



SCAR FOREST

**Strategic Working Group on Forests and Forestry
Research and Innovation**

BIOEAST conference, Brussels 21.2.2020

Taneli Kolström



EUROPEAN UNION

Project co-funded by
H2020 Programme under
Grant Agreement n° 727486

SCAR FOREST Mandate

- **SCAR FOREST mandate** has been initiated in 2011, established in 2013, reviewed in 2016 until mid-2019, finally reviewed in 2019 until mid 2022
- **SCAR FOREST missions** are to:
 - Strengthen transnational research and cooperation in forests and forestry (climate change, biodiversity, bioeconomy)
 - Promote research-based systems and value-chain approaches with consideration of other sectors and regions in the world
 - Advise on R&I support to the implementation of MS and EU strategies
- **SCAR FOREST activities**
 - Support, develop and improve networking actions
 - Contribute to define priorities for R&I framework programs
 - Broaden the scope of cooperation (agricultural issues and global challenges)
 - Stay tuned to developments in public policies

SCAR FORESTRY team

Participants:

- Member states: AT, BE, CZ, DE, EE, ES, FI, FR, GR, HU, IE, IT, LV, LT, NO, PL, SE, SK, UK, ...
- Observers: EFI, FTP, INNOVAWOOD, IUFRO, FORESTVALUE (EU DG AGRI)

Coordinating group

- Taneli Kolström, Luke, FI, Chair (taneli.kolstrom@luke.fi)
- Vera Steinberg, Ble, DE (Vera.Steinberg@ble.de)
- Kalliopi Radoglou, Duth, GR (kradoglo@fmenr.duth.gr)
- Tomas Bucha, SK (bucha@nlcsk.org) BIOEAST
- Annabell Amm, Ecofor, FR (annabelle.amm@gip-ecofor.org)

Recent reports



Climate Change and Forest Systems New horizons for research and innovation

Novotel Hotel
115 N Tsarigradsko Shosse Blvd
1784 Sofia (BG)
5 June 2018

Co-organised with:



In cooperation with:



MINISTRY OF
EDUCATION
AND SCIENCE



Coming in near future: **Study on digitalisation and automation in the forest-based sector.**

<https://scar-europe.org/index.php/forest-documents>



CASA, Support to SCAR

Assessment of forest-related ERA-Nets and Cost Actions



	COST actions	ERA-Nets
Period	From 1990	From 2004
Number of projects	137	159
Average funding	2/3 M€/year	8 M/year
Domains		
Forestry	37%	33%
Wood	27%	19%
Paper	12%	4%
Novel products	4%	21%
Other (biodiversity)	20%	23%
Leading countries	Rather balanced	DE, FI, SE, FR UK, NO, AT, DK, IT, ES

- COST activities decreasing in forestry
- **COST – Horizon succes rate 37%** (Ferrao, 20.2.2020)

<https://scar-europe.org/index.pp/forest-documents>

Study on digitalisation and automation in the forest-based sector – preliminary results

- Importance of information and communication technology (ICT) and automation (incl. robotisation), both in forest management (including the provision of ecosystem services) and the forest-based sector
- Feeling that there is less research and innovation activities in these sectors than in the agro-food sector, but tools
 - of multi-source forest inventories and projections
 - To improve the marketing of wood,
 - To increase the performance of logging operations
 - To provide a traceability of resources
 - To better know and valorise ecosystem services
 - To support industrial processes.
- Final version ready in near future



Photo: Erkki Oksanen / Luke

Study on digitalisation and automation in the forest-based sector – main messages

- Great role of the forest-based sector as an ecosystem, in terms both bioeconomy and ecology
- Research and Innovation are crucial to play this role
- Digital revolution: key factor for competitiveness and effectiveness in playing this role
- Adaptation of forests to climate change needs big data and their smart use
- Forest owners and managers are much concerned
- Useful to optimize complex value chains
- Useful for market transparency



Photo: Erkki Oksanen / Luke



Photo: Erkki Oksanen / Luke

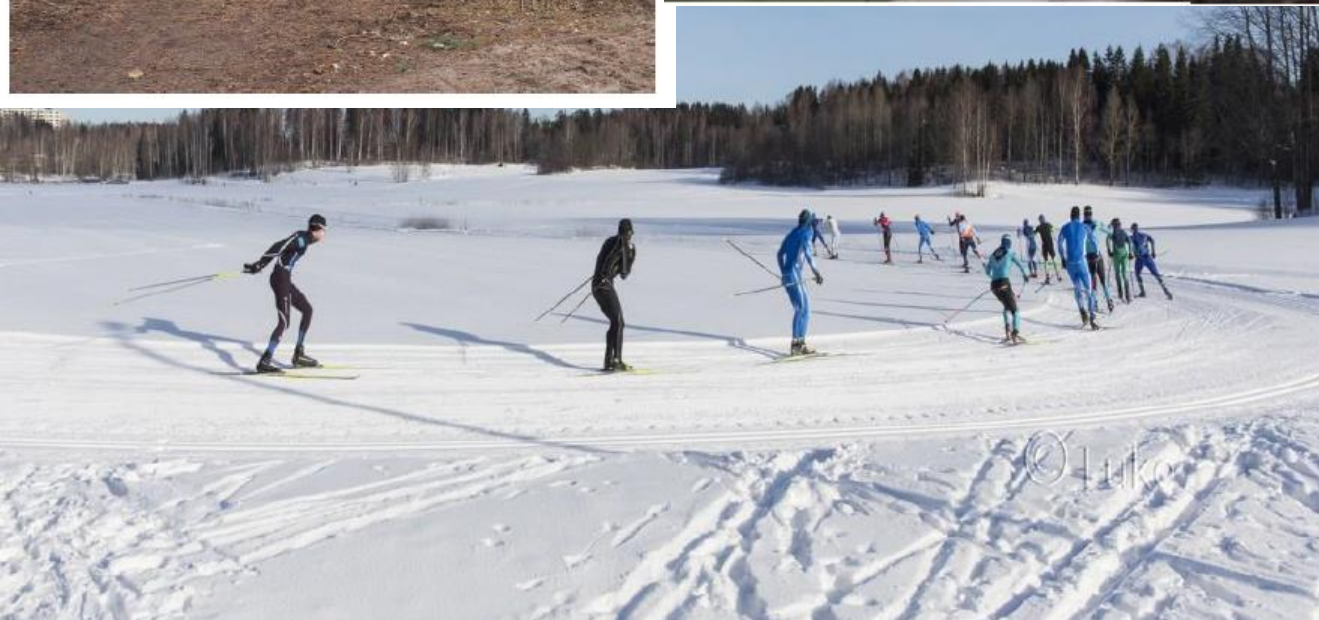
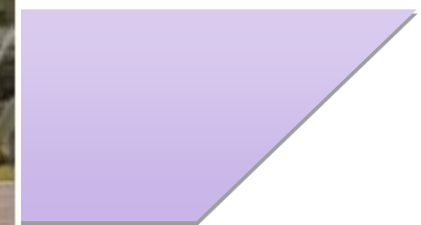


Photo: Erkki Oksanen / Luke

Photo: Erkki Oksanen / Luke

Context of the forest-based sector

- The forest-based sector is **essential worldwide for societies** because it provides many goods and services and is concerned by many of the SDGs.
- It is **highly concerned by major, increasing and different issues** on climate change, biodiversity, illegal timber logging, deforestation, social expectations, new opportunities due to the development of bioeconomy and ICTs.
- Wood is a **renewable, energy-efficient, natural resource with multiple properties:** aesthetic, insulating ,acoustic, mechanical, chemical, ...
- The **length of forest cycles** underlies the need for **sustainable** forest management that is challenged by **increasing uncertainties** under global change
- **Fragmentation of the forest-based sector** (multiple owners, SMEs), **forest-related policies** (BD, agriculture, climate, energy and circular bioeconomy; sustainable development, forests and timbers,...) and **research and innovation.**

Context of the forest-based sector

This fragmented context pushes to:

- **Unite forces and cooperate** in research and innovation partnerships
- Analyse issues **systemically, holistically**
- Make the forest-based sector **more visible**

Global changes reinforce these needs:

- **BD** has become a clear global challenge (UNFCCC, IPBES)
 - With tropical deforestation and forest degradation,
 - With ecologically-friendly forest transition and management, often increasing BD
- Climate warming demands **resilience** (adaptation to mitigation)
- Circular bioeconomy with wood as a major renewable resource

THANK YOU

For your attention

Dr Taneli Kolström

taneli.kolstrom@luke.fi

