosystem services across the globe reservation, Bonn, 26 Febr. 2020 13. Nabuurs, G.-J., Forest and Biodiversity conference.'Necessity and use of forest information in Europe', Berlaymont, Brussels, 4 Febr. 2020 14. Nabuurs, G.-J. Invited talk 'Dutch forest climate policies' National climate action conference, den Bosch, 3 Dec. 2019 15. Nabuurs, G.-J. Invited keynote at Thinktank of Mondi-IUFRO event on future wood supply from Europe, 26 Nov. 2019 16. Nabuurs, G.-J. Hardwood supply in future. Invited presentation at Int Hardwood conference, Berlin, 21 Nov. 2019 17. Nabuurs, G.-J.: Wood supply in future from EU forests. Invited keynote at Raw Materials week, Brussels, 18 Nov. 2019 18. Mauser, H.: What is Climate Smart Forestry?, PEFC EU Policy Seminar 26 Sep. 2019, Brussels 19. Nabuurs, G.-J. Keynote 'Climate-Smart Forestry' at CLIMO Cost action, Tatras, Slovakia, 8 Sep. 2019 20. Nabuurs, G.-J. Invited talk 'European forest policy in the frame of bioenergy-IEA workshop, Athens, Georgia, USA, 1-3 May 2019 21. Nabuurs, G.-J. Invited talk 'Role of European forest management' at Global Carbon project meeting RECCAPP2, Gotemba, Japan, 19-23 March 2019 22. Nabuurs, G.-J. Invited lecture at the science seminar of VERIFY H2020 project 'Impact of forest management on European Forests' carbon balance' Reading ECMWF, 13 March 2019 23. 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 24. Nabuurs, G-J. Invited talk Prince Edward Island University (UPEI). Sustainable forestry practices for PEI: compatible ideas from Europe. 18 Nov 2018 25. Nabuurs, G-J. Invited talk at Universite Laval Quebec. European forests:

	challenges in meeting climate mitigation goals. 15 Nov. 2018 26. Nabuurs, G-J. Purdue University, Lafayette, IN, USA. Invited talk: European forests issues under climate change. 12 Nov 2018 27. 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. 28. 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 29. Nabuurs, G-J. Invited keynote at KNAW symposium. 'Multi functionality in European Forests – the EASAC report'. 19 February 2018 30. 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 Hans. Gestión forestal y su contribución a la mitigación de cambio climático. Proyecto Life Forest CO_2, 11 May **2021,** online 2. Verkerk Hans. Biomass-based carbon sinks. Carbon neutrality 2050, 8 April, **2021**, online 3. Hans Verkerk & Hassegawa Mariana. FORESIGHT: Forest renewables replacing fossil-based and GHG-intensive products. Annual meeting of the Advisory Committee on Sustainable Forest-based Industries, organized by FAO. 31 March 2020, online 4. Leskinen, P, Climate change mitigation as driver towards bioeconomy, Barents Forest Forum, Umeå 16.10.2019, Keynote. 5. Leskinen, P, The role of wood-based products in climate change mitigation, Koli Forum, Koli, 9.10.2019, invited presentation. 6. Leskinen, P, Forests in climate change mitigation and sustainable bioeconomy, Forum Wood Building Nordic, Helsinki, 27.9.2019, Keynote. 7. Hans Verkerk, Pekka Leskinen, Giuseppe Cardellini, Elias Hurmekoski, Roger Sathre, Jyri Seppälä, Carolyn Smyth & Mariana Hassegawa. Substitution effects of wood-based products in climate change mitigation. Poster presented at the XXV IUFRO World Congress, 25.9.2019, Curitiba, Brazil 8. Hans Verkerk, Climate-Smart Forestry: the missing link. CMCC-EFI webinar: Forests: solutions and perspectives to fight climate change, 21 March 2019. 9. Hans Verkerk, European forest under climate change and Climate-Smart Forestry, YLP Eurasia, Joensuu, 11 March 2019. 10. Leskinen, Pekka. Invited talk on Forest bioeconomy in climate change mitigation at World Resources Forum. Antwerp, Belgium. 26 February 2019 11. 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, Koli, Finland. 14 February 2019 12. Verkerk, H. 2018. Mitigating climate change through Climate-Smart Forestry. FORMASAM kick-off meeting, 12-14 November 2018, Wageningen.

"Living with bark beetles: impacts, outlook and management options", FSTP 8 *(Published, April 2019)*	1. Hlásny, T., Presentation *"Current bark beetle outbreaks in Central Europe – Causes, impacts and future developments*". COFFI 2020, the 78th session of the ECE Committee on Forests and the Forest Industry. 5.11.2020 2. Hlásny, T., Presentation of the report at the meeting of the Slovak Academy of Agriculture Sciences, Zvolen, Slovakia, 17.11.2019 3. Hlásny, T., Presentation of the report at the Wood Forum (Virkenforum), Stockholm, Sweden, 11.9.2019 4. Hlásny, T., Two interviews with Swedish journalist, 11.9.2019, https://www.landskogsbruk.se/skog/all-avverkning-koncentreras-till-dod-skog-i-tjeckien/?fbclid=IwAR34PcGU5IWIJNDE6kI-l0dSHTokZ07zk_oXifW-efl8FbDcStV7c_jCXSk 5. Svoboda, M., Presentation of the report in the FECOF meeting, Prague, Czech Republic, 20.10.2019 6. Hlásny, T. Presentation of the report at the General Assembly of the European Organization of the Sawmill Industry, Vienna, Austria, 18.6.2019 7. Hlásny, T., Presentation of the report in the meeting with senators in the Czech Parlament, Prague, Czech Republic, 10.6.2019 8. Hlásny, T., Input to the Czech TV, Prague, Czech Republic, 4.4.2019 9. Hlásny, T., Presentation of the report at SURE project meeting, Prague, Czech Republic, 3.4. 2019
"Plantation forests in Europe: challenges and opportunities" FSTP 9 *(Published, Dec. 2019)*	1. Freer-Smith P. US Forest Service Forests and Fire Ecology Lecture series 12 March 2020 Invited talk title: Forest Land Use and Management Strategies to deliver European Climate and Bioeconomy Policies' 2. Freer-Smith, P., Presentation of the preliminary results of the study at the EFI Annual Conference Scientific seminar, Aberdeen, UK, 19.9.2019
"Forest policy governance post-2020" FSTP10 *(Published, April 2020)*	1. Pülzl, H., The future of pan-European Forest Policy. Finnish Network on International Forest Policy Cooperation . Kv-metsäverkosto, May, 4, **2021**, online 2. Mauser, H., EU Policy Environment for Forest and Wood. Forestry & Agriculture Investment Summit, 18-19 May, **2021**, invited presentation. 3. Pülzl, H., Winkel. G.(2021): The politics of FES in Europe. Conflicting views, policies and changing societal perceptions. Sincere-Nobel Final Conference: Incentives for Forest Ecosystem Services in Europe: connecting science, practice and policy, SEP, 28-29, **2021**, online 4. Mauser, H., Forest relevant EU Policy Environment. EUSTAFOR Strategy Workshop, 13. October, **2021**, invited presentation. 5. Mauser, H. Some Forest Issues at EU Level. ERIAFF Forested Regions Working Group Meeting., 26. October **2021**, invited presentation. 6. Pülzl, H. Europäische Waldpolitik. Zwischen Fragmentierung und Koordination, 14. December **2021**, Webinar Austrian Forest Dialogue,

	Keynote. 7. Pülzl, H., Elomina, J., Jeanne- Lazya Roux, Winkel, G. EU Forest Governance post-2020: Perceptions, coalitions and policy frames, 17-18 March **2021,** IFPM3 online. 8. Wolfslehner B. Europäische Waldpolitik nach 2020. Webinar Austrian Forest Dialogue. 30.11.2020
"Public perception of forests and forest-based bioeconomy in European Union" K2A 3 *(Published, Oct. 2020)*	1. Ranacher, Lea, Contested Society-Nature-Relations – Forest-related Emotions, Practices and Conflicts in Times of Societal Change, International Multidisciplinary Workshop, 24-25 November 2020, Jena, Germany (postponed to **2021**)
"China-Europe Forest Bioeconomy: Assessment and Outlook" (*Published in Dec. 2020)*	1. Hetemäki, L. Global forest bioeconomy development and outlook. Forest Bioeconomy Development and Cooperation between China and Central and Eastern European Countries, 20 April **2021**. 2. Chen Xiaoqian. Develop China's Domestic Timber Production Capacity Sustainably, Online meeting of "Sustainable Management Forest Resources in China", Beijing, 9 January **2021** 3. Chen Xiaoqian. Forestry Bioeconomy Policy and Market in China, "Green Growth in Forest Sector", Beijing, World Economic Forum, Beijing office Beijing, 16, Oct. 2020 4. Chen Xiaoqian. Green Development in China, "Youth Forum of Green and sustainable development in Asia Pacific", Beijing, 10 December 2019 5. Chen Xiaoqian. Forest Bioeconomy in China, "China-Europe Forest Bioeconomy" seminar, Embassy of Finland Residence, Beijing, 14 November 2019 6. Chen Xiaoqian. Presentation of the preliminary results of the study at the EFI Annual Conference Scientific seminar, Aberdeen, UK, 19.9.2019
"Key questions on forests in the EU" *(Published in March 2021)*	Please note that while no formal overall presentation was done, different author teams have presented their question-related summaries in public lectures, pointed towards them during informal meetings with stakeholders and decision-makers and used them in teaching.
Presentations based on several MDTF studies	1. Hetemäki L. Tutkimus politiikan tukena: Kokemuksia metsäntutkimuksesta EU:ssa. Metsäpolitiikan kurssi, Itä-Suomen yliopisto, 3 December **2021** 2. Hetemäki L. Tutkimus EU:n politiikan tukena. Metsätieteen päivä, 26 October **2021** 3. Hetemäki L. Global forest bioeconomy development and outlook. The Third China-CEEC High-level Conference on Forestry Cooperation, 2 June **2021**. 4. Hetemäki L. Global forest bioeconomy development and outlook. The Third China-CEEC High-level Conference on Forestry Cooperation, 2 June **2021**.

	5. Hetemäki L. Closing Words. Role of Science in Policymaking: A Post COVID World, ThinkForest Webinar, 20 May **2021**. 6. Hetemäki L. Is there enough wood to support forest-based circular bioeconomy? Global Landscapes Forum "Nature at the heart of a global circular bioeconomy", 19 March **2021**. 7. Hetemäki, L. Introducing "Circular Bioeconomy Alliance" & Comments on Green Deal. European Parliament Intergroup on 'Climate Change, Biodiversity and Sustainable Development'" seminar, 17 March **2021**. 8. Hetemäki L. Planning to 2030: drivers & impacts to natural resource research. Foresight Workshop, Faculty of Agriculture and Forestry, University of Helsinki. 10 March **2021**. 9. Hetemäki L. Dynamics of the bioeconomy market with focus on wood. CIFOR-ICRAF Workshop "Delivering a forest-based circular bio-economy", 10 December 2020. 10. Hetemäki L. Circular Bioeconomy: introduction and a forest perspective. NOVA Course Lecture, University of Helsinki, 8 April 2020. 11. Hetemäki L. Expert statement to the Finnish Parliamentary Future Committee on the EU Commission's Communication on the Green Deal. 17 April 2020. 12. Hetemäki L. The Green Deal and the EU Forest policies, Sweden's Embassy in Helsinki, 12 February 2020. 13. Hetemäki L. What changes are expected in forestry at European level?, Forest Sector Conference 2020 "Climate, Future, Forests", 22 January 2020, University of Latvia, The House of Nature, Riga.

3.4. Media impacts

There was active contact with the media during 2021, with news items/press releases and invitations to the ThinkForest event.

8 press releases/news items were published in 2021 on the EFI website and EFI blog, on timely, relevant topics.

12.02.2021 You measure what you treasure (EFI blog, Tony Ofori, Marc Palahí and Janez Potočnik)
24.02.2021 New Assistant Director for Policy Support appointed
24.03.2021 New study tackles key questions on forests in the EU
19.04.2021 A New Deal for European forests
27.05.2021 More than enough wood in the European forest (EFI blog, Gert-Jan Nabuurs, Bas Lerink and Mart-Jan Schelhaas)
21.05.2021 ThinkForest discussions explore the science-policy process
18.05.2021 Not so simple (EFI blog, Lauri Hetemäki)
15.09.2021 Rethinking our cities (EFI blog, Marc Palahí)

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 many 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 registration for event	Media articles
ThinkForest: Role of Science in Supporting Policymaking	331	17%	5	0

Media attendance and immediate coverage of live events is often limited, with journalists mostly using events as an opportunity to gain background information on a subject. Journalists also watch the recording afterwards, although this is only possible to validate anecdotally. Post-event media coverage and ongoing media monitoring was also carried out via the Meltwater system. For more information see Annex Table 5.

Journalist questions in webinar
We continued to extend invitations to journalists to ask questions during the ThinkForest webinars. Louise Guillot from Politico.eu submitted a question for the Role of Science in Supporting Policymaking seminar.

Head of Communications Rach Colling presented some highlights of EFI's science-policy communication in an ICONS Foundation webinar on 8 June, which looked at Best practices in science communication as part of EU Green Week 2021. The panel included Jacopo Pasotti, reporter and photographer working for many international newspapers and magazines such as National Geographic, El Pais, Science.

https://www.youtube.com/watch?v=7LLZDp30Pl8

4. Reporting of expenses

4.1 Background

The general background principle for reporting of the funding and budgeting of the Trust Fund for 2021 is given here. Due to the time lag between closing of the accounts, as of 20 January 2022 (time of writing this) the financial accounts for EFI 2021 have not yet been closed.

4.2 Expenditures by cost category

In 2021 the Trust Fund 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 (e.g. contracting) of Trust Fund SC, Head of Communications responsible for the Trust Fund communication, and Brussels Liaison Officer supporting the dissemination and increasing the impact of the Trust Fund work and networking in Brussels (all positions partly funded by Trust Fund). These salary costs were linked to the general management, planning, administration, communication, networking, and coordination of the Trust Fund work. All the other salaries paid from Trust Fund 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 Trust Fund Guidelines (shown also in Chapter 1.2) were covered by the Trust Fund funding.

According to Trust Fund Guidelines, 13% is allocated to overheads (indirect costs). Compared to common practices, this is a low share. For example, in European Commission Horizon 2020 overheads is 25% for research and innovation projects. Indeed, in the Trust Fund 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 Trust Fund activities (e.g., coordination, management, administration, EFI lawyer costs related to subcontracting and country agreements, working for the publications and ThinkForest webinars) are reported under Trust Fund salaries, not overheads.

The activities under Trust Fund have been organized for administrative and cost following purposes under Work Packages (WP). In 2021, costs were related to following WPs:

1. FPS Multi-Donor Trust Fund General
2. FPS MDTF WP4: Europe Post-2020
3. FPS MDTF WP7: China-Europe forest bioeconomy
4. FPS MDTF WP11: European forest facts
5. FPS MDTF WP12: ThinkForest April-June 2021
6. FPS MDTF WP13: Environmental impacts of using wood for construction and textiles
7. FPS MDTF WP14: European forest-based sector climate change mitigation
8. FPS MDTF WP15: Enhancing and financing forest biodiversity in Europe

The expenses for 2021 are reported in the Table 4.1 next page.

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 chapter describes important developments in the EU framework relevant for forest and wood related policies that took place in 2021.

5.1 Continued shift in the leadership of forest-related issues in the European Union

In the European Commission (EC), the handling of forest-related topics was steered for a very long time by the Commissioner and the Directorate General responsible for Agriculture and Rural Development (DG AGRI), but this has consistently changed over time. During 2021 it became clearly visible that Executive Vice-President Timmermans, responsible for the European Green Deal (EGD) and climate policy, and Commissioner Sinkevičius, responsible for environment, now also lead discussions on forests. Commissioner Wojciechowski, responsible for agriculture, addressed forest-related issues mostly in the context of agriculture. Commissioner Breton, responsible for the internal market including industry policy, seems to be less involved in forest-related discussions.

This shift of engagement is also visible in the activities of the EC services. DG Environment (DG ENV) has developed into the most active service regarding forest issues. DG AGRI is participating in these activities to a lower extent and does not necessarily set its own initiatives. For instance in the past the Standing Forestry Committee (SFC), many times chaired by DG AGRI, met 3-4 times a year. In 2021, only one meeting took place. However, the development and publication of the new EU Forest Strategy in July 2021, the publication of a legal proposal on deforestation and forest degradation in November 2021 as well as other ongoing forest-related policy discussions would have justified several meetings of the SFC. The importance of engaging with forest experts from Member States in a participatory manner also seems to have decreased as the SFC was not used much for advisory services nor information exchange with Commission services during 2021.

To the outside world, it seems that DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) and DG Energy (DG ENER) are also less engaged in forest-related discussions. Consequently, aspects of bioeconomy, bioenergy and industry seem not to receive the same political impetus and attention in forest-related debates than environmental and climate aspects.

The '*New EU Forest Strategy for 2030*' proposes to merge the SFC with the DG ENV-led Working Group on Forest and Nature into one single expert group with the mandate to reflect all environmental, social and economic objectives. At the same time, it aims to ensure that multiple Member State representatives, including from different Ministries, are members of this group. While the idea to form an inclusive and cross-cutting working group for forest-related policy aspects is appealing, it remains to be seen how this

will be implemented in real terms. National administrations might have different, but also opposing views on how to manage and/or protect forests; they might also not wish to send two or more colleagues to the same meeting to save public funding. This would then go against the initial idea to have different Member States' interests represented in the same meeting to find synergies and discuss trade-offs.

On the other hand, if more than one person per Member State participates and stakeholders are invited as well, the meeting organization will become difficult due to the large number of participants. This form of meeting might then risk serving only informative purposes, with deliberation and policy-learning reduced to a minimum. Rather innovative meeting formats will need to be used to at the same time (a) maintain the advisory function of the committee for the Commission and (b) allow for policy-learning among stakeholders and Member States' representatives holding different forest-related interests to mitigate potential conflicts and identify policy-relevant solution pathways. In addition, this proposal does not include existing expert groups representing industry and energy policy interests, although these interests are important drivers for forest policy and management. The proposed structural change may therefore risk not fostering the comprehensive view on the forest-based sector which is needed to consider all relevant interests and the inherent trade-offs.

5.2 Expanding number of policy proposals relevant for the forest-based sector and the need for inclusive decision-making

Since the start of the new EC led by President Von der Leyen in summer 2019, 11 new EU legislative acts and 13 non-legislative strategies with direct relevance for forestry or the wood-processing industries have entered into force. 12 of these new initiatives were completed in 2021. Before the start of trialogue the two co-legislators, the European Parliament, and the Council, are currently debating internally 13 legal proposals relevant to the forest-based sector. The EC has been very active and presented most of these proposals during the year 2021. Furthermore, the EC has already announced another 5 strategies and 15 proposals for legislative acts of relevance for the sector for which it will present the documents and legal texts in 2022 and 2023. Table 5.1 compiles all new and upcoming legislation and strategies.

In the DG ENV-led Working Group on Forest and Nature, 4 guidelines are currently being developed that are expected to have a strong impact on forest management in the future in the EU. In 2022, the EC will approve the CAP Strategic Plans. It is strongly recommending to Member States a better inclusion of forestry in these plans, and forest-oriented measures in Pillar 2 of the CAP.

All this merits the conclusion that forests and their use have gained higher importance than before in a growing number of EU policy areas. The numerous new initiatives establish more requests and obligations for Member States and forest-based sector stakeholders to align with the rapidly evolving EU legislative and political framework. For the moment however, it remains unclear how the manifold trade-offs nourished by the different interests and objectives of all these initiatives are to be handled and implemented in consistent ways. Past research has shown that the implementation of EU non-legislative

strategies and legislative proposals can nonetheless provide for change (Aggestam and Pülzl 2020), but also conflicts (Blondet et al. 2017) at national levels. The involvement of public and private stakeholders from the forestry and wood processing sectors has also weakened in recent policy discussions. Their expertise and inclusion could support the design and implementation of these policy initiatives in a more holistic way, in particular when addressing economic sustainability, respecting market realities and the diversity of conditions in the field.

In addition, forest ownership issues (Ficko et al. 2019, Matilainen et al. 2019, Weiss et al. 2019) in the European Union fail to get consistent political attention during these decision-making processes. Forest owners, including small- and large-scale owners, are very important as they are the ones that implement European goals locally. Despite large-scale forest disturbances, looming climate change and the urgent need to invest in biodiversity conservation, their motivation to invest in forestry might decrease, especially if new requirements are to be implemented and scientific knowledge is not readily available on how to manage, conserve and protect as well as use their forests and non-wood products to make a consistent living and respect European and national goals. Other actors looking for political attention include conservation NGOs. They monitor potentially bad forestry practices and collect evidence of illegal logging in nature reserves and old-growth forests, while promoting large-scale nature protection and forest conservation values.

While different actors have their interests (e.g. Sotirov et al. 2021, Winkel and Sotirov 2016) the urgently needed societal transformation not only calls for a change of current practices, but also an understanding and acceptance of different viewpoints (e.g. Aggestam et al 2020, Sotirov et al. 2021, Kleinschmit et al. 2018). This is fundamentally important to find inclusive solutions in the long and short-term. In this context, forest-related scientific research and evidence-based decision-making, both from natural and social sciences, have their role to play. While forest research has a long tradition in Member States, at the European Union level no statutory scientific forest body exists that consistently advises decision-makers. The looming Corona crisis has given us clear evidence that decision-making bodies involving the best scientists and expertise are of crucial importance in times of crisis. At the European Union level such a scientific advisory body that would bring together forest-related natural and social scientists and expertise is clearly missing. In the face of the climate and biodiversity crises this expertise and scientific advice would be needed as soon as possible to advise decision-making processes and minimize trade-offs, given the increasingly heated debates about the use, management and protection of forests. Future decision-making might also involve more large-scale decisions that are cross-sectoral as well as transnational.

5.3 Unclear role of forests and wood in serving EU policy objectives

The European Green Deal acknowledges the need for a systemic transformation to achieve goals set by the Paris Climate Agreement, the Sustainable Development Goals and the Convention on Biological Diversity. One of the guiding paradigms in EU and pan-European forest governance for the past decades has been the multifunctional sustainable management of forests (Pülzl et al. 2018, Elomina and Pülzl 2021)

to benefit society with a broad range of products and services, respecting the ecological, economic and social dimensions of sustainability. The EGD is highly ambitious, but together with the recent policy initiatives geared towards its implementation a more narrow view on forests is being pursued. The latter presents a shift towards prioritizing forest ecosystems for carbon storage, biodiversity conservation and using wood for long-living wood products. From this point of view the forest-based sector's role seems to focus on climate change mitigation. The SDGs however point towards a more holistic view on forests and wood including economic and bioeconomy aspects. From this point of view carbon sequestration in forests is not prioritized over other forest-related goals. It seems that the high relevance of wood products in the daily life of EU citizens, the important role of markets in the decision-making of forestry and the wood-processing industries, and the entire set of contributions of forests and wood to climate change mitigation (Nabuurs et al. 2015) are not acknowledged in the same way.

A growing world population, rising wealth levels, the need to replace fossil-based and other climate unfriendly materials within an evolving circular bioeconomy will result in a growing demand for renewable sources and feedstock for energy generation and material production. Biomass from sustainably managed forests can provide an important share of this alternative feedstock needed. This would also serve the EU policies on industry, energy, regional development and bioeconomy. The wood processing industries in the EU have achieved a leading position at global level regarding the generation of traditional and new wood-based products and related innovation. The *'New EU Forest Strategy for 2030'*, the revisions of the *LULUCF Regulation* and the *Renewable Energy Directive* indicate more restrictions on the supply of wood from domestic forests. This raises the risk of both a continuation of meeting the growing material and energy demand through the use of fossil-based and climate unfriendly approaches and/or increasing the need for imports of feedstock and products from regions with less strict regulations, resulting in leakage effects. It is therefore still unclear how the transition to a new economic paradigm underlying the EGD can be made compatible with the forest-related polices outlined in the relevant recent EU policy initiatives.

The forest-based sector in the EU has the potential to strongly contribute in a competitive manner to a socially fair transition to a more sustainable, climate and environmentally friendly society. Realizing this potential would need a supportive policy framework that empowers this sector to deliver to the full extent possible. This will require innovation, investments, forest owners' interest in maintaining and actively managing their resources, and the interest of industry to engage in innovation of new wood-based products and other marketable forest-based services. However, the growing number of regulations on forest management and intended impediments to providing wood to markets pose risks for financial investors and for the economic sustainability of forestry.

Furthermore, the impacts on the wood-processing industries, as well as economic sectors interested to change to renewable biobased feedstock in their transition to a more sustainable and climate-friendly business model, and the consequences on the regions affected would need a more comprehensive assessment. This is still missing. Maximizing synergies and minimizing potential trade-offs between the diverse societal demands for forests, the impacts from dynamic and diverse natural conditions, markets

and societal developments require continued thorough analysis, forest sector know-how, and the broad involvement of stakeholders. Engaging forest sector expertise and stakeholder views would allow a wider perspective of the forest sector's potential to contribute to the EGD strategic objectives. This could increase its policy impact and as recent research (e.g. Aggestam and Pülzl 2020) has shown, also lead to effective policy implementation if implementers are involved in the up- and downloading of policy objectives from the European Union level.

With many upcoming legislative and non-legislative initiatives, the EC has an increasing influence on each Member State's forest sector despite Member State competence. The coordination of forest-related issues between different services of the EC and with Member States is weak (Wolfslehner et al. 2020) and the forest sector's ability to influence its own cause in the EU has been decreasing. It is very likely that this trend will continue in the future.

Table 5.1 Recent and upcoming EU legislation and strategies

(selection of policy initiatives of relevance for forests and the forest-based sector)

Revent Legislation and Policy in Force		
Year	**Legislative**	**Non-Legislative**
2019	Plant Health Delegated and Implementing Regulations	EU Action Plan on Protecting and Restoring the World's Forests
	Taxonomy Regulation	
2020	Plant Health Delegated and Implementing Regulations	A New Industrial Strategy for Europe
	2030 Climate Target Plan	New Circular Economy Action Plan
	Delegated Regulation on Forest Reference Levels	A Farm to Fork Strategy
	CAP Transitional Provisions	Biodiversity Strategy to 2030
		A Renovation Wave for Europe
2021	Horizon Europe	New EU Strategy on Adaptation to Climate Change
	European Climate Law	Updating the 2020 New Industrial Strategy
	Amending the Aarhus Regulation (better access to justice)	A long-term Vision for the EU's Rural Areas
	CAP Horizontal Regulation	New EU Forest Strategy for 2030
	CAP Strategic Plan Regulation	New European Bauhaus
		Soil Strategy for 2030
		Restoring Sustainable Carbon Cycles incl. Carbon Farming Initiative
Co-Legislators currently working on Legislative Proposals from the European Commission		
	Revision of the Effort Sharing Regulation	
	Revision of the LULUCF Regulation	
	Revision of the Renewable Energy Directive	
	Revision of the Energy Performance of Buildings Directive	
	GHG emission reductions by Member States from 2021 to 2030	
	Regulation on Social Climate Fund	
	Regulation on European Green Bonds	
	Taxonomy Delegated Act on Climate Change Mitigation and Adaptation	
	Taxonomy Delegated Act on Disclosure	
	Directive on Sustainable Corporate Governance	
	Regulation on Carbon Border Adjustment Mechanism	
	Directive on Improving Environmental Protection through Criminal Law	
	Regulation on Deforestation and Forest Degradation	
Proposals for EU Legislation and Strategies announced by the European Commission		
Announced for	**Legislative**	**Non-Legislative**
Q1 2022	Revision of the Ecodesign Directive	Sustainable Products Policy Initiative
Q1 2022	Regulation on Nature Restoration (Restoration Law)	Strategy on Sustainable Textiles
Q1 2022	Update of EU Rules on Sustainable Use of Pesticide	Bioeconomy Strategy Progress Report and Re-framing within the new Context
Q1/Q2 2022	Horizon Europe Work Programmes 2023-2024	
Q2 2022	Policy Framework on biobased, biodegradable and compostable Plastics	Revision of the vertical and horizontal Block Exemption
Q2 2022	Renewed Strategic Partnership with the outermost Regions	
Q3 2022	Revision of the Ambient Air Quality Directive	European Care Strategy
Q4 2022	Regulation on Carbon Removal Certification	
Q4 2022	Revision of the Legislation on Forest Reproductive Material	
Q4 2022	GreenData4All - Revision of INSPIRE	
2022	Biodiversity Governance Framework (Biodiversity Law)	
2022	Taxonomy Delegated Acts on 4 Environmental Objectives	
2022-2023	Revision of Ecolabel Commission Decisions (on wood-based products)	
Q1 2023	EU Forest Observation, Reporting and Data Collection	
Q1/Q2-2023	Soil Health Law	

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6. Conclusions

The year 2021 was the 1st year of operation of the new cycle of Trust Fund (2021-2025). In 2021, one ThinkForest webinar was held and one Knowledge to Action report published. Work to still enlarge the Trust Fund with new countries in the future also took place in 2021 (with Poland, Slovenia and the United Kingdom) and as a result Slovenia joined the Trust Fund. The cooperation with the European Commission continued, for example, with the bioeconomy work.

2021 was an exceptional year also for the Trust Fund, as it has been for all organizations, due to continued impacts of COVID19 pandemic, however three different author teams were working intensively on important forest-related Trust Fund studies that will be ready during spring 2022. The related planning of events has already started during 2021. This report also shows clearly that the work of the Trust Fund and policy support is appreciated by a wide range of actors and policy impact is generated in many different forms both directly and indirectly.

Since one Assistant Director for Policy Support retired and a new one started her work in September 2021, time was also dedicated to engage in an intensified dialogue with Trust Fund member countries and to learn about countries priorities and identify new ways to enhance the impact of the Trust fund science-policy work even further.

Annexes

Table 1: Online statistics

Publication statistics

No copies of publications were printed in 2021.

*Electronic copies downloaded: Google analytics tracks the numbers of visitors who go to a page on the EFI website, and then download the publication.

These numbers do not include direct downloads from the EFI website server, downloads from ResearchGate, authors' institutional repositories, organisations' own libraries etc.

DOI resolutions: shows the number of people who have clicked on the DOI address for a publication, such as https://doi.org/10.36333/fs11

Title	Publication date	No of electronic copies downloaded 2021*	DOI resolutions 2021	Lifetime copies downloaded
K2A04 (Forest questions)	Mar 2021	1475 Long version pdfs: 635	602	2110
FSTP11 (China-Europe bioeconomy)	Dec 2020	179	329	307
K2A03 (Public perception)	Oct 2020	238	228	594
FSTP10 (Forest governance)	April 2020	114	565	667
FSTP9 (Plantation forests)	Dec 2019	157	281	689
FSTP8 (Bark beetles) (EN, CZ)	Apr 2019	391	336	5213
FSTP 7 (Substitution effects of wood-based products)	Nov 2018	394	890	5053

FSTP 6 (Climate-Smart Forestry)	Mar 2018	222	238	3625
WSCTU 8 (Forest-based bioeconomy), plus Summary	Dec 2017	161	n/a	8551
FSTP 5 (Circular bioeconomy) (EN, CN, RU)	Oct 2017	137	320	7362
FSTP 5 Summaries (EN, FR, DE, IT, ES, CN, RU)	Nov 2017-Apr 18	20	n/a	4039
WSCTU 7 (Natura 2000) plus Summary	Sept 2017	84	n/a	4245
FSTP 4 (Forest bioeconomy indicators)	Nov 2016	43	169	8390
FSTP 3 (Forest biomass, carbon neutrality)	Oct 2016	187	269	17218
FSTP 2 (A new role for forests)	Dec 2015	65	141	11733
FSTP 1 (EUTR-FLEGT)	Apr 2015	20	56	8828

Several editions of the newsletter, Science informing policymaking, were published in 2021, including also single issue mailings (for example relating to publications).

Newsletter/mailing	Contents	Number of subscribers	% read
18.02.2021	Invitation: Nature at the heart of a global circular bioeconomy	898	44%
24.02.2021	New Assistant Director for Policy Support appointed	900	40%
24.03.2021	New publication: Key questions on forests in the EU	925	43%
07.04.2021	Issue 1/2021	911	38%
19.04.2021	Open letter: Marc Palahí reflects on A New Deal for European forests	910	45%

29.04.2021	Is forest harvesting increasing in Europe?	924	40%
04.05.2021	Register now: ThinkForest seminar on the Role of Science in Supporting Policymaking	940	42%
01.06.2021	Issue 2/2021	949	38%

Social media

By the end of 2021, the EFI Twitter account had 11,950 followers. This represents an increase of 1650 new followers during 2021.

	Gain in followers
Total 2021	**1,650**
Total 2020	1,447
Total 2019	1,422
Total 2018	1,315
Total 2017	1,288
Total 2016	1,505
Total 2015	1,106

EFI's other social media channels were also utilised:

Other channels	**No of policy support-related posts, 2021**
Linked In	11
Facebook	15

Videos

Seven policy support videos were published on the EFI YouTube channel in 2021:

Video	**Published**	**Recording views 2021**
Forests in a nutshell	16.06.2021	182
EU forests in a nutshell: all the facts and figures	09.08.2021	492
EU forests in a nutshell: part 2	09.08.2021	32
EU forests in a nutshell: part 3	09.08.2021	34
EU forests in a nutshell: part 4	09.08.2021	51
EU forests in a nutshell: part 5	09.08.2021	23

ThinkForest webinar: Role of Science in Supporting Policymaking: A post-COVID world	25.05.2021	297
Promo video/social media: Marc Palahí welcomes you to our next ThinkForest event on 20 May 2021	03.05.2021	210

Previous video material:	**Published**	**No of views 2021**	**Lifetime views (to 02.01.2022)**
ThinkForest webinar: China-Europe Forest Bioeconomy	15.12.2020	100	148
ThinkForest webinar: Public perception of forests and bioeconomy	30.10.2020	131	302
ThinkForest: European Forest Policy Post-2020	25.09.2020	113	296
Reimagining our world: Göran Persson on the Green Deal and the future of rural areas	25.09.2020	997	1205
Reimagining our world: Transforming the economy	22.09.2020	267	846
Reimagining our world: the future role of rural areas	22.09.2020	26	110
ThinkForest: Science insights to the European Green Deal and forests	22.05.2020	252	1191
ThinkForest: The Future of Plantation Forests in Europe	17.12.2019	199	906
ThinkForest: How to Respond to Forest Disturbances in Europe	04.04.2019	123	2011
Climate policy and forest bioeconomy	04.12.2018	55	896
Role of bioeconomy in controlling forest fires	29.05.2018	94	1107
Looking ahead to a circular European bioeconomy	07.11.2017	35	897
Implementing Natura 2000 in forests: lessons learned and looking ahead	27.09.2017	38	729
Leading the way to a new European bioeconomy strategy	10.05.2017	367	2509
Building an innovative and resilient forest bioeconomy	15.11.2016	13	646
Building the bioeconomy: insights from European strategies	08.06.2016	42	1593
Climate policy after COP21: Implications for the European forest-based sector	15.03.2016	3	579
7 videos from COP21 event: Climate policy targets – How can European forests contribute?	04.01.2016	49	1421

Towards Paris 2015: How can the forest sector contribute?	Oct 2015	7	912
Bioeconomy is the future *(Göran Persson)*	Nov 2015	282	4180
A new role for forests and the forest sector in climate targets *(Gert-Jan Nabuurs)*	Nov 2015	178	1008

Website

Web pages	Page views 2021	Page views 2020	Page views 2019	Unique visitors 2021	Unique visitors 2020	Unique visitors 2019
Policy support main landing page (policysupport/)	**1,106**	**1,860**	1,736	**881**	**1,305**	1,259
Our work (policysupport/ourwork)	**193**	**303**	346	**134**	**243**	264
ThinkForest (policysupport/thinkforest/) plus subpages	**6,581**	**16,210**	10,025	**5,675**	**12,011**	7,458
Publications (policysupport/publications/)	**56**	**630**	702	**55**	**461**	545

Both page views and unique visitor numbers for the general policy support and ThinkForest pages are lower in 2021. This is in line with (a) fewer ThinkForest activities and events (b) the general trend of people engaging on social media rather than on the EFI website.

In 2021, a dedicated sub-site was made available on the EFI website for materials from the *Key questions on forests in the EU* report.

Web pages	Page views 2021
Forest questions (/forestquestions) plus subpages	10,500

Table 2: Number of ThinkForest and other participants according to background

Participant background (registered participants*)	**ThinkForest webinar: Role of Science in Supporting Policymaking: A Post-COVID World, 20 May 2021**
European Parliament	-
European Commission	12
Council of the EU	-
Ministries	13
Embassies, permanent representations	5
Forest industry	16
Forest owner	12
NGO	25
Other stakeholder groups	40
Research	134
Other *(e.g. international org. incl. EFI)*	25
Media	5
TOTAL	287*

**287 participants registered to the webinar. 45% (~130) of them participated to the event on the day, and 297 participants or other interested parties have watched the recording during 21 May -31 December 2021.*

Number of Trust Fund countries represented in ThinkForest webinar

(out of 10 countries)

Participant background	ThinkForest webinar: Role of Science in Supporting Policymaking: A Post-COVID World, 20 May 2021
Ministries in total	13
From Trust Fund countries	5
Embassies, permanent representations in total	5
From Trust Fund countries	2

Table 3: Stakeholder follow-up articles related to events and publications

ThinkForest webinar Role of Science in Policymaking: A Post COVID World, 20 May 2021		
Publisher / Stakeholder	**Specified, article name**	**Link**
Final meeting of the Nordic-Baltic network Centre of Advanced Research in Ecosystem Services (CAR-ES III)	The role of science for creating trust and legitimacy of sustainability governance for bioenergy and the wider bioeconomy in the Nordic and Baltic countries	https://www.skogur.is/static/files/radstefnur/car-es-2021/dagur2/talk-05-_-inge-_-car-es_governance_iceland_6oct2021.pdf

K2A04 Key questions on forests in the EU		
Publisher / Stakeholder	**Specified, article name**	**Link**
SAPPI	Our approach to promoting healthy forests in Europe	https://www.sappi.com/our-approach-to-promoting-healthy-forests-in-europe
Propopulus	EFI presents a new study aiming to tackle key questions on European forests	https://propopulus.eu/en/efi-presents-a-new-study-aiming-to-tackle-key-questions-on-european-forests
Florestas.pt	12 questões sobre as florestas europeias que todos deviam saber	https://florestas.pt/noticias-e-agenda/12-questoes-sobre-as-florestas-europeias-que-todos-deviam-saber/
EOS	Key Questions on Forests in the EU - new publication from the European Forest Institute	https://www.eos-oes.eu/en/news.php?id=2033
FSC Italy	Cosa sappiamo delle foreste europee	https://it.fsc.org/it-it/news/id/890
Forest Owners Association Of Lithuania (FOAL)	EFI: atsakymai į 12 pagrindinių klausimų apie ES miškus	https://forest.lt/go.php/lit/EFI-atsakymai-i-12-pagrindiniu-klausimu-apie-ES-miskus/6764

Other: ThinkForest Forest Disturbances event, 2019 / FSTP8		
Publisher / Stakeholder	**Specified, article name**	**Link**
Czech University of Life Sciences Prague	Friends or foes? Managing bark beetles in the 21st century	https://www.fld.czu.cz/en/r-11220-news-homepage/friends-or-foes-managing-bark-beetles-in-the-21-st-century.html
	Translation to Ukrainian by Agency for Sustainable Development of the Carpathian Region "FORZA"	https://derevoobrobnyk.com/druzi-chy-vorogy-borotba-z-

		koroyidamy-v-21-stolitti-akczent-na-zmenshennya-vrazlyvosti-lisu-spryyannya-stijkosti-ta-adaptacziyi-do-klimatu/

ThinkForest referenced in:

Vizzarri, M., Pilli, R., Korosuo, A. *et al.* Setting the forest reference levels in the European Union: overview and challenges. *Carbon Balance Manage* **16,** 23 (2021). https://doi.org/10.1186/s13021-021-00185-4

Table 4: Media coverage related to events

ThinkForest webinar Role of Science in Policymaking: A Post COVID World**, 20 May 2021**			
Publisher	**Type of publication**	**Article name**	**Link**
Bio Market Insights	Online magazine for the circular economy	ThinkForest Explores Science and Policy-Making	https://biomarketinsights.com/thinkforest-explores-science-and-policy-making/

For media coverage related to publications, please see Table 6.

Table 5

Publication citations

Published during 2021

From Science to Policy 1: Assessment of the EU Timber Regulation and FLEGT Action Plan Published 21 April 2015			
Citations			
Radosavljević, M.; Masiero, M.; Rogelja, T et al.	Forests 2021, 12, 1665.	Adaptation to EUTR Requirements: Insights from Slovenia, Croatia and Serbia	https://doi.org/10.3390/f12121665
E.F. Morten Komdeur & Paul T.M. Ingenbleek.	International Wood Products Journal, 2021	The potential of blockchain technology in the procurement of sustainable timber products	https://doi.org/10.1080/20426445.2021.1967624
Pham Thu Thuy, Tang Thi Kim Hong, Dang Thi Thanh Nhan, et al.	Forest Policy and Economics, Volume 132, 2021, 102592.	Perceptions of wood-processing industries on FLEGT implementation: Insights from Vietnam	https://doi.org/10.1016/j.forpol.2021.102592
Hino Samuel Jose.	VOL 5 NO 1 (2021): CENDEKIA NIAGA	Analisis Dampak FLEGT VPA Terhadap Ekspor Hutan Indonesia Ditengah EU Green Deal	https://doi.org/10.52391/jcn.v5i1.573
Paul Rougieux and Ragnar Jonsson.	Sustainability 2021, 13(11), 6030	Impacts of the FLEGT Action Plan and the EU Timber Regulation on EU Trade in Timber Product	https://doi.org/10.3390/su13116030
Stefanie Onder, James T. Erbaugh and Georgia Christina Kosmidou-Bradley.	Oxford Research Encyclopedia of Environmental Science. (2021, March 25).	Economic Issues Related to Asian Deforestation	https://doi.org/10.1093/acrefore/9780199389414.013.575
Simon L. Bager, U. Martin Persson, Tiago N.P. dos Reis.	One Earth, Volume 4, Issue 2, 2021	Eighty-six EU policy options for reducing imported deforestation	https://doi.org/10.1016/j.oneear.2021.01.011
Encarnación Moral-Pajares, Concepción Martínez-Alcalá, Leticia Gallego-Valero et al.	Forests 2020, 11(9), 1009	Transparency Index of the Supplying Countries' Institutions and Tree Cover Loss: Determining Factors of EU Timber Imports?	https://doi.org/10.3390/f11091009
Margret Köthke	Forest Policy and Economics Volume 111, February 2020, 102028	Implementation of the European Timber Regulation by German importing operators: An empirical investigation	https://doi.org/10.1016/j.forpol.2019.102028

Ahmad Maryudi, Emmanuel Acheampong, Rebecca L. Rutt et al.	Society & Natural Resources, Published online: 13 Feb 2020	"A Level Playing Field"? – What an Environmental Justice Lens Can Tell us about Who Gets Leveled in the Forest Law Enforcement, Governance and Trade Action Plan	https://doi.org/10.1080/08941920.2020.1725201
Bager, Simon and Persson, Martin and Reis, Tiago	Available at SSRN (June 15, 2020)	Reducing Commodity-Driven Tropical Deforestation: Political Feasibility and 'Theories of Change' for EU Policy Options	http://dx.doi.org/10.2139/ssrn.3624073
Emmanuel Acheampong, Ahmad Maryudi	Forest Policy and Economics Volume 111, February 2020, 102047	Avoiding legality: Timber producers' strategies and motivations under FLEGT in Ghana and Indonesia	https://doi.org/10.1016/j.forpol.2019.102047
A.W. Bruijnzeel	Master's thesis, Tilburg University 2020	An analysis of the principal international and European legislative efforts that combat illegal international trade in tropical timber. How do CBD, CITES, ITTA and EU FLEGT interact and compare?	http://arno.uvt.nl/show.cgi?fid=152695
N Patel	PhD thesis, Kingston University, 2019	Illegal timber trade : analysing the effectiveness of European Union Timber Regulation (EUTR) in the UK	https://eprints.kingston.ac.uk/45532/1/Patel-N-45532.pdf
Axel Marx	In Olga Martin-Ortega and Claire Methven O'Brien (eds) (2019) Public Procurement and Human Rights-Opportunities, Risks and Dilemmas for the State as Buyer	Chapter 8: Public procurement and human rights: current role and potential of voluntary sustainability standards	https://www.elgaronline.com/view/edcoll/9781788116305/9781788116305.00017.xml
Claudia Ituarte-Lima, Amelie Dupraz-Ardiot, Constance L. McDermott	Int Environ Agreements (2019)	Incorporating international biodiversity law principles and rights perspective into the European Union Timber Regulation	https://doi.org/10.1007/s10784-019-09439-6
Andrighetto, Nicola	University of Padua, PhD thesis, 2018	Impacts and interaction of political and economic driving	http://paduaresearch.cab.unipd.it/10680/

		forces in the international timber trade	
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
K Matsson,	SLU Master's thesis (2015)	The impact of the EU Timber Regulation on the Bosnia and Herzegovinian export of processed wood	http://stud.epsilon.slu.se/8077/1/Matsson_K_20150622.pdf
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
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
Nicola Andrighetto, Davide Pettenella and Mauro Masiero	IUFRO Proceedings of the 13th International Symposium: Legal	Illegal Activities in the Italian Wood-Energy Sector and Potential Impacts on Regulation (EU) 995/2010 (EU Timber Regulation)	http://www.unitbv.ro/Portals/64/internationalizare/Proceedings%20IUFRO_Brasov_2015.pdf

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Stakeholders			
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